



California Independent System Operator

July 30, 2012

The Honorable Kimberly D. Bose  
Secretary  
Federal Energy Regulatory Commission  
888 First Street, NE  
Washington, DC 20426

**Re: California Independent System Operator Corporation  
Docket Nos. ER08-1178-\_\_\_\_, and EL08-88-\_\_\_\_  
April 2012 Exceptional Dispatch Report (Chart 2 data)**

Dear Secretary Bose:

Pursuant to the September 2, 2009 and May 4, 2010 orders in the above referenced docket, the California Independent System Operator Corporation submits the attached report. The attached report provides Exceptional Dispatch information that the Commission directed be included in "Chart 2", which was set forth in Appendix A to the September 2 Order, as modified the Commission's May 4 Order.

The attached report provides Chart 2 data for the month of April 2012. The attached Chart 2 report also includes the price impact analysis for the month of April 2012 required by Paragraph 44 of the September 2 Order as well as the degree of mitigation analysis required by ISO tariff section 34.9.4 for the month of April 2012.

Respectfully submitted,

**By: /s/ Sidney M. Davies**  
Nancy Saracino  
General Counsel  
Sidney M. Davies  
Assistant General Counsel  
California Independent System  
Operator Corporation  
250 Outcropping Way  
Folsom, CA 95630  
Tel: (916) 608-7144  
Fax (916) 608-7222  
[sdavies@casio.com](mailto:sdavies@casio.com)



# Exceptional Dispatch Report

## Table 2: April 2012

ISO Market Analysis and Development

July 30, 2012

## TABLE OF CONTENTS

Introduction .....	3
The Nature of Exceptional Dispatch.....	3
Appendix A: Explanation by Example .....	16
Example 1: Exceptional Dispatch Instructions Prior to DAM .....	16
Example 2: Incremental Exceptional Dispatch Instructions in RTM.....	17
Example 3: Decremental Exceptional Dispatch Instructions in RTM .....	19
Appendix B: Price Impact Analysis .....	20
Appendix C: Exceptional Dispatch Bid Mitigation Analysis .....	66

## LIST OF TABLES AND FIGURES

Table 1: Exceptional Dispatches in April 2012.....	7
Table 2: Instructions Prior to Day-Ahead Market .....	16
Table 3: FERC Summary of Instructions Prior to DAM .....	16
Table 4: Incremental Exceptional Dispatch Instructions in RTM .....	17
Table 5: FERC Summary of ED Instructions in RTM .....	18
Table 6: Decremental Exceptional Dispatch Instructions in RTM .....	19
Table 7: FERC Summary of Decremental ED Instructions in RTM .....	19
Table 8: Price Impact Analysis Information for Pricing Node A in PGAE LAP .....	21
Table 9: Price Impact Analysis Information for Pricing Node B in SCE LAP .....	57
Table 10: Bid Mitigation Analysis for April.....	66

## Introduction

This report is filed pursuant to FERC's September 2, 2009, and May 4, 2010, orders in ER08-1178. These orders require two monthly Exceptional Dispatch reports—one issued on the 15<sup>th</sup> of each month and one issued on the 30<sup>th</sup> of each month. This report provides data on the frequency, reasons and costs for Exceptional Dispatches issued in April 2012.

In addition, this report contains a price impact analysis as prescribed by FERC in its September 2 order. The price impact analysis for the month of April is presented in Appendix B. This report also includes the degree of mitigation analysis for April 2012 required by section 34.9.4 of the ISO tariff. As it has previously explained, the ISO indicated that it would start including the degree of mitigation analysis beginning with the month of August 2009 when the more limited Exceptional Dispatch bid mitigation took effect. This analysis will compare those Exceptional Dispatches subject to bid mitigation (i.e. Exceptional Dispatches to address noncompetitive constraints and Delta Dispatch), and determine the cost difference between the Exceptional Dispatch bid mitigation settlement rules and what the settlement amount would have been had the Exceptional Dispatches not been subject to bid mitigation. The Exceptional Dispatch bid mitigation analysis for April is presented in Appendix C.

## The Nature of Exceptional Dispatch

The ISO can issue exceptional dispatch instructions for a resource as a pre-day-ahead unit commitment, a post day-ahead unit commitment or a real-time exceptional dispatch. A pre-day-ahead unit commitment is an exceptional dispatch instruction committing a resource at or above its physical minimum ( $P_{min}$ ) operating level in the day-ahead market. A post-day-ahead unit commitment is an exceptional dispatch instruction committing a resource at or above its ( $P_{min}$ ) operating level in the real-time market. A real-time exceptional dispatch instructs a resource to operate at or above its physical minimum operating point. For the purposes of this report, a real-time exceptional dispatch above the resource's day-ahead award is considered an incremental exceptional dispatch instruction and a real-time exceptional dispatch below the day-ahead award is considered a decremental dispatch instruction. The ISO issues exceptional dispatch instructions primarily to manage transmission constraints that are not modeled in the market software. In addition to constraints, the ISO also issues exceptional dispatch instructions relating to reliability requirements and, on occasion, software failures. Reliability requirements are calculated for both local area and the system wide needs, and are classified into various requirements including local generation, transmission management, non-modeled transmission outages, ramping and intertie emergency assistance. Whenever the ISO issues an exceptional dispatch instruction, these instructions are logged by the operators into the scheduling and logging system (SLIC), including an associated reason for each exceptional dispatch instruction.

In April 2012, the ISO issued exceptional dispatches for the following transmission management requirements: (1) 6610, Lugo-Victorville 500 kV line and Sylmar Transformer Banks Operation; (2) 7110, transmission facilities in Humboldt area; (3) 7240, Drum Area/Summit Operations; (4) 7320, transmission facilities in Bay Area; (5) 7430, transmission facilities in Fresno area; (6) 7820, transmission facilities in San Diego and Imperial Valley area; and (7) other transmission outages in PG&E, SCE and SDG&E area.

Most of the generation procedures are internal to the ISO and not available publically on the ISO website; however, all of the transmission procedures are available on the ISO website.<sup>1</sup>

The following additional reasons for exceptional dispatch instructions in April 2012 were not related to specific generation or transmission operating procedures: (1) Software Limitation, when an exceptional dispatch instruction was used to bridge schedules across days for resources with a minimum down time of 24 hours, as the ISO software does not handle multi day commitment. For instance, a resource has a day-ahead schedule from 0600 till 2300, and then is shut down in 2400. If this resource had a minimum down time of 24 hours and it is required the following day, then the ISO issues an exceptional dispatch to commit this resource in 2400 so that it can be dispatched economically in the following day. Software limitation reason was also used for exceptional dispatches to manually issue shut down instructions to a resource because of a temporary Automatic Dispatch System (“ADS”) failure, or similar issues; and (2) Ramp Rate, when exceptional dispatch instructions were issued to dispatch a resource above its physical minimum to a level where the resource has significantly higher ramp rate capability. For example, a resource could have a ramp rate of 2 MW/min at its physical minimum of 100 MW, but a significantly higher ramp rate of 10 MW/min at 250 MW. The operators could issue an exceptional dispatch for this resource to be dispatched to 250 MW, so that the resource could respond to the anticipated steep load ramp or to a potential contingency. There were a few other reasons used to explain exceptional dispatch instructions in April, which are self explanatory.

As mentioned earlier, the data shown in Table 1 is based on a template specified in the September 2009 order.<sup>2</sup> This table contains all the information published in Table 1 of the first report for April. In addition, it contains volume (MWh) and cost information. Each entry in Table 1 is a summary of exceptional dispatches classified by (1) the reason for the exceptional dispatch; (2) the location of the

---

<sup>1</sup> A list of all of the ISO's Operating Procedures and all the publicly available Operating Procedures are available at the following link:  
<http://www.caiso.com/thegrid/operations/opsdoc/index.html>

<sup>2</sup> The data in Table 1 is principally SLIC information supplemented with data from the Market Quality System (MQS) and Settlements database. The volume and cost information is based on t+51B Recalculation Statements.

resource by Participating Transmission Owner (PTO) service area; (3) the Local Reliability Area (LRA) where applicable; (4) the market in which the exceptional dispatch occurred (day-ahead vs. real-time); and (5) the date of the exceptional dispatch. For each classification the following information is provided: (1) Megawatts (MW); (2) Commitment; (3) Inc or Dec; (4) Hours; (5) Begin Time; (6) End Time; (7) Total Volume (MWh); (8) Min Load Cost; (9) Start Up Cost; (10) CC6470; (11) ED Volume (MWh INC/DEC); (12) CC6470 INC; (13) CC6470 DEC; (14) CC6482; (15) CC6488; and (16) CC6620. Each column is defined as follows:

- The MW column shows the range of exceptional dispatch instruction in MW for the classification.
- The Commitment column specifies if there was a unit commitment for the classification.
- The INC/DEC/NA column specifies if there was an incremental dispatch (INC), a decremental dispatch (DEC), or only a unit commitment (NA). The Begin Time and End Time columns show the start and end time of exceptional dispatch for the classification respectively.
- The Hours column is the time difference between begin time and end time rounded up to the next hour.
- The total volume column shows the total MWh dispatch quantity dispatched for that classification. This quantity includes the minimum load quantity, the imbalance energy quantity, and the exceptional dispatch quantity.
- The Min-Load Cost column shows eligible minimum load cost for the classification.
- The Start-Up Cost column shows the eligible start up cost for the classification. Please note that the ISO does not explicitly pay resources for its start up and minimum load costs; however, it ensures that resources are compensated adequately through its bid cost recovery process.<sup>3</sup>
- The CC6470 column shows the total imbalance energy costs for the classification. This cost contains the portion of exceptional dispatch instruction that was settled as optimal energy by virtue of its bid price being less than the LMP in that specific settlement interval.
- The ED Volume MWh (MWh INC/DEC) column shows the incremental or the decremental portion of the real-time exceptional dispatch MWh for the classification. The CC6470-INC shows that portion of incremental exceptional dispatch instruction which is settled at the resource specific LMP.
- The CC6470-DEC column shows that portion of decremental exceptional dispatch instruction which is settled at the resource specific LMP. Both

---

<sup>3</sup> For further details regarding the Bid Cost Recovery process please refer to section 11.8 of the ISO tariff.

these charge codes are portion of the real-time instructed imbalance energy charge code (6470).<sup>4</sup>

- The CC6482 column shows the real-time excess cost for the classification.<sup>5</sup>
- The CC6488 column shows the real-time exceptional dispatch uplift settlement for the classification.<sup>6</sup> The CC6620 shows the bid cost recovery payment for the classification. This cost is shown for all pre-day-ahead unit commitments only.

