SWIDLER BERLIN LLP

The Washington Harbour
3000 K Street, N.W., Suite 300
Washington, D.C. 20007-5116
Phone 202.424.7500
Fax 202.424.7647

www.swidlaw.com

Michael Kunselman
Phone 202.295.8465
Fax 202.424.7643
mnkunselman@swidlaw.com

April 15, 2005

The Honorable Magalie Roman Salas
Secretary
Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, D.C. 20426

Re: First Weekly DMA Report on Market Impacts of Amendment No. 66
Docket No. ER05-718

Dear Secretary Salas:

Pursuant to Paragraph 21 of the Commission's "Order on Tariff Filing" issued in this docket on April 7, 2005, 111 FERC ¶ 61,008 (2005), the California Independent System Operator Corporation ("ISO") respectfully submits an original and fourteen copies of the first weekly Report on Market Impacts of Amendment 66, as prepared by the ISO's Department of Market Analysis. Two additional copies of this filing are enclosed to be date-stamped and returned to our messenger. If there are any questions concerning this filing please contact the undersigned.

Respectfully Submitted,

Michael Kunselman

Counsel for the California Independent
System Operator Corporation

Certificate of Service

I hereby certify that I have this day served a copy of this document upon all parties listed on the official service list compiled by the Secretary in the above-captioned proceedings, in accordance with the requirements of Rule 2010 of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2010).

Dated this 15th day of April, 2005 at Folsom in the State of California.

_____

Sidney Davies
(916) 608-7144

CALIFORNIA ISO

Report on Market Impacts of Amendment 66: "As-Bid" Settlement of Pre-dispatched Inter-tie Bids for Real Time Energy

Prepared by the Department of Market Analysis
California Independent System Operator
April 15, 2005

Background

In Amendment No. 66, the California Independent System Operator ("CAISO") proposed to modify the CAISO Tariff so that bids for incremental and decremental energy on inter-ties with neighboring control areas that are pre-dispatched by the CAISO are settled under a "pay as bid" rule. With this modification, bids would be paid (or pay the CAISO) their original bid price, rather than the "bid or better" in effect since October 1, 2004. [1]

In its April 7, 2005 order on Amendment No. 66, the Federal Regulatory Energy Commission ("Commission") approved the "pay as bid" settlement rule effective as of March 24 until the earlier of September 30, 2005 or the effective date of a long-term solution filed and accepted by the Commission.[2] The Commission also ordered the CAISO's Department of Market Analysis ("DMA") to file weekly reports on the market effects of these interim tariff provisions, including "the liquidity and sufficiency of bids at the interties," until the earlier of the effective date of a future tariff change implementing a long-term solution or September 30, 2005.

The following report is submitted by DMA in response to the above directive in the Commission's Order on Amendment 66. As the first weekly report submitted following approval of Amendment 66, the report focuses on the changes in dispatches and costs in the first two weeks since the March 24 effective date of Amendment 66, compared to the months and weeks leading up to the change from the "bid or better" to the "as bid" settlement rules on March 24th. Future weekly reports will include additional analysis and indicators of the market impacts of Amendment 66. For example, this first report contains limited analysis of the "the liquidity and sufficiency of bids at the interties", as DMA will be monitoring and analyzing these issues over a longer-term basis, and will include the results of this analysis in future weekly reports.

Initial Report Findings

Costs Impacts of Amendment No. 66

Attachment A to this report provides a detailed explanation of the methodology used to calculate costs included in this report.

Figures 1 and 2 summarize total energy pre-dispatched by the CAISO for market clearing versus ISO system demand for energy, and the costs associated with overlapping (or off-setting) incremental ("inc") and decremental ("dec") bids dispatched to clear the market. Table 1 summarizes these same data by week since implementation of Phase 1B on October 1, 2004. This data shows the following with respect to the effectiveness of the Amendment 66 interim solution:

- The amount of "overlapping" inc and dec bids cleared by the CAISO dropped dramatically as soon as the CAISO moved from the "bid or better" settlement rule to the "as bid"

[1] Under the "bid or better" settlement rule, inter-tie bids for incremental energy pre-dispatched by the CAISO prior to each operating hour were paid the higher of their bid price or the *ex post* real time market clearing price. Inter-tie bids for decemental energy pre-dispatched by the CAISO paid the lower of their bid price or the *ex post* real time market clearing price. See Amendment No. 66 Transmittal Letter.

