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July 15, 2005

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

**Re: Fourteenth 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 fourteenth 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 15<sup>th</sup> day of July, 2005 at Folsom in the State of California.

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**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  
July 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.<sup>1</sup>

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.<sup>2</sup> 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 inter-ties” 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. This weekly report includes additional data for the week of July 2 – July 8.<sup>3</sup>

## Report Findings

### Cost Impacts of Amendment No. 66

Figures 1 and 2 summarize total energy pre-dispatched by the CAISO for market clearing versus CAISO 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.

Due to increasing inter-zonal congestion, which may require the CAISO to pre-dispatch incremental bids into one zone while pre-dispatching decremental bids in another zone, the methodology used to calculate bids pre-dispatched to clear the market, rather than meet ISO imbalance energy needs, was refined to account for inter-zonal congestion. With this more refined methodology, the amount of inc and dec bids pre-dispatched to clear the ISO Market is calculated on a zonal basis during hours when real time congestion occurs. Without this refinement, inc and dec bids pre-dispatched for zonal imbalanced energy needs may be incorrectly classified as off-setting inc and dec bids pre-dispatched to clear the market, so that bids pre-dispatched for market clearing may be somewhat overestimated when inter-zonal congestion occurs.

<sup>1</sup> 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 decremental 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.

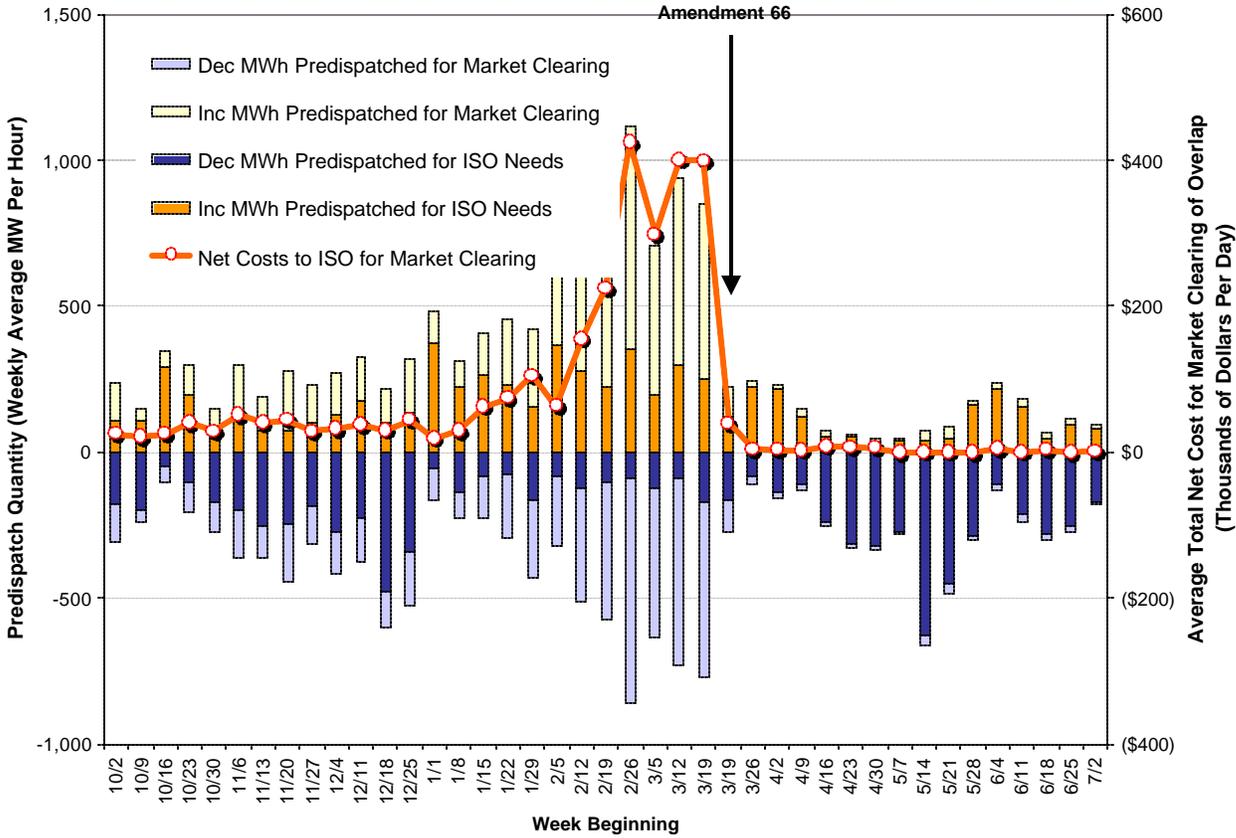
<sup>2</sup> *California Independent System Operator Corporation*, 111 FERC ¶ 61,008 (2005) (“Amendment 66 Order”).