Charge codes 6470, 6470 INC, 6470 DEC, 6482 and 6488 are shown in Table 1 because all these charge codes pertain to real-time exceptional dispatch MWH quantities. The classification of data is further explained by way of example in Attachment A.

---

<sup>4</sup> For further details please refer to the BPM configuration Guide: Real-Time Instructed Imbalance Energy Settlement published on the ISO's website.

<sup>5</sup> For further details please refer to the BPM configuration Guide: Real Time Excess Cost for Instructed Energy Settlement published on the ISO's website.

<sup>6</sup> For further details please refer to the BPM configuration Guide: Real Time Exceptional Dispatch Uplift Settlement published on the ISO's website.

**Table 1: Exceptional Dispatches in April 2012**

**California Independent System Operator Corporation  
Exceptional Dispatch Report  
July 30, 2012**

**Chart 2: Table of Exceptional Dispatches for Period 01/April/2012 - 30/April/2012**

Number	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commitment	INC_DEC	Hours	Begin Time	End Time	Total MWH	Min Load Cost	Start Up Cost	CC6470	ED MWH (INC/DEC)	CC6470 INC	CC6470 DEC	CC6482	CC6488	CC6620
1	RT	6610	PG&E	Humboldt	1-Apr-12	44- 48	No	INC	6	17:45	22:14	62.02	\$1,785	\$0	(\$1,445)	\$21	(\$379)	\$0	\$0	(\$222)	\$0
2	RT	7110	PG&E	Humboldt	1-Apr-12	30- 123	No	INC	23	0:00	22:14	1042.12	\$27,860	\$0	(\$3,689)	\$218	(\$1,659)	\$0	\$0	(\$4,141)	\$0
3	RT	7110	PG&E	Humboldt	2-Apr-12	48	No	INC	2	8:15	9:59	27.72	\$420	\$0	(\$868)	\$12	(\$281)	\$0	\$0	(\$60)	\$0
4	RT	7110	PG&E	Humboldt	5-Apr-12	16	No	INC	4	20:09	23:29	48.47	\$1,260	\$61	(\$1,027)	\$11	(\$234)	\$0	\$0	(\$92)	\$0
5	RT	7110	PG&E	Humboldt	6-Apr-12	32	No	INC	7	0:00	6:59	121.81	\$2,641	\$0	(\$2,052)	\$51	(\$873)	\$0	\$0	(\$365)	\$0
6	RT	7110	PG&E	Humboldt	9-Apr-12	29	No	INC	2	13:55	14:39	9.25	\$250	\$0	(\$410)	\$0	\$0	\$0	\$0	\$0	\$0
7	RT	7110	PG&E	Humboldt	12-Apr-12	96- 128	No	INC	5	19:03	23:58	155.15	\$3,323	\$0	(\$4,823)	\$59	(\$1,411)	\$0	\$0	(\$298)	\$0
8	RT	7110	PG&E	Humboldt	13-Apr-12	80- 112	No	INC	24	0:00	23:59	1274.64	\$23,643	\$0	(\$179,309)	\$374	(\$17,809)	\$0	\$0	(\$4,969)	\$0
9	RT	7110	PG&E	Humboldt	17-Apr-12	29- 58	No	INC	2	20:51	21:14	4.86	\$0	\$0	(\$82)	\$0	(\$8)	\$0	\$0	\$0	\$0
10	RT	7240	PG&E	Sierra	29-Apr-12	3- 22	No	INC	5	14:20	18:59	89.81	\$0	\$0	(\$1,980)	\$0	\$0	\$0	\$0	\$0	\$0
11	RT	7320	PG&E	Bay Area	9-Apr-12	20	No	INC	2	20:04	21:59	29.94	\$1,422	\$287	(\$659)	\$2	(\$45)	\$0	\$0	(\$15)	\$0
12	RT	7320	PG&E	Bay Area	25-Apr-12	19- 37	Yes	INC	3	19:27	21:59	178.00	\$4,740	\$638	(\$3,162)	\$74	(\$1,308)	\$0	\$0	(\$737)	\$0
13	RT	7430	PG&E	Fresno	3-Apr-12	5	Yes	DEC	6	9:20	14:59	-24.68	\$0	\$0	\$398	(\$8)	\$0	\$113	\$0	\$0	\$0
14	RT	7430	PG&E	Fresno	3-Apr-12	60	Yes	INC	6	9:20	14:59	122.62	\$0	\$0	(\$5,904)	\$1	(\$12)	\$0	\$0	\$0	\$0
15	RT	7430	PG&E	Fresno	7-Apr-12	25- 35	Yes	DEC	3	19:11	21:59	-94.27	\$0	\$0	\$4,524	(\$91)	\$0	\$4,096	\$0	(\$3,000)	\$0
16	RT	7430	PG&E	Fresno	7-Apr-12	60	Yes	INC	3	20:05	22:59	117.40	\$0	\$0	(\$2,832)	\$0	\$0	\$0	\$0	\$0	\$0
17	RT	7430	PG&E	Fresno	8-Apr-12	12- 15	Yes	DEC	4	19:00	22:59	-33.61	\$0	\$0	\$559	(\$37)	\$0	\$602	\$0	(\$38)	\$0
18	RT	7430	PG&E	Fresno	8-Apr-12	70	Yes	INC	2	21:55	22:59	10.23	\$0	\$0	(\$213)	\$0	\$0	\$0	\$0	\$0	\$0
19	RT	7430	PG&E	Fresno	9-Apr-12	15	Yes	DEC	9	13:10	21:59	-43.19	\$0	\$0	\$940	(\$26)	\$0	\$564	\$0	(\$148)	\$0
20	RT	7430	PG&E	Fresno	9-Apr-12	5- 70	Yes	INC	16	6:25	21:59	314.18	\$0	\$0	(\$7,813)	\$0	\$0	\$0	\$0	\$0	\$0
21	RT	7430	PG&E	Fresno	10-Apr-12	0	No	INC	2	19:40	20:59	1.46	\$0	\$0	(\$31)	\$0	\$0	\$0	\$0	\$0	\$0
22	RT	7430	PG&E	Fresno	12-Apr-12	38	Yes	DEC	2	20:17	21:07	-55.42	\$0	\$0	\$2,071	(\$26)	\$0	\$872	\$0	(\$285)	\$0
23	RT	7430	PG&E	Fresno	12-Apr-12	32	Yes	INC	2	20:17	21:07	-2.92	\$0	\$0	\$124	\$0	\$0	\$0	\$0	\$0	\$0
24	RT	7430	PG&E	Fresno	19-Apr-12	72	Yes	INC	1	23:38	23:58	0.00	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
25	RT	7430	PG&E	Fresno	20-Apr-12	72	Yes	INC	24	0:00	23:59	0.00	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
26	RT	7430	PG&E	Fresno	21-Apr-12	303	Yes	INC	8	0:00	7:59	1628.63	\$0	\$0	(\$24,455)	\$0	\$0	\$0	\$0	\$0	\$0
27	RT	7430	PG&E	Fresno	23-Apr-12	17	No	DEC	2	17:20	18:59	-39.76	\$0	\$0	\$619	\$0	\$0	\$0	\$0	\$0	\$0
28	RT	7430	PG&E	Fresno	23-Apr-12	10- 200	Yes	INC	6	16:45	21:59	970.09	\$27,888	\$1,683	(\$15,337)	\$536	(\$8,888)	\$0	\$0	(\$2,979)	\$0
29	RT	7430	PG&E	Fresno	24-Apr-12	43	No	INC	1	23:37	23:59	2.70	\$0	\$0	\$11	\$2	\$27	\$0	\$0	(\$33)	\$0
30	RT	7430	PG&E	Fresno	25-Apr-12	3- 38	Yes	DEC	22	0:00	21:59	-14.43	\$0	\$0	\$292	(\$14)	\$0	\$328	\$0	(\$116)	\$0
31	RT	7430	PG&E	Fresno	25-Apr-12	0	No	INC	1	0:00	0:59	-0.70	\$0	\$0	\$9	\$0	\$0	\$0	\$0	\$0	\$0
32	RT	7430	PG&E	Fresno	26-Apr-12	5- 9	No	DEC	14	8:45	21:59	-32.05	\$0	\$0	\$437	(\$33)	\$0	\$466	\$0	(\$17)	\$0
33	RT	7430	PG&E	Fresno	27-Apr-12	5- 107	Yes	DEC	15	8:16	22:37	-94.29	\$0	\$0	(\$3,419)	(\$43)	\$0	(\$4,532)	\$0	(\$37)	\$0
34	RT	7430	PG&E	Fresno	27-Apr-12	41- 75	Yes	INC	15	8:16	22:59	20.28	\$0	\$0	(\$401)	\$10	(\$154)	\$0	\$0	(\$345)	\$0
35	RT	7430	PG&E	Fresno	28-Apr-12	2- 6	Yes	DEC	13	9:19	21:59	-15.67	\$0	\$0	\$202	(\$18)	\$0	\$243	\$0	(\$47)	\$0

