

UNITED STATES OF AMERICA 101 FERC ¶ 61,061  
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Pat Wood, III, Chairman;  
William L. Massey, Linda Breathitt,  
And Nora Mead Brownell.

California Independent System  
Operator Corporation

Docket Nos. ER02-1656-001  
ER02-1656-002  
ER02-1656-003  
ER02-1656-004  
ER02-1656-005  
ER02-1656-006

Investigation of Wholesale Rates of  
Public Utility Sellers of Energy and  
Ancillary Services in the Western  
Electricity Coordinating Council

Docket No. EL01-68-019

ORDER ON REHEARING AND COMPLIANCE FILING

(Issued October 11, 2002)

1. In this order, we are addressing parts of the rehearing requests of an order issued July 17, 2002<sup>1</sup> concerning the California Independent System Operator Corporation's (CAISO) Comprehensive Market Redesign Proposal (MD02). We also address parts of a compliance filing. This order benefits customers by clarifying aspects of the July 17 Order, which will result in enhanced electricity reliability for California and help provide power at just and reasonable prices.

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<sup>1</sup>See California Independent System Operator Corporation, 100 FERC ¶ 61,060 (2002) (July 17 Order). In the July 17 Order, the Commission imposed an October 1, 2002 effective date for changes to the California energy markets. However, on September 26, 2002, the Commission issued an order in which we directed that the effective date be changed to October 31, 2002. See California Independent System Operator Corporation, 100 FERC ¶ 61,351 (2002).

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2. With the issuance of our order concerning the WestConnect RTO proposal, the Commission has provided guidance on the three principal RTO proposals in the Western Interconnection: CAISO, RTO West and WestConnect.<sup>2</sup> To achieve the efficiencies reflected in those market design proposals, we believe that it is imperative that the proponents of these organizations, Western market participants and other interested parties all work cooperatively to identify common commercial practices among the proposals as well as potential market design elements that could create seams between the organizations. Where potential seams issues are identified, we direct CAISO, RTO West and WestConnect, and strongly encourage market participants and other interested parties, to collaborate through the Seams Steering Group - Western Interconnection (Steering Group) on solutions to such issues, thus ensuring that markets in the West can achieve their fullest potential benefit.

### Background

3. In the July 17 Order, the Commission took several actions concerning the CAISO's MD02 proposal, including the following:

(1) extended the must-offer requirement;

(2) established a \$250/MWh bid cap for California markets and a price cap for all sales in Western Electricity Coordinating Council spot markets;

(3) directed the CAISO to file, by August 16, 2002, a revised "automatic mitigation procedures" (AMP) proposal and to file quarterly reports detailing the impact of its AMP measures;

(4) rejected the CAISO's proposal to implement an interim residual unit commitment process;

(5) rejected the CAISO's proposal to use a 12-month market competitive index as a mitigation tool, but directed the CAISO to file the information produced from this index with the Commission's Office of Market Oversight and Investigations on a weekly basis;

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<sup>2</sup>See California Independent System Operation Corporation, 100 FERC ¶ 61,060 (2002), Avista Corporation, et al., 100 FERC ¶ 61,274 (2002) and Arizona Public Service Company, et al., 101 FERC ¶ 61\_\_\_\_ (2002).

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(6) directed the CAISO to file, by October 21, 2002, tariff language for the day-ahead, ancillary services, and hour-ahead and real-time reforms to be implemented by January 1, 2003;

(7) authorized the CAISO to expend funds on the development of software and systems for locational marginal pricing and a full network model;

(8) accepted for filing the CAISO proposals for clearing the price overlap using real-time economic dispatch, and the use of a single energy bid curve;

(9) approved, subject to certain conditions, the CAISO's proposals for a negative \$30/MWh cap on decremental energy bids, and penalties for excessive uninstructed deviations and directed the CAISO to make a compliance filing by August 16, 2002 modifying the proposals;

(10) directed the CAISO to submit a schedule and process, no later than October 21, 2002, that integrate demand signals in its market design; and

(11) directed the staff to convene a technical conference to address long-term elements of the comprehensive market redesign.

#### Procedural Matters

4. On September 16, 2002, the Commission issued an order in which we granted rehearing of the July 17 Order for the limited purpose of further consideration and so that timely-filed rehearing requests would not be deemed denied by operation of law. In this order, we address the parts of compliance filings, proposed tariff revisions, and the rehearing requests concerning the California market redesign elements that will go into effect by October 31, 2002 or that are necessary to be addressed at this time. The Commission will address the remaining issues raised in these filings at a later time.

5. On May 21, 2002 and May 24, 2002, the CAISO filed proposed tariff revisions to correct mistakes it submitted in its May 1, 2002 MD02 filing. Reliant Energy Power Generation (Reliant), Mirant Parties (Mirant), and Northern California Power Agency (NCPA) filed timely comments to the CAISO's May 21, 2002 and/or May 24, 2002 proposed tariff revisions.

6. The following parties filed timely comments to the CAISO's June 17, 2002 and June 28, 2002 proposed tariff revisions that supplemented the CAISO's May 1, 2002

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MD02 proposal: Alameda Power & Telecom of Alameda, California; California Electricity Oversight Board (EOB); California Department of Water Resources State Water Project (California State Water Project); City and County of San Francisco (San Francisco); Pacific Gas & Electric Company (PG&E); Reliant; California Municipal Utilities Association (CMUA); Dynegy Power Marketing (Dynegy); City of Palo Alto; City of Redding, California (Redding); City of Santa Clara, California (Santa Clara); Duke Energy North America, and Duke Energy Trading and Marketing, LLC (Duke); Electric Power Supply Association and the Western Power Trading Forum (EPSA); Independent Energy Producers Association (IEP); Metropolitan Water District of California (Metropolitan); Northern California Power Agency (NCPA); Sacramento Municipal Utility District (SMUD); Southern California Edison Company (SoCal Edison); Transmission Agency of Northern California (TANC); and Williams Energy Marketing & Trading Company (Williams). On July 5, 2002, California Large Energy Consumers Association filed an untimely motion to intervene in this proceeding.

7. The following parties filed timely motions for rehearing and/or clarification of the July 17 Order: CAISO; Bonneville Power Administration (BPA); California State Water Project; EOB; CMUA; Dynegy; San Francisco; Palo Alto; Duke; IEP; Mirant Parties (Mirant); Modesto Irrigation District; Reliant; SMUD; SoCal Edison; Williams; and the California Public Utilities Commission (CPUC). On August 22, 2002, Californians for Renewable Energy, Inc. (CARE) filed an untimely request for rehearing.

8. The following parties filed timely comments to the CAISO's August 16, 2002 and August 21, 2002 compliance filings: California State Water Project; Duke; Dynegy; EOB; IEP; Powerex Corp.; Reliant; and Williams.

9. Regarding the untimely motion to intervene from the California Large Energy Consumers Association, given its interest in this proceeding, the early stage at which it filed its motion in this proceeding, and the absence of any undue prejudice or delay from granting late intervention, we will grant this party's intervention. However, we must reject CARE's untimely request for rehearing. As the courts have repeatedly recognized, the time period within which a party may file an application for rehearing of a Commission order is statutorily established at 30 days by section 313(a) of the FPA, and the Commission has no discretion to extend that deadline.<sup>3</sup> Similarly, the Commission

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<sup>3</sup> See *City of Campbell v. FERC*, 770 F.2d 1180, 1183 (D.C. Cir. 1985) ("The 30-day time requirement of [the FPA] is as much a part of the jurisdictional threshold as the (continued...)

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has long held that it lacks the authority to consider requests for rehearing filed more than 30 days after issuance of a Commission order.<sup>4</sup>

## Discussion

### Must-Offer Requirement

10. Several parties contend that the Commission erred in extending the must-offer requirement beyond September 30, 2002. Some of these parties contend that the Commission should identify specific conditions under which it will consider removing the must-offer requirement. Reliant argues that the must-offer requirement should not be continued because it allows load serving entities, in effect, to receive free reserves when they would otherwise be required to acquire ancillary services to meet their load. Reliant states that extending the must-offer requirement will hinder the development of a robust market because its existence eliminates any incentive for generators to improve the resource adequacy problem.