<sup>3</sup> The 7-day lag between the most recent data in this report and the filing date of this report reflects the time needed for post-operational checks and changes done as part of the CAISO settlement process, as well as time needed to prepare and review the report.

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**Figure 1. Average Hourly Volume of Bids Pre-Dispatched by the CAISO and Average Daily Costs to CAISO of Market Clearing  
(By Week Since Phase1B Implementation)**



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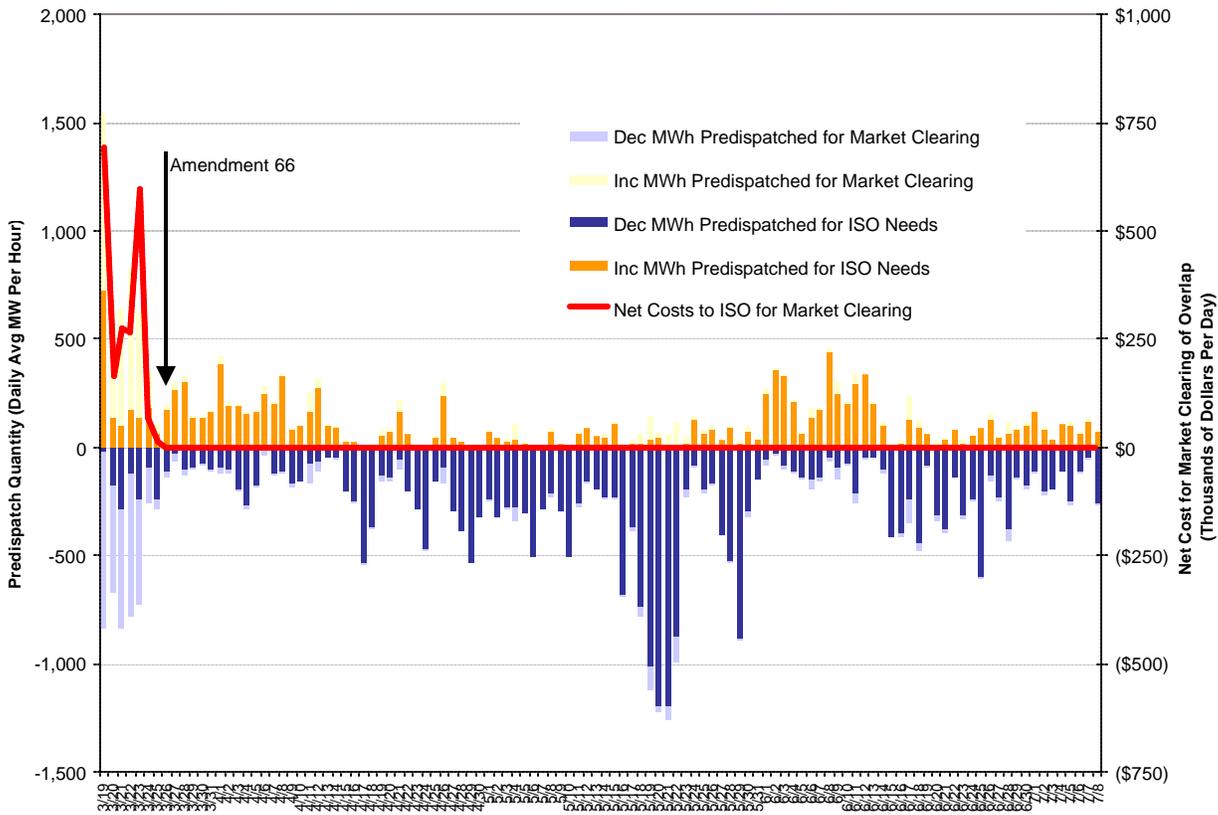
**Table 1. Weekly Summary Data (Before and After Amendment 66)**