Number	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commitment	INC_DEC	Hours	Begin Time	End Time	Total MWH	Min Load Cost	Start Up Cost	CC6470	ED MWH (INC/DEC)	CC6470 INC	CC6470 DEC	CC6482	CC6488	CC6620
36	RT	7430	PG&E	Fresno	28-Apr-12	46- 264	Yes	INC	13	11:25	23:59	2216.77	\$16,898	\$0	(\$37,178)	\$1,599	(\$26,543)	\$0	\$0	(\$46,799)	\$0
37	RT	7430	PG&E	Fresno	29-Apr-12	1- 12	Yes	DEC	16	8:15	23:59	-62.16	\$0	\$0	\$1,162	(\$69)	\$0	\$1,311	\$0	(\$260)	\$0
38	RT	7430	PG&E	Fresno	29-Apr-12	364	Yes	INC	24	0:00	23:59	3409.41	\$57,827	\$2,453	(\$75,238)	\$1,216	(\$27,205)	\$49	\$0	(\$51,470)	\$0
39	RT	7430	PG&E	Fresno	30-Apr-12	1- 9	Yes	DEC	16	7:20	22:59	-34.44	\$0	\$0	\$257	(\$50)	\$0	\$562	\$0	(\$47)	\$0
40	RT	7430	PG&E	Fresno	30-Apr-12	49- 405	Yes	INC	17	7:07	23:59	3193.54	\$33,493	\$2,705	(\$60,040)	\$1,667	(\$31,375)	(\$70)	\$0	(\$17,910)	\$0
41	RT	7820	SDG&E	N/A	28-Apr-12	65	No	INC	5	2:25	6:59	259.61	\$0	\$0	(\$5,121)	\$70	\$274	\$0	\$0	(\$1,500)	\$0
42	RT	7820	SDG&E	San Diego	25-Apr-12	99	No	INC	2	19:27	20:01	51.46	\$1,000	\$83	(\$1,606)	\$15	(\$318)	\$0	\$0	(\$113)	\$0
43	RT	7820	SDG&E	San Diego	27-Apr-12	225- 500	No	INC	14	8:55	21:06	-635.32	\$0	\$0	\$15,095	\$53	(\$986)	\$0	\$0	(\$725)	\$0
44	RT	Bridging Schedules	PG&E	N/A	12-Apr-12	52	No	INC	6	18:00	23:59	1757.92	\$29,258	\$0	(\$54,796)	\$0	\$0	\$0	\$0	\$0	\$0
45	RT	Bridging Schedules	SCE	LA Basin	13-Apr-12	130	Yes	INC	17	2:00	18:59	2262.97	\$144,381	\$0	(\$166,009)	\$0	\$0	\$0	\$0	\$0	\$0
46	RT	COI Mitigation	Intertie	N/A	3-Apr-12	150	No	DEC	2	14:12	15:59	-278.77	\$0	\$0	\$3	(\$241)	\$0	\$2	\$0	\$0	\$0
47	RT	COI Mitigation	Intertie	N/A	5-Apr-12	50	No	DEC	2	3:50	4:59	-90.70	\$0	\$0	(\$966)	(\$21)	\$0	\$0	\$0	\$0	\$0
48	RT	COI Mitigation	Intertie	N/A	7-Apr-12	56- 100	No	DEC	19	5:00	23:59	-102.58	\$0	\$0	\$1	(\$103)	\$0	\$1	\$0	\$0	\$0
49	RT	COI Mitigation	Intertie	N/A	8-Apr-12	46- 84	No	DEC	20	3:00	22:59	-105.54	\$0	\$0	(\$85)	(\$95)	\$0	(\$55)	\$0	\$0	\$0
50	RT	COI Mitigation	Intertie	N/A	13-Apr-12	100- 200	No	DEC	4	9:11	12:59	-740.41	\$0	\$0	\$4,472	(\$705)	\$0	\$7	\$0	\$0	\$0
51	RT	COI Mitigation	Intertie	N/A	14-Apr-12	200	No	DEC	2	14:20	15:59	-366.65	\$0	\$0	\$4	(\$367)	\$0	\$4	\$0	\$0	\$0
52	RT	COI Mitigation	Intertie	N/A	18-Apr-12	110	No	DEC	1	16:20	16:59	-72.22	\$0	\$0	\$1	(\$72)	\$0	\$1	\$0	\$0	\$0
53	RT	COI Mitigation	Intertie	N/A	20-Apr-12	150	No	DEC	2	9:47	10:59	-177.29	\$0	\$0	\$2	(\$177)	\$0	\$2	\$0	\$0	\$0
54	RT	COI Mitigation	PG&E	Bay Area	13-Apr-12	253	No	INC	14	10:11	23:59	5136.93	\$59,859	\$0	(\$216,123)	\$0	(\$0)	\$0	(\$0)	\$0	\$0
55	RT	COI Mitigation	PG&E	Fresno	7-Apr-12	303	No	INC	2	4:55	5:14	126.25	\$0	\$0	(\$5,888)	\$0	\$0	\$0	\$0	\$0	\$0
56	RT	COI Mitigation	PG&E	Fresno	13-Apr-12	83- 523	Yes	INC	7	9:06	15:59	2474.24	\$34,326	\$1,143	(\$801,272)	\$201	(\$10,166)	\$0	(\$1,209)	\$0	\$0
57	RT	COI Mitigation	PG&E	N/A	13-Apr-12	197	No	INC	4	9:14	12:02	530.25	\$14,315	\$0	(\$153,178)	\$12	(\$12,066)	\$0	\$0	\$0	\$0
58	RT	COI Mitigation	SDG&E	San Diego	13-Apr-12	68	No	INC	12	10:40	21:59	978.70	\$53,867	\$0	(\$69,079)	\$12	(\$7,174)	\$0	(\$0)	\$0	\$0
59	RT	Contingency	PG&E	Fresno	2-Apr-12	375	Yes	INC	4	0:40	3:24	489.92	\$621	\$156	\$12,443	\$41	\$1,192	\$0	(\$323)	\$0	\$0
60	RT	Contingency	SCE	Big Creek-Ventura	2-Apr-12	64- 184	Yes	INC	3	0:40	2:06	302.10	\$7,141	\$590	\$7,792	\$186	\$4,579	\$0	(\$3,488)	\$0	\$0
61	RT	Contingency	SCE	LA Basin	2-Apr-12	47	Yes	INC	3	0:40	2:06	57.96	\$2,597	\$192	\$1,625	\$0	\$3	\$0	(\$6)	\$0	\$0
62	RT	Contingency	SDG&E	San Diego	2-Apr-12	190- 224	Yes	INC	3	0:40	2:44	499.09	\$21,141	\$2,454	\$10,576	\$31	\$668	\$0	(\$2,796)	\$0	\$0
63	RT	Dispatch Modification	SDG&E	San Diego	7-Apr-12	281- 455	No	INC	6	18:20	23:59	-98.92	\$45,141	\$0	\$1,397	(\$200)	(\$238)	\$4,173	\$0	\$0	\$0
64	RT	Dispatch Modification	SDG&E	San Diego	8-Apr-12	281	No	INC	5	0:00	4:39	-29.21	\$0	\$0	(\$670)	\$0	(\$1)	\$0	\$0	\$0	\$0
65	RT	Generation Outage	SCE	LA Basin	23-Apr-12	25	Yes	INC	12	12:00	23:59	300.00	\$31,717	\$22,943	(\$5,202)	\$0	\$0	\$0	\$0	\$0	\$0
66	RT	Intertie Emergency Assistance	Intertie	N/A	6-Apr-12	80	No	INC	1	7:05	7:59	0.00	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
67	RT	Intertie Emergency Assistance	Intertie	N/A	8-Apr-12	100	No	INC	1	15:46	15:59	0.00	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
68	RT	Intertie Emergency Assistance	Intertie	N/A	22-Apr-12	100	No	INC	1	16:30	16:59	0.00	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
69	RT	Load Forecast Uncertainty	PG&E	N/A	11-Apr-12	52	No	INC	6	18:00	23:59	358.20	\$15,942	\$83,023	(\$6,085)	\$0	\$0	\$0	\$0	\$0	\$0
70	RT	Load Forecast Uncertainty	PG&E	N/A	21-Apr-12	20	Yes	INC	5	17:05	21:59	174.93	\$4,016	\$227	(\$6,163)	\$0	\$0	\$0	\$0	\$0	\$0
71	RT	Load Forecast Uncertainty	SCE	LA Basin	21-Apr-12	0	Yes	DEC	5	16:25	20:59	5.83	\$0	\$0	(\$233)	\$0	\$0	\$0	\$0	\$0	\$0
72	RT	Load Forecast Uncertainty	SCE	LA Basin	21-Apr-12	94- 140	Yes	INC	6	16:25	21:29	472.09	\$16,268	\$0	(\$12,683)	\$0	\$0	\$0	\$0	\$0	\$0

