

Appendix B

Updates to the ISO's 60-day Comments on Market Performance for Incorporation into September 14 Quarterly Report to FERC

Overview

On August 21, 2001, the ISO submitted extensive comments to the Commission¹ on the performance of its markets since implementation of the Commission's June 19 Order. Those comments covered the summer period through July 31, 2001. This document provides a brief update on market performance that includes August 2001 and, for certain data, the first ten days of September. In short, the basic findings and trends reported in the ISO's 60-Day Comments have not changed through the month of August. Market prices have remained moderate and stable. Though it is difficult to discern how much of this favorable trend can be attributed to the June 19 Mitigation Plan versus other favorable market conditions, the ISO believes the June 19 Mitigation Plan has had a significant and effective influence in stabilizing the market and mitigating market power. Despite these very positive market trends, the ISO is deeply concerned about the persistent and worsening trend of market participants not complying with dispatch instructions. As reported below, the level of non-compliance with dispatch instructions is unacceptably high and volatile, thus creating ongoing operational problems for the ISO.

Real Time Energy Costs

Figure 1 updates Figure 3 from the 60-Day Comments by including data for the month of August. Real-time energy costs are calculated based on incremental dispatches during peak hours and represents the combined costs of purchases from the ISO's imbalance energy market (the BEEP stack, including as-bid purchases above the MCP) and real-time out-of-market purchases (i.e., made any time after the close of the hour-ahead market). The competitive base line prices are based on a market simulation model developed by the Department of Market Analysis that calculates estimated competitive baseline prices based on supply and demand conditions, spot market gas prices, unit heat rates, and other factors that could be expected to effect system marginal costs under competitive market conditions.²

The August data clearly reinforce the ISO's earlier observation that since the June 19 mitigation provisions were implemented, the ISO's real-time energy costs have on average been roughly

¹ See the ISO's "Comments of the California Independent System Operator Corporation Concerning the Order on Rehearing of Monitoring and Mitigation Plan for the California Wholesale Electric Markets, Establishing West-Wide Mitigation, and Establishing Settlement Conference" filed with the Commission on August 20, 2001 and appended as Appendix A in this filing.

² A complete description of the methodology used by the ISO Department of Market Analysis to calculate competitive baseline energy prices can be found in "Further Analyses of the Exercise and Cost Impacts of Market Power in California's Wholesale Energy Market", March 2001, Prepared by Dr. Eric Hildebrandt, Department of Market Analysis. Submitted as Attachment B to the ISO's Comments on FERC Staff's Recommendations on Prospective Market Monitoring and Mitigation for the California Wholesale Market, March 22, 2001.

commensurate with estimated competitive levels. Specifically, for the month of August the real-time cost has been on average very close to the competitive base line price, as it had been during the June 21 to July 31 period the ISO reported on in the 60-Day Comments. However, as the ISO indicated in its 60-Day Comments, it is difficult to say how much of this change can be attributed to the June 19 mitigation provisions versus a variety of other factors that have helped to improve the overall competitiveness of the market (i.e. increased supply, lower gas prices, long term contracting, conservation, mild temperatures etc.). Moreover, as the ISO noted in its 60-Day Comments and reported to the Commission in weekly confidential reports, despite the moderation in prices, the ISO continues to see certain suppliers submitting energy bids well in excess of their proxy bid cost. Fortunately, because of reduced real-time demand and an ample amount of lower priced bids, the ISO has rarely had to call on such high bids.

Figure 1: Comparison of Average Real-time Energy Costs to Competitive Baseline Prices for Peak Hours