[2] *California Independent System Operator Corporation*, 111 FERC ¶ 61,008 (2005) ("Amendment 66 Order").

settlement rule. In the two weeks since the effective date of Amendment 66, an average of only about 19 MW of off-setting inc and dec bids have been pre-dispatched each hour, as opposed to an average of about 600 MW per hour in the month prior to implementation of Amendment 66. It should be noted that all of this decrease is due to changes in bidding behavior in response to moving from the "bid or better" to the "as-bid" settlement rule, since the CAISO continues to clear all "overlapping" inc and dec bids. Specifically, under the "as-bid" settlement rule, buyers and seller are forced to bid prices that they are actually willing to pay/sell for energy, and, as a result, the amount of "price overlap" between dec and inc bids has been nearly eliminated.

- Costs the CAISO associated with "clearing the market" by dispatching all "overlapping" inc and dec bids (beyond CAISO system demand) have been essentially eliminated under the "as bid settlement rule", since revenues received by the CAISO for dec bids pre-dispatched to clear the market meet or exceed payments for off-setting inc bids pre-dispatched to clear the market.[3] As noted in the CAISO Amendment 66 tariff filing, the costs attributable to clearing of overlapping (or off-setting) inc and dec bids averaged about $400,000 per day in the month prior to Amendment 66. Thus, savings from Amendment 66 may be estimated at about $400,000 per day.[4]

Figure 3 summarizes the total cost of net incremental energy purchased by the CAISO for CAISO system needs (*i.e*. net energy pre-dispatched when the sum of all pre-dispatched bids was positive, indicating the CAISO was a net purchaser of imbalance energy in the pre-dispatch process). Figure 4 summarizes the total cost of net decremental energy purchased by the CAISO for CAISO system needs (*i.e*. net energy pre-dispatched when the sum of all pre-dispatched bids was negative, indicating the CAISO was a net seller of imbalance energy in the pre-dispatch process). In order to compare the net price paid and received for net incremental and decremental energy by the CAISO from inter-tie bids to prices outside and inside of the CAISO system, the value of the incremental and decremental energy pre-dispatched by the CAISO was also calculated based on a bilateral price index for hourly spot market transactions (Powerdex Weekly Subscription Service) and at the CAISO's real time ex-post prices.

[3] After the change to the "as-bid" settlement rule, minor net costs from market clearing result from the fact that the methodology used to calculate net costs based on total overall average price for all inc and dec energy pre-dispatched in hour. Thus, when incremental energy exceeds decremental energy pre-dispatched, the weighted average price per MWh of incremental energy may exceed the weighted average price of all decremental bids pre-dispatched. In practice, market clearing would be revenue neutral or produce small positive net revenue. However, due to the very small volume of off-setting inc and dec bids pre-dispatched under the "as-bid" rule (i.e. 19 MW per our) any net revenues from clearing the market on an "as-bid" basis would be minimal.

[4] The bulk of these savings would reduce charges to Load Serving Entities within the ISO, since uplift charges are allocated to Scheduling Coordinators based on a combination of negative uninstructed deviations and total load.

Figure 1. Average Hourly Volume of Bids Pre-Dispatched by the CAISO and Average Daily Costs to ISO of Market Clearing

(By Week Since Phase1B Implementation)