Number	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commitment	INC_DEC	Hours	Begin Time	End Time	Total MWH	Min Load Cost	Start Up Cost	CC6470	ED MWH (INC/DEC)	CC6470 INC	CC6470 DEC	CC6482	CC6488	CC6620
73	RT	Load Forecast Uncertainty	SDG&E	San Diego	22-Apr-12	25	Yes	INC	3	16:15	18:59	51.81	\$1,800	\$296	(\$1,404)	\$0	\$0	\$0	\$0	\$0	\$0
74	RT	NP26 Capacity	PG&E	Bay Area	2-Apr-12	45	No	INC	1	23:00	23:59	51.58	\$0	\$0	(\$1,010)	\$0	(\$0)	\$0	(\$0)	\$0	\$0
75	RT	NP26 Capacity	PG&E	Bay Area	3-Apr-12	45	Yes	INC	24	0:00	23:59	1111.73	\$58,632	\$0	(\$15,102)	\$0	(\$2)	\$0	(\$3)	\$0	\$0
76	RT	NP26 Capacity	PG&E	Bay Area	4-Apr-12	45	Yes	INC	24	0:00	23:59	1090.58	\$58,632	\$0	(\$19,698)	\$0	(\$4)	\$0	(\$2)	\$0	\$0
77	RT	NP26 Capacity	SCE	LA Basin	3-Apr-12	10	Yes	INC	5	19:00	23:59	54.01	\$13,405	\$0	(\$2,327)	\$0	(\$1)	\$0	(\$0)	\$0	\$0
78	RT	NP26 Capacity	SCE	LA Basin	4-Apr-12	169	Yes	DEC	24	0:00	23:59	-312.64	\$0	\$0	\$4,841	\$0	\$0	\$0	\$0	\$0	\$0
79	RT	NP26 Capacity	SCE	LA Basin	4-Apr-12	0- 10	Yes	INC	24	0:00	23:59	217.04	\$56,301	\$0	(\$13,213)	\$0	(\$6)	\$0	(\$0)	\$0	\$0
80	RT	Path 15	Intertie	N/A	13-Apr-12	308	No	DEC	1	9:42	9:54	-85.16	\$0	\$0	\$14,828	(\$39)	\$0	\$414	\$0	\$0	\$0
81	RT	Path 15	SCE	Big Creek-Ventura	13-Apr-12	0	No	INC	1	9:42	9:54	36.62	\$0	\$0	(\$23,634)	\$0	\$0	\$0	\$0	\$0	\$0
82	RT	Path 66	Intertie	N/A	14-Apr-12	200	No	DEC	5	14:00	18:59	-962.58	\$0	\$0	(\$4,056)	(\$929)	\$0	(\$3,964)	\$0	\$0	\$0
83	RT	Ramp Rate	SCE	LA Basin	2-Apr-12	147- 161	No	DEC	5	17:00	21:59	-137.71	\$0	\$0	\$3,631	\$0	\$0	\$0	\$0	\$0	\$0
84	RT	Ramp Rate	SCE	LA Basin	2-Apr-12	45	No	INC	5	17:00	21:59	78.03	\$0	\$0	(\$2,258)	\$79	(\$2,287)	\$0	\$0	\$0	\$0
85	RT	Ramp Rate	SCE	LA Basin	3-Apr-12	147- 161	No	DEC	14	8:00	21:59	-314.64	\$0	\$0	\$4,680	\$0	\$0	\$0	\$0	\$0	\$0
86	RT	Ramp Rate	SCE	LA Basin	3-Apr-12	45	No	INC	15	7:55	21:59	504.59	\$0	\$0	(\$13,808)	\$438	(\$8,467)	\$0	\$0	(\$4,252)	\$0
87	RT	Ramp Rate	SCE	LA Basin	4-Apr-12	45	No	INC	3	18:00	20:59	161.41	\$0	\$0	(\$5,510)	\$135	(\$4,537)	\$0	\$0	\$0	\$0
88	RT	Ramp Rate	SCE	LA Basin	6-Apr-12	240	No	INC	6	15:30	20:59	1363.48	\$0	\$0	(\$31,945)	\$493	(\$11,537)	\$0	\$0	\$0	\$0
89	RT	Ramp Rate	SCE	LA Basin	7-Apr-12	5	No	DEC	4	18:25	21:59	161.18	\$0	\$0	(\$4,289)	\$0	\$0	\$0	\$0	\$0	\$0
90	RT	Ramp Rate	SCE	LA Basin	7-Apr-12	38- 240	No	INC	4	18:25	21:59	474.55	\$0	\$0	(\$18,165)	\$73	(\$1,828)	\$0	\$0	\$0	\$0
91	RT	Ramp Rate	SCE	LA Basin	13-Apr-12	72	No	DEC	12	10:55	21:59	-3.83	\$0	\$0	\$77	\$0	\$0	\$0	\$0	\$0	\$0
92	RT	Ramp Rate	SCE	LA Basin	13-Apr-12	45- 405	No	INC	12	10:55	21:59	2798.69	\$0	\$0	(\$164,442)	\$2,484	(\$80,014)	\$0	\$0	\$0	\$0
93	RT	Ramp Rate	SCE	LA Basin	14-Apr-12	65- 445	No	INC	12	10:25	21:59	2170.46	\$0	\$0	(\$55,327)	\$1,761	(\$51,304)	\$0	\$0	\$0	\$0
94	RT	Ramp Rate	SCE	LA Basin	15-Apr-12	361- 405	No	INC	5	17:00	21:59	1808.84	\$0	\$0	(\$50,437)	\$1,700	(\$49,360)	\$0	\$0	\$0	\$0
95	RT	Ramp Rate	SCE	LA Basin	17-Apr-12	316- 380	No	INC	5	17:00	21:59	1522.98	\$0	\$0	(\$43,191)	\$1,397	(\$41,021)	\$0	\$0	\$0	\$0
96	RT	Ramp Rate	SCE	LA Basin	21-Apr-12	234	No	DEC	8	14:30	21:59	-212.58	\$0	\$0	\$7,127	\$0	\$0	\$0	\$0	\$0	\$0
97	RT	Ramp Rate	SCE	LA Basin	21-Apr-12	190- 410	No	INC	8	14:30	21:59	2164.61	\$0	\$0	(\$81,059)	\$1,749	(\$60,586)	\$0	\$0	\$0	\$0
98	RT	Ramp Rate	SDG&E	San Diego	2-Apr-12	68	No	INC	5	17:00	21:59	443.85	\$18,536	\$0	(\$15,092)	\$0	(\$1)	\$0	\$0	\$0	\$0
99	RT	Ramp Rate	SDG&E	San Diego	14-Apr-12	68	No	INC	22	0:40	21:59	1123.45	\$89,037	\$0	(\$15,100)	\$1	(\$37)	\$0	\$0	\$0	\$0
100	RT	Ramp Rate	SDG&E	San Diego	17-Apr-12	68	No	INC	3	19:55	21:59	103.80	\$8,336	\$0	(\$1,884)	\$0	(\$0)	\$0	\$0	\$0	\$0
101	RT	Ramp Rate	SDG&E	San Diego	18-Apr-12	68	No	INC	17	5:45	21:59	781.44	\$64,575	\$0	(\$11,564)	\$0	(\$5)	\$0	\$0	\$0	\$0
102	RT	Ramp Rate	SDG&E	San Diego	21-Apr-12	68	No	INC	14	8:25	21:59	1429.36	\$51,994	\$0	(\$61,333)	\$0	(\$4)	\$0	\$0	\$0	\$0
103	RT	Ramp Rate	SDG&E	San Diego	22-Apr-12	68	No	INC	16	6:30	21:59	1139.12	\$61,779	\$0	(\$33,794)	\$12	(\$334)	\$0	\$0	\$0	\$0
104	RT	SDG&E Import Limit	SDG&E	San Diego	25-Apr-12	99	No	INC	2	20:00	21:29	147.55	\$3,600	\$300	(\$16,405)	\$30	(\$1,070)	\$0	\$0	(\$216)	\$0
105	RT	SP26 Capacity	SCE	Big Creek-Ventura	13-Apr-12	125	No	INC	2	22:50	23:58	156.36	\$0	\$0	(\$30,882)	\$123	(\$2,232)	\$0	(\$1,180)	\$0	\$0
106	RT	SP26 Capacity	SCE	Big Creek-Ventura	14-Apr-12	125	No	INC	1	0:00	0:16	39.47	\$0	\$0	(\$379)	\$0	\$0	\$0	\$0	\$0	\$0
107	RT	SP26 Capacity	SCE	LA Basin	5-Apr-12	10- 30	Yes	INC	24	0:00	23:59	702.96	\$108,995	\$0	(\$67,924)	\$0	(\$5)	\$0	(\$14)	\$0	\$0
108	RT	SP26 Capacity	SCE	LA Basin	13-Apr-12	93- 457	Yes	INC	15	9:20	23:59	840.01	\$18,434	\$833	(\$53,291)	\$0	\$0	\$0	\$0	\$0	\$0
109	RT	SP26 Capacity	SCE	LA Basin	14-Apr-12	320- 455	Yes	INC	8	0:00	7:59	4863.50	\$104,217	\$218	(\$61,584)	\$0	\$0	\$0	\$0	\$0	\$0
110	RT	SP26 Capacity	SCE	LA Basin	28-Apr-12	129	Yes	DEC	24	0:00	23:59	-116.44	\$0	\$0	\$2,380	\$0	\$0	\$0	\$0	\$0	\$0
111	RT	SP26 Capacity	SCE	LA Basin	28-Apr-12	20	Yes	INC	24	0:00	23:59	574.75	\$36,246	\$0	(\$7,639)	\$0	\$0	\$0	\$0	\$0	\$0
112	RT	SP26 Capacity	SDG&E	San Diego	1-Apr-12	200- 281	Yes	INC	24	0:00	23:59	3704.56	\$75,992	\$15,710	(\$32,343)	\$0	(\$1)	\$0	(\$0)	\$0	\$0

