UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

California Electricity Oversight Board	)	Docket No. EL00-____-000
	)	
Complainant	)	
v.	)	
	)	
All Sellers[1] of Energy and Ancillary Services	)	
Into the Energy and Ancillary	)	
Services Markets Operated by the	)	
California Independent System	)	
Operator Corporation and the	)	
California Power Exchange;	)	
	)	
All Scheduling Coordinators[2] Acting	)	
On behalf of the Above Sellers;	)	
	)	
California Independent System	)	
Operator Corporation; and	)	
	)	
California Power Exchange Corporation	)	
	)	
Respondents	)	

COMPLAINT

1. Pursuant to Section 206 of the Federal Power Act, 16 U.S.C. § 824e, and Rule 206 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.206,[3] the California Electricity California Board (California Board) hereby

---

[1] The California Board's complaint does not necessarily seek a change in the rate schedules of FERC-jurisdictional sellers. Because all sellers—whether FERC jurisdictional or not—that elect to sell through the CAISO and CalPX markets could be affected by the outcome of this proceeding, the California Board names all sellers as real parties in interest.

[2] Because Scheduling Coordinators—whether FERC jurisdictional or not—could be affected by the outcome of this proceeding, the California Board names all Scheduling Coordinators as real parties in interest.

[3] The California Board has not used any of the Commission's alternative dispute resolutions services (ADR) described in Rule 206(b)(9) and believes that the nature of the complaint is such that ADR will not be useful.

petitions the Commission to rectify unjust and unreasonable prices stemming from the wholesale markets for energy and ancillary services operated by the California Independent System Operator (CAISO) and the California Power Exchange (CalPX). The California Board requests that the Commission find that wholesale markets in California are not currently workably competitive and take such actions as are necessary to ensure that wholesale prices for energy and ancillary services are just and reasonable. In addition to any other interim or longer-term relief the Commission directs, the California Board requests that the Commission affirmatively direct the California Independent System Operator Corporation (CAISO) to maintain bid caps at a level *no greater than* $250 per MWh for energy, $250 per MW for ancillary services products, and $100 for Replacement Reserves, until the Commission has completed its investigation of California markets, has implemented any necessary reforms and has determined that the energy and ancillary services markets operated by the CAISO and the CalPX are workably competitive in all hours or has otherwise put in place revisions to the market and pricing structure to ensure that wholesale prices will be just and reasonable during all hours. The California Board recognizes that this complaint reiterates issues that have already been placed before the Commission by earlier complaint[4] and the Commission's own action. The California Board therefore requests that this complaint be consolidated with Commission Dockets EL00-95-000 and EL00-98-000.

[4] On August 2, 2000, San Diego Gas & Electric Company (SDG&E) filed a complaint against all sellers of energy and ancillary services into California's markets. This matter is pending in Docket No. EL00-95-000.

This Complaint is based on the conclusion, following preliminary investigation, that respondent Sellers[5] and Scheduling Coordinators,[6] individually and collectively, have market power and exercise market power commanding prices far above rates that would be determined by cost-of-service ratemaking or prices voluntarily agreed to by buyers and sellers in a workably competitive market. This circumstance is reflected most acutely in the CAISO's real-time markets because the CAISO has no choice but to buy energy in real-time to meet load in order to maintain reliability and to keep the lights on. Resultant market based rates during significant and recurring periods in California are neither just nor reasonable as required by Sections 205(a) and 206(a) of the Federal Power Act. 18 U.S.C. § 824d(a) and 824e(a). Thus, the California Board petitions the Commission to direct the implementation of any and all actions necessary to ensure that California's wholesale rates are just and reasonable.[7]

2. The California Board was enacted as part of California's electric industry restructuring law. The California Board's statutory responsibilities include oversight of the CAISO, the CalPX, the energy and ancillary services markets

---

[5] The term "Sellers" includes all entities with market-based rate authority for sales in California, including but not limited to: power marketers, traditional investor-owned utilities and new generation owners. The term is also intended to include non-FERC jurisdictional sellers, including but not limited to: federal power administrations, publicly owned utilities (including agencies of the State of California and agencies of other states) local agencies (both in-state and out-of-state) and sellers located beyond the borders of the United States.

[6] The California Board believes that Scheduling Coordinators are particularly well positioned to take advantage of gaming opportunities in the CalPX and CAISO's markets because they often bid on behalf of more than one seller. In effect, the benefits of divestiture—reducing concentration of ownership—can be undermined if a single Scheduling Coordinator is able to bid on behalf of multiple suppliers.