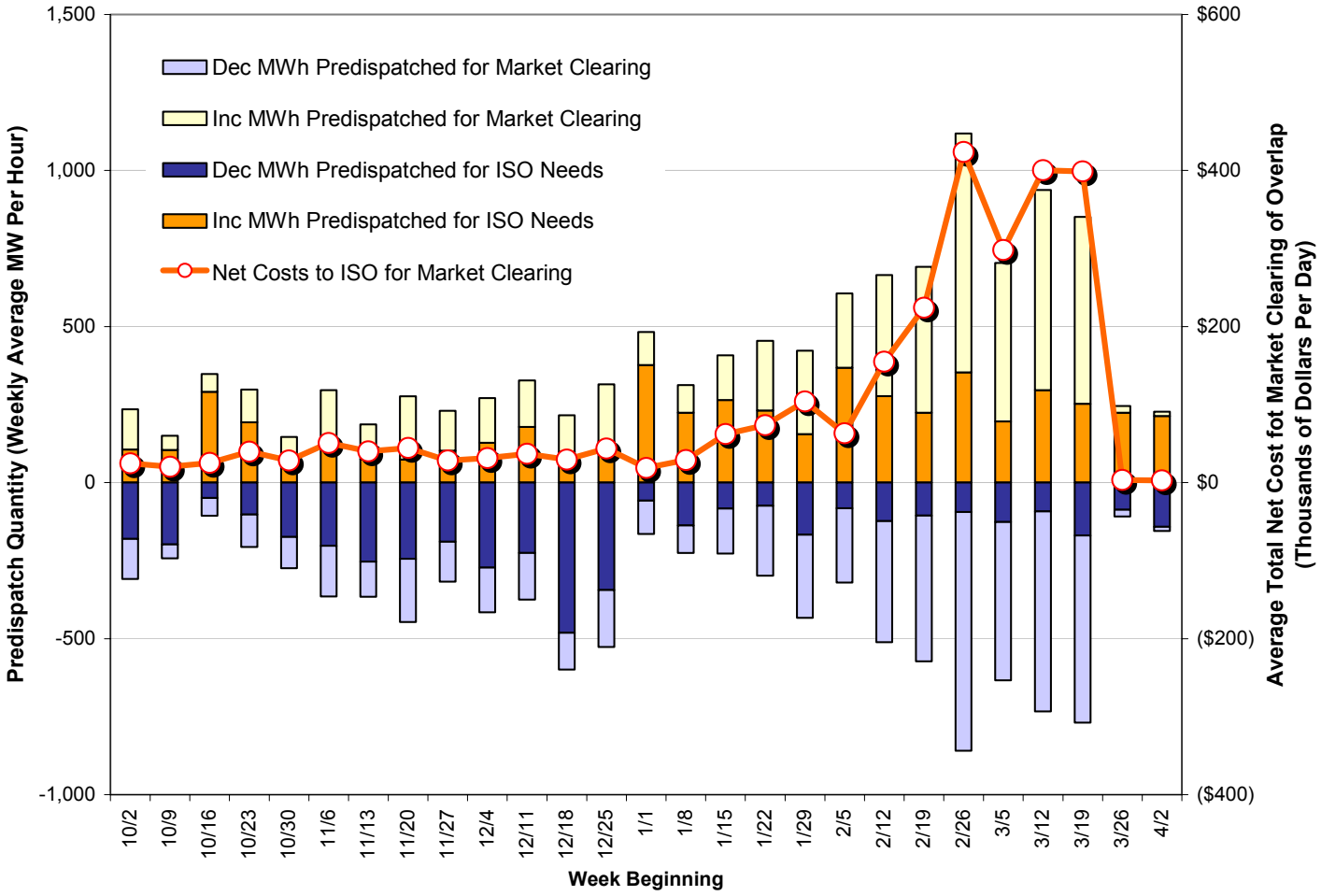


Table 1. Weekly Summary Data (Before and After Amendment 66)

Week Beginning	Market Clearing (Average MW/hour) Inc	Dec	Net ISO Imbalance Energy (Average MW/hour) Inc	Dec	Average Daily Net Costs (Thousands per Day) Market Clearing	Net ISO Energy
10/2/2004	129	-129	106	-180	$25	-$69
10/9/2004	45	-45	105	-197	$20	$14
10/16/2004	57	-57	291	-49	$25	$326
10/23/2004	104	-104	194	-102	$40	$177
10/30/2004	100	-100	46	-174	$28	-$132
11/6/2004	162	-162	135	-202	$51	-$17
11/13/2004	112	-112	75	-253	$40	-$130
11/20/2004	202	-202	74	-244	$44	-$128
11/27/2004	128	-128	102	-189	$28	-$52
12/4/2004	143	-143	128	-273	$32	-$127
12/11/2004	149	-149	179	-225	$37	$4
12/18/2004	117	-117	99	-481	$30	-$332
12/25/2004	182	-182	133	-344	$44	-$166
1/1/2005	107	-107	376	-58	$19	$467
1/8/2005	88	-88	224	-137	$29	$162
1/15/2005	144	-144	265	-83	$62	$261
1/22/2005	224	-224	231	-74	$74	$198
1/29/2005	267	-267	156	-167	$104	$40
2/5/2005	238	-238	368	-82	$63	$385
2/12/2005	388	-388	278	-123	$155	$246
2/19/2005	468	-468	224	-105	$224	$216
2/26/2005	765	-765	353	-94	$424	$419
3/5/2005	508	-508	196	-126	$298	$143
3/12/2005	641	-641	297	-92	$400	$375
3/19/2005*	599	-599	253	-169	$399	$190
Change from "Bid or Better" to "As-Bid" Settlement						
3/26/2005	**22**	**-22**	**224**	**-87**	**$3**	**$211**
4/2/2005	**14**	**-14**	**214**	**-141**	**$3**	**$159**
4/9/2005**	**9**	**-9**	**87**	**-161**	**$0**	**-$21**