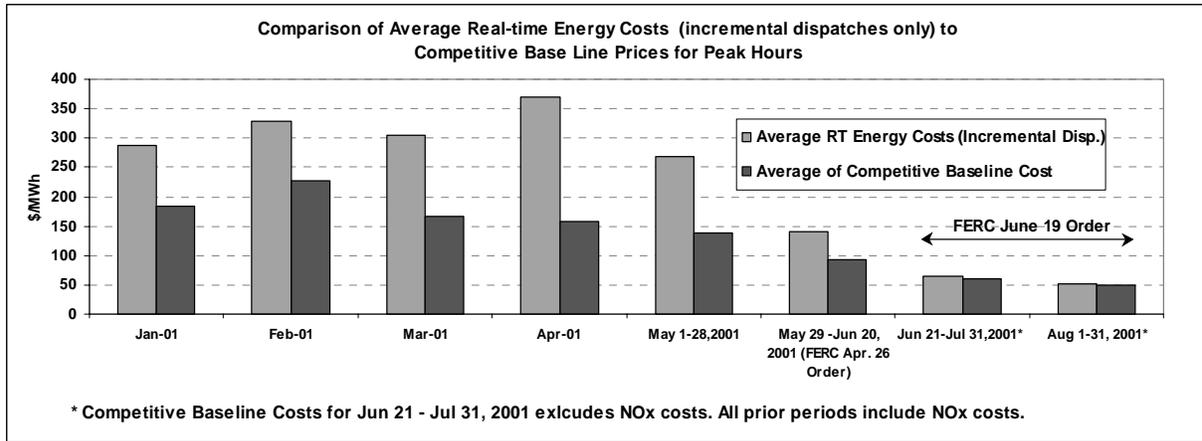
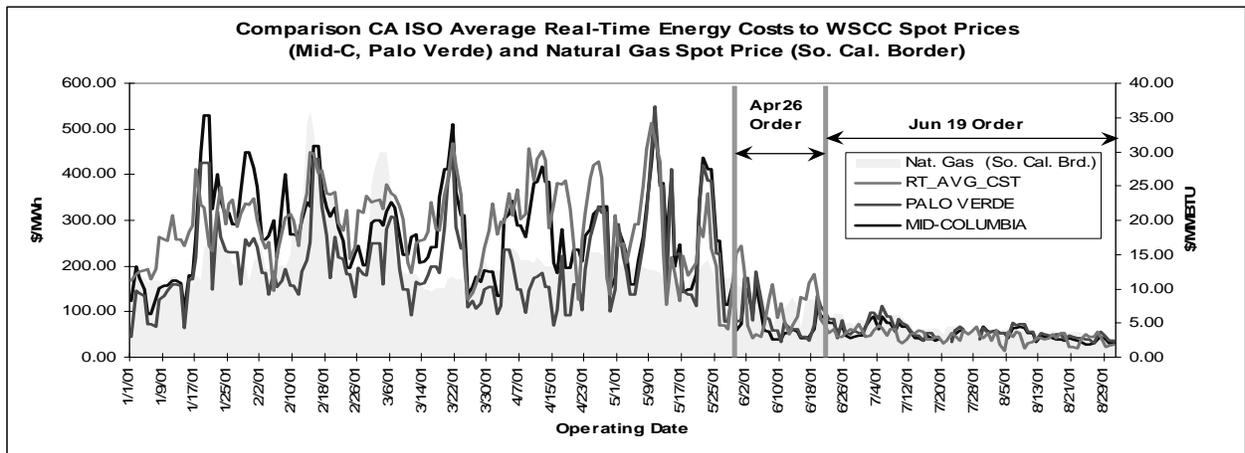


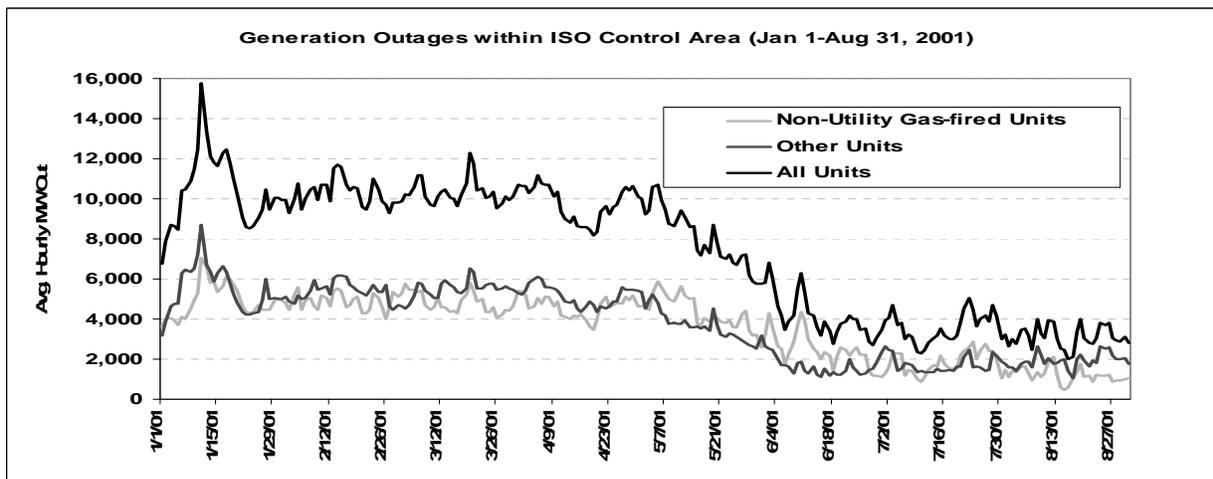
Figure 2 compares daily average energy costs in the ISO's real-time market for peak hours to average peak energy prices for the Palo Verde and Mid-Columbia trading hubs for the period of 1/01/01 through 8/31/01. The findings indicate that the reduction and stabilization of western energy prices observed in June through July 2001 continued through the month of August. Figure 2 also illustrates that natural gas spot prices in southern California remain stable and low through the month of August.