Number	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commitment	INC_DEC	Hours	Begin Time	End Time	Total MWH	Min Load Cost	Start Up Cost	CC6470	ED MWH (INC/DEC)	CC6470 INC	CC6470 DEC	CC6482	CC6488	CC6620
113	RT	SP26 Capacity	SDG&E	San Diego	3-Apr-12	25	Yes	INC	16	5:40	20:59	429.36	\$23,719	\$1,173	(\$23,433)	\$2	(\$11)	\$0	(\$44)	\$0	\$0
114	RT	SP26 Capacity	SDG&E	San Diego	25-Apr-12	63	No	INC	10	10:35	19:59	604.39	\$37,793	\$0	(\$27,107)	\$0	\$0	\$0	\$0	\$0	\$0
115	RT	Software Limitation	Intertie	N/A	5-Apr-12	0	No	INC	2	3:30	4:29	-340.36	\$0	\$0	(\$570)	\$0	\$0	\$0	\$0	\$0	\$0
116	RT	Software Limitation	Intertie	N/A	15-Apr-12	0	No	INC	1	6:08	6:19	-26.26	\$0	\$0	\$537	\$0	\$0	\$0	\$0	\$0	\$0
117	RT	Software Limitation	PG&E	Bay Area	30-Apr-12	0	No	INC	2	21:02	22:14	0.00	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
118	RT	Software Limitation	PG&E	Fresno	2-Apr-12	35	Yes	INC	2	7:45	8:29	29.57	\$0	\$0	(\$18,857)	\$0	\$0	\$0	\$0	\$0	\$0
119	RT	Software Limitation	PG&E	Fresno	10-Apr-12	0	Yes	INC	1	23:37	23:58	6.92	\$758	\$68	(\$131)	\$0	\$0	\$0	\$0	\$0	\$0
120	RT	Software Limitation	PG&E	Fresno	15-Apr-12	0	No	INC	1	6:08	6:21	9.47	\$0	\$0	(\$111)	\$0	\$0	\$0	\$0	\$0	\$0
121	RT	Software Limitation	PG&E	Fresno	16-Apr-12	320	No	INC	4	1:50	4:59	183.10	\$0	\$0	(\$3,036)	\$0	\$0	\$0	\$0	\$0	\$0
122	RT	Software Limitation	PG&E	N/A	9-Apr-12	0	No	INC	4	0:00	3:59	0.00	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
123	RT	Software Limitation	PG&E	N/A	10-Apr-12	50	No	DEC	4	0:00	3:59	-195.83	\$0	\$0	(\$196)	\$0	\$0	\$0	\$0	\$0	\$0
124	RT	Software Limitation	PG&E	N/A	11-Apr-12	50	No	DEC	11	0:00	10:59	-245.83	\$0	\$0	(\$246)	\$0	\$0	\$0	\$0	\$0	\$0
125	RT	Software Limitation	PG&E	N/A	11-Apr-12	0	No	INC	11	0:00	10:59	-2.08	\$0	\$0	\$31	\$0	\$0	\$0	\$0	\$0	\$0
126	RT	Software Limitation	PG&E	N/A	14-Apr-12	0	No	INC	1	1:30	1:59	75.06	\$1,252	\$0	\$2,255	\$0	\$0	\$0	\$0	\$0	\$0
127	RT	Software Limitation	SCE	Big Creek-Ventura	13-Apr-12	64	Yes	INC	15	9:20	23:34	112.31	\$2,023	\$329	(\$73,722)	\$0	\$0	\$0	\$0	\$0	\$0
128	RT	Software Limitation	SCE	Big Creek-Ventura	20-Apr-12	0	Yes	INC	1	23:05	23:34	0.85	\$0	\$38	(\$28)	\$0	\$0	\$0	\$0	\$0	\$0
129	RT	Software Limitation	SCE	LA Basin	2-Apr-12	46	Yes	DEC	2	7:15	8:29	-76.67	\$0	\$0	\$2,298	(\$57)	\$0	\$3	\$0	\$0	\$0
130	RT	Software Limitation	SCE	LA Basin	2-Apr-12	0	Yes	INC	1	23:20	23:59	0.00	\$0	\$0	(\$0)	\$0	\$0	\$0	\$0	\$0	\$0
131	RT	Software Limitation	SCE	LA Basin	3-Apr-12	36	Yes	INC	4	6:43	9:29	122.28	\$2,988	\$7	(\$14,260)	\$0	(\$0)	\$0	\$0	\$0	\$0
132	RT	Software Limitation	SCE	LA Basin	9-Apr-12	0	Yes	INC	2	22:20	23:19	0.00	\$0	\$0	(\$0)	\$0	\$0	\$0	\$0	\$0	\$0
133	RT	Software Limitation	SCE	LA Basin	13-Apr-12	66	Yes	INC	15	9:20	23:34	126.17	\$1,913	\$109	(\$51,582)	\$0	\$0	\$0	\$0	\$0	\$0
134	RT	Software Limitation	SCE	LA Basin	14-Apr-12	0	Yes	INC	2	0:25	1:24	0.00	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
135	RT	Software Limitation	SCE	LA Basin	16-Apr-12	0	Yes	INC	1	15:00	15:59	0.00	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
136	RT	Software Limitation	SCE	LA Basin	17-Apr-12	0	Yes	INC	5	15:30	19:29	0.00	\$0	\$0	(\$0)	\$0	\$0	\$0	\$0	\$0	\$0
137	RT	Software Limitation	SCE	LA Basin	18-Apr-12	0	Yes	INC	9	10:55	18:59	0.42	\$0	\$10	(\$5)	\$0	\$0	\$0	\$0	\$0	\$0
138	RT	Software Limitation	SCE	LA Basin	20-Apr-12	0	Yes	INC	2	21:25	22:24	7.73	\$524	\$0	(\$185)	\$0	\$0	\$0	\$0	\$0	\$0
139	RT	Software Limitation	SCE	LA Basin	22-Apr-12	0	Yes	INC	2	21:40	22:39	0.00	\$0	\$0	(\$0)	\$0	\$0	\$0	\$0	\$0	\$0
140	RT	Software Limitation	SCE	LA Basin	25-Apr-12	0	Yes	INC	1	23:05	23:34	1.28	\$0	\$0	(\$54)	\$0	\$0	\$0	\$0	\$0	\$0
141	RT	Software Limitation	SCE	LA Basin	28-Apr-12	0	Yes	INC	2	12:40	13:09	0.00	\$0	\$0	(\$0)	\$0	\$0	\$0	\$0	\$0	\$0
142	RT	Software Limitation	SCE	N/A	3-Apr-12	348- 356	Yes	DEC	2	9:30	10:29	-43.35	\$0	\$0	\$2,616	\$0	\$0	\$0	\$0	\$0	\$0
143	RT	Software Limitation	SDG&E	San Diego	2-Apr-12	0	Yes	INC	4	2:40	5:14	30.01	\$0	\$226	(\$482)	\$0	\$0	\$0	\$0	\$0	\$0
144	RT	Software Limitation	SDG&E	San Diego	3-Apr-12	200- 523	No	INC	9	9:15	17:54	-478.30	\$6,778	\$0	\$8,857	(\$39)	\$0	\$126	\$0	\$0	\$0
145	RT	Software Limitation	SDG&E	San Diego	5-Apr-12	0	Yes	INC	1	23:15	23:59	2.00	\$0	\$0	(\$39)	\$0	\$0	\$0	\$0	\$0	\$0
146	RT	Software Limitation	SDG&E	San Diego	6-Apr-12	0	No	INC	1	0:00	0:14	0.00	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
147	RT	Software Limitation	SDG&E	San Diego	9-Apr-12	0	Yes	INC	2	21:45	22:44	2.75	\$277	\$0	(\$51)	\$0	\$0	\$0	\$0	\$0	\$0
148	RT	Software Limitation	SDG&E	San Diego	13-Apr-12	50	No	DEC	1	14:10	14:59	-10.49	\$0	\$0	\$189	(\$10)	\$0	\$189	\$0	\$0	\$0
149	RT	Software Limitation	SDG&E	San Diego	13-Apr-12	29	Yes	INC	15	9:20	23:34	27.25	\$479	\$30	(\$14,214)	\$0	\$0	\$0	\$0	\$0	\$0
150	RT	Software Limitation	SDG&E	San Diego	26-Apr-12	0	Yes	INC	2	0:35	1:14	1.17	\$197	\$0	(\$22)	\$0	\$0	\$0	\$0	\$0	\$0
151	RT	Software Limitation	SDG&E	San Diego	30-Apr-12	0	Yes	INC	2	15:51	16:50	0.05	\$0	\$0	(\$1)	\$0	\$0	\$0	\$0	\$0	\$0
152	RT	Stranded A/S or RUC	SCE	LA Basin	21-Apr-12	88	No	DEC	1	15:00	15:59	-99.08	\$0	\$0	\$2,808	\$0	\$0	\$0	\$0	\$0	\$0
153	RT	System Energy	Intertie	N/A	7-Apr-12	150	Yes	INC	2	7:00	8:59	0.00	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Number	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commitment	INC_DEC	Hours	Begin Time	End Time	Total MWH	Min Load Cost	Start Up Cost	CC6470	ED MWH (INC/DEC)	CC6470 INC	CC6470 DEC	CC6482	CC6488	CC6620
154	RT	System Energy	Intertie	N/A	17-Apr-12	175	Yes	INC	1	23:00	23:59	0.00	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
155	RT	System Energy	Intertie	N/A	19-Apr-12	85	No	DEC	1	0:00	0:59	0.00	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
156	RT	System Energy	Intertie	N/A	19-Apr-12	100	No	INC	1	0:00	0:59	0.00	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
157	RT	System Energy	Intertie	N/A	20-Apr-12	25- 50	No	INC	3	16:00	18:59	0.00	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
158	RT	System Energy	Intertie	N/A	22-Apr-12	25	No	INC	4	15:00	18:59	0.00	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
159	RT	Transmission Outage Other	PG&E	Bay Area	1-Apr-12	605	Yes	INC	24	0:00	23:59	16719.89	\$651,265	\$0	(\$210,429)	\$6	(\$46)	\$0	(\$155)	\$0	\$0
160	RT	Transmission Outage Other	PG&E	Bay Area	19-Apr-12	35- 85	No	DEC	5	19:10	23:59	-300.90	\$0	\$0	\$5,785	(\$143)	\$0	\$4,216	\$0	(\$2,493)	\$0
161	RT	Transmission Outage Other	PG&E	Bay Area	19-Apr-12	380- 830	No	INC	11	13:05	23:59	-1313.32	\$0	\$0	\$10,685	(\$48)	\$0	\$931	\$0	(\$35)	\$0
162	RT	Transmission Outage Other	PG&E	Bay Area	20-Apr-12	865-1160	No	INC	24	0:00	23:59	-3474.91	\$0	\$0	(\$57,158)	(\$12)	\$0	\$211	\$0	(\$22)	\$0
163	RT	Transmission Outage PG&E	PG&E	Bay Area	14-Apr-12	433	Yes	INC	24	0:00	23:59	14653.82	\$471,999	\$0	(\$155,614)	\$0	(\$2)	\$0	\$0	(\$8)	\$0
164	RT	Transmission Outage PG&E	PG&E	Bay Area	19-Apr-12	35	No	DEC	5	15:00	19:59	-188.38	\$0	\$0	\$9,498	(\$111)	\$0	\$8,764	\$0	(\$7,197)	\$0
165	RT	Transmission Outage PG&E	PG&E	Bay Area	19-Apr-12	450- 500	No	INC	12	12:15	23:59	-4084.77	\$0	\$0	\$19,576	(\$129)	\$0	\$3,045	\$0	(\$564)	\$0
166	RT	Transmission Outage PG&E	PG&E	Bay Area	20-Apr-12	650	No	INC	1	0:00	0:59	-200.11	\$0	\$0	\$3,781	(\$12)	\$0	\$211	\$0	(\$22)	\$0
167	RT	Transmission Outage PG&E	PG&E	Bay Area	24-Apr-12	20	Yes	INC	9	14:10	22:59	283.94	\$8,199	\$562	(\$10,760)	\$0	(\$1)	\$0	\$0	(\$0)	\$0
168	RT	Transmission Outage PG&E	PG&E	Fresno	28-Apr-12	83	Yes	INC	3	13:31	15:59	207.97	\$0	\$0	(\$3,492)	\$31	\$0	\$0	\$0	\$0	\$0
169	RT	Transmission Outage PG&E	PG&E	Humboldt	5-Apr-12	32	No	INC	5	17:40	21:59	-45.43	\$0	\$0	\$1,221	(\$0)	\$0	\$23	\$0	(\$10)	\$0
170	RT	Transmission Outage PG&E	PG&E	Humboldt	14-Apr-12	32- 96	No	INC	9	0:00	8:55	280.03	\$6,588	\$0	\$1,410	\$80	(\$11)	\$0	\$0	(\$2,150)	\$0
171	RT	Transmission Outage PG&E	PG&E	Humboldt	18-Apr-12	45	No	INC	13	8:00	20:59	171.33	\$4,544	\$0	(\$2,345)	\$66	(\$904)	\$0	\$0	(\$899)	\$0
172	RT	Transmission Outage PG&E	PG&E	Humboldt	26-Apr-12	32- 80	No	INC	13	11:30	23:59	311.90	\$6,415	\$0	(\$3,254)	\$136	(\$1,297)	\$0	\$0	(\$2,361)	\$0
173	RT	Transmission Outage PG&E	PG&E	Humboldt	27-Apr-12	32- 64	No	INC	24	0:00	23:59	680.75	\$13,915	\$0	(\$8,807)	\$221	(\$2,696)	\$0	\$0	(\$3,249)	\$0
174	RT	Transmission Outage PG&E	PG&E	Humboldt	28-Apr-12	32- 76	No	INC	24	0:00	23:59	1182.36	\$22,317	\$0	(\$12,503)	\$668	(\$6,851)	\$0	\$0	(\$6,084)	\$0
175	RT	Transmission Outage PG&E	PG&E	Humboldt	29-Apr-12	48- 90	No	INC	24	0:00	23:59	674.30	\$13,145	\$0	(\$11,307)	\$280	(\$4,841)	\$0	\$0	(\$2,468)	\$0
176	RT	Transmission Outage PG&E	PG&E	Humboldt	30-Apr-12	29- 80	No	INC	24	0:00	23:59	869.56	\$16,625	\$0	(\$14,241)	\$307	(\$4,982)	\$0	\$0	(\$2,704)	\$0
177	RT	Transmission Outage PG&E	PG&E	Sierra	3-Apr-12	24- 25	No	DEC	5	18:45	22:59	12.38	\$0	\$0	\$276	\$0	\$0	\$0	\$0	\$0	\$0
178	RT	Transmission Outage PG&E	PG&E	Sierra	3-Apr-12	7- 108	No	INC	5	18:00	22:59	414.60	\$0	\$0	\$105,356	\$0	\$0	\$0	\$0	\$0	\$0
179	RT	Transmission Outage PG&E	PG&E	Sierra	4-Apr-12	20	No	DEC	8	16:47	23:59	-190.88	\$0	\$0	\$2,450	(\$176)	\$0	\$2,413	\$0	(\$1,634)	\$0
180	RT	Transmission Outage	PG&E	Sierra	5-Apr-12	8- 38	No	DEC	18	6:00	23:59	-388.98	\$0	\$0	\$4,299	(\$355)	\$0	\$4,341	\$0	(\$3,878)	\$0