11. The Commission addressed these parties' concerns regarding the must-offer requirement in the July 17 Order. We stated in the July 17 Order, beginning at paragraph 35, "that extending the current West-wide must-offer requirement is necessary to ensure reliable energy supplies and continued short-term market stability. We will consider removing the must-offer requirement in the future after we determine that adequate infrastructure and market design improvements have been made and Western market prices reflect competitive outcomes on a more consistent basis. By extending the current must-offer requirement, the Commission is able to provide continued market stability until long-term market-based solutions can be fully implemented."

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<sup>3</sup>(...continued)

mandate to file for a rehearing."); *Boston Gas Co. v. FERC*, 575 F.2d 975, 977-78, 979 (1st Cir. 1978) (same; describing identical rehearing provision of Natural Gas Act as "a tightly structured and formal provision. Neither the Commission nor the courts are given any form of jurisdictional discretion."). See also *Sierra Association for Environment v. FERC*, 791 F.2d 1403, 1406 (9th Cir. 1986).

<sup>4</sup>See, e.g., *New England Power Pool*, 89 FERC ¶ 61,022 at 61,076 (2000); *Arkansas Power & Light Co.*, 19 FERC ¶ 61,115 at 61,217-18 (1982), reh'g denied, 20 FERC ¶ 61,013 at 61,034 (1982). See also *Public Service Company of New Hampshire*, 56 FERC ¶ 61,105 at 61,403 (1991); *CMS Midland, Inc.*, 56 FERC ¶ 61,177 at 61,623 (1991).

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12. Several parties also request clarification concerning the must-offer requirement. Specifically, these parties contend that the Commission should clarify that (1) the July 17 Order does not change the must-offer requirement other than to extend its life; (2) the CAISO must continue to compensate generators pursuant to the must-offer requirement for start-up and minimum-load costs that they incur, in accordance with Commission directives;<sup>5</sup> and (3) the CAISO is not authorized to expand or modify the Commission-approved must-offer requirement without a formal filing before the Commission.<sup>6</sup>

13. In the July 17 Order, we did not approve any additional modifications to the current must-offer requirement other than to extend its life. If the CAISO desires a change to any provision of its tariff, as a public utility subject to the Commission's jurisdiction, it must file a request to do so pursuant to Section 205 of the FPA. Absent Commission approval to change its tariff, the CAISO is legally obligated to comply with the provisions of its Commission-approved tariff. We find that operating procedure M432 is a change to the must-offer procedures and must be filed with the Commission under section 205 for approval before it can be implemented. Since the CAISO and others have not had an opportunity to address Dynegy's argument on rehearing about operating procedure M432 and no section 205 filing has been made, we make no further findings on M432 at this time.

### Bid Cap

14. Some of the commenters state that the \$250/MWh bid cap is too high and another contends that it is dangerously low. Several of the parties also state that the Commission

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<sup>5</sup>See San Diego Gas & Electric Co. v. Sellers of Energy and Ancillary Services Into Markets Operated by the California Independent System Operator and the California Power Exchange, et al., 97 FERC ¶ 61,275 (2001) (December 19 Rehearing Order).

<sup>6</sup>Dynegy states that on July 26, 2002 the CAISO issued Operating Procedure M432, which effectively modifies the CAISO tariff without Commission approval. Dynegy states that this operating procedure allows the CAISO the discretion to grant a waiver from the must-offer obligation when there is a "15 percent capacity margin for the control area." Dynegy contends that this action effectively transforms the must-offer requirement from a reliability/physical withholding mitigation measure for generators requiring an hour or more to start-up into a measure that gives the CAISO the ability to control supply.

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should clarify the milestones for increasing the cap to the \$1000/MWh level currently in use in the PJM Interconnection LLC (PJM) and the New York Independent System Operator (NYISO) or that the \$1000/MWh cap should be phased in incrementally and fully implemented by October 1, 2003. Duke asks that the Commission clarify the conditions that are currently absent in California and the Western Electricity Coordinating Council but that are present in the Northeast that the Commission relied upon to justify a lower bid cap in the West. Furthermore, Duke requests that the Commission specify the milestones that must be met in order to ultimately raise the bid cap to levels used in the East and to intermediate levels in the interim. Duke states that if the Commission does not clarify these points, then the Commission acted arbitrarily and capriciously when it established the \$250/MWh bid cap.

15. The Commission addressed these issues concerning the bid cap in paragraph 51 of the July 17 Order:

Our decision to establish a \$250/MWh bid cap together with the other mitigation measures is a careful balance of the need to provide incentive for market entry by new generation investment with the need to protect markets from the potential of market power abuse. Without additional infrastructure and other necessary market design improvements in California and throughout the West, continuing market intervention and restrictions on market operations will thwart the evolution of robust, competitive markets.

Furthermore, the Market Surveillance Committee supported the establishment of a bid cap at the \$250/MWh level. The Commission agreed with the Market Surveillance Committee that a low bid cap, such as the one the CAISO proposed at \$108/MWh, is a "high-risk strategy," which would create a disincentive for out-of-state suppliers to bid into the California market. We also noted in the July 17 Order that in the absence of a long-term resource adequacy requirement in California markets, this mitigation program will not encourage sufficient long-term investment.

16. The conditions upon which the Commission will raise the bid cap depend only on the ability of the bid cap to help ensure just and reasonable rates. Ensuring just and reasonable rates was also the reason for the Commission's decision to establish a \$250/MWh bid cap level that balances the need to mitigate market power against the need to provide incentives for infrastructure investment. While a higher bid cap is authorized for markets such as PJM and the NYISO, those markets have not experienced

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the supply and demand imbalance and turmoil recently seen in the West, which justify a more cautious approach at this time.

17. Several of the generators request that the Commission clarify that bids may be submitted above the \$250/MWh cap, subject to justification and refund. These parties argue that allowing justification of bids above the cap is consistent with the Commission's current procedures and that the continuation of this existing policy is necessary to allow a generator to recover its operating costs. Without the ability to justify their bids, generators argue that the must-offer obligation could require them to operate at a cost that cannot be recovered under the cap (e.g., if gas prices rise). In order to allow generators to recover operating costs, we clarify that sellers may continue to submit bids above the bid cap with the understanding that such bids cannot set the market clearing price and that these bids above the cap will be subject to justification and refund.<sup>7</sup>

18. Duke requests that the Commission clarify that for purposes of the July 17 Order, sales into the Western Electricity Coordinating Council spot market consists of sales that are 24 hours or less and that are entered into the day of or day prior to delivery for delivery in the Western Electricity Coordinating Council region. We so clarify.<sup>8</sup>

19. The CAISO requests that the Commission clarify that bidders into the California ISO markets are no longer required to bid \$0/MWh and be "price takers." The CAISO also requests that the Commission allow these bidders to submit a bid other than \$0/MWh but not allow that bid to set the market clearing price. In addition, the CAISO requests that these bidders be guaranteed the average of the interval prices and their bid. However, Dynegy requests that accepted bids from out-of-state suppliers be allowed to set the market clearing price. The CAISO comments that the Commission's primary reason for imposing the \$0/MWh bid requirement was to help to eliminate "megawatt

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<sup>7</sup>Generators must file within seven days after the end of the month justification that shows actual margin costs are higher than the market clearing price. See San Diego Gas & Electric Company v. Sellers of Energy and Ancillary Services, 95 FERC ¶ 61,115 at 61,359 (2001).

<sup>8</sup>This definition is consistent with our earlier determination on this issue. See e.g., San Diego Gas & Electric Company v. Sellers of Energy, Ancillary Service Into Markets Operated by the California Independent System Operator Corporation, 95 FERC ¶ 61,418 at n.3 (2001), order on clarification and rehearing, 97 FERC ¶ 61,275 (2001).

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laundering." Since the Commission approved a \$250/MWh West-wide bid cap and subjected imports to AMP, the CAISO asserts that these measures should be sufficient to protect against "megawatt laundering."

