

UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION

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

San Diego Gas & Electric Company,  
Complainant,

v.

Sellers of Energy and Ancillary Services  
Into Markets Operated by the California  
Independent System Operator and the  
California Power Exchange,  
Respondents.

Docket Nos. EL00-95-058

EL00-95-062

EL00-95-053

EL00-95-031

EL01-68-012

EL01-68-013

Investigation of Practices of the California  
Independent System Operator and the  
California Power Exchange

Docket Nos. EL00-98-051

EL00-98-047

EL00-98-042

EL00-98-038

EL00-98-033

EL00-98-009

ORDER ON REHEARING, RECONSIDERATION AND CLARIFICATION

(Issued July 11, 2002)

1. On June 7, 2002, the California Independent System Operator Corporation (ISO) filed a motion for clarification, request for rehearing, and petition for reconsideration of the issue concerning the implementation of the seven percent Operating Reserve threshold for recalculation of the mitigated market clearing price (MMCP) addressed in the Commission's orders issued on May 15, 2002 in this proceeding.<sup>1</sup> Since all parties have had an opportunity

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<sup>1</sup>San Diego Gas & Electric Co., *et al.*, 99 FERC ¶ 61,158 (2002); San Diego Gas & Electric Co., *et al.*, 99 FERC ¶ 61,159 (2002); and San Diego Gas & Electric Co., *et al.*, 99 FERC ¶ 61,160 (2002).

to comment in this proceeding, the Commission intended to take action on this motion at its July 17, 2002 open meeting. However, on July 9, 2002, the ISO issued a market notice indicating that its operating reserves fell below seven percent and that it had declared a Stage 1 System Emergency. The market notice also stated that the ISO had recalculated the MMCP to \$57.14/MWh. Also on July 10, 2002, the ISO issued market notices declaring a Stage 1 System Emergency and a Stage 2 System Emergency (operating reserves below 5 percent). The market notice reset the MMCP to \$55.26/MWh. Today the Commission takes short-term action, establishing a hard cap at the previously existing MMCP (i.e., \$91.87/MWh), to assure the continuity and reliability of Western spot markets<sup>2</sup> for approximately the next twelve weeks. Although price mitigation until now has been predicated on operating reserve levels in California, the resulting price mitigation has been applied in spot markets throughout the Western Interconnection. This hard cap will remain in effect across the western states until the expiration of the Commission's current price mitigation measures on September 30, 2002.

2. We act now because we cannot expose customers in California and other Western states to the risks of a low price cap. A low energy price cap, such as the \$57.14/MWh cap set on July 9, 2002, or the \$55.26/MWh cap set on July 10, 2002, could cause severe supply disruptions. In addition, because the current regulatory requirement could cause the price cap to vary with changing conditions, we now establish this hard cap of \$91.87/MWh. That price level has helped to provide market stability for over a year. Establishment of a hard cap for the remainder of summer 2002 will terminate the ISO's ability to re-trigger recalculation of the price mitigation formula through its procurement activities.

3. Returning the price cap to \$91.87/MWh should continue to facilitate energy offers into the Western market. Over the past year that this cap has been in effect, energy prices rarely reached the \$91.87/MWh level. We do not expect this to change. Because the hard cap applies to the entire Western spot market, not just to California, there should be no reason for energy suppliers to differentiate between California and other Western spot markets.

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<sup>2</sup>In California, the spot market consists of the real-time energy and ancillary services markets operated by the ISO. In other parts of the Western Interconnection there are no organized spot markets and the Commission has considered offers to sell for a period of less than 24 hours to be spot market transactions.

4. This order is in the customers' interest because it encourages adequate supplies and promotes market stability, thereby reducing the risk of service interruptions over the summer of 2002.

5. The Commission realizes that in the long term, this cap may be inadequate to properly encourage the continued development of transmission and generation infrastructure. Other mitigation measures, including a bid cap, have been proposed to be effective October 1, 2002, as part of the ISO's comprehensive market redesign proposal in Docket No. ER02-1656-000. **The Commission will act in the near future to establish appropriate mitigation measures and encourage infrastructure development for the period beginning October 1, 2002.**

### **Background**

6. In ordering price mitigation for California and Western markets in April 2001,<sup>3</sup> as modified and expanded West-wide in June 2001,<sup>4</sup> the Commission implemented a process to prevent the exercise of market power during periods of supply shortage. In doing so, the Commission required all non-hydro generators in California not otherwise committed to bilateral sales to offer their available capacity for sale in California and Western markets.<sup>5</sup>

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<sup>3</sup>San Diego Gas & Electric Co., et al., 95 FERC ¶ 61,115 (2001) (April 26 Order).