Week Beginning	Market Clearing (Average MW/hour)		Net CAISO Imbalance Energy (Average MW/hour)		Average Daily Net Costs (Thousands per Day)	
	Inc	Dec	Inc	Dec	Market Clearing	Net ISO Energy
10/2/2004	129	-129	106	-180	\$25	(\$690)
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
<i>Change from "Bid or Better" to "As-Bid" Settlement</i>						
3/26/2005	22	-22	224	-87	-	\$211
4/2/2005	14	-14	213	-140	-	\$160
4/9/2005	15	-15	130	-109	-	\$88
4/16/2005	8	-8	64	-219	-	(\$106)
4/23/2005	10	-10	53	-319	-	(\$204)
4/30/2005	14	-14	28	-318	-	(\$208)
5/7/2005	5	-5	42	-273	-	(\$144)
5/14/2005	34	-34	39	-631	-	(\$88)
5/21/2005	38	-38	49	-450	-	(\$10)
5/28/2005	14	-14	164	-287	-	\$13
6/4/2005	22	-22	215	-109	-	\$145
6/11/2005	29	-29	153	-210	-	\$21
6/18/2005	18	-18	47	-280	-	(\$170)
6/25/2005	19	-19	96	-252	-	(\$35)
7/2/2005	11	-11	83	-170	-	(\$12)

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

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**Figure 2. Average Hourly Volume of Bids Pre-Dispatched by the CAISO and Average Daily Costs to CAISO of Market Clearing  
(By Day, Before and After Amendment 66)**



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As shown in Figure 1, 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" settlement rule. Since the effective date of Amendment 66, an average of only about 25 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. During the week of July 2-8, an average of only about 11 MW of off-setting inc and dec bids have been pre-dispatched each hour to clear the market.