20. Upon further consideration, we share Intervenors' concerns that implementation of AMP only in California and not West-wide will create disincentives to bid into the CAISO markets. Because no organized spot markets exist in the rest of the West, there is no ability to impose an AMP mechanism outside California. In addition, we believe that establishing a separate set of rules for imports (*i.e.*, not permitting imports to set the market clearing price yet subjecting such bids to AMP) may continue incentives for megawatt laundering or other gaming strategies. To avoid these supply disincentives and to address megawatt laundering concerns that would otherwise arise, on rehearing, we will reverse the July 17 order on the issue of applying AMP to imports and we will exempt bids from outside California from AMP. In light of concerns regarding megawatt laundering, we will require that bidders outside California continue to be "price takers," *i.e.*, they must continue to submit zero bids into CAISO markets.

#### Automatic Mitigation Procedure

21. Reliant argues that the proposed AMP is unnecessary to protect customers from the exercise of market power and will, when triggered, depress prices to levels that will prevent infrastructure maintenance and development by denying generators the ability to recover their costs. Reliant asserts that with the "dangerously low" bid cap of \$250/MWh, further mitigation in the form of AMP will preclude infrastructure maintenance and development, thereby preventing development of robust competitive wholesale markets. SMUD states that AMP is overly complex, with too many screens and reference price calculations. SMUD also believes that California-only AMP creates disincentives to sell into the California market because price transparency is reduced and sellers may not know if their bid is mitigated until after a transaction is consummated. SMUD offers an alternative bid cap that is based on a rolling weekly gas price average and imputed heat rates to be applied West-wide.

22. Because AMP is an important part of a comprehensive mitigation plan for the California market, we find that the use of AMP is necessary at this time in the California market, especially as this market transitions from the existing mitigation measures. While a bid cap such as SMUD suggests would be simpler, a more sophisticated tool such as AMP can better distinguish between high bids due to scarcity and bids that reflect the exercise of market power. Since AMP is applied ahead of real-time and any mitigation resulting from AMP will be applied before units are dispatched, SMUD's

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concern is limited only to out-of-sequence bids which are used to relieve intra-zonal congestion and which fail the market impact test.<sup>9</sup> However, to ensure that notification of out-of-sequence bids that have been mitigated is given at the earliest possible time, we direct the CAISO to post such mitigated bids on its OASIS within 24 hours. We note that, in such circumstances, a mitigated out-of-sequence bid will be paid the higher of the bidder's reference price or the market clearing price for the interval in question. The implementation of California-only AMP should not be a disincentive to sell into CAISO spot markets. AMP is to be used to prevent attempts by a bidder to exercise market power. Furthermore, the continuation of the must-offer requirement in California and the rest of the West ensures that available supply will be offered, which will further protect against attempts to exercise market power.

### AMP Thresholds

23. Williams argues that the AMP thresholds are too low and should be set at the same levels as in the NYISO (*i.e.*, the lower of 300 percent or \$100 for conduct and the lower of 200 percent or \$100 for market impact). EOB and CPUC argue that the thresholds are too high, and urge adoption of those the CAISO proposed: the lower of 100 percent or \$50 for conduct and the lower of 100 percent or \$50 for market impact. The CAISO seeks rehearing of AMP thresholds, stating that any changes from its original proposal are unjustified. Specifically, the CAISO states that "[t]he thresholds approved by the Commission are wholly inappropriate for the California market, insufficient to protect against the exercise of market power under current market conditions, and likely to result in the payment of unjust and unreasonable rates."

24. In the July 17 Order, the Commission noted that the CAISO first considered thresholds ranging from 100 percent/\$50 to the NYISO's 300 percent/\$100 for conduct and 100 percent/\$50 and 200 percent/\$100 for impact. For both the conduct and impact thresholds, the CAISO chose to submit in its proposal the lowest value of those it first considered. While the Commission agreed with the CAISO's statement that thresholds must strike a balance between being overly restrictive and overly generous, we found that setting the thresholds at the lowest values in the range the CAISO first considered would not strike such a balance. Thus, the Commission found it appropriate to set the levels of the thresholds as described in the table below.

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<sup>9</sup>According to the CAISO May 1, 2002 proposal, any mitigation of bids in its AMP process will be posted on its OASIS.

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Design Element	Range Considered by CAISO		CAISO proposal	July 17 Order
	Lowest	Highest		
Conduct threshold (lower of)	100% or \$50	300% or \$100	100% or \$50	200% or \$100
Impact threshold (lower of)	100% or \$50	200% or \$100	100% or \$50	200% or \$50

25. We also note that we have required the CAISO to file quarterly reports on the effectiveness of its AMP and that the Commission will review on a prospective basis the bid thresholds, reference levels and price screen as experience reveals their appropriateness and effectiveness.

#### Price Screen

26. Several parties request clarification that AMP will not be applied to any zone in which the market-clearing price is below the \$91.87/MWh price screen. This matter was described in paragraph 67-C of the July 17 Order: "For the price screen, if the market clearing price for all zones is \$91.87/MWh or below, AMP will not be applied." Therefore, if the market-clearing price is projected to be above \$91.87/MWh in any zone, an examination of bids through AMP will occur in all zones.

27. Duke requests clarification of what circumstances, if any, would prompt the Commission to modify the \$91.87/MWh price screen. Williams believes that the level of the price screen is too low and that it does not take into account units running at minimum load. Several parties argue that the price screen is arbitrary, that its level is too high, and that its use will result in unjust and unreasonable rates.

28. The CAISO requests rehearing of the adoption of the price screen as an element of AMP and suggests that the price screen be eliminated. The CAISO maintains that the Commission incorrectly relied on a comparison with the NYISO and pointed out that the NYISO price screen is not in its tariff and that the NYISO uses a price screen voluntarily. Alternatively, if the Commission does not eliminate the price screen, the CAISO protests the level of the price screen as inappropriate and unrepresentative of current market conditions, since gas prices have changed since the \$91.87/MWh level was set. The CAISO suggests a price screen based on the highest heat rate unit on the system (approximately 20,000 Btu/MWh), the current monthly gas index plus a \$6.00 O&M adder.

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29. The July 17 Order requires quarterly reports from the CAISO to monitor the effectiveness of its use of AMP and provides for its re-examination as experience reveals the appropriateness of the reference levels and bid thresholds that trigger mitigation.<sup>10</sup>

30. The purpose of the price screen is to eliminate unnecessary testing of bids for potential mitigation. If projected market clearing prices are below a level that provides a degree of certainty that market power is not being exercised, AMP procedures are unnecessary.<sup>11</sup> The level at which to establish a price screen is not an exact science. A price screen that is too low undermines its purpose, while one that is too high could provide opportunities to exercise market power. The establishment of a \$91.87/MWh price screen reflects our judgment that price levels going forward in the California market below this level will not represent an exercise of market power. Since market clearing prices for the past eighteen months have been subject to this limitation under the mitigation measures we imposed in our June 19, 2001 Order,<sup>12</sup> market participants have a history of operation at prices at or below this level. Prices in the CAISO markets have stabilized during the past eighteen months. The revised market design elements that we have approved should maintain, if not improve, market conditions. Consequently, we believe that the level of the price screen strikes an appropriate balance between adequate protection to the market place and unnecessary deployment of resources to verify that bids do not represent an exercise of market power. Furthermore, as we stated in the July 17 Order, the CAISO's AMP was not proposed as an exact duplicate of NYISO's AMP and the Commission made note of the similarities and differences between the two in making its determination.<sup>13</sup>

#### Reference Prices

31. Duke requests that the Commission or some other independent body, instead of the CAISO, select the independent entity that will calculate generators' reference prices. We deny rehearing on this issue. We are confident that the request for proposal process

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<sup>10</sup>July 17 Order at paragraph 69.

<sup>11</sup>As discussed in this order, we are not requiring a price screen when the CAISO must take a bid out of merit order to address intra-zonal congestion.

<sup>12</sup>See San Diego Gas & Electric Company, et al., 95 FERC. ¶ 61,418 (2001).

<sup>13</sup>July 17 Order, paragraph 57.

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described in the July 17 Order will result in the selection of an independent entity that will produce an unbiased work product.

32. Mirant requests that the Commission clarify whether the independent entity will only calculate the reference prices initially or on an on-going basis until the CAISO is independent. We clarify that the independent entity will provide the reference prices on an on-going basis. We will reconsider this decision after we determine that the CAISO's operations are independent.