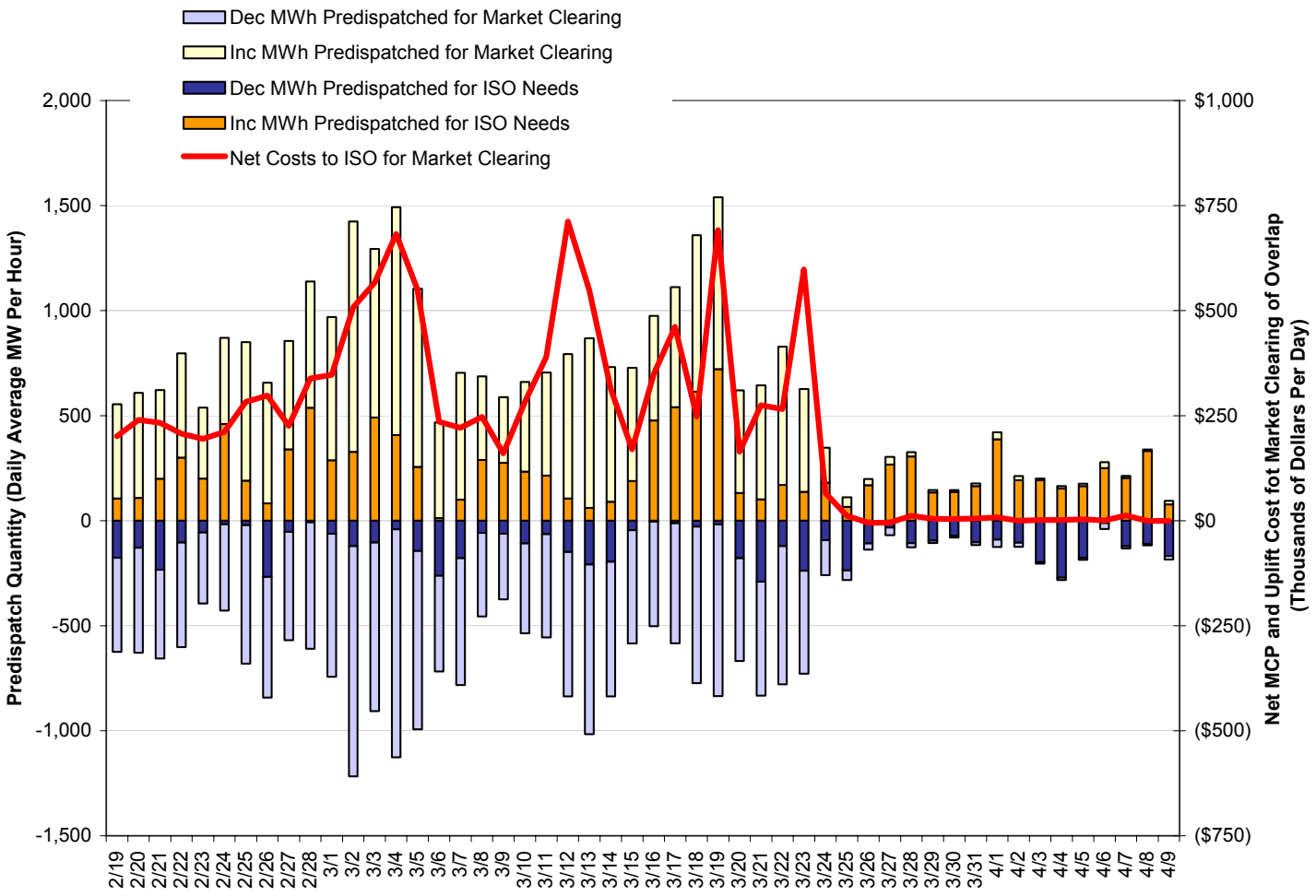
* Average for week beginning 3/19/05 includes date for 3/19 – 3/23 only. Data for 3/24 – 3/25 excluded from weekly average since these two days Amendment 66 was in effect.

** Includes data for 4/9 and 4/10 only due to lag in availability of post-operational data for analysis and reporting.

NOTE: After change to "as-bid" settlement rule, minor net costs from market clearing result from fact that methodology used to calculate net costs based on overall average price for inc and dec dispatched in hour. In practice, market clearing would be revenue neutral or produce small positive net revenue.

Figure 2. Average Hourly Volume of Bids Pre-Dispatched by the CAISO and Average Daily Costs to CAISO of Market Clearing

(By Day, Starting One Month Prior to Amendment 66)



As shown in Figure 3 and 4, in the weeks leading up to the approval of Amendment 66, the costs associated with clearing the market significantly increased the degree to which the CAISO "bought high and sold low" relative to reported bilateral prices in the regional hourly spot markets. However, as displayed in Figures 3 and 4, in the two weeks since implementation of Amendment 66, prices paid by the CAISO for net incremental energy and received by the CAISO for net decremental energy have tracked more closely the average reported bilateral prices in the regional hourly spot markets.