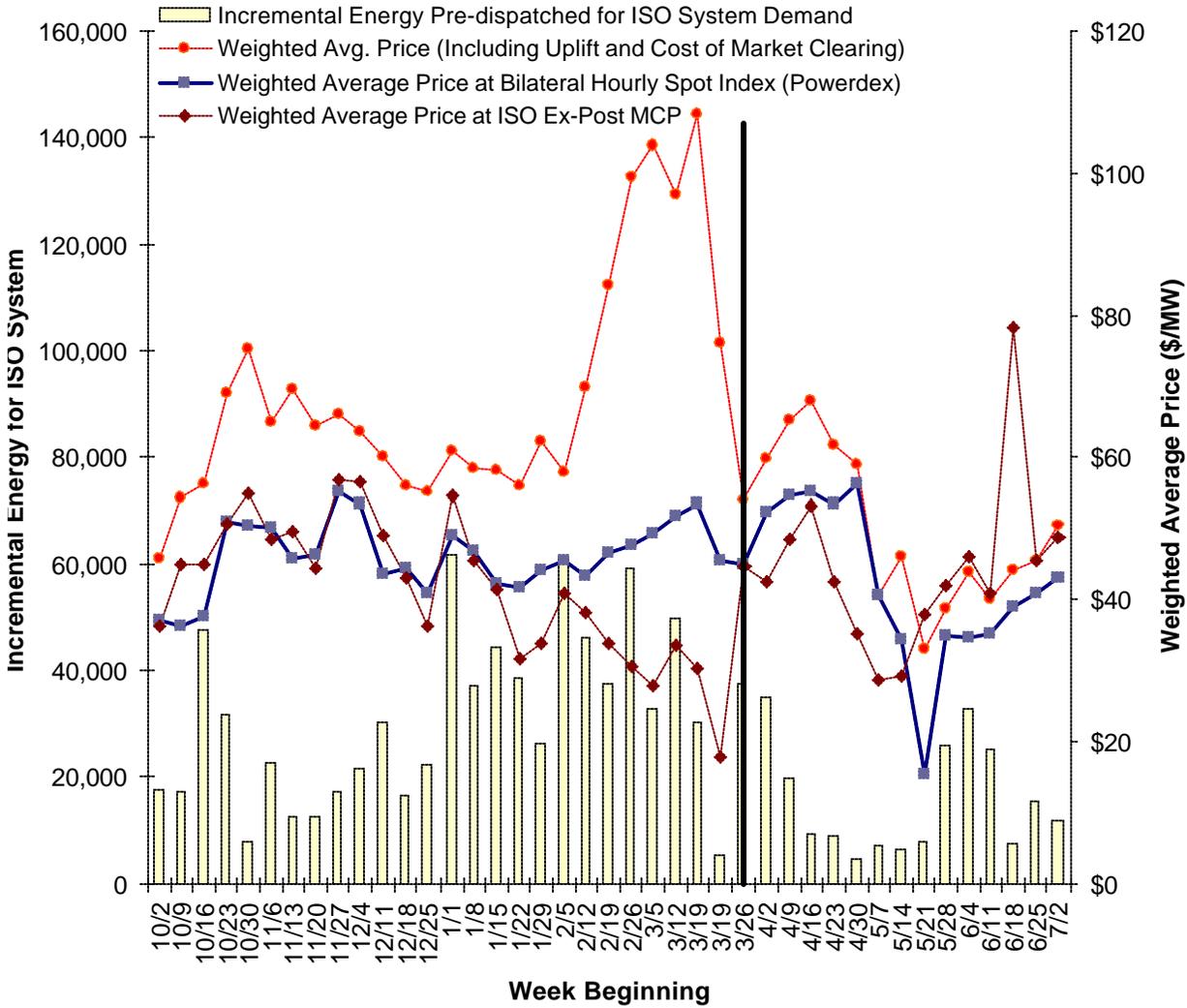
As shown in Figures 1 and 2, the CAISO began dispatching less decremental energy and more incremental energy during the week of July 2-8 relative to the previous week.

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). As shown in Figure 3, the average price paid for pre-dispatched incremental energy increased to about \$50/MWh during the week of July 28. The weighed average price of incremental energy pre-dispatched by the CAISO calculated at the ex post price in the CAISO's real time market was also about \$49/MWh during this period. The weighted average price reported for hourly spot market transactions in bilateral markets (Powerdex) during hours when the CAISO was a net importer of pre-dispatched energy was about \$43/MWh.

Figure 4 summarizes the total cost of net decremental energy sold by the CAISO for 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).