33. Several parties request that the Commission clarify whether it sought to ensure that an independent entity calculate reference levels or if it intended that the CAISO simply hire an "independent" entity to "plug in" numbers using the CAISO's previously specified criteria. Dynegy seeks rehearing on this issue if the Commission intended for the independent entity to "plug in" numbers. Dynegy states that the CAISO reference price criteria are far different from the criteria used in the NYISO and that the Commission should direct the CAISO to use cost-based reference prices only as a last resort, consistent with the NYISO. We clarify that the independent entity will use the criteria outlined in the July 17 Order. We note that it is not just a matter of "plugging in" numbers, as suggested by Dynegy. Several of the criteria include subjective decisions, e.g., the determination of reference levels for non-gas-fired units includes a provision for negotiated rates. Again, the CAISO's AMP was not proposed as an exact duplicate of NYISO's AMP and the Commission made note of the similarities and differences between the two in making its determination. We deny Dynegy's request for rehearing.

34. The CPUC questions the Commission's decision to require the use of an independent entity to calculate reference prices and seeks an explanation as to why a discretionary calculation by an outside consultant is more desirable than a discretionary calculation by the CAISO. The Commission required the CAISO to retain the services of an independent entity to calculate the reference prices because of the concerns of the Commission and numerous other parties regarding the CAISO's lack of independence.<sup>14</sup>

35. Several parties seek clarification on the issue of which bids are to be included in the calculation of a generator's historical reference price. Parties seek to confirm that "accepted bids" under the 90-day bid price method specifically exclude both (1) proxy bids resulting from imposition of the Commission's previous price mitigation measures (e.g., reserve deficiency periods when the CAISO could use the proxy bid) and (2) future

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<sup>14</sup>See July 17 Order at paragraph 70.

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mitigated bids under the AMP. We clarify that the term "accepted bids" referred to in paragraph 57-A of the July 17 Order is defined as bids that were submitted and accepted. Therefore, the term "accepted bids" does not include proxy bids or mitigated bids.

36. Reliant claims that the CAISO's request for proposal to hire an independent entity violates the Commission's direct instructions and only attempts to suppress real-time prices, rather than maintaining market stability. Reliant wants the independent entity to set a reference level sufficient to allow recovery of all costs: fixed, variable, opportunity and risk costs. Reliant requests that the Commission modify the AMP proposal so that reference prices are set at the highest level produced under the approaches listed in the July 17 Order. Reliant maintains that failure to do so will result in prices that are too low to support the type of wholesale markets that the Commission wants. Williams states that proxy bids for gas-fired units with no significant energy limitations do not track supply/demand changes or opportunity costs and that they do not allow for fixed-cost recovery. We note that the first method in order of preference to determine reference prices is based on accepted bids over the previous 90-day period. Because a rational bidder would include all relevant costs in its bid, a reference price determined from historical bids would allow for recovery of such costs. The AMP mechanism with the thresholds set in the July 17 Order is designed to limit the exercise of market power while allowing prices to fluctuate with changes in supply and demand. In addition, to the extent that an accepted bid was below the market clearing price for the interval, such differential represents additional compensation to the bidder to cover such costs. We find that if a supplier believes that the AMP procedures and associated reference prices do not allow for recovery of all of their relevant costs for a specific unit, then the supplier should seek CAISO consent to enter into an RMR agreement. If such an agreement cannot be negotiated, the generator may file a complaint with the Commission concerning this matter.

37. EOB claims that historical bids reflect the "rampant" exercise of market power and that the calculation of 90-day bid prices should include only bids from periods when the CAISO's proposed 12-month market competitiveness index has not been violated. In the July 17 Order, the Commission rejected the use of the 12-month market competitiveness index as a mitigation tool and required the CAISO to file the data produced by the index on an advisory basis only. We find that the use of this index for any other mitigation measure is inappropriate. Given the fact that the CAISO's Department of Market Analysis reports that total energy costs have been stable over the first eight months of 2002, with the average cost of energy and ancillary services ranging

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between \$39/MWh and \$44/MWh, we find that the EOB's concern over the "rampant" exercise of market power during this time period is unsupported.<sup>15</sup>

38. Duke requests rehearing on the issue of reference price calculation and maintains that the generator reference prices calculated by the independent entity should be submitted to the Commission as part of a compliance filing, along with the underlying data used to calculate them, and made subject to comment and protest. While we understand the parties' concerns with the process of calculating reference prices, we reiterate our confidence in the ability of the independent entity to produce an unbiased work product. We also note that a dispute between a generator and the independent entity may be decided by means of the Dispute Resolution Process set forth in the CAISO tariff.

39. Regarding the criteria for determining the reference price, Williams seeks clarification that the Commission's use of the phrase "in similar periods" refers to on- and off-peak periods as defined in the CAISO tariff. We so clarify. Williams seeks further clarification that the "previous 90 days" is a window within which any number of accepted bids will be tabulated and the lower of the mean or median of the tabulation will constitute the reference price. We clarify that, for the purpose of determining a reference price for peak or off-peak periods, the data requirement referred to in paragraph 57 of the July 17 Order has been satisfied if at least one bid has been accepted during the relevant period (peak or off-peak) within the previous 90 calendar days.<sup>16</sup>

40. California State Water Project protests that AMP should not apply to demand response and dedicated-purpose hydro generation until the CAISO clarifies how and why AMP would apply to these resources. The Commission notes that hydro-electric resources located within the CAISO control area who voluntarily bid into the CAISO market are eligible to set the market clearing price. As such, these resources must be subject to AMP. As we stated in paragraph 57 of the July 17 Order, reference prices for non gas-fired units (which would include hydro-electric resources) would be set at a negotiated rate using opportunity cost data supplied by the market participant.

#### AMP for Local Market Power Mitigation

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<sup>15</sup>See Market Analysis Report for July-August 2002, p.4.

<sup>16</sup>If only one bid has been accepted during a peak or off-peak period, that bid will set the reference price for that peak or off-peak period.

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41. Several parties are concerned that AMP is insufficient for local market power mitigation. Williams believes that the use of RMR units alone should be sufficient for this purpose. Palo Alto requests rehearing of the Commission's determination that "no bid below \$91.87/MWh should be mitigated in any case." The CAISO requests that the Commission eliminate the price screen for mitigation of local market power. According to the CAISO, the level of \$91.87/MWh is especially inappropriate and unjustifiable in the local market power mitigation context. As the Commission noted in the July 17 Order at paragraph 88, load pockets, generation pockets, or local reliability problems resulting from such a situation may place a generating unit in a position to exercise market power. In a zonal congestion management system such as that currently in place in California, we agree that there may be the opportunity to exercise local market power at price levels below a price screen. Therefore, we will not require a price screen when the CAISO must take bids out of merit order to address intra-zonal congestion. The Commission finds that the use of RMR procedures in conjunction with the application of AMP without a price screen provides sufficient local market power mitigation.

42. The CAISO requests rehearing of the rejection of its local market power mitigation proposal, stating that the Commission "is not permitted to reject proposed [tariff] revisions simply because a better alternative is available." The CAISO maintains that "it is axiomatic that the Commission has the authority to reject tariff changes filed by a public utility only if it finds that the changes proposed by the public utility are not just and reasonable." We find that the CAISO proposal fails to meet the just and reasonable standard because, as we stated in the July 17 Order at paragraph 90, "the CAISO's local market power mitigation measure, as proposed, is inappropriate in light of the existence of a three-zone congestion management model." We are modifying the CAISO's proposal and find that this modification is just and reasonable because, as we stated in the July 17 Order at paragraph 90, "there is a need for an appropriate interim measure in order to provide protection from the possible exercise of local market power during the transition to the full network model."

43. The CAISO argues that thresholds for local market power mitigation should be more strict than normal AMP thresholds and refers to the NYISO AMP in support of its argument. The Commission notes that the levels of the normal AMP thresholds in CAISO are significantly lower than the levels in NYISO, and finds that the thresholds ordered in CAISO strike an appropriate balance between being overly restrictive and overly generous.