As shown in Figure 3, during hours when the ISO was a net purchaser of energy on the inter-ties, the net price ultimately paid by the CAISO for pre-dispatched incremental energy used to meet ISO system demand (including costs associated with inc and dec bids pre-dispatched to clear the market) has consistently exceeded the price of energy reported in bilateral hourly spot markets (see Figure 3). In the four weeks prior to approval of Amendment 66, the net price ultimately paid by the CAISO for net incremental energy purchased for ISO system demand increased to an average of $100/MWh, compared to an average reported bilateral price of $50/MWh. However, in the two weeks since implementation of Amendment 66, the net price paid by the CAISO for net incremental energy has dropped to an average of $60/MWh, compared to an weighted average reported bilateral price of $48/MWh.

Similarly, as shown in Figure 4, during hours when the ISO was a net seller of energy on the inter-ties, the net price ultimately received by the CAISO for pre-dispatched decremental energy used to meet ISO system demand (including costs associated with inc and dec bids pre-dispatched to clear the market) has consistently been lower than the price of energy reported in bilateral hourly spot markets (see Figure 4). Again, in the four weeks prior to implementation of Amendment 66, the net price ultimately received by the CAISO for net decremental energy dropped to an average of just $3/MWh, compared to a weighted average reported bilateral price of $46/MWh. However, in the two weeks since implementation of Amendment 66, the net price received by the CAISO for net decremental energy sold has risen to an average of $35/MWh, compared to an average reported bilateral price of $47/MWh.

Figure 3. Total Net Cost of Incremental Energy Pre-dispatched for CAISO System Demand