Number	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commitment	INC_DEC	Hours	Begin Time	End Time	Total MWH	Min Load Cost	Start Up Cost	CC6470	ED MWH (INC/DEC)	CC6470 INC	CC6470 DEC	CC6482	CC6488	CC6620
		PG&E																			
181	RT	Transmission Outage PG&E	PG&E	Sierra	13-Apr-12	14	No	INC	2	11:10	12:47	24.17	\$0	\$0	(\$8,408)	\$0	\$0	\$0	\$0	\$0	\$0
182	RT	Transmission Outage PG&E	PG&E	Sierra	14-Apr-12	26- 46	No	DEC	9	1:35	9:59	-460.92	\$0	\$0	\$6,018	(\$458)	\$0	\$6,054	\$0	\$0	\$0
183	RT	Transmission Outage SCE	SCE	Big Creek-Ventura	9-Apr-12	51- 76	No	DEC	5	11:00	15:59	-372.40	\$0	\$0	\$6,039	(\$187)	\$0	\$3,401	\$0	(\$3,091)	\$0
184	RT	Transmission Outage SCE	SCE	Big Creek-Ventura	9-Apr-12	140- 171	Yes	INC	11	0:00	10:59	1219.90	\$48,963	\$0	(\$70,312)	\$0	\$0	\$0	\$0	\$0	\$0
185	RT	Transmission Outage SCE	SCE	Big Creek-Ventura	13-Apr-12	115- 315	No	INC	8	12:25	19:59	214.53	\$0	\$0	(\$4,846)	\$0	\$0	\$0	\$0	\$0	\$0
186	RT	Transmission Outage SCE	SCE	Big Creek-Ventura	18-Apr-12	14- 110	No	INC	5	11:55	15:59	12.72	\$0	\$0	(\$153)	\$0	\$0	\$0	\$0	\$0	\$0
187	RT	Transmission Outage SCE	SCE	Big Creek-Ventura	20-Apr-12	62- 76	No	DEC	5	12:25	16:59	-319.23	\$0	\$0	\$12,388	(\$262)	\$0	\$10,956	\$0	(\$4,008)	\$0
188	RT	Transmission Outage SCE	SCE	Big Creek-Ventura	24-Apr-12	57	No	DEC	1	12:45	12:59	-18.22	\$0	\$0	\$3,797	(\$13)	\$0	\$2,818	\$0	(\$2,773)	\$0
189	RT	Transmission Outage SCE	SCE	Big Creek-Ventura	24-Apr-12	6- 320	No	INC	11	12:20	22:59	1040.49	\$0	\$0	(\$34,091)	(\$13)	\$0	\$2,818	\$0	(\$2,773)	\$0
190	RT	Transmission Outage SCE	SCE	Big Creek-Ventura	25-Apr-12	10- 338	No	DEC	6	10:25	15:59	-943.37	\$0	\$0	\$41,001	(\$891)	\$0	\$38,196	\$0	(\$34,594)	\$0
191	RT	Transmission Outage SCE	SCE	Big Creek-Ventura	26-Apr-12	180- 208	No	DEC	5	11:00	15:59	-951.01	\$0	\$0	\$12,782	(\$875)	\$0	\$12,649	\$0	(\$11,362)	\$0
192	RT	Transmission Outage SCE	SCE	LA Basin	1-Apr-12	65- 235	No	DEC	24	0:00	23:58	-4677.72	\$0	\$0	\$44,367	(\$4,323)	\$0	\$43,667	\$0	(\$34,755)	\$0
193	RT	Transmission Outage SCE	SCE	LA Basin	1-Apr-12	3- 80	No	INC	24	0:00	23:58	201.57	\$0	\$0	(\$3,361)	\$0	\$0	\$0	\$0	\$0	\$0
194	RT	Transmission Outage SCE	SCE	LA Basin	2-Apr-12	16- 48	No	DEC	12	0:00	11:44	-63.67	\$0	\$0	\$603	(\$61)	\$0	\$583	\$0	(\$520)	\$0
195	RT	Transmission Outage SCE	SCE	LA Basin	2-Apr-12	18- 326	No	INC	24	0:00	23:58	2547.84	\$0	\$0	(\$185,829)	\$0	\$0	\$0	\$0	\$0	\$0
196	RT	Transmission Outage SCE	SCE	LA Basin	3-Apr-12	8- 50	No	DEC	24	0:01	23:58	-86.65	\$0	\$0	\$2,633	(\$83)	\$0	\$2,606	\$0	(\$635)	\$0
197	RT	Transmission Outage SCE	SCE	LA Basin	3-Apr-12	33- 308	No	INC	24	0:01	23:58	572.14	\$0	\$0	(\$386,845)	\$0	\$0	\$0	\$0	\$0	\$0
198	RT	Transmission Outage SCE	SCE	LA Basin	4-Apr-12	13- 262	No	DEC	24	0:01	23:58	-4431.00	\$0	\$0	\$43,936	(\$4,159)	\$0	\$41,784	\$0	(\$51,281)	\$0
199	RT	Transmission Outage SCE	SCE	LA Basin	4-Apr-12	1- 42	No	INC	24	0:01	23:58	113.70	\$0	\$0	\$7,218	\$0	\$0	\$0	\$0	\$0	\$0
200	RT	Transmission Outage SCE	SCE	LA Basin	5-Apr-12	158- 262	No	DEC	24	0:00	23:58	-6306.66	\$0	\$0	(\$1,185)	(\$5,748)	\$0	\$6,945	\$0	(\$42,456)	\$0
201	RT	Transmission Outage SCE	SCE	LA Basin	6-Apr-12	13- 197	No	DEC	24	0:00	23:58	-1500.10	\$0	\$0	\$9,915	(\$757)	\$0	\$6,479	\$0	(\$5,591)	\$0
202	RT	Transmission Outage SCE	SCE	LA Basin	6-Apr-12	3- 308	No	INC	24	0:00	23:58	116.18	\$0	\$0	(\$3,841)	\$0	\$0	\$0	\$0	\$0	\$0
203	RT	Transmission Outage SCE	SCE	LA Basin	7-Apr-12	189- 308	No	INC	24	0:00	23:58	-486.63	\$0	\$0	\$22,531	\$0	\$0	\$0	\$0	\$0	\$0
204	RT	Transmission Outage SCE	SCE	LA Basin	8-Apr-12	125- 308	No	INC	24	0:00	23:58	-523.62	\$0	\$0	\$950	\$0	\$0	\$0	\$0	\$0	\$0
205	RT	Transmission Outage SCE	SCE	LA Basin	9-Apr-12	134- 308	No	INC	24	0:00	23:58	260.16	\$0	\$0	(\$13,062)	\$0	\$0	\$0	\$0	\$0	\$0
206	RT	Transmission Outage SCE	SCE	LA Basin	10-Apr-12	53- 306	No	INC	24	0:00	23:58	1048.60	\$0	\$0	(\$18,707)	\$0	\$0	\$0	\$0	\$0	\$0
207	RT	Transmission Outage SCE	SCE	LA Basin	11-Apr-12	9- 30	No	DEC	24	0:00	23:58	-122.90	\$0	\$0	\$2,102	(\$105)	\$0	\$1,840	\$0	(\$1,421)	\$0
208	RT	Transmission Outage SCE	SCE	LA Basin	11-Apr-12	45- 222	No	INC	24	0:00	23:58	379.21	\$0	\$0	(\$7,129)	\$0	\$0	\$0	\$0	\$0	\$0
209	RT	Transmission Outage SCE	SCE	LA Basin	12-Apr-12	3- 86	No	DEC	9	0:00	8:59	-759.46	\$0	\$0	\$535	(\$436)	\$0	\$610	\$0	(\$1,641)	\$0
210	RT	Transmission Outage SCE	SCE	LA Basin	12-Apr-12	15- 279	No	INC	24	0:00	23:58	-375.82	\$0	\$0	(\$1,673)	\$0	\$0	\$0	\$0	\$0	\$0
211	RT	Transmission Outage SCE	SCE	LA Basin	13-Apr-12	6- 200	No	DEC	24	0:00	23:58	-1841.64	\$0	\$0	\$272,001	(\$976)	\$0	\$147,673	\$0	(\$138,617)	\$0
212	RT	Transmission Outage SCE	SCE	LA Basin	13-Apr-12	10- 308	No	INC	24	0:00	23:58	1379.99	\$0	\$0	(\$39,486)	\$0	\$0	\$0	\$0	\$0	\$0
213	RT	Transmission Outage SCE	SCE	LA Basin	14-Apr-12	38- 262	No	DEC	24	0:00	23:58	-6066.71	\$0	\$0	\$78,504	(\$5,306)	\$0	\$66,661	\$0	(\$39,073)	\$0