[7] The level of bid caps proposed in this Complaint will not mitigate market power. The bid caps will merely limit the damage caused by the exercise of market power until the market problems are solved.

operated by the CAISO and the CalPX, and the reliability of the CAISO controlled-grid.

3. The principal office of the California Board is located at 770 L Street, Suite 1250, Sacramento, California, 95814.

4. All pleadings, orders, correspondence and communications regarding this Complaint should be directed to the following persons:

Erik Saltmarsh
California Electricity Oversight Board
770 L Street, Suite 1250
Sacramento, CA 95814
Tel: (916) 322-8601
Fax: (916) 322-8591

Sidney Mannheim Jubien
California Electricity Oversight Board
770 L Street, Suite 1250
Sacramento, CA 95814
Tel: (916) 322-8601
Fax: (916) 322-8591

5. The energy and ancillary services markets in California are not now workably competitive. Sellers of energy and ancillary services, and Scheduling Coordinators that schedule and/or submit bids on behalf of Sellers, have market power and exercise market power. This occurs with regularity during periods of high demand. At some times, respondent Sellers and Scheduling Coordinators know with substantial certainty that the CAISO will be accepting all bids, regardless of their level. At other times, a number of Sellers and Scheduling coordinators know that they control enough capacity in relation to the system demand at that time and the resulting margin of residual supply that they have a high likelihood of being able to successfully set the price. Under both of these sets of circumstances, resulting prices cease to bear any relationship to the cost of supplying the service and instead reflect bids made with the knowledge that supply will have to be taken regardless of the price at which it is offered. Many sellers appear to define their opportunity cost in all the

California markets at these times as the product of the cap price and the very high likelihood that they (alone or in coincidence with the similar actions by others,) could successfully set that price in at least one market. At these times, the cap level becomes a very obtainable target price, and in many respects a default price. In the absence of a bid cap, prices in uncompetitive hours would be constrained (if at all) only by Sellers' and Scheduling Coordinators' voluntary restraint. Once demand reaches or exceeds approximately 33,000 MW, Sellers and/or Scheduling Coordinators have the ability, and do, exercise market power. It is not competitive forces but rather the CAISO's bid cap that most significantly moderates price run up during these periods.

6. Because, during periods of high-demand, Sellers and Scheduling Coordinators know with practical certainty that they will be needed, they have substantially diminished incentive to offer service in the forward markets, such as the CalPX, at a price lower than what they expect they could secure if they waited for the later CAISO markets. When the CAISO's bid cap was set at $750, a Seller could earn, and for many hours did earn, up to $1500 per MWh because Sellers could earn up to $750 per MW for sales of Replacement Reserves and $750 per MWh for energy. Prices were at or near the $750 caps in the CAISO's real-time market on May 21 and 22 for several hours.[8] Prices were also high in the CalPX market, reaching $400 for operating day of May 23, and remained high—between $100 and $200—during the May 21-24 period. During two high temperature periods in June—June

[8] Pricing information in this paragraph comes from the CAISO's August 10, 2000 "Report on California Energy Market Issues and Performance: May-June, 2000" prepared by the CAISO's Department of Market Analysis.

13-15, June 19-22 and June 26-30—prices in the CAISO's real-time energy and Replacement Reserves markets were at or near the $750 cap for many hours. CalPX market clearing prices were also extremely high during roughly the same time-period, averaging $381 during peak hours in the June 26-30 period, reaching or exceeding $749 level for seven hours on both June 28 and 29, and reaching $1099—a record—for five hours on June 28. In response to these price spikes, the CAISO reduced the bid cap for energy and ancillary services to $500 and implemented a separate bid cap of $100 for Replacement Reserves. On August 1, 2000, the CAISO further reduced the bid cap to $250 in the energy and ancillary services markets. As discussed further below, the high prices experienced in May and June are greatly above the production cost of the highest cost units participating in California's markets and cannot be attributed to market clearing prices being set by different units, with much higher operating costs, than was the case in periods with more moderate prices. The CAISO has estimated that the total market costs for June, 2000, are as much as $3.6 billion based on day-ahead, day-of and real time prices for energy and ancillary services in the CalPX and CAISO markets.[9] This compares with total costs of in the range of eight billion dollars for all of 1999.