44. The EOB protests that the use of AMP to mitigate intra-zonal congestion costs is arbitrary and capricious, because it asserts that "the Commission acknowledges the existence of market power in cases where intra-zonal congestion exists." EOB is in

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error. In our July 17 Order in paragraph 88, we recognized that certain situations "may place a generating unit in a position to exercise market power" (emphasis added). The Commission finds that AMP is an appropriate tool that will detect an attempt to exercise local market power and notes that the removal of the price screen for purposes of local AMP should reassure the EOB that all bids taken out-of-merit-order for the purposes of relieving intra-zonal congestion will be examined for the exercise of local market power.

45. The CAISO claims that the Commission's measures fail to address the DEC game, specifically that they do not include any measures to mitigate decremental energy bids that result from the exercise of local market power. According to the CAISO, "[t]he negative cap does not provide adequate protection against local market power." Dynegy claims that the Commission's decision regarding local market power mitigation assumes that only incremental energy is needed to alleviate intrazonal congestion. Consequently, Dynegy claims that the appropriate price to be bid under such circumstances for decremental energy has not been addressed. The CAISO sought and was granted a reduction in the cap on negative decremental energy bids from -\$108/MWh to -\$30/MWh. If the CAISO believes that a further restriction on negative decremental bids is necessary, it may file a tariff amendment under section 205 for prospective implementation to modify such mitigation.

#### The 12-Month Market Competitive Index

46. The CAISO states that it should not be required to provide day-ahead pricing information under the 12-month market competitive index until the CAISO implements a day-ahead market. Some of the commenters contend that the Commission should approve the 12-month market competitive index because the performance of the market as a whole, not only individual transactions, must be measured to ensure that the benefits of competitive markets are realized.

47. The Commission addressed these concerns in paragraph 103 of the July 17 Order. In that paragraph, we found that "[t]here are a multitude of factors other than historical reference prices that must be considered in determining that prices are just and reasonable in any market subject to competitive pressures, including the California market. Consequently, it would be inappropriately rigid to allow automatic mitigation measures to be triggered using this index." While the Commission identified the shortcomings of the index to trigger automatic mitigation measures, we recognized the importance of the data from the index for evaluating California energy market prices. Accordingly, we directed the CAISO to file this information on a weekly basis with the Commission's Office of Market Oversight and Investigations. Given the Commission's

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need for this information to help evaluate these energy markets, we will not condition the filing of this information on the creation of a day-ahead market.<sup>17</sup>

### Expenditure of CAISO Funds

48. Commenters request rehearing of the Commission's decision to allow the CAISO to expend funds to begin developing its full network model and locational marginal pricing software. These parties argue that the Commission should not have allowed the CAISO to begin developing software without first determining the specific market design that the CAISO will implement or assessing the cost impact of these plans on California consumers.

49. In the July 17 Order, the Commission determined that congestion management, using locational marginal pricing and a system of nodal pricing, was "reasonable" for the CAISO to include in its long-term market design. By agreeing in principle to the CAISO's long-term market design proposals and allowing expenditures for software development, the Commission did not preclude further discussion or modifications to these proposals or to the underlying software. For practical reasons, we have allowed the CAISO to begin the development of its long-term market design and explore software development, but this approval does not prevent the Commission from considering the concerns of parties, and making changes based on these concerns, if we believe that the specifics of the long-term plan will not ensure just and reasonable rates. In fact, the Commission has proposed that the underlying software used to support Standard Market Design "must be able to accommodate change" for evolving wholesale markets.<sup>18</sup>

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<sup>17</sup>We will no longer require the CAISO to file the quarterly reports as directed in an April 26, 2001 order. See San Diego Gas & Electric Company v. Sellers of Energy and Ancillary Service into Markets Operated by the California Independent System Operator and the California Power Exchange, 95 FERC ¶ 61,115 (2001). We also note that the Commission's requirement that the CAISO submit weekly reports containing price data is separate and apart from our requirement that the CAISO submit quarterly reports detailing the effectiveness of AMP.

<sup>18</sup>Notice of Proposed Rulemaking on Remediating Undue Discrimination through Open Access Transmission Service and Standard Electricity Market Design, 100 FERC ¶ 61,138 (2002) at paragraph 352 (SMD). Furthermore, the Commission's Standard Market Design proposes modular software development (*i.e.* "the ability to change software modules without changing other software" or the entire program). Through this  
(continued...)

### Available Capacity Requirement

50. The CPUC argues that the "resource procurement" activities of investor-owned utilities and demand response programs are issues for state regulatory commissions. Since this question is pending before the Commission in the SMD proceeding and we have not accepted actual tariff language at this time, we find that this matter is unripe and we will not address it in this rehearing order.<sup>19</sup> However, we note that the Commission stated in its SMD Notice of Proposed Rulemaking that its resource adequacy requirements proposal "is designed to complement, not replace, existing state resource adequacy programs."<sup>20</sup>

51. Modesto Irrigation District argues that if the Commission approved the component of the CAISO's available capacity proposal that would require load serving entities to dedicate available capacity resources for the CAISO's use in real-time, then it requests rehearing on this issue. Alternatively, Modesto Irrigation District requests that the Commission declare as "undecided" the issue of whether the CAISO has the ability to "unilaterally" deploy and use resources designated as available capacity resources. Finally, Modesto Irrigation District requests that the Commission set this issue concerning the CAISO's ability to deploy resource adequacy requirements as one to be discussed at technical conferences.

52. As noted above, the Commission has not addressed the pending question concerning the CAISO's proposed available capacity requirement. A resource adequacy requirement is essential because spot market prices do not consistently signal the need for new infrastructure. Furthermore, as we stated in paragraph 120 of the July 17 Order, the Commission set the CAISO's proposed available capacity requirement for development at technical conferences.

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<sup>18</sup>(...continued)

type of flexible software development, we can allow the initial expenditure of funds on software development and the CAISO can implement Commission-approved changes to the market design at a later time without completely revising the software.

<sup>19</sup>See Id. We note that the Commission did not address this jurisdictional question in the July 17 Order but set the CAISO's proposed available capacity requirement as a discussion item at technical conferences.

<sup>20</sup>See Id. at p. 261.

### Single Bid Curve

53. In the July 17 Order, the Commission considered the CAISO's proposal to require bidders into the day-ahead and hour-ahead markets to submit the same energy bid (*i.e.*, a single energy bid curve) for all services offered by a single resource. Duke requests that the Commission clarify how uncommitted capacity is treated in the hour-ahead and real-time markets. The CPUC requests clarification concerning the Commission's approval of the CAISO's single bid curve proposal. Specifically, the CPUC states that the CAISO in its June 17, 2002 proposed tariff language defines single bid curve as not allowing a supplier to change the day-ahead bid curve, the hour-ahead bid curve or the residual unit commitment for energy and ancillary services once the supplier has been awarded a final schedule or has been selected to provide an ancillary service. The CPUC contends that the current market design already does not allow suppliers to change their bids once they were selected to supply. Thus, the CPUC requests that the Commission clarify how the July 17 Order changes the current market design to a single bid curve.

54. The Commission clarifies that a seller may increase or decrease its bid in the real-time market for capacity associated with that part of its bid curve that was not accepted in the hour-ahead market. The Commission also notes that for committed capacity, while a supplier may not submit higher bids, a supplier may submit lower bids in subsequent markets to ensure that its bid is scheduled.

55. Dynegy requests that the Commission reverse its approval of the single bid curve. Dynegy asserts that there are numerous reasons for having separate price curves for day-ahead, hour-ahead, and real-time schedules and that the Commission should permit day-ahead, hour-ahead, and real-time bid curves to differ. The Commission has already considered Dynegy's arguments, which it also raised in its comments to the CAISO's May 1, 2002 MD02 proposal. In paragraph 131 of the July 17 Order, the Commission found that the implementation of a single bid curve requirement "will provide additional efficiency to markets operated by the CAISO." Accordingly, the Commission denies Dynegy's request for rehearing on this issue.