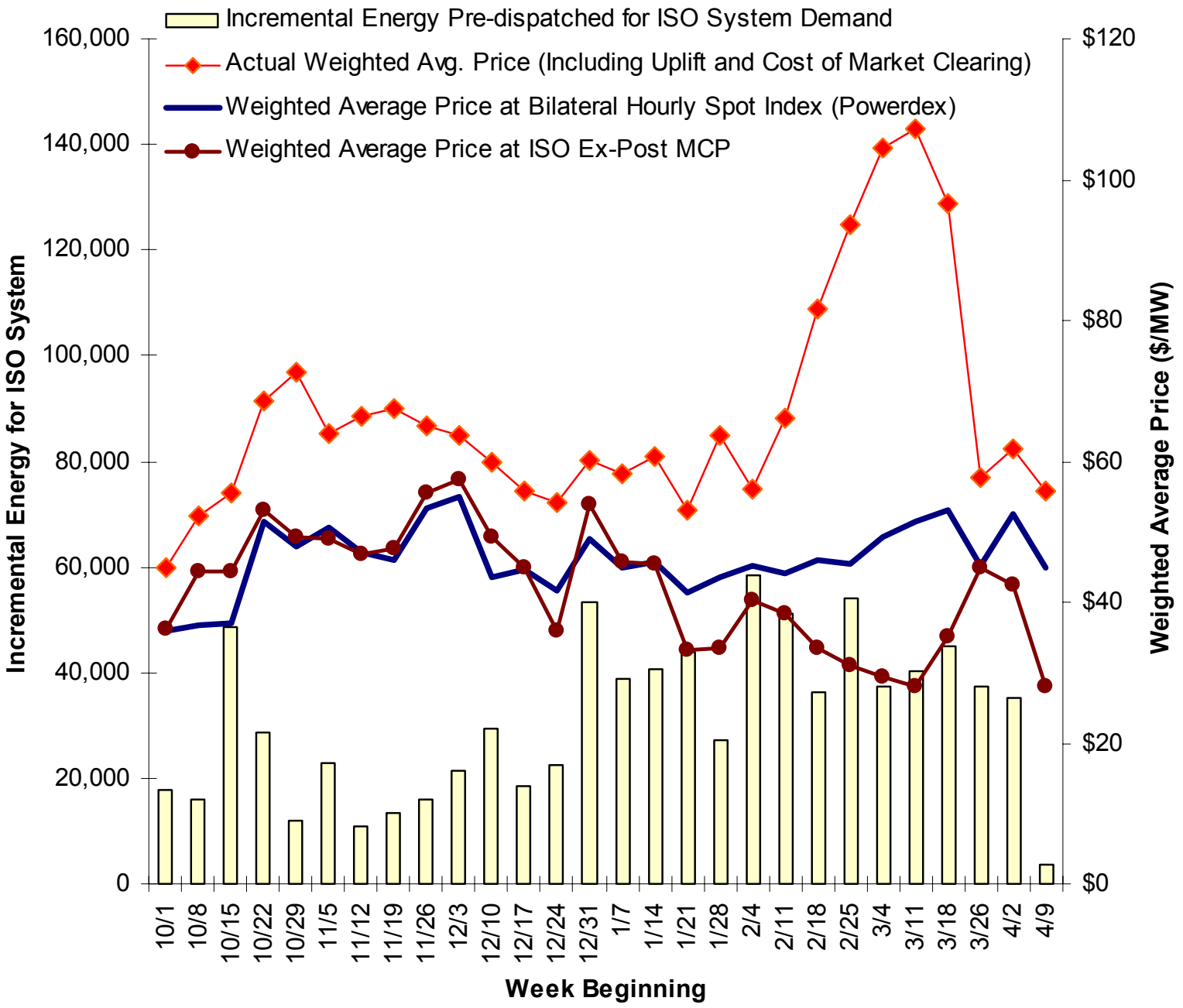
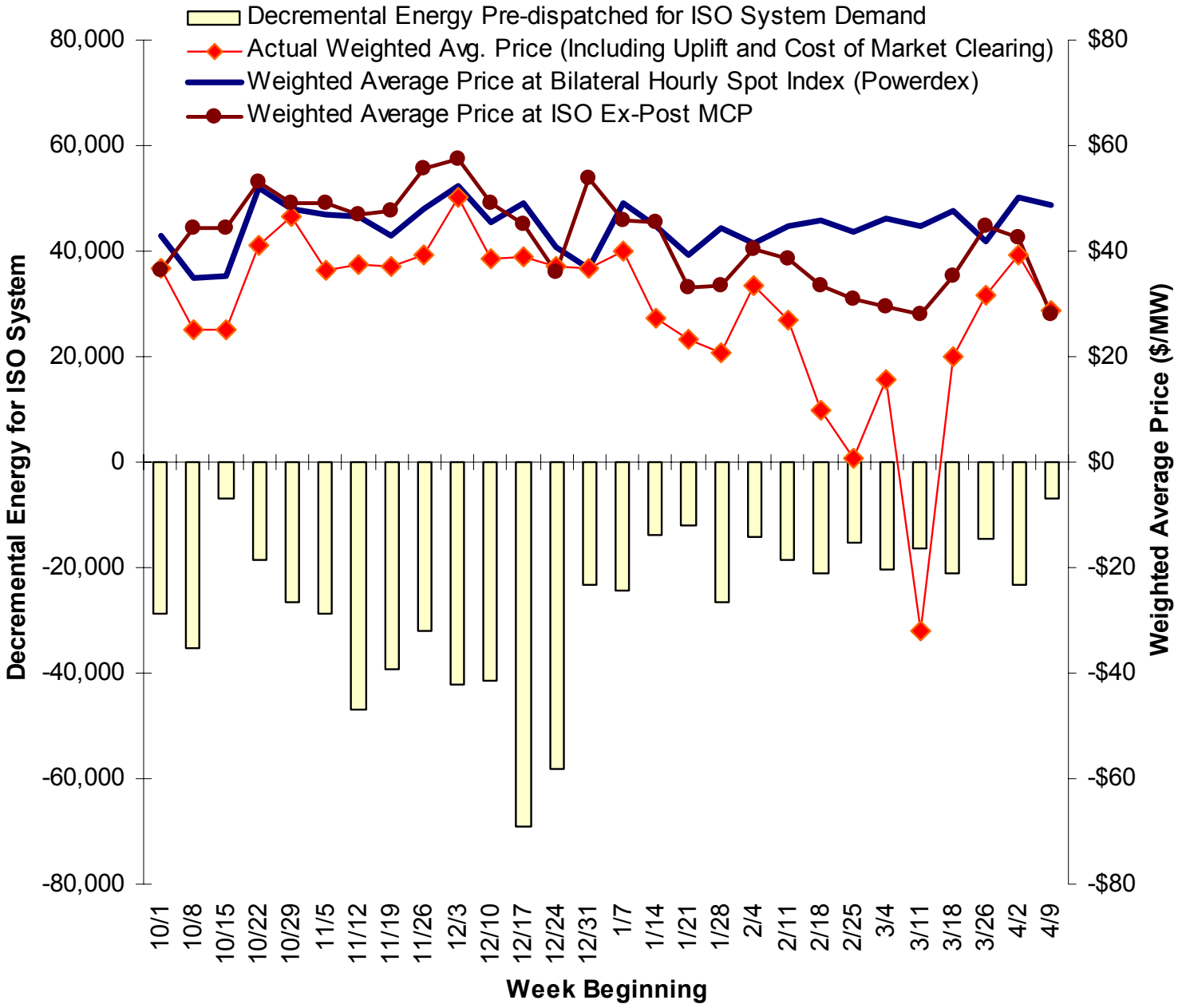