[9] Cost information comes from the CAISO's August 10, 2000 "Report on California Energy Market Issues and Performance: May-June, 2000" prepared by the CAISO's Department of Market Analysis. The $3.6 billion figure does not take into account bi-lateral purchases and block forward purchases, which would reduce the $3.6 billion figure to the extend that purchases were below the market clearing prices. Nor does the figure take into account that some portion of the $3.6 billion represents "sales" of generation owned by investor-owned utilities to itself.

7. The CAISO current authority to cap bids appears to expire as of November 15, 2000.[10] Partially in response to requests of California Governor Gray Davis and the California Board, the CAISO will file for an extension of its bid capping authority as soon as possible. The California Board nevertheless urges the Commission to recognize that the bid cap is a necessary and not merely allowable damage mitigation measure until measures are implemented that allow the Commission to find affirmatively that prices are just and reasonable. Accordingly, the California Board petitions the Commission to exercise its responsiblities under Sections 205 and 206 of the Federal Power Act to ensure just and reasonable rates by directing a cap be maintained at not more than $250 for bids into the CAISO's energy and ancillary services markets, and not more than $100 for bids into the CAISO's Replacement Reserves market (which are the bid caps currently in effect pursuant to the CAISO's August 1, 2000 resolution).

8. In response to requests of California Governor Gray Davis and the California Board, the CalPX is seeking similar capping authority in the CalPX day-ahead and day-of markets. Pursuant to the CalPX governing board resolution dated August 16, 2000, the CalPX proposes an initial cap for both the day-ahead and day-of markets of $350 per MWh. The CalPX governing board selected the $350 figure to correspond to the opportunity cost of participating in the CAISO's markets based on

[10] In *California Independent System Operator Corp.*, 89 FERC ¶ 61,169 (1999) the Commission stated that the CAISO had discretion to determine the price at which it would purchase energy and ancillary services. The Commission reasoned that if these prices were not adequate to attract sufficient supplies, the CAISO would be compelled to raise its maximum purchase price. This reasoning suggests that the CAISO could continue to name its maximum purchase price beyond the November 15, 2000 date without seeking an extension of its capping authority. As stated in the body of the complaint, however, the California Board believes that the Commission must, in order to ensure just and reasonable rates, impose a bid cap that is not subject to CAISO discretion until the market power problems have been solved.

the current CAISO bid caps of $250 and $100 as described above.[11] The California Board agrees that any CalPX cap should be set in a way to avoid creating, or exacerbating, Sellers' incentives to withhold energy from the forward markets in favor of the CAISO's markets. This would occur if the CalPX were to set a cap below the opportunity cost of the CAISO markets. Sellers should not have an expectancy of earning more in the CAISO's markets than in the CalPX.[12]

9. Caps of $250, in the CAISO's markets, and $350 in the CalPX's markets, are sufficiently high to allow generators to recover their variable costs and earn significant additional revenues. As noted in the complaint filed by San Diego Gas & Electric Company (SDG&E) pending in docket No. EL00-95-000, assuming current natural gas prices of approximately $4.62 MMBTU, and the operating costs of an inefficient gas-fired unit with a heat rate of 20,000 BTU/kWh and a five percent capacity factor, the hourly operating costs would be $147/MWh.

10. Although some costs of production, particularly that of natural gas fuel, have seen recent increases, the magnitude of wholesale price escalation in California cannot be attributed to higher costs of providing the service. The current situation

[11] Because the CAISO has reduced the bid cap on Replacement Reserves to $100, a realistic opportunity cost of participating in the CAISO's markets stands at $350. Because the cap on ancillary services is $250, the maximum amount a seller could earn would be $500--$250 per MW for sales of ancillary services and $250 for sales of energy, if prices for both products clear at the cap, and if the CAISO calls on the seller of ancillary services to provide energy in real-time. Because this should rarely occur, $350 is a more realistic measure of the CAISO's opportunity costs. Moreover, the CAISO has also changed its Replacement Reserves buying practices by drastically reducing the amount purchased. By diminishing the likelihood of earning $100 per MW for selling Replacement Reserves and $250 per WMh for real-time energy, sellers will be less inclined to withhold energy from the CalPX. This should serve to keep prices in the CalPX below $250 per MWh a large part of the time.