### Penalties for Uninstructed Deviations

56. Williams and Duke argue that the uninstructed deviation penalties that the Commission approved are punitive and should be based instead on a graduated or sliding scale. Dynegy further argues that the three percent bandwidth that the Commission approved for these penalties is too low, given the age of the units located in California,

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and it proposes a five percent penalty bandwidth. The Commission considered these arguments and addressed them in paragraph 150 of the July 17 Order when we found that, in light of near-term concerns over the adequacy of generation supply in the West, appropriate incentives are justified to prevent deviations from schedules or ignoring dispatch instructions. Furthermore, because the Commission found the CAISO's proposed penalty and bandwidth level to be reasonable to address the supply problem, we approved the CAISO's proposal.<sup>21</sup>

57. SoCal Edison and Duke argue that scheduling coordinators should be allowed to adjust their schedules after the close of the day-ahead market and before real-time without penalty. The Commission considered and rejected this argument in paragraph 147 of the July 17 Order. In that paragraph, we found that penalties should apply to changes from hour-ahead schedules, unless changed by the CAISO, because these changes serve as default operating instructions, and thus they are the equivalent of dispatch instructions. We clarify that adjustments may be made to schedules after the close of the day-ahead market and before the hour-ahead market without penalty.

58. In the alternative, Duke requests that the Commission direct the CAISO to submit tariff language permitting "virtual" bids. Duke asserts that the Commission's order appears to make the hour-ahead schedule a resource-specific physical commitment and would preclude a seller from purchasing less expensive power in the real-time market to meet its commitments. Duke requests that the Commission direct the CAISO to permit purely financial bids (*i.e.*, implement "virtual" bidding). Sempra also supports virtual bidding, asserting that "the CAISO has also proposed that its integrated day-ahead markets permit both physical and financial trades ... [t]hat is, market participants would be able to submit bids that are tied to a physical resource and also bids that are identified as being strictly financial." We note that on page 14 of Appendix C to Attachment A of the CAISO May 1, 2002 filing, the CAISO stated that it "has considered Virtual Bidding, has looked at how it is implemented in the New York ISO and PJM designs, and agrees that the new market design and associated software should not impede the possibility of incorporating this capability in the future." We encourage the stakeholders and the CAISO to discuss virtual bidding in ongoing stakeholder processes and expect the CAISO will ensure that all software will be modular in design to allow modifications without requiring a complete redesign.

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<sup>21</sup>However, the Commission left open the possibility that "as market conditions improve, we will consider requests to adjust the level of, or eliminate, the penalty provisions." July 17 Order at paragraph 150.

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59. SMUD requests that the Commission clarify that changes to hour-ahead schedules will not incur penalties for entities with transmission contracts that allow for schedule changes within the hour. We so clarify.

60. Dynegy and Williams allege that the CAISO may manipulate the penalty procedures. Dynegy asserts that the CAISO can manipulate uninstructed deviation penalties simply by granting a waiver during a unit's minimum run period and thus causing that unit to run uninstructed. Dynegy requests that the Commission clarify that no penalty will apply if the CAISO does not follow the minimum run times in the Commission-filed participating generator agreements. The Commission notes that these concerns are addressed by section 11.2.4.1.2 (e) of the CAISO's tariff, which states that "[t]he Uninstructed Deviation Penalty will not apply to constrained resources for the duration of the relevant start-up/shut-down and minimum up/down times."<sup>22</sup>

61. Williams states that the Commission must impose conditions on the CAISO to prevent it from abusing the authority to impose penalties. Specifically, Williams states that the CAISO must be required to accurately model all of the physical characteristics of generating units, including multiple ramp rates, and minimum start times and run times. We find it unnecessary at this time to condition the CAISO's ability to impose penalties for uninstructed deviations on extensive modeling of all of the physical characteristics of generating units. The Commission notes that in paragraph 141 of the July 17 Order that we conditioned our approval of penalties on software improvements that will allow more accurate representation of ramp rates at various operating points of a unit. We find that these software requirements are sufficient at this time to allow the CAISO to impose penalties without abusing its authority.

62. Dynegy has concerns that if the CAISO issues a dispatch instruction that does not conform to its dispatch protocol, the Commission should clarify that this instruction cannot be "deemed delivered" and is not a basis for imposing a penalty for uninstructed deviation. The Commission agrees that a CAISO action in violation of its tariff cannot be relied upon to impose sanctions.

63. Reliant requests that penalties should apply equally to generators and load serving entities. The Commission considered this and determined that penalties on load serving

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<sup>22</sup>We note that alternative dispute resolution procedures are available in the CAISO tariff for any disputes that may arise concerning uninstructed deviation penalties.

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entities were not necessary at this time, since the CAISO had stated that underscheduling was no longer a significant problem. However, the Commission stated in paragraph 151 of the July 17 Order that if underscheduling increases to a problematic level, "the CAISO may propose a remedy that provides an appropriate incentive to load serving entities to schedule load more accurately." In order to allow the Commission to better monitor underscheduling, we will require that the CAISO file quarterly reports that compare its load forecasts with actual schedules. Moreover, if underscheduling in the future causes further concern to parties and the CAISO does not propose a remedy, parties are free to file a Section 206 complaint.

64. Dynegy requests clarification regarding the CAISO's tariff language in 11.2.4.1.2(I) regarding the aggregation that is allowed for resources represented by the same scheduling coordinator and connected to the same CAISO controlled grid bus and voltage level for purposes of determining uninstructed deviation penalties. Dynegy requests clarification "to eliminate ambiguity and to ensure that generators continue to be allowed to self-provide power to their auxiliary loads (*i.e.*, even when the loads are powered from a start-up transformer)." Similarly, Reliant requests that the Commission instruct the CAISO to permit netting of resources when it would result in no operational impact to the system. We find that these concerns are addressed in CAISO's tariff at section 11.2.4.1.2(I) stating that "[o]ther levels of aggregation for purposes of the Uninstructed Deviation Penalty will be considered on a case-by-case basis based on an ISO review of impact on the ISO Controlled Grid." We believe that the commenters' concerns are addressed by this tariff language but note that, as we stated in paragraph 145 of the July 17 Order, "should a market participant believe that it was improperly denied the ability to aggregate deviations, it can request dispute resolution under the CAISO's tariff provisions."

65. Mirant asserts that penalties for uninstructed deviations should not apply when deviations occur due to environmental constraints, as a result of complying with an operating permit or applicable law. Because the Commission finds reasonable Mirant's concerns regarding the constraints that applicable laws may impose on a generator's ability to comply with scheduling, we direct that the CAISO file proposed tariff language allowing for this type of an exemption to uninstructed deviation penalties.

66. Commenters assert that the CAISO struck a sentence from section 11.2.4.1.2 of the proposed tariff language that it submitted on May 1, 2002 when it filed its proposed tariff sheets on June 17, 2002. The Commission directs that the CAISO re-file proposed tariff section 11.2.4.1.2 and include the following sentence in section 11.2.4.1.2 (c):

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"Uninstructed energy resulting from declining intra-hour Instructions will not be subject to an Uninstructed Deviations Penalty."

67. The CPUC insists that financial incentives alone are not sufficient to deter anti-competitive supplier behavior, and requests "an explicit market rule requiring market participants to submit real, accurate, feasible information to the ISO, and requiring market participants to perform to such schedules." To the extent that this CPUC-proposed tariff revision addresses penalties for uninstructed deviations, we find that the CPUC has not made the requisite showing that the CAISO's proposed tariff concerning these penalties is unjust and unreasonable. Accordingly, we will deny the CPUC proposal at this time.

#### Clearing Price Overlap Using Real-Time Economic Dispatch

68. The CAISO requests rehearing on the implementation date for clearing the price overlap using real-time economic dispatch. The CAISO states that the Commission should condition implementation of this element on the implementation of penalties for uninstructed deviations. According to the CAISO, because real-time economic dispatch will eliminate separate incremental and decremental pricing and produce a single market clearing price applicable to both instructed and uninstructed deviations, absent a penalty provision for excessive uninstructed deviations, unit owners would have no incentive to follow instructed deviations. The CAISO requests that the Commission require simultaneous implementation of these two elements. The Commission accepts the CAISO proposal to delay implementation of the clearing of the price overlap using real-time economic dispatch until the CAISO completes the software improvements necessary for implementation of the penalty provision.