Figure 2: Comparison of CA ISO Average Energy Costs to WSCC Spot Prices and Natural Gas Spot Prices



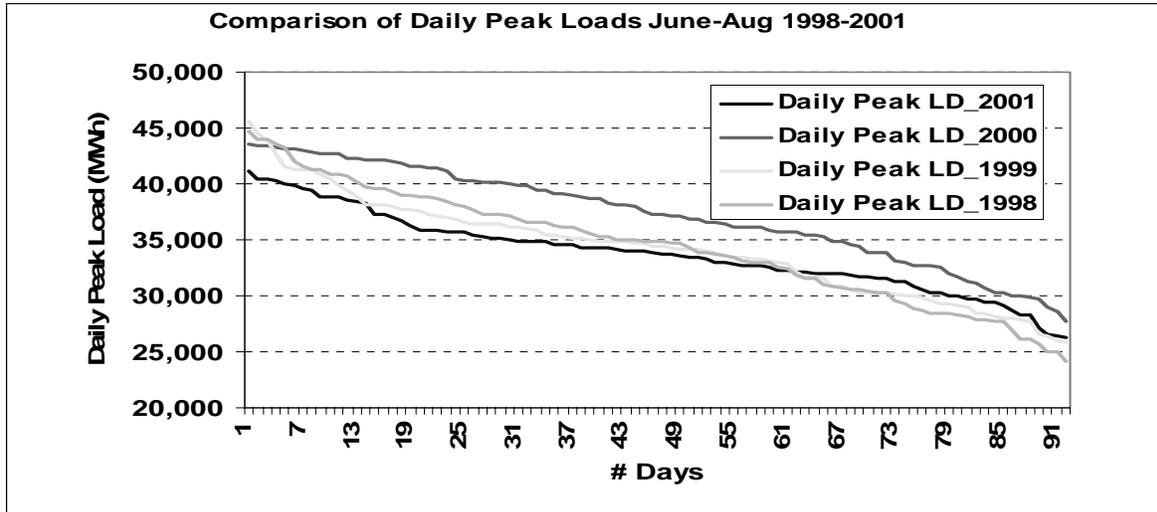
The favorable supply and demand conditions reported in the ISO's 60-Day Comments for June-July, 2001 continued to persist through the month of August. Generation outages remained moderate (Figure 3) and mild temperatures and conservation efforts continued through August (Figure 4).

Figure 3: Generation Outages



As shown in Figure 4, for the summer period of June-August, daily peak loads were the lowest of the past four year periods. For summer 2001, the ISO only experienced 6 days where system daily peak hourly loads were greater than 40,000 MWh (compared to 30 days in summer 2000) and only 29 days where daily peak hourly loads exceeded 35,000 (compared to 65 days in summer 2000).