[12] The total opportunity cost in the CAISO's markets serves as the *de facto* cap for the CalPX market-clearing price. Buyers are unwilling to pay more in the CalPX than the cost of purchasing through the CAISO. So long as the CAISO's ancillary services purchase practices are prudent, the likelihood of a seller's earning the capped price for both ancillary services and energy should be low, thereby helping to

reflects an imbalance in market forces. A characteristic often identified as supporting the fairness of prices in a market is the presence of “willing buyers and sellers” who voluntarily agree to make a trade at a given price. Electricity is an instantaneous product for which actual production must constantly be kept in equilibrium with consumption on a moment-by-moment basis; for which demand is largely inelastic (especially in real time due to limitations on metering); for which the largest purchasers have an obligation to meet the demand of load; and for which the CAISO has an obligation to purchase whatever is necessary to make up any shortfall in real time. These factors together leave producers aware that any load need that has not been successfully forward matched to generation will have to be served by obligatory purchases in real time at whatever price is necessary. Sellers collectively recognize that if any significant amount of forecast demand remains unmatched to generation as real time approaches, and there is not a significant surplus of generation, a very high price can be commanded at that time. This is factored into what Sellers view as the opportunity cost of selling forward, thus raising the price at which producers are willing to sell their output in forward markets. Sellers observe that by selling forward (even by a day), they give up the chance to be paid a high price if they wait until real time. Consequently, forward offer prices have risen because the expectancy of being able to command a high real time price acts as a backstop to the prospect that no buyer accepts the high offer price in a forward market.

Other factors have compounded the basic weakness in the competitiveness of the market. As currently operated, the California market is unusual in the proportion

---

encourage forward energy sales in the CalPX. The California Board believes that cap levels must be of energy and ancillary services needed to meet load in any particular day whose price is not determined until the day before and the day-of the need for service. This amplifies both the ability of sellers to leverage prices during high demand times of the year and the effect on consumers when wholesale market prices are pressed upward. In PJM, for example, only 15% of energy to serve total load was actually purchased in the spot markets in 1999.[13] In the current California environment by contrast, over 50 % of California's purchases through the CalPX and CAISO are subject to net payment of the spot market price.[14] Further, the presently defined role of "Scheduling Coordinators" may provide a structural mechanism that facilitates the combination of generation resources in the market into larger market share segments than would otherwise be the case. Current regulatory barriers to price-responsive demand reductions limit one potential mechanism to moderate the vulnerability of the market at peak times.[15] Concerns over the absence demand-responsiveness have been identified in every report prepared by the CAISO's Market Surveillance Committee and the CalPX's Market Monitoring Committee. In addition, the CAISO's Replacement Reserve penalty (implemented in August 1999) and the CAISO's recently implemented (January 2000) Out-of Market (OOM) payment mechanism each appear to have had aggravating effects on some market problems.[16] The

---

balanced so as to avoid incentives to withhold capacity or load from the CalPX market.

[13] "PJM Interconnection: State of the Market Report 1999" at 2 prepared by the Market Monitoring Unit of the PJM Interconnection, L.L.C. June 2000.

[14] The California Public Utilities Commission (CPUC) has recently increased the extent to which the state's investor-owned utilities may engage in forward purchases.

[15] Both the CAISO and the CPUC have implemented load participation programs where by load can be paid the market-clearing price for not consuming. The practical size of these load programs remains very small.

[16] The most recent statement of MSC concerns is set forth in a July 6, 2000 paper by MSC Chairman Professor Frank Wolak titled: "Recent Events in the California Electricity Industry and the Level of Price Caps on the ISO's Energy and Ancillary Services Markets." In this paper, Professor Wolak restates the

Replacement Reserve penalty has the effect of increasing seller's incentive to withhold energy from rewarding them by increasing their opportunity to sell two products in the CAISO's market at a potential total price of $1500 (when bid caps were set at $750) and penalizing load unscheduled load by charging the costs or Replacement Reserves entirely to load.[17] This rule, which was intended to reduce the "under-scheduling problem" by creating an incentive for load to schedule in the CalPX to avoid the penalty of paying the price for energy plus Replacement reserves, had the opposite result. Even less supply/demand was scheduled in the CalPX and load bore 100% of the cost. Although the CAISO has modified its practices by procuring reduced amounts of Replacement Reserves, the penalty for "under-scheduling" should not fall disproportionately on load. The OOM pricing problem is familiar. Any time a seller has the opportunity of earning an out-of-market price in excess of the prevailing (or anticipated) prices available from one of the competitive markets, the seller has an incentive to withhold supply from the competitive markets in order to be paid the out-of-market price. This problem was present in the earlier forms of the Reliability Must-Run (RMR) contracts, which have been renegotiated in the protracted RMR proceedings of which the Commission is familiar. Unfortunately, OOM reintroduces a form of the problem the RMR redesign effort sought to eliminate. Recently, the CAISO's Department of Market Analysis has

