A Comprehensive Market Power Mitigation Plan for the California Electricity Market Frank A. Wolak, Chairman Market Surveillance Committee (MSC) of the California Independent System Operator (ISO) April 24, 2001 In its December 15, 2000 Report of the California electricity industry, the Federal Energy Regulatory Commission (FERC) stated that electricity prices in California during the summer and autumn of 2000 were unjust and unreasonable and reflected the exercise of significant market power. On January 1, 2001, all of the FERC remedies for these unjust and reasonable rates were implemented, with the major remedy being the "soft-cap" on the spot electricity prices. The enormous run-up in wholesale electricity and natural gas prices since this soft-cap was implemented provide irrefutable evidence that these remedies failed to produce just and reasonable prices for wholesale electricity in California. Moreover, a very strong case can be made that these remedies in fact only made the unilateral exercise of market power easier and significantly more profitable. These events and the March 9, 2001 FERC staff report and recommendations on mitigating market power in the California electricity market demonstrate that FERC is either unable or unwilling to fulfill its statutory obligation under the Federal Power Act and mitigate the significant market power exercised in the California electricity market.

Now, more than ever, it is necessary for California to speak with one voice in demanding that FERC implement a single comprehensive market power mitigation plan that will protect California consumers during the next two years. Rather than asking FERC to devise a solution, the California delegation should formulate and endorse as widely as possible a solution of its own that will best solve the current market power problems. Give FERC no discretion to modify this plan, but instead simply ask it to make a yes or no decision on its implementation. California should require that if FERC's decision is no, it should explain in detail why this solution is not feasible within its statutory mandate and why this plan will not mitigate the market power that currently exists in California. This memo outlines a comprehensive plan for mitigating the significant market power that currently exists in California. This plan also minimizes the likelihood of rolling blackouts during the summer of 2001. The plan is discussed in detail in the Market Surveillance Committee Reports submitted to the FERC on December 1, 2000, February 6, 2001, and March 22, 2001.

To strengthen the resolve of FERC to implement this plan, California should also take advantage of the one piece of good luck currently at its disposal. All of the generators selling into California are subject to renewal of their market-based pricing authority before the summer of 2001. In order for a market participant to receive market-based pricing authority, it must demonstrate that it is does not possess market power, meaning that it does not have the ability to raise the market price through its own actions. As market outcomes since June 2000 have clearly demonstrated and as was rigorously documented in the recent report by the Department of Market Analysis of the California ISO, all of these market participants possess and exercise significant market power. For this reason, the State of California should use all legal avenues available to it oppose the renewal of market-based pricing authority for any of these market participants unless this market power mitigation plan is implemented.

To deal with the reduced amount of available energy in the West for import to California during the summer of 2001 the following market power mitigation plan is necessary.

(1) California generators and entities (besides the three California investor-owned utilities) that sell to any California purchaser could continue to be eligible for market-based rates only if they offer 75% their expected annual sales in the form of two-year forward contracts at prices set at the perfectly competitive benchmark price. This is the market price that would prevail under the no market power standard explicitly stated in FERC's competitive market requirement for allowing a market participant to substitute market prices for cost-based prices. Each market participant is required to sell its lowest production cost power in these forward contracts, because they have the opportunity to sell any remaining more expensive energy at market-based rates. The details of how each participant's contract quantity and price are set is outlined in the December 1, 2000

MSC Report. The February 6, 2001 MSC Report computed a just and reasonable price of \$54/MWh for these forward contracts for this two-year period using futures market gas prices at that time.

- (2) Any market participant that does not offer these two-year forward contracts would lose its market-based rate authority and be subject to cost-of-service rates for all of its sales of energy and ancillary services into the California market and surrounding markets in the Western US for at least this two-year period.
- (3) Once these forward contracts are in place, all price caps and bid caps (especially the current \$150/MWh soft cap) on the ISO's real time energy and ancillary services markets would be removed. All market participants still eligible for market-based prices will not be subject to bid caps or price caps in any of the ISO markets. This will maximize the likelihood that sufficient generation capacity in the western US will be available to serve California's demand during all hours of the summers of 2001 and 2002.
- (4) All market participants with capacity located in California, including those subject to cost-based rates, would be subject to the following availability standard. All generators would be required to submit on an annual basis planned outage schedules. These would be reviewed by and approved by the California ISO. At all times besides those previously scheduled with the ISO, all generation units would be required to submit standing bids into the ISO's real-time energy market for the difference between the unit's nameplate capacity and its final energy schedule at whatever price the owner chooses. If a unit owner's bid is selected and it is unable to respond to the ISO's dispatch instruction, either with its own unit or some other unit in the same local area, the unit owner will be required to purchase this quantity of energy from the real-time energy market at the current market price. This availability standard effectively assigns the risk of forced outages to the unit owner, rather than the ISO.
- (5) With 75% percent of the expected sales of all market participants locked-in for the next to years at a price in the neighborhood of \$60/MWh and 100% of the expected production from the assets of the three investor-owned utilities available at production cost, California will have wholesale price certainly for between 80 and 85 percent of expected electricity consumption over the next two years at a wholesale price of less than \$65/MWh.
- California can allow prices in a significantly smaller spot market to rise to the point necessary to (6) attract sufficient supply into state to avoid rolling blackouts and to provide the necessary signals to final demand to cut back during high-priced periods. In order to provide signals to final demand to cut back during these high-priced periods, California should give all customer classes the right to purchase 85% of their 2000 demand each month or hour (depending on the time interval at which that customer's load is metered) at the 2000 retail price. Any additional purchases in that month or hour would be made that the wholesale price for that month or hour (depending on the time interval at which that customer's load is metered) plus the associated transmission, distribution and supply charges. Any reduction in consumption below this 85% of 2000 demand baseline would be refunded at wholesale price for that month or hour plus the associated transmission, distribution and supply charges. Given the existence of the forward contracts at the price discussed above and the supply of the output of the investor-owned utilities at production costs, this plan should not require the state to spend any tax revenues purchasing power for California consumers.