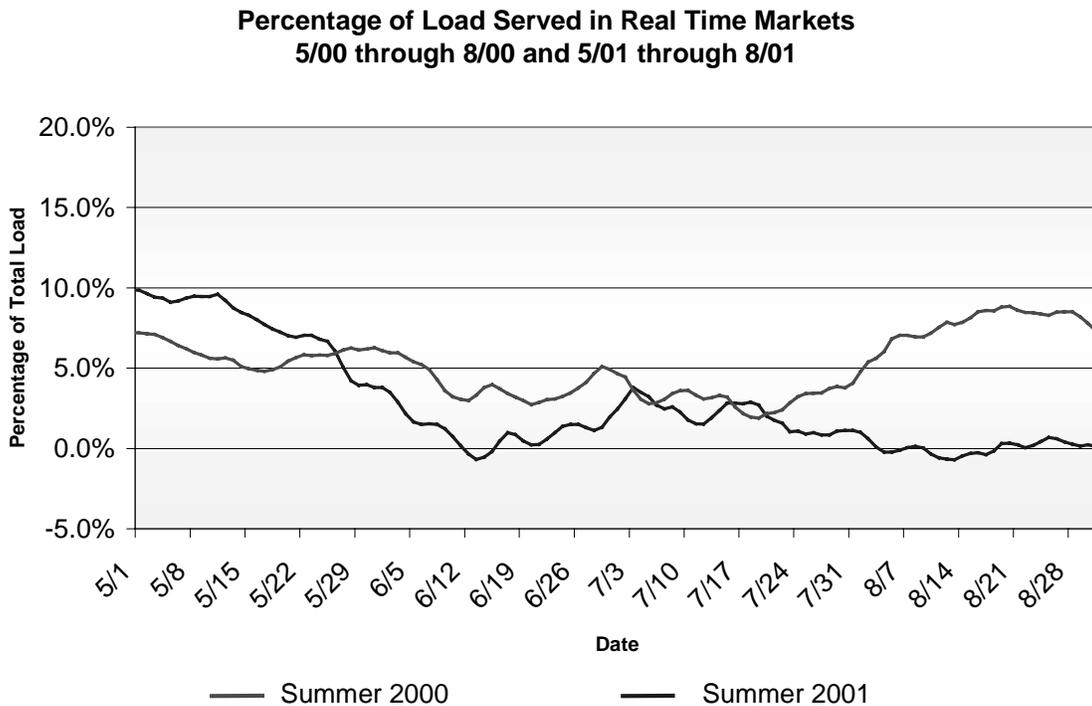
Figure 4: Comparison of Daily Peak Load June-Aug 1998-2001



Volume Served Through the ISO Real Time Market

Figure 5 updates Figure 9 of the 60-Day Comments by incorporating data through the end of August. This figure shows the percentage of system load that was not scheduled in the ISO forward markets and was instead procured in real time (i.e., total system load minus final hour-ahead schedules). This figure demonstrates the dramatic impact that forward energy purchases by the State (CERS) have had on the ISO's real-time energy needs. In particular, two observations may be made. First, the persistent under-scheduling that had plagued the ISO's real-time operations in August 2000 has virtually disappeared in August 2001. Second, in 2001 the ISO has often had the problem of excess forward energy being scheduled, which then had to be accommodated by issuing real-time DEC instructions.

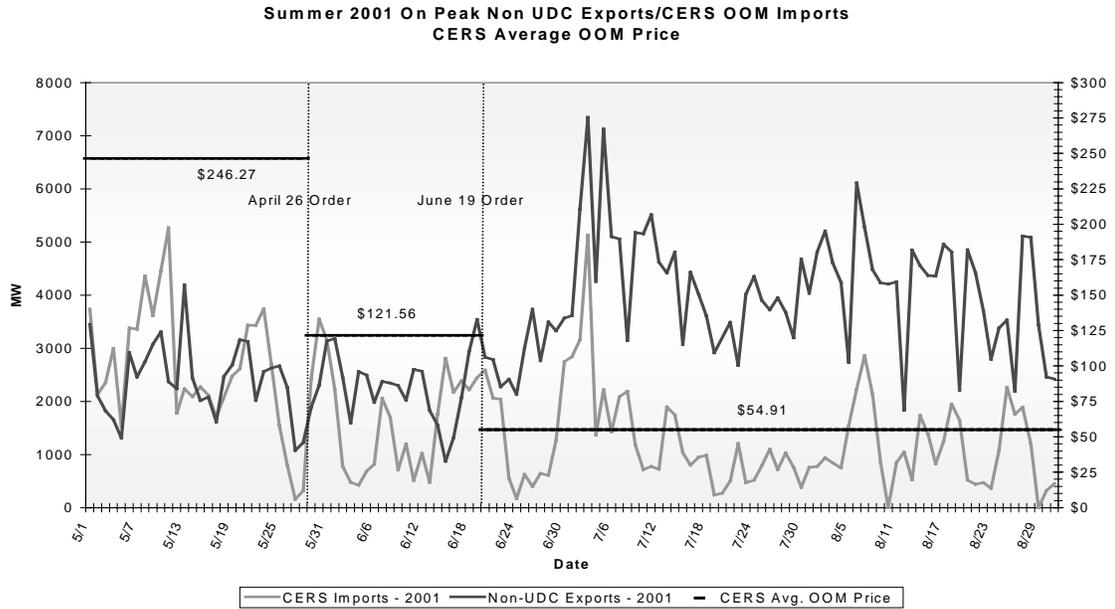
Figure 5: Percent of Load Served in the ISO's Real-time Market