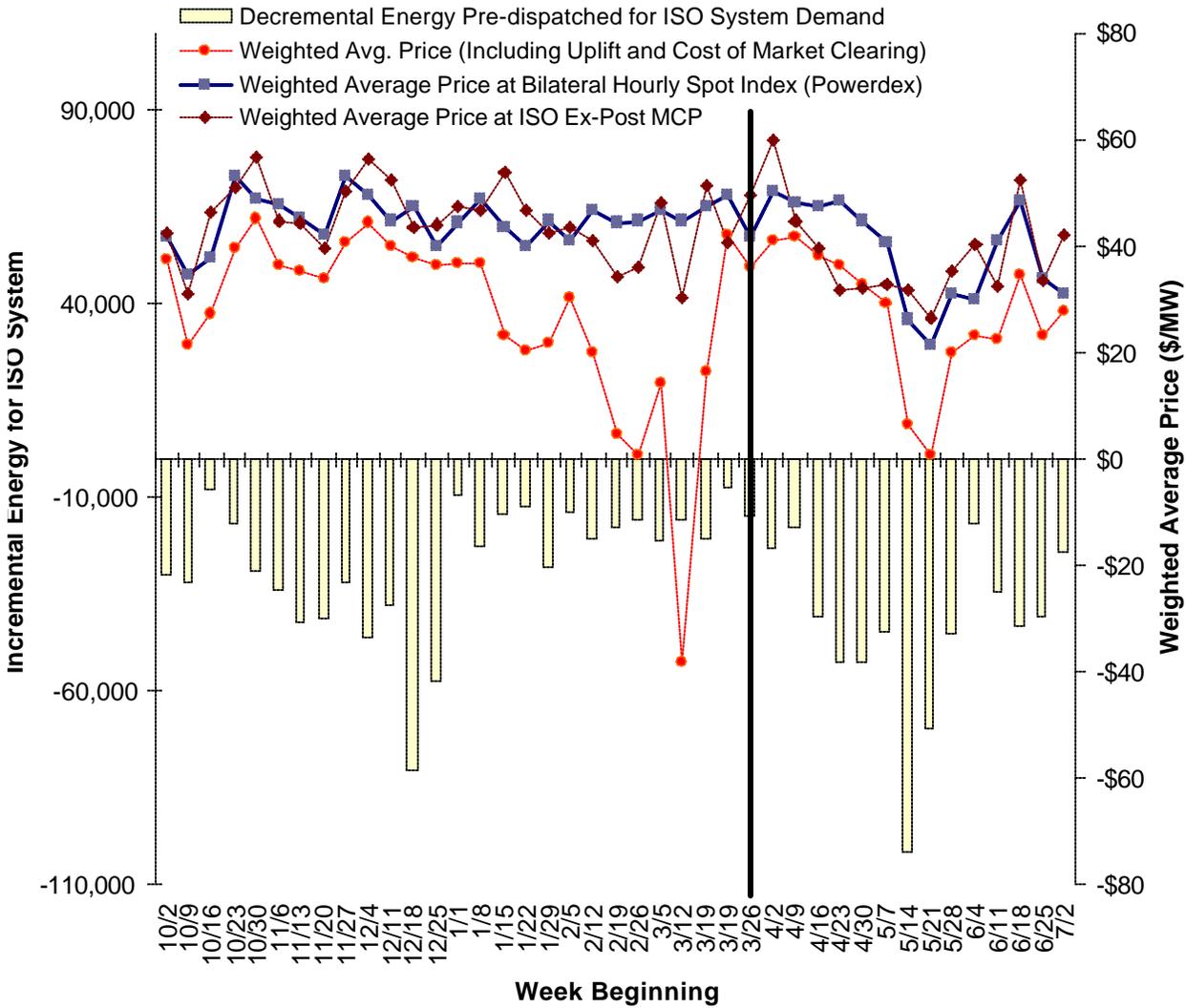
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**Figure 3. Total Net Cost of Incremental Energy Pre-dispatched for CAISO System Demand**



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



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As shown in Figure 4, the volume of net decremental pre-dispatched energy by the CAISO dropped during the week of July 2-8, while energy prices received by the CAISO for net decremental energy pre-dispatched increased to about \$28/MWh. During the week of July 2-8, the weighed average price of this decremental energy pre-dispatched by the CAISO calculated at the ex post price in the CAISO's real time market was about \$42/MWh. The weighted average price reported for hourly spot market transactions in bilateral markets (Powerdex) during hours when the CAISO was a net exporter of pre-dispatched energy was about \$31/MWh.