Number	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commitment	INC_DEC	Hours	Begin Time	End Time	Total MWH	Min Load Cost	Start Up Cost	CC6470	ED MWH (INC/DEC)	CC6470 INC	CC6470 DEC	CC6482	CC6488	CC6620
214	RT	Transmission Outage SCE	SCE	LA Basin	14-Apr-12	1- 36	No	INC	24	0:00	23:58	35.71	\$0	\$0	(\$527)	\$0	\$0	\$0	\$0	\$0	\$0
215	RT	Transmission Outage SCE	SCE	LA Basin	15-Apr-12	5- 236	No	DEC	24	0:00	23:58	-1375.69	\$0	\$0	\$14,752	(\$1,065)	\$0	\$12,715	\$0	(\$7,624)	\$0
216	RT	Transmission Outage SCE	SCE	LA Basin	15-Apr-12	3- 308	No	INC	24	0:00	23:58	955.91	\$0	\$0	(\$12,796)	\$0	\$0	\$0	\$0	\$0	\$0
217	RT	Transmission Outage SCE	SCE	LA Basin	16-Apr-12	2- 156	No	DEC	24	0:00	23:58	-934.69	\$0	\$0	\$10,024	(\$534)	\$0	\$4,963	\$0	(\$2,132)	\$0
218	RT	Transmission Outage SCE	SCE	LA Basin	16-Apr-12	9- 308	No	INC	24	0:00	23:58	878.27	\$0	\$0	(\$13,033)	\$0	\$0	\$0	\$0	\$0	\$0
219	RT	Transmission Outage SCE	SCE	LA Basin	17-Apr-12	21- 169	No	DEC	24	0:00	23:58	-2187.65	\$0	\$0	\$29,559	(\$1,670)	\$0	\$22,100	\$0	(\$12,003)	\$0
220	RT	Transmission Outage SCE	SCE	LA Basin	17-Apr-12	4- 307	No	INC	24	0:00	23:58	397.79	\$0	\$0	(\$39,637)	\$0	\$0	\$0	\$0	\$0	\$0
221	RT	Transmission Outage SCE	SCE	LA Basin	18-Apr-12	19- 262	No	DEC	24	0:00	23:58	-4355.57	\$0	\$0	\$30,739	(\$3,963)	\$0	\$27,589	\$0	(\$24,829)	\$0
222	RT	Transmission Outage SCE	SCE	LA Basin	18-Apr-12	2- 74	No	INC	24	0:00	23:58	-16.11	\$0	\$0	\$182	\$0	\$0	\$0	\$0	\$0	\$0
223	RT	Transmission Outage SCE	SCE	LA Basin	19-Apr-12	5- 262	No	DEC	24	0:00	23:58	-2435.26	\$0	\$0	\$30,924	(\$2,066)	\$0	\$26,181	\$0	(\$17,560)	\$0
224	RT	Transmission Outage SCE	SCE	LA Basin	19-Apr-12	13- 308	No	INC	24	0:00	23:58	1085.80	\$0	\$0	(\$15,705)	\$0	\$0	\$0	\$0	\$0	\$0
225	RT	Transmission Outage SCE	SCE	LA Basin	20-Apr-12	10- 18	No	DEC	24	0:00	23:58	-213.90	\$0	\$0	\$3,642	(\$40)	\$0	\$669	\$0	(\$506)	\$0
226	RT	Transmission Outage SCE	SCE	LA Basin	20-Apr-12	66- 308	No	INC	24	0:00	23:58	258.06	\$0	\$0	(\$5,577)	\$0	\$0	\$0	\$0	\$0	\$0
227	RT	Transmission Outage SCE	SCE	LA Basin	21-Apr-12	1- 31	No	DEC	24	0:00	23:58	-407.58	\$0	\$0	\$11,343	(\$65)	\$0	\$1,859	\$0	(\$45)	\$0
228	RT	Transmission Outage SCE	SCE	LA Basin	21-Apr-12	45- 305	No	INC	24	0:00	23:58	439.55	\$0	\$0	\$961	\$0	\$0	\$0	\$0	\$0	\$0
229	RT	Transmission Outage SCE	SCE	LA Basin	22-Apr-12	39- 180	No	INC	24	0:00	23:58	-150.17	\$0	\$0	\$8,866	\$0	\$0	\$0	\$0	\$0	\$0
230	RT	Transmission Outage SCE	SCE	LA Basin	23-Apr-12	1	No	DEC	24	0:00	23:58	-45.18	\$0	\$0	\$687	(\$1)	\$0	\$11	\$0	(\$1)	\$0
231	RT	Transmission Outage SCE	SCE	LA Basin	23-Apr-12	57- 292	No	INC	24	0:00	23:58	-609.90	\$0	\$0	\$11,767	\$0	\$0	\$0	\$0	\$0	\$0
232	RT	Transmission Outage SCE	SCE	LA Basin	24-Apr-12	3- 50	No	DEC	24	0:00	23:58	-978.36	\$0	\$0	\$30,893	(\$231)	\$0	\$7,246	\$0	(\$5,862)	\$0
233	RT	Transmission Outage SCE	SCE	LA Basin	24-Apr-12	13- 286	No	INC	24	0:00	23:58	-352.59	\$0	\$0	\$12,003	\$0	\$0	\$0	\$0	\$0	\$0
234	RT	Transmission Outage SCE	SCE	LA Basin	25-Apr-12	44- 146	No	DEC	24	0:00	23:58	-963.99	\$0	\$0	\$56,264	(\$311)	\$0	\$18,678	\$0	(\$13,724)	\$0
235	RT	Transmission Outage SCE	SCE	LA Basin	25-Apr-12	18- 308	No	INC	24	0:00	23:58	406.13	\$0	\$0	(\$18,521)	\$0	\$0	\$0	\$0	\$0	\$0
236	RT	Transmission Outage SCE	SCE	LA Basin	26-Apr-12	7- 226	No	DEC	24	0:00	23:58	-2393.38	\$0	\$0	\$20,054	(\$1,640)	\$0	\$13,775	\$0	(\$6,687)	\$0
237	RT	Transmission Outage SCE	SCE	LA Basin	26-Apr-12	6- 301	No	INC	24	0:00	23:58	633.85	\$0	\$0	(\$10,956)	\$0	\$0	\$0	\$0	\$0	\$0
238	RT	Transmission Outage SCE	SCE	LA Basin	27-Apr-12	5- 262	No	DEC	24	0:00	23:58	-3244.75	\$0	\$0	\$24,264	(\$2,997)	\$0	\$21,035	\$0	(\$22,241)	\$0
239	RT	Transmission Outage SCE	SCE	LA Basin	27-Apr-12	43- 308	No	INC	24	0:00	23:58	841.25	\$0	\$0	(\$14,844)	\$0	\$0	\$0	\$0	\$0	\$0
240	RT	Transmission Outage SCE	SCE	LA Basin	28-Apr-12	3- 262	No	DEC	24	0:00	23:58	-2606.22	\$0	\$0	\$19,150	(\$2,103)	\$0	\$15,386	\$0	(\$12,697)	\$0
241	RT	Transmission Outage SCE	SCE	LA Basin	28-Apr-12	11- 307	No	INC	24	0:00	23:58	329.03	\$0	\$0	(\$7,344)	\$0	\$0	\$0	\$0	\$0	\$0
242	RT	Transmission Outage SCE	SCE	LA Basin	29-Apr-12	2- 121	No	DEC	24	0:00	23:58	-747.77	\$0	\$0	\$12,998	(\$292)	\$0	\$4,647	\$0	(\$1,773)	\$0
243	RT	Transmission Outage SCE	SCE	LA Basin	29-Apr-12	3- 306	No	INC	24	0:00	23:58	-257.38	\$0	\$0	\$6,425	\$0	\$0	\$0	\$0	\$0	\$0
244	RT	Transmission Outage SCE	SCE	LA Basin	30-Apr-12	9- 154	No	DEC	24	0:00	23:58	-1520.51	\$0	\$0	\$25,529	(\$975)	\$0	\$15,177	\$0	(\$6,485)	\$0
245	RT	Transmission Outage SCE	SCE	LA Basin	30-Apr-12	9- 223	No	INC	21	3:22	23:58	295.67	\$0	\$0	(\$4,568)	\$0	\$0	\$0	\$0	\$0	\$0
246	RT	Transmission Outage SCE	SCE	N/A	1-Apr-12	35	No	INC	24	0:00	23:58	-39.87	\$0	\$0	\$1,997	\$0	\$0	\$0	\$0	\$0	\$0
247	RT	Transmission Outage SCE	SCE	N/A	2-Apr-12	20- 51	No	DEC	15	9:42	23:58	-580.51	\$0	\$0	\$25,615	(\$558)	\$0	\$25,228	\$0	(\$18,738)	\$0
248	RT	Transmission Outage SCE	SCE	N/A	2-Apr-12	75- 158	No	INC	24	0:00	23:58	-122.54	\$0	\$0	\$17,199	\$0	\$0	\$0	\$0	\$0	\$0
249	RT	Transmission Outage SCE	SCE	N/A	3-Apr-12	2- 717	Yes	DEC	24	0:01	23:58	-9315.30	\$0	\$0	\$1,602,759	(\$8,702)	\$0	\$1,591,996	\$0	(\$1,448,742)	\$0
250	RT	Transmission Outage SCE	SCE	N/A	3-Apr-12	108- 189	Yes	INC	24	0:01	23:59	-43.20	\$0	\$0	\$191,362	\$0	\$0	\$0	\$0	\$0	\$0
251	RT	Transmission Outage SCE	SCE	N/A	4-Apr-12	1- 6	No	DEC	24	0:01	23:58	-26.12	\$0	\$0	\$578	(\$18)	\$0	\$464	\$0	(\$399)	\$0
252	RT	Transmission Outage SCE	SCE	N/A	4-Apr-12	108- 137	No	INC	24	0:01	23:58	389.10	\$0	\$0	\$5,869	\$0	\$0	\$0	\$0	\$0	\$0
253	RT	Transmission Outage SCE	SCE	N/A	5-Apr-12	1- 6	No	DEC	24	0:00	23:58	-22.58	\$0	\$0	(\$507)	(\$18)	\$0	(\$573)	\$0	(\$160)	\$0
254	RT	Transmission Outage SCE	SCE	N/A	5-Apr-12	108- 137	No	INC	24	0:00	23:58	486.97	\$0	\$0	(\$2,536)	\$0					