Figure 4. Total Net Cost of Decremental Energy Pre-dispatched for ISO System Demand



Inter-tie Bid Sufficiency and Liquidity

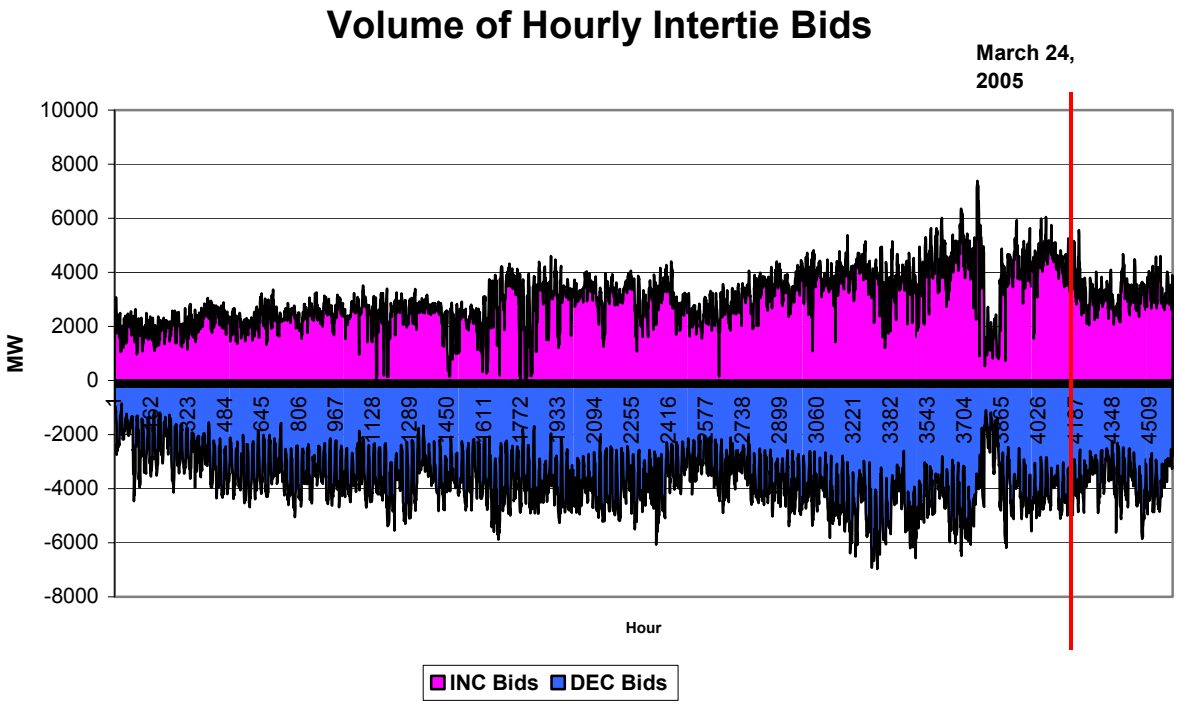
Figure 5 shows the hourly aggregate INC and DEC intertie bids volume during the period October 1, 2004 to April 10, 2005. Based on data in Figure 5, it appears that the volume of inter-ties bids for supplemental real time energy submitted to the CAISO has not changed significantly in the two weeks following implementation of Amendment 66:

- The average hourly volume of the INC intertie bids for the entire CAISO Control Area is 3,247 MW after March 24, 2005, which is slightly higher than the average INC intertie bids volume of 3,002 MW from October 1, 2004 to March 23, 2005.

- The average hourly DEC intertie bids volume is 3,655 MW, which is very similar to the average hourly DEC intertie bids volume during the pre-Amendment 66 period (3,644 MW).

As previously noted, this first weekly report contains limited analysis of the "the liquidity and sufficiency of bids at the interties", as DMA will be monitoring and analyzing these issues over a longer-term basis, and will include the results of this analysis in future weekly reports.

Figure 5



Attachment A:
Methodology for Calculating Net Costs Incurred Due to Pre-dispatch of Overlapping Incremental/Decremental Bids as Part of Market Clearing Process

Background

Uplift costs incurred under the "bid or better" settlement rule in effect from October 1, 2004 through March 23, 2005 may be attributed to two separate causes or categories:

1) Net CAISO system imbalance energy needs met by pre-dispatched intertie bids.