#### Decremental Energy Bids

69. Reliant argues that the Commission should provide specific rules for justifying decremental bids in excess of negative \$30/MWh to prevent the CAISO from arbitrary and inconsistent rejection of justifications. In addition, Williams reiterates its opposition to the decremental bid cap of negative \$30/MWh and argues that the Commission did not "support" its position to allow a cap on decremental bids. In allowing a cap on decremental bids, the Commission considered that the CAISO's proposal is narrowly tailored to address periods of system overgeneration during which suppliers could exercise market power. In setting the cap level, the Commission relied on historical

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data<sup>23</sup> indicating that the majority of decremental bids over the past year were within the \$30/MWh cap. We find that specific rules for justifying decremental bids in excess of the cap are unnecessary at the present time. Because there are many potentially complex reasons for exceeding the cap level, we find that suppliers should have the flexibility to justify bids beyond the cap without prescribed rules that could limit their justifications.

#### Transmission Constrained Unit Commitment and the Must-Offer Waiver Process

70. In its MD02 filing, the CAISO proposed that AMP be applied in two stages: first ahead of real-time during a residual unit commitment process, and again in real-time. In its July 17 Order, the Commission accepted the CAISO's proposal to run the AMP in two stages but rejected the CAISO's proposed interim residual unit commitment process. Because we did not approve the CAISO's interim residual unit commitment process, we directed the CAISO to apply its first stage AMP procedures at the time it runs the transmission constrained unit commitment software for the purpose of granting waivers of the must-offer obligation. The Commission made this ruling based on the CAISO's characterization that the transmission constrained unit commitment software, as part of a process of granting or denying waivers and for recalling units that were previously granted a waiver, was "basically a unit-commitment process."<sup>24</sup> In relying on the CAISO's characterization of its software, the Commission intended that the CAISO apply its first stage AMP ahead of real-time.

71. The CAISO asks that the Commission clarify that it is permitted to use its transmission constrained unit commitment software to grant must-offer waivers. The CAISO states that the transmission constrained unit commitment software was designed to "optimally commit units based on system reliability, transmission constraints, expected Load, and economics." The CAISO states that because its transmission constrained unit commitment software includes an economic factor in determining must-offer waivers, clarification is necessary because the Commission's prior orders<sup>25</sup> appear to specifically exclude economic factors as a criteria in the must-offer waiver process. The CAISO also argues that it would be appropriate to use the transmission constrained unit commitment

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<sup>23</sup>CAISO June 17, 2002 Answer to Protests, Attachment A.

<sup>24</sup>CAISO May 1, 2002 MD02 Filing, Attachment A at 109-110.

<sup>25</sup>See San Diego Gas & Electric Company v. Sellers of Sellers of Energy and Ancillary Services Into Markets Operated by the California Independent System Operator and the California Power Exchange, 99 FERC ¶ 61,158 (2002).

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software because it would be consistent with the Commission's approval of other ISO's use of economic considerations in committing units.

72. In a May 15, 2002 Order, the Commission stated that "[w]hile minimization of costs is generally desirable in the context of our Must-Offer Obligation, where the primary focus is to ensure that there is sufficient energy to meet load, the exemption procedure should not be used to minimize costs to the detriment of reliability" (emphasis added).<sup>26</sup> While this order directed the CAISO to make reliability its highest priority in determining which units to grant a waiver to, the Commission finds that once reliability has been ensured, it would be reasonable for the CAISO to use economic considerations in deciding which units will be granted must-offer waivers (i.e., granting waivers to the highest cost units). If the CAISO wishes to propose economic considerations as a secondary criteria to reliability, it may do so in a section 205 filing to amend its tariff.

#### Residual Unit Commitment and the Must-Offer Obligation

73. The CAISO requests rehearing of the Commission's rejection of its proposed interim residual unit commitment process, arguing that while this process and the must-offer obligation are complementary, they are not substitutes. The CAISO argues that "the Commission has not stated any reasons why PJM, NYISO, and NEISO should be permitted to have a unit commitment process but the CAISO should not." As we discussed in paragraphs 65 and 123 of the July 17 Order, the Commission found that the CAISO's interim residual unit commitment proposal was unnecessary because of our extension of the must-offer obligation in the United States portion of the Western Interconnection and the CAISO's development of a resource adequacy plan. We found that through these measures there exist sufficient assurances that generators will make available their uncommitted supply to the markets. In fact, the CAISO stated in its May 1, 2002 filing that "[t]he process for granting or denying waiver requests and for recalling units that were previously granted waivers is basically a residual unit commitment or RUC process." Furthermore, simply because other regions of the country have a Commission-approved unit commitment process at this time is not a reason for us to approve the CAISO's interim residual commitment process. However, the Commission encourages the CAISO, with input from stakeholders, to develop a long-term residual commitment proposal.

#### Demand-Side Participation

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<sup>26</sup>Id. at 61,630.

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74. The California State Water Project states that the CAISO's tariff must accommodate demand-based resources and hydro resources whose primary purpose is water management. It argues that the CAISO "seems to have no intention of accommodating demand-response," noting that the issue does not appear on the CAISO's draft list of open design issues. The California State Water Project states that the Commission directed the CAISO in the July 17 Order to "work with the demand response community and other stakeholders to determine how demand response programs can participate in other ancillary service markets, and file a compliance report by October 21, 2002, outlining the measures taken to improve demand response participation in all CAISO markets." Since the deadline for the CAISO's compliance filing on this issue has not passed, we find that the California State Water Project's request that the CAISO be directed to revise its tariff to incorporate demand-based measures is premature.

#### Requests for Rehearing of the July 17 Order Implementation Schedule

75. In the July 17 Order, the Commission directed the CAISO to expedite implementation of Phase II of the MD02 proposal, including the creation of an integrated day-ahead market, ancillary services reforms, and hour-ahead and real-time reforms. We also directed the CAISO to file its proposal by October 21, 2002, for implementation by January 1, 2003.

76. SoCal Edison states that the MD02 implementation schedule the Commission adopted in the July 17 Order is arbitrary and unreasonable and unsupported by most market participants. The EOB asserts that the decision to expedite Phase II of the MD02 is not supported by the record. CMUA and Palo Alto urge the Commission to reconsider its implementation time lines and to allow the technical conference process to develop implementation proposals for MD02. CMUA further states that it "recognizes that some of the market reforms set for early 2003 were requested by stakeholders and may improve market efficiencies" and supports moving hour-ahead time lines closer to real-time. CMUA states that the current schedule is problematic for the following reasons: (1) software development would precede resolution of several key policy issues, (2) the specifications for the software would be developed hurriedly and without public involvement, and (3) testing time for both the CAISO and market participants would be limited.

77. In the CAISO's request for rehearing of the Commission's decision to expedite the proposed Phase II of MD02 from May 2003 to January 1, 2003, the CAISO states that "it is neither prudent nor practical to implement the day-ahead market and related market

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reforms by January 1, 2003" and that it cannot design and test the necessary software changes by January 1, 2003. In its request for rehearing, the CAISO states that the timeline it used for planning purposes is as follows: (1) Specification Stage with a completion date of September 30, 2002; (2) Sourcing Stage to be completed by mid-October 2002; (3) Development Stage to be completed by December 31, 2002; (4) CAISO Testing to be completed by mid-February 2002; and (5) Market Testing (market simulation) to be completed by April 30, 2002, in order to implement Phase II by May 1, 2003. The CAISO adds that an expedited timeline would necessarily limit the stakeholder process concerning the design and specification of Phase II.

78. At the August 2002 Technical Conference convened in San Francisco by Commission staff, the CAISO presented to stakeholders the reasons why it believed it could not implement the Phase II elements by the Commission-directed deadline of January 1, 2003. Stakeholders found the CAISO's arguments convincing and discussed with the CAISO various options for the MD02 implementation timeline. These options included (1) collapsing Phase II into Phase III, to be implemented at the originally proposed Phase III deadline of Fall 2003, or (2) splitting Phase II through the implementation of a "Phase II Lite" by January 31, 2003, and implementing the remaining elements of Phase II concurrently with the elements of Phase III.