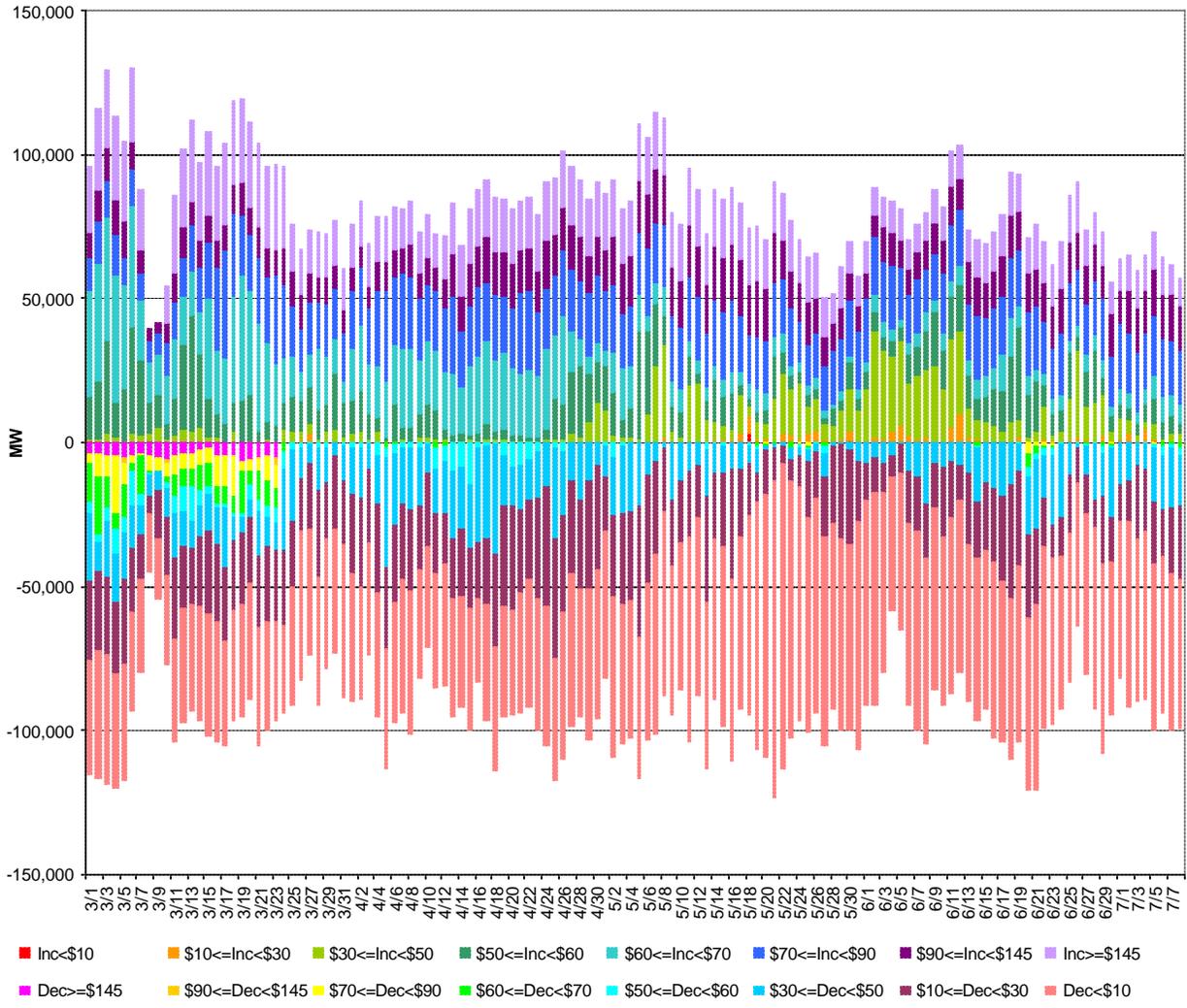
### ***Inter-tie Bid Sufficiency and Liquidity***

Figure 5 shows the daily total volumes of incremental and decremental inter-tie bids during the period July 2-8, 2005 categorized by bid price levels. Figure 6 shows these same bid data, but highlights the average hourly volume of net incremental bids submitted during weekdays on a weekly basis. In addition, Figure 6 also includes a comparison of total incremental bid volumes this year to the most comparable five weekdays last year (i.e. the five weekdays last year most closely matching the weekday dates shown in Figure 6). The bid volumes from last year are shown by the blue shaded area behind the bars depicting bid volumes this year by bid price.