2) Offsetting incremental and decremental energy pre-dispatched on the ties as part of the Phase 1B "market clearing" process that "nets out" and therefore provides zero net incremental or decremental energy during that hour.

As noted in the CAISO's Amendment 66 filing, total uplift costs incurred prior to the CAISO's March 23 filing were estimated at $33.6 million, with about $18.6 million of these uplift costs attributable to clearing of overlapping (or off-setting) inc and dec bids under Phase 1B. This document provides a more detailed explanation of the methodology used to calculate these costs, and provides additional analysis, including a comparison of the total net cost or revenues paid/received for CAISO imbalance energy from pre-dispatched inter-ties bids to the bilateral spot market process for spot market energy.

Methodology

The portion of total uplift costs attributable to offsetting incremental and decremental energy pre-dispatched on the interties as part of the Phase 1B market clearing process was calculated as follows:

First, the total amount of incremental and decremental energy bids pre-dispatched by the CAISO during each hour was calculated.

The "overlap" between these incremental and decremental energy bids equals the minimum of these values. For example, if 500 MW of incremental bids and 400 MW of decremental bids were pre-dispatched during an hour, the "overlap" equals 400 MW. This "overlap" represents incremental and decremental bids that are cleared, but are "offsetting" so that no net energy is provided or received from these dispatches into the CAISO grid.

The total payments from CAISO for all incremental energy pre-dispatches during each hour are calculated under the "bid or better" settlement rule. This calculation includes payments for incremental energy at the real time market price, plus any uplift paid in cases where the market clearing price is less than the supplier's incremental bid price.

The total payments to the CAISO for all decremental energy pre-dispatches during each hour are calculated under the "bid or better" settlement rule. This calculation includes revenues paid by the participant for decremental energy at the real time market clearing price, less any uplift paid in cases where the market clearing price is higher that the participant's decremental bid price.

The portion of total payments from the CAISO for incremental energy pre-dispatches associated with the "overlap" calculated in Step 2 is then calculated as follows:

$$\text{Inc Payments for Overlap}_t = \text{Total Inc Payments}_t \times \frac{\text{Overlap MW}_t}{\text{Total Inc MW}_t}$$

The portion of total payments to the CAISO for decremental energy pre-dispatches associated with the "overlap" calculated in Step 2 is then calculated as follows:

$$\text{Dec Payments for Overlap}_t = \text{Total Dec Payments}_t \times \frac{\text{Overlap MW}_t}{\text{Total Dec MW}_t}$$

Finally, the net payments by the CAISO that are associated with the "overlap" between incremental and decremental bids pre-dispatched by the CAISO during each hour are then calculated based on the difference between incremental energy payments calculated in Step 5 and decremental energy payments calculated in Step 6.

For the period after the CAISO's requested effective date for Amendment 66 settlement changes, the same basic equations can be used to calculate net costs (or revenues) associated with off-setting incremental and decremental bids pre-dispatched. However, for this period, the calculations assume all bids are paid and charged on an "as-bid" basis.

The results of this analysis, summarized by week and day, are presented in Figure 1 and 2 of the preceding report.

In addition, based on the calculations above, the total cost of net incremental energy purchased by the CAISO on the inter-ties each hour (if any) can be calculated as follows:

$$\text{Net Incremental Energy Purchased}_t = \text{Maximum}(0,\ \text{Total Inc MW}_t - \text{Total Dec MW}_t)$$

$$\text{Net Cost}_t = \text{Total Inc Payments}_t + \text{Total Dec Payments}_t$$

$$\text{Net Cost of Incremental Energy}_t = \frac{\text{Net Cost}_t}{\text{Net Incremental Energy Purchased}_t}$$

Similarly, the total cost of net decremental energy sold by the CAISO on the inter-ties each hour (if any) can be calculated as follows:

$$\text{Net Decremental Sales}_t = \text{Maximum}(0,\ \text{Total Dec MW}_t - \text{Total Inc MW}_t)$$

$$\text{Net Revenues}_t = \text{Total Inc Payments}_t + \text{Total Dec Payments}_t$$

$$\text{Net Revenue from Decremental Energy}_t = \frac{\text{Net Revenues}_t}{\text{Net Decremental Energy Sold}_t}$$

In order to compare the net price paid and received for net incremental and decremental energy by the CAISO from inter-tie bids to prices outside and inside of the CAISO system, the value of the incremental and decremental energy pre-dispatched by the CAISO was also calculated based on a bilateral price index for hourly spot market transactions (Powerex)[1] and the CAISO's real time prices. The results of this analysis, summarized by week and day, are presented in Figure 3 and 4 of the preceding report.

[1] For this analysis, the reported hourly price for COB and Palo Verde were averaged.