Evidence of Megawatt Laundering

Figure 6 updates Figure 10 of the 60-Day Comments by including data through the end of August. This figure shows that, following the unusual behavior during the extreme heat wave of early July, the quantities of non-UDC exports and real-time CERS imports have remained roughly consistent through most of July and August. More importantly, there does not appear to be any clear evidence of megawatt laundering, which would, if it occurred, rely for its profitability on high-priced CERS imports in real time. As the figure indicates, the average price for real-time CERS imports was under \$55 per MWh for the entire period June 21 through August 31.

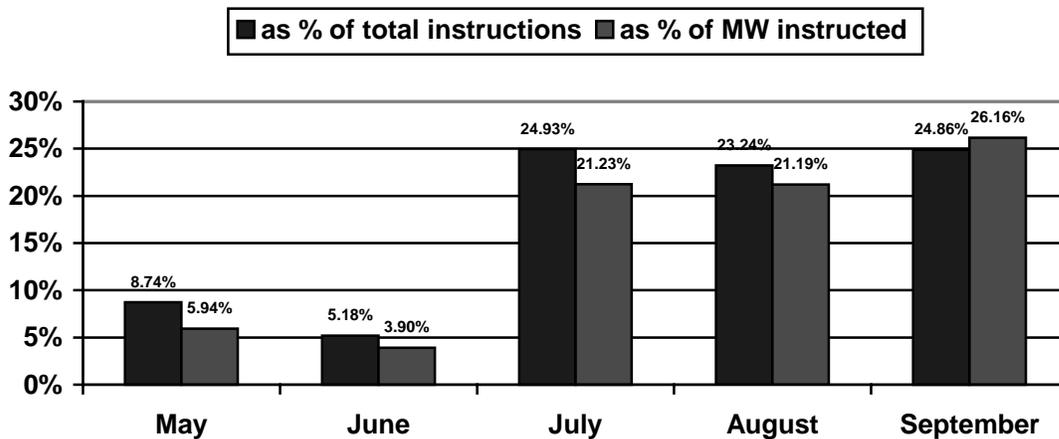
Figure 6: Comparison of Non-UDC Exports to CERS OOM Imports



Compliance with Dispatch Instructions

Figure 7 updates Figure 13 from the 60-Day Comments by including the full month of August (the 60-Day Comments included only August 1-8) and September 1-10. Moreover, this figure is entirely revised from the earlier version in that it includes all instructions (participating loads and imports) in addition to in-state generation that was in the 60-day report. The most significant observation is that the level of non-compliance has not improved in August, and in fact appears to have increased in the first 10 days of September. This rate of non-compliance is approximately the same measured by either the number of Dispatch Instructions issued or the total MW represented by those instructions.

Figure 7: Compliance with ISO Dispatch Instructions



Another assessment of non-compliance is shown in Figure 8, which updates Figure 14 from the 60-Day Comments by incorporating all dates through September 10. Figure 8 shows that the daily level of non-compliance with Dispatch Instructions as measured in MW is high and volatile, and continues to present ongoing operational problems for the ISO. Moreover, within each day there is a high level of hour-to-hour volatility in the level of compliance. This problem makes real-time operations even more difficult because the dispatchers can not accurately determine the correct amount of MW to dispatch in order to meet a given level of system imbalance.

Figure 8: Declined Bids June 1 – Sep 10, 2001