79. "Phase II Lite" would implement a modified day-ahead market through (1) relaxation of the balanced schedule requirement for energy and congestion management bids; (2) elimination of the market separation rule; and (3) acceleration of the hour-ahead scheduling modifications the CAISO proposed. The rest of Phase II and all of Phase III would be implemented in Fall 2003, to include the full implementation of the forward integrated markets (energy, congestion management, ancillary services, unit commitment and a full network model) along with implementation of locational marginal pricing.

80. In comments filed in response to the technical conference, IEP and Dynegy support implementing Phase II Lite, arguing that the market participants' need to receive a full analysis and disclosure regarding the reforms must be carefully balanced with the need to expeditiously establish a stable energy market. Mirant states that it recognizes the complexities associated with specifying, sourcing, developing, and testing the software necessary to accomplish Phase III and that it does not oppose a limited delay, provided that the day-ahead market is implemented no later than May 1, 2003. Mirant states that it wishes to ensure that "any such modification does not result in procrastination or intentional delay by parties who disagree with the day-ahead market proposal."

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81. CMUA, NCPA, Santa Clara, SoCal Edison, Sempra and the California State Water Project state that Phase II time lines should be extended and joined with Phase III in order to have only one major market change. Sempra asserts that it would be more beneficial to implement the integrated energy and ancillary services markets simultaneously with implementation of locational marginal pricing. While SoCal Edison favors termination of the balanced schedule requirement and market separation rule, it states that it is willing to wait until Fall 2003 to ensure successful implementation.

82. In its answer to comments filed following the August 2002 Technical Conference, the CAISO states that it believes the Phase II implementation timeline it originally proposed is preferable to either of the alternatives discussed at the Technical Conference or to the expedited timeline directed by the Commission. The CAISO states that its preference is to return the Phase II implementation deadline to May 1, 2003, and to implement Phase III separately in Fall 2003.

83. The CAISO states that from a purely technical perspective, it believes it could implement Phase II Lite, the hourly, integrated day-ahead Energy and Congestion Management market, on a zonal basis (by eliminating the market separation rule and the balanced schedule requirement) and move the hour-ahead market closer to real-time by January 31, 2003. While the CAISO indicates that it could implement a Phase II Lite, it does not advocate doing so. Despite the benefits, the CAISO states that it wants more time to identify and analyze thoroughly all of the potential adverse impacts. According to the CAISO, Phase II Lite does not resolve many of its operational concerns, and would not alleviate the concerns about having two major market design and software changes in 2003.

84. However, the CAISO also asserts that postponing the changes proposed in Phase II, in order to implement these changes simultaneously with Phase III, would not provide it with adequate tools to address operational concerns during the summer of 2003. The CAISO believes that the operational and market efficiency benefits of implementing Phase II prior to Summer 2003 outweigh the concomitant costs and challenges. Therefore, the CAISO argues for returning to its originally proposed implementation schedule: Phase II in May 2003 and Phase III in Fall 2003.

85. The Commission finds reasonable the proposal to implement "Phase II Lite," a modified day-ahead market, through the elimination of the market separation rule and the balanced schedule requirement, and the proposed modifications to the hour-ahead schedule by January 31, 2003. Implementing these features provides additional market

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efficiency. The Commission will accept the postponement of the remaining Phase II elements until implementation of Phase III in the Fall of 2003.

#### Expiration of Creditworthiness Adder

86. In its August 16, 2002 compliance filing, the CAISO submits proposed tariff revisions that reflect the CAISO's contention that the ten percent creditworthiness adder expires on September 30, 2002.<sup>27</sup> Several commenters argue that credit issues remain a legitimate concern because DWR's authority to enter into new contracts expires on December 31, 2002. Since it is uncertain that either PG&E or SoCal Edison will regain their investment grade credit ratings by that date, these parties contend that there remains a significant risk of future nonpayment of debts and that suppliers are still owed billions in past-due amounts. Other commenters argue that the creditworthiness adder is not simply a component of the mitigation plan that is set to automatically expire, as the CAISO states, but that the Commission directed it to remain until it issues an order expressly removing it.

87. The CAISO is incorrect when it argues that the ten percent credit adder has an expiration date. As stated in section 11.2.12 of the CAISO tariff concerning creditworthiness, the ten percent creditworthiness adder applies until the Commission "issues any order to the contrary." However, the Commission finds that the ten percent creditworthiness adder will be unnecessary once the MD02 redesign goes into effect. This ten percent charge was added to the market clearing price paid to generators when proxy bids were used. The market-oriented rules in the July 17 Order remove the ability of the CAISO to impose proxy prices to replace a supplier's bids. Once these market design changes are implemented, a supplier may choose to include a credit risk premium in its bid price.<sup>28</sup> We direct the CAISO to remove the ten percent creditworthiness adder effective October 31, 2002.

#### Order No. 614 Issues

88. In the ER02-1656 docket since May 1, 2002, the CAISO has filed numerous proposed tariff revisions, errata to these proposed tariff revisions, and subsequent supplemental proposed tariff revisions it intended to supersede its previously filed

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<sup>27</sup>See San Diego Gas & Electric Company, et al., 95 FERC. ¶ 61,418 (2001).

<sup>28</sup>A supplier will have to evaluate market conditions to determine if a premium adversely affects its likelihood of being dispatched.

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proposed tariff revisions. We direct the CAISO to file the following by October 23, 2002: (1) proposed tariff revisions with corrected effective dates; (2) a clean set of all of the proposed tariff revisions that the CAISO has made since May 1, 2002 in Docket No. ER02-1656, including the proposed tariff revisions it is directed to file as discussed in the body of this order; and (3) a redline version of all of the proposed tariff revisions that the CAISO has made since May 1, 2002 in Docket No. ER02-1656, including the proposed tariff revisions it is directed to file as discussed in the body of this order.<sup>29</sup> The redline version must clearly show the differences that the CAISO is proposing to its tariff from the currently effective CAISO tariff. The redline version must also be organized by subject matter.

The Commission orders:

(A) The Commission hereby denies in part and grants rehearing in part and grants clarification in part, of the July 17 Order, as discussed in the body of this order.

(B) The CAISO is directed to submit a compliance filing by October 23, 2002, as discussed in the body of this order.

(C) The Commission hereby rejects CARE's request for rehearing, as discussed in the body of this order.

By the Commission. Commissioner Massey dissenting in part with a separate statement attached.

( S E A L )

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<sup>29</sup>See Designation of Electric Rate Schedule Sheets, Order No. 614, III Stats. & Regs. Preamble § 31,096 (2000).

Magalie R. Salas,  
Secretary.

UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION

California Independent System  
Operator Corporation

Dockets Nos. ER02-1656-001  
ER02-1656-002  
ER02-1656-003  
ER02-1656-004  
ER02-1656-005  
ER02-1656-006

Investigation of Wholesale Rates of  
Public Utility Sellers of Energy and  
Ancillary Services in the Western  
Electricity Coordinating Council

Docket No. EL01-68-019

(Issued October 11, 2002)

MASSEY, Commissioner, dissenting in part:

I am writing separately to express my disagreement with the order's denial of the CPUC's proposed tariff revision that would require market participants to submit accurate information and feasible schedules to the ISO and to perform to such schedules. This strikes me as a good idea, especially in the California market given what we continue to learn about the practices of some traders during the Western electricity crisis. As the CPUC points out, the Commission staff team investigating the causes of that crisis recommends just such a prohibition. The staff team's initial report finds that such a provision would allow the Commission to sanction such behavior with refunds and thus would be an effective means to ensure conduct consistent with the public interest.<sup>30</sup> I would also note that our SMD NOPR proposes a tariff condition that would impose similar requirements.<sup>31</sup>

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Given the sound basis for such a provision, I would have given the CPUC's proposal more favorable treatment. Our order should have instructed the CAISO to file an explicit tariff provision that accomplishes the objectives of the CPUC's proposal. After a comment period, the Commission could ensure the implementation of a tariff provision that is balanced and fair to all concerned.

For these reasons, I dissent from today's order.

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<sup>30</sup>FERC Staff Initial Report, Docket No. PA02-2-000 (August 2002) at 5.

<sup>31</sup>Remedying Undue Discrimination through Open Access Transmission Service and Standard Electricity Market Design, 100 FERC ¶ 61,138 (2002) at paragraph 445.

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William L. Massey  
Commissioner