<sup>4</sup>San Diego Gas & Electric Co., et al., 95 FERC ¶ 62,549 (2001) (June 19 Order).

<sup>5</sup>A similar requirement was imposed for non-hydro generators in the West, i.e.,

During times of reserve deficiencies, the Commission also established a formula mechanism whereby prices in the market place would be capped at a level that reflected the marginal cost of the last unit dispatched to meet the last increment load during a period of capacity deficiency.<sup>6</sup> The MMCP was to be reset each time the ISO declared a system emergency.<sup>7</sup>

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generators were required to offer any output not already scheduled (or committed for minimum operating reserves) to the spot market of their choice.

<sup>6</sup>See San Diego Gas & Electric Co., et al., 97 FERC ¶ 61,293 at 62,361, fn 7(2001) (December 19 Compliance Order).

<sup>7</sup>The Commission has subsequently approved a definition change so that the event is now referred to as a "reserve deficiency period."

7. By order issued on December 19, 2001,<sup>8</sup> the Commission required the ISO to modify its Tariff "regarding the declaration of a system emergency to reflect a definition of a Stage 1 system emergency to occur when reserves fall below 7 percent."<sup>9</sup> The Commission determined that establishing a specific reserve level for recalculating the mitigated prices was appropriate and reasonable because it enhanced market certainty during the mitigated period, and responded to market participants' concerns that the ISO previously had the ability to manipulate the declaration of a system emergency.

8. In implementing the Must-Offer Obligation, the ISO proposed certain interim operating procedures under which generators could seek and be granted a waiver of the requirement. The waiver was to be initiated by the generator, and granting or revocation of a waiver was subject to the discretion of the ISO. Although it initiated the procedures voluntarily through a market notice posted on its web site, the Commission approved the concept of the ISO's proposed waiver process in the December 19 Compliance Order. The Commission required the ISO to make a compliance filing incorporating into its tariff the provision for exempting generators from the Must-Offer Obligation. The Commission further required that "such language should include enough specificity to ensure that the procedures are non-discriminatory and transparent to market participants and the Commission."<sup>10</sup> By order issued May 15, 2002, the Commission accepted, subject to certain modifications, the ISO's proposed tariff language implementing the waiver procedures.<sup>11</sup> However, in the May 15 Order, the Commission stated that it did not specify that the exemption procedures be used to minimize costs incurred under the Must-Offer requirement. Specifically, the Commission noted that, although minimization of costs is generally desirable, the exemption procedure should not be used to minimize costs to the detriment of reliability. Consequently, the Commission specifically rejected the ISO's proposed criteria to grant exemptions to minimize start-up and minimum load costs necessary to meet the ISO's forecasted demand.

9. On rehearing of the December 19 Compliance Order, the ISO argued that the Commission's requirement to recalculate the MMCP when reserves in California fall below seven percent would result in the use of a reserve margin that did not comport with

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<sup>8</sup>San Diego Gas & Electric Co., et al., 97 FERC ¶ 61,293 (2001).

<sup>9</sup>December 19 Compliance Order at 62,364.

<sup>10</sup>December 19 Order at 62,363.

<sup>11</sup>San Diego Gas & Electric Co., et al., 99 FERC ¶ 61,158 (2002) (May 15 Order).

the Western Electric Coordinating Council (the "WECC," formerly known as Western Systems Coordinating Council (WSCC)) reserve requirements. The ISO stated that under the WECC reserve requirements, the average monthly operating reserve obligations for the year 2001 was not seven percent, but approximately 6.2 percent. The ISO therefore requested that the Commission modify its requirement of a seven percent reserve requirement trigger for recalculation of the MMCP to 6.2 percent.

10. On May 15, 2002, the Commission issued an order on rehearing<sup>12</sup> wherein the Commission, among other things, denied the ISO's request that the Commission establish a 6.2 percent reserve requirement as the trigger for recalculation of the MMCP. The Commission held that to modify the triggering mechanism to reflect actual WECC reserves of 6.2 percent for the year 2001 would not rectify any claimed unjust or unreasonable result but rather simply, at best, conform the triggering mechanism to be precisely aligned with WECC reserve requirements, which would only place form over substance. The Commission believed that the seven percent reserve amount as the triggering mechanism for recalculation of the mitigated market clearing price was appropriate because its continued use was consistent with the Commission's intent to provide market participants with as much certainty in the California markets as possible during the period when the Commission's mitigation plan was in effect.<sup>13</sup>

11. On July 9, 2002, the ISO issued a market notice stating that the operating reserves dropped below seven percent for the full operating hour from 2:00 P.M. to 3:00 P.M. In addition, the ISO declared a Stage 1 System Emergency and recalculated the MMCP to equal \$57.14/MWh to be effective for bids beginning 7:00 P.M., July 9, 2002.