MSC's March 9, 2000 conclusion that the markets for summer 1998 and 1999 work not workably competitive and that the MSC was unable to conclude that the summer 2000 would be workably competitive. Indeed, Professor Wolak concluding in his July 6, 2000 paper that recent events demonstrate the CAISO's markets are not workably competitive.

[17] Prior to introduction of the Replacement Reserve policy, the CAISO purchased only a small amount of capacity, approximately 400 MW per day. During June, the CAISO purchased 6,000 MW per day. This bonanza virtually guaranteed the opportunity for sellers to earn $1500 per MWh for many hours during those days.

released a Special Report titled "Report on California Energy Market Issues and Performance: May-June, 2000." This report acknowledges these problems, and others, and frankly states that the exercise of market power has "inflated wholesale prices well above levels that would have resulted under competitive market conditions."

WHEREFORE, the California Board requests that the Commission find that California's wholesale markets are not workably competitive and take such action as necessary to ensure that California's wholesale rates are just and reasonable and to direct the interim maintenance of bid caps as described herein until demonstrable evidence exists that California's wholesale market are workably competitive and that rates are just and reasonable.

Dated: August 28, 2000   Respectfully submitted,

Erik N. Saltmarsh
Counsel
California Electricity Oversight Board
770 L Street, Suite 1250
Sacramento, CA 95814
(916) 322-8601

CERTIFICATE OF SERVICE

I hereby certify that I have served the foregoing document upon each person designated on the service lists compiled by the Secretary on or before August 29, 2000 in the following dockets, which related to the CAISO's bid-capping authority: ER98-2843, ER99-4462 and EL00-91.

Dated at Sacramento, California, this 28th day August 2000.

Sidney Mannheim Jubien
Electricity Oversight Board
770 L Street, Suite 1250
Sacramento, CA 95814
(916) 322-8601

NOTICE SUITABLE FOR PUBLICATION IN THE FEDERAL REGISTER

UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

California Electricity Oversight Board	)	Docket No. EL00-____-000
	)	
Complainant	)	
v.	)	
	)	
All Sellers of Energy and Ancillary Services Into the Energy and Ancillary Services Markets Operated by the California Independent System Operator Corporation and the California Power Exchange;	)	
	)	
All Scheduling Coordinators Acting On behalf of the Above Sellers;	)	
	)	
California Independent System Operator Corporation; and	)	
	)	
California Power Exchange Corporation	)	
	)	
Respondents	)	

NOTICE OF COMPLAINT

(August ___, 2000)

Please take notice that on August ____, 2000, the California Electricity Oversight Board (California Board) tendered for filing a Complaint alleging that California's wholesale markets as administered by the California Independent System Operator Corporation and the California Power Exchange Corporation are not workably competitive and that wholesale rates are not just and reasonable. The California Board urges the Commission to take such action to ensure that California's wholesale rates are just and reasonable and to maintain bid caps of nor more than $250 per MW for ancillary services, $250 per MWh for energy and $100 per MW for replacement reserve capacity until demonstrable evidence exists that California's wholesale market are workably competitive and that wholesale rates are just and reasonable.

Any person desiring to be heard or protest such filing should file a motion to intervene or protest with the Federal Energy Regulatory Commission, 888 First Street, N.E., Washington, D.C. 20426, in accordance with Rules 211 and 214 of the Commission's Rules of Practice and Procedures (18 C.F.R. §§ 385.211 and 385.214). All such motions or protests should be filed on or before _________. Protests will be considered by the Commission in determining the appropriate action to be taken, but will not serve to make protestants parties to the proceeding. Any person wishing to become a party must file a motion to intervene. Copies of this filing are on file with the Commission and are available for public inspection in the Public Reference Room. This filing may also be viewed on the Internet at http://www.ferc.fed.us/online/rims.htm (call 202-208-222 for assistance). Answers to the complaint shall also be due on or before August ___, 2000.

David P. Boegers
Secretary