As shown in Figures 5 and 6, the volume of inter-tie bids received by the CAISO dropped slightly immediately after implementation of Amendment 66, but subsequently increased to a level almost equal to the volume of bids received during the week prior to implementation of Amendment 66 by the first week in May. The overall volume of incremental energy bids dropped during the first three weeks of May, but increased each of the last three weeks ending June 10, before dropping the last two weeks from June 11-24 as loads increased in the west with the advent of warmer weather. During the week of July 2-8, average incremental energy bids on inter-ties during peak hours dropped to about 2,600 MW from about 2,900 MW the week before.

To date, the CAISO has not experienced problems in terms of bid insufficiency or liquidity of incremental energy import bids since the switch to an "as-bid" market under Amendment 66. In addition, as shown in Figure 6, until the week of July 2-8, the volume of incremental energy bids has consistently been higher this year than during the comparable period in 2004 (see blue shaded area behind the bars depicting bid volumes this year by bid price in Figure 6). DMA will continue to monitor and assess the issue of sufficiency and liquidity of incremental energy bid supplies as loads increase and potential demand for incremental energy materializes.

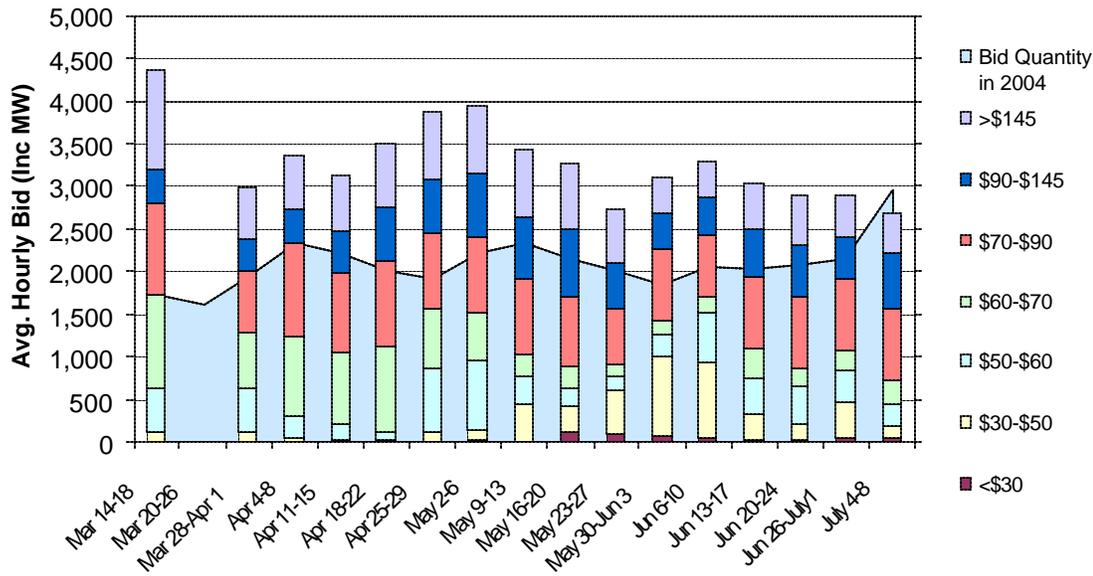
Figure 5. Inter-tie Bid Quantities and Prices



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Figure 6. Inter-Tie Bid Quantities and Prices for Incremental Energy

Hourly Averages (Weekdays Only)



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