12. On July 10, 2002, the ISO issued another market notice stating that the operating reserves dropped below seven percent for the full operating hour from 2:00 P.M. to 3:00 P.M. In addition, the ISO declared a Stage 1 System Emergency and recalculated the MMCP to equal \$55.26/MWh to be effective for bids beginning 7:00 P.M., July 10, 2002.

#### **Request for Rehearing and Answers**

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<sup>12</sup>San Diego Gas & Electric Co., et al., 99 FERC ¶ 61,159 (2002).

<sup>13</sup>Id., slip op. at 5.

13. On June 7, 2002, the ISO filed its motion for clarification, request for rehearing and petition for reconsideration of the May 15 Order on Rehearing and, particularly, the issue concerning the effective date on which the ISO is to implement the seven percent reserve threshold for resetting the MMCP and whether the price should be reset for short-term operating events.<sup>14</sup> Specifically, the ISO requests clarification on (1) whether temporary Operating Reserve deficiencies caused by deploying contingency reserves are eligible to trigger price mitigation and (2) whether the Commission wants the ISO to recalculate the MMCP based on the events of May 13 and June 6, 2002 during which the ISO's Operating Reserves level dropped below seven percent for at least one full clock hour on those dates.

14. Moreover, the ISO requests clarification regarding the relationship between the level of Operating Reserves it must maintain and the recalculation of the MMCP. The ISO contends that the WECC criteria do not require the ISO to procure or maintain a static level of Operating Reserves. Instead, the ISO must purchase and maintain reserves based on dynamic system conditions. The ISO states that from January 1, 2000 to the present, under the WECC's criteria, the operating reserve requirements have ranged from 6.08 percent to 9.67 percent. The ISO asserts that the variable nature of the WECC reserve requirement criteria conflicts with the use of a single number that would serve as a threshold for recalculation of the mitigated market clearing price and as Operating Reserve requirement for the ISO. The ISO asserts, as an example, that if the Commission mandated seven percent as the level of Operating Reserves the ISO must maintain, the result would be periods in which the ISO was out of compliance with WECC requirements by buying too few reserves, as well as other periods in which the ISO would be forced into over-procuring Operating Reserves, such as during off-peak hours. The ISO contends that if the Commission set 6 percent as the threshold for resetting the MMCP, this number would allow the ISO to continue to purchase Operating Reserves based on variable system conditions in accordance with the WECC criteria and Good Utility Practice.

15. On June 14, 2002, the Public Utilities Commission of the State of California (CPUC) and The Generators<sup>15</sup> filed answers to the ISO's motion. On June 17 and 18, 2002, the Independent Energy Producers Association (IEP) and the California Electricity Oversight Board (CEOB), respectively, filed late answers. On June 24, 2002, Southern California Edison filed a late answer to the ISO's motion as well as in response to the answers filed by Generators and IEP. The Electric Power Supply Association (EPSA) and the Western Power Trading Forum (WPTF) filed late comments on June 21, 2002.

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<sup>14</sup>The ISO notes in a footnote that it may seek clarification of additional issues concerning the May 15 Order on Rehearing at a later date.

<sup>15</sup>The Generators consist of The Williams Companies, Inc., Dynegy Power Marketing, Inc. and Mirant Americas Energy Marketing and Mirant California, LLC.

16. CPUC supports the ISO's compromise proposal to trigger recalculation of the MMCP when Operating Reserves fall below 6 percent. The CPUC nonetheless expressed concern regarding the ISO's failure to act on the two occasions on which Operating Reserves fell below seven percent.

17. The Generators urge the Commission to: (1) deny the ISO's motion for clarification; (2) reconsider the Commission's seven percent operating reserve mitigation trigger; and (3) reinstate the winter West-wide mitigation methodology. Generators, while supporting the ISO's decision not to reset the mitigated price under the current circumstances, are concerned with giving the ISO greater discretion to reset prices.<sup>16</sup> Therefore, Generators request that the Commission reinstate the winter West-wide mitigation methodology, which set a price floor of \$108/MWh, until the expiration of the Commission's price mitigation measures on September 30, 2002.<sup>17</sup>

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<sup>16</sup>Specifically, Generators contend that the ISO seeks new authority by: (1) seeking to clarify that prices are only reset if it anticipates the emergency by notifying market participants; (2) seeking to clarify that price mitigation only takes place when operating reserves fall as a result of demand outstripping supply; (3) wishing to base the trigger for resetting the mitigation price to the WECC operating reserve criteria, and (4) suggesting that prices should not be reset due to the fact that it never declared a System Emergency.

<sup>17</sup>Attached to the Generators' answer is their Emergency Motion to Retain Winter West-Wide Price Mitigation Methodology filed on May 15, 2002 in Docket No. EL01-68-012. Generators request that the Emergency Motion be considered concurrently with the ISO's request in this proceeding.

18. IEP is concerned that resetting the MMCP will threaten electric system reliability in the Western Interconnection. IEP contends that if setting of the price cap is triggered by failure to meet the seven percent Operating Reserve threshold, then the price cap will fall to levels that will make it difficult to attract electricity supplies at precisely the time when supplies are critical to meet summer peak demands. IEP urges the Commission to grant the relief sought in the Emergency Motion to Retain Winter West-Wide Price Mitigation Methodology filed on May 17, 2002 in Docket No. EL01-68.

19. CEOB agrees with the ISO that under certain circumstances temporary Operating Reserve deficiencies caused by deploying contingency reserves should not trigger recalculation of the MMCP. Consequently, CEOB believes that some accommodation must be adopted that precludes recalculation of the MMCP following the ISO's normal deployment and restoration of Operating Reserves. CEOB asserts, however, that ISO's motion fails to explicitly define the conditions limiting the proposed exemption for "short-term operating events." CEOB contends that this omission must be addressed. CEOB proposes that the Commission modify the trigger for resetting the MMCP by focusing on the functionality of the ISO's market for ancillary services. Specifically, CEOB proposes that any Operating Reserve deficiency caused by deployment after an operating event that cannot be restored based on self-provided resources and bids for ancillary services in the next open hour-ahead market following the event better reflects capacity scarcity that should trigger recalculation of the MMCP. CEOB contends that such a bright-line rule would better satisfy the Commission's concern that market participants have the opportunity to adjust their behavior as well as protect California consumers from market manipulation through physical withholding. CEOB proposes that this rule apply prospectively.

20. Additionally, CEOB agrees with the ISO that if an objective level of Operating Reserves is to serve as the trigger mechanism, then the appropriate threshold is 6 percent, rather than seven percent. CEOB contends that such modification will permit the ISO to avoid procurement of unnecessary and excessive Operating Reserves at the expense of California consumers without impairing existing reliability requirements.

21. SCE contends that the Commission should affirm the ISO's decision to not reset the MMCP based on the events of May 13 and June 6, 2002. Additionally, SCE asserts that the Commission should adopt more reasonable criteria for resetting the MMCP. Specifically, SCE sees no impediment in adopting a floating threshold – the WECC's actual minimum reliable criteria reserve requirement. Moreover, SCE asserts that the ISO should have the discretion not to trigger the MMCP resetting for a limited time period due to a true system emergency.<sup>18</sup>

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<sup>18</sup>Specifically, SCE contends that if a generator trip causes reserves to dip below the threshold, the ISO should have one hour to rectify the problem. If an unplanned transmission line outage causes the reserve deficiency, the ISO should have two hours to remedy the deficiency before resetting the MMCP.

## **Discussion**

### **A. Procedural Matters**

22. As noted above, late answers were filed by IEP, CEOB and SCE. Late comments were filed by EPSA and WPTF. The Commission will allow the late answers and comments filed in this proceeding because they contain information that has aided the Commission in understanding the issues.

### **B. Removal of Operating Reserve Threshold**

23. The Commission clarifies that on the occasions between December 20, 2001 and July 8, 2002, when the ISO's operating reserves fell below seven percent a recalculation of the MMCP was impermissible because all of the conditions required to trigger recalculation had not been satisfied. In particular, no declaration of a system emergency or reserve deficiency period was cited by the ISO in its motion. The declaration of an emergency is a necessary prerequisite to trigger recalculation. The declaration of a system emergency/reserve deficiency is part of the Commission-approved ISO Tariff language concerning price mitigation.<sup>19</sup> Thus, even if all other conditions had been satisfied, the ISO's failure to declare a system emergency prohibited recalculation of price mitigation, in particular, after the fact. Furthermore, because this condition necessary to trigger recalculation was not met, we need not address whether other prerequisites were present on the occasions the ISO believed recalculation of price mitigation was required.

24. The Commission established seven percent as a reasonable, transparent, not-to-be-manipulated threshold that, if broken, would denote a capacity shortage in the California market that would adversely affect competitiveness of price in that market. Without a formal notice to the market that the operating reserves are at, or approaching, a critically low level, the market is not provided an opportunity to respond with additional supply (or demand reduction) and cure the shortage within the established time period (*i.e.*, one full clock hour after the hour in which operating reserves fall below the threshold) before price mitigation is recalculated. In addition, to permit the ISO to declare a system emergency after the fact, would contravene the Commission's intent that market participants have the ability to respond to situations that could potentially trigger a recalculation of price mitigation applicable to them. In this regard, we note that the ISO did not declare a system emergency between December 21, 2001 and July 8, 2002. In fact, until July 9, 2002, the ISO had not declared a system emergency since the Commission implemented West-wide mitigation measures.

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<sup>19</sup>See ISO Tariff section 2.5.23.3.1.1.

25. In light of our decision to implement a hard cap prospectively from the date of this order, as discussed below, it is unnecessary to address other aspects of the ISO's clarification request, e.g., the appropriate level of operating reserves that must occur as one of the conditions necessary to trigger a recalculation. For the same reason, we deny the Generators' emergency motion to retain the winter West-wide price mitigation methodology.

26. The Commission intended the mitigation to provide an economic trigger, i.e., a transparent mechanism not subject to manipulation and with opportunity for market response with which to evaluate adequacy of supply. The ISO's actions, on the other hand, have sought only to achieve a minimum reliability cost, i.e., minimizing cost by procuring only the amount of operating reserves necessary to satisfy minimum reliability requirements at any moment. The Commission has stated that while minimizing of costs is generally desirable in the context of its 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.<sup>20</sup>

27. However, by its own admission, the ISO has not attempted to procure operating reserves at the seven percent level established by the Commission at the commencement of its price mitigation plan. Instead the ISO has procured operating reserves that are targeted to satisfy WECC MORC reliability requirements, which as noted above averaged less than seven percent during 2001. This practice effectively provides the ISO with the ability at times to reduce its operating reserve levels (to below the Commission required seven percent threshold yet above the applicable MORC requirement) and thus trigger recalculation of price mitigation. Furthermore, when coupled with the waiver process the Commission approved for use by the ISO in conjunction with the Must-Offer Obligation, the ISO's ongoing procurement practice can result in units being granted waivers merely to minimize procurement costs, at the potential detriment of reliability. If a system contingency occurs and the ISO must deploy its available operating reserves, units that could have been available, and avoided an operating reserve shortage in the first instance, cannot return to service quickly enough (within one full clock hour of the hour that the contingency occurs) once the ISO revokes waivers. We find that the waiver procedures used by the ISO provide additional ability to manipulate the trigger for recalculation of price mitigation. Thus, as the Commission's purpose in establishing a specific percentage is to enhance market certainty and to avoid potential manipulation of price mitigation, we believe that purpose will now be better

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<sup>20</sup>San Diego Gas & Electric Co., et al., 99 FERC ¶ 61,158, slip op. at 7.

achieved by replacing the existing price mitigation formula with a hard price cap at \$91.87/Mwh, the level of price mitigation that existed prior to the July 9, 2002 events.

28. A cap at this level maintains the same Commission objectives of transparency and certainty of a number known readily by market participants, and ensures that it is not subject to potential manipulation by either the ISO or generators. Use of this number together with the Must-Offer Obligation (and waiver procedures) also will ensure that the maximum supply of operating reserves are available for use by the ISO while avoiding concerns that any difference between reliability needs and cost procurement goals may unexpectedly trigger recalculation of price mitigation under conditions where supplies are otherwise adequate. Therefore, we will impose a cap of \$91.87/Mwh for spot markets operated in California and the West effective the day following the date of this order and continuing through September 30, 2002, the end of our currently effective West-wide price mitigation period.

The Commission orders:

(A) The ISO's and Generators' motions for clarification are granted in part and denied in part, as discussed in the body of this order.

(B) The ISO's request for rehearing and petition for reconsideration are denied, and the Generators' petition for reconsideration is denied, as discussed in the body of this order.

(C) The Generators' emergency motion to retain the Winter West-Wide Price Mitigation Methodology is denied, as discussed in the body of this order.

(D) The Commission establishes as of the first trading hour on the day following the date this order issues, an MMCP of \$91.87/MWh as a hard price cap which will remain in effect until the expiration of the Commission's price mitigation measures on the last trading hour on September 30, 2002.

(E) Within 15 days of the date this order issues, the ISO must make a compliance filing to include the hard cap of \$91.87/MWh in its tariff.

By the Commission.

( S E A L )

Magalie R. Salas,  
Secretary.