Number	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commitment	INC_DEC	Hours	Begin Time	End Time	Total MWH	Min Load Cost	Start Up Cost	CC6470	ED MWH (INC/DEC)	CC6470 INC	CC6470 DEC	CC6482	CC6488	CC6620
256	RT	Transmission Outage SCE	SCE	N/A	6-Apr-12	67- 171	No	INC	24	0:00	23:58	-170.10	\$0	\$0	\$4,256	\$0	\$0	\$0	\$0	\$0	\$0
257	RT	Transmission Outage SCE	SCE	N/A	7-Apr-12	147- 172	No	INC	24	0:00	23:58	45.95	\$0	\$0	(\$4,062)	\$0	\$0	\$0	\$0	\$0	\$0
258	RT	Transmission Outage SCE	SCE	N/A	8-Apr-12	159- 172	No	INC	24	0:00	23:58	34.27	\$0	\$0	(\$582)	\$0	\$0	\$0	\$0	\$0	\$0
259	RT	Transmission Outage SCE	SCE	N/A	9-Apr-12	165- 172	No	INC	24	0:00	23:58	331.50	\$0	\$0	(\$6,897)	\$0	\$0	\$0	\$0	\$0	\$0
260	RT	Transmission Outage SCE	SCE	N/A	10-Apr-12	4- 26	No	DEC	24	0:00	23:58	-257.31	\$0	\$0	\$12,647	(\$158)	\$0	\$10,353	\$0	(\$9,926)	\$0
261	RT	Transmission Outage SCE	SCE	N/A	10-Apr-12	111- 171	No	INC	24	0:00	23:58	410.95	\$0	\$0	(\$26,461)	\$0	\$0	\$0	\$0	\$0	\$0
262	RT	Transmission Outage SCE	SCE	N/A	11-Apr-12	4- 47	No	DEC	24	0:00	23:58	-536.38	\$0	\$0	\$8,929	(\$173)	\$0	\$2,829	\$0	(\$2,133)	\$0
263	RT	Transmission Outage SCE	SCE	N/A	11-Apr-12	64- 169	No	INC	24	0:00	23:58	314.10	\$0	\$0	(\$4,989)	\$0	\$0	\$0	\$0	\$0	\$0
264	RT	Transmission Outage SCE	SCE	N/A	12-Apr-12	4- 44	No	DEC	24	0:00	23:58	-544.00	\$0	\$0	\$12,408	(\$524)	\$0	\$11,996	\$0	(\$11,030)	\$0
265	RT	Transmission Outage SCE	SCE	N/A	12-Apr-12	64- 132	No	INC	24	0:00	23:58	232.14	\$0	\$0	(\$4,162)	\$0	\$0	\$0	\$0	\$0	\$0
266	RT	Transmission Outage SCE	SCE	N/A	13-Apr-12	26- 54	Yes	DEC	24	0:00	23:58	-785.85	\$0	\$0	\$23,338	(\$677)	\$0	\$21,138	\$0	(\$18,636)	\$0
267	RT	Transmission Outage SCE	SCE	N/A	13-Apr-12	64- 157	Yes	INC	24	0:00	23:58	-38.49	\$0	\$0	(\$4,225)	\$0	\$0	\$0	\$0	\$0	\$0
268	RT	Transmission Outage SCE	SCE	N/A	14-Apr-12	2- 48	No	DEC	24	0:00	23:58	-1232.65	\$0	\$0	\$15,623	(\$596)	\$0	\$8,062	\$0	(\$6,637)	\$0
269	RT	Transmission Outage SCE	SCE	N/A	14-Apr-12	64- 108	No	INC	24	0:00	23:58	-313.06	\$0	\$0	\$4,698	\$0	\$0	\$0	\$0	\$0	\$0
270	RT	Transmission Outage SCE	SCE	N/A	15-Apr-12	1- 6	No	DEC	24	0:00	23:58	-18.57	\$0	\$0	\$252	(\$18)	\$0	\$242	\$0	(\$203)	\$0
271	RT	Transmission Outage SCE	SCE	N/A	15-Apr-12	101- 168	No	INC	24	0:00	23:58	-72.41	\$0	\$0	(\$402)	\$0	\$0	\$0	\$0	\$0	\$0
272	RT	Transmission Outage SCE	SCE	N/A	16-Apr-12	1- 6	No	DEC	24	0:00	23:58	-52.21	\$0	\$0	\$746	(\$18)	\$0	\$218	\$0	(\$120)	\$0
273	RT	Transmission Outage SCE	SCE	N/A	16-Apr-12	108- 172	No	INC	24	0:00	23:58	-185.97	\$0	\$0	\$4,086	\$0	\$0	\$0	\$0	\$0	\$0
274	RT	Transmission Outage SCE	SCE	N/A	17-Apr-12	338- 550	No	DEC	21	3:00	23:59	-7880.55	\$0	\$0	\$7,827	(\$7,722)	\$0	\$7,105	\$0	\$0	\$0
275	RT	Transmission Outage SCE	SCE	N/A	17-Apr-12	64- 181	Yes	INC	24	0:00	23:59	2613.73	\$76,305	\$3,181	(\$138,437)	\$958	(\$14,043)	\$0	\$0	(\$7,844)	\$0
276	RT	Transmission Outage SCE	SCE	N/A	18-Apr-12	1- 6	No	DEC	24	0:00	23:58	-81.22	\$0	\$0	\$280	(\$18)	\$0	\$224	\$0	(\$191)	\$0
277	RT	Transmission Outage SCE	SCE	N/A	18-Apr-12	64- 93	No	INC	24	0:00	23:58	577.81	\$0	\$0	(\$6,212)	\$0	\$0	\$0	\$0	\$0	\$0
278	RT	Transmission Outage SCE	SCE	N/A	19-Apr-12	1- 6	No	DEC	24	0:00	23:58	-127.03	\$0	\$0	\$1,836	(\$18)	\$0	\$345	\$0	(\$149)	\$0
279	RT	Transmission Outage SCE	SCE	N/A	19-Apr-12	64- 146	No	INC	24	0:00	23:58	-352.43	\$0	\$0	\$4,270	\$0	\$0	\$0	\$0	\$0	\$0
280	RT	Transmission Outage SCE	SCE	N/A	20-Apr-12	1- 6	No	DEC	24	0:00	23:58	-260.31	\$0	\$0	\$5,369	(\$18)	\$0	\$359	\$0	(\$56)	\$0
281	RT	Transmission Outage SCE	SCE	N/A	20-Apr-12	108- 164	Yes	INC	24	0:00	23:58	-242.12	\$0	\$0	\$5,044	\$0	\$0	\$0	\$0	\$0	\$0
282	RT	Transmission Outage SCE	SCE	N/A	21-Apr-12	1	No	DEC	24	0:00	23:58	-0.97	\$0	\$0	\$16	(\$1)	\$0	\$14	\$0	(\$12)	\$0
283	RT	Transmission Outage SCE	SCE	N/A	21-Apr-12	101- 171	Yes	INC	24	0:00	23:58	-76.12	\$0	\$0	(\$38)	\$0	\$0	\$0	\$0	\$0	\$0
284	RT	Transmission Outage SCE	SCE	N/A	22-Apr-12	146- 172	Yes	INC	24	0:00	23:58	399.88	\$0	\$0	(\$9,554)	\$0	\$0	\$0	\$0	\$0	\$0
285	RT	Transmission Outage SCE	SCE	N/A	23-Apr-12	2- 4	No	DEC	24	0:00	23:58	-91.44	\$0	\$0	\$1,411	(\$12)	\$0	\$198	\$0	(\$79)	\$0
286	RT	Transmission Outage SCE	SCE	N/A	23-Apr-12	86- 172	Yes	INC	24	0:00	23:58	73.68	\$0	\$0	(\$806)	\$0	\$0	\$0	\$0	\$0	\$0
287	RT	Transmission Outage SCE	SCE	N/A	24-Apr-12	14- 33	No	DEC	24	0:00	23:58	-251.91	\$0	\$0	\$4,452	(\$171)	\$0	\$3,002	\$0	(\$1,791)	\$0
288	RT	Transmission Outage SCE	SCE	N/A	24-Apr-12	101- 172	Yes	INC	24	0:00	23:58	297.41	\$0	\$0	(\$8,754)	\$0	\$0	\$0	\$0	\$0	\$0
289	RT	Transmission Outage SCE	SCE	N/A	25-Apr-12	1	No	DEC	24	0:00	23:58	-55.93	\$0	\$0	\$951	(\$1)	\$0	\$13	\$0	\$0	\$0
290	RT	Transmission Outage SCE	SCE	N/A	25-Apr-12	108- 172	Yes	INC	24	0:00	23:58	-157.89	\$0	\$0	(\$700)	\$0	\$0	\$0	\$0	\$0	\$0
291	RT	Transmission Outage SCE	SCE	N/A	26-Apr-12	2- 6	No	DEC	24	0:00	23:58	-38.41	\$0	\$0	\$436	(\$17)	\$0	\$211	\$0	(\$154)	\$0
292	RT	Transmission Outage SCE	SCE	N/A	26-Apr-12	64- 154	No	INC	24	0:00	23:58	307.87	\$0	\$0	(\$3,385)	\$0	\$0	\$0	\$0	\$0	\$0
293	RT	Transmission Outage SCE	SCE	N/A	27-Apr-12	1- 6	No	DEC	24	0:00	23:58	-49.53	\$0	\$0	\$738	(\$18)	\$0	\$291	\$0	(\$143)	\$0
294	RT	Transmission Outage SCE	SCE	N/A	27-Apr-12	108- 157	No	INC	24	0:00	23:58	-32.34	\$0	\$0	\$497	\$0	\$0	\$0	\$0	\$0	\$0
295	RT	Transmission Outage SCE	SCE	N/A	28-Apr-12	1- 6	No	DEC	24	0:00	23:58	-37.70	\$0	\$0	\$752	(\$18)	\$0	\$385	\$0	(\$257)	\$0
296	RT	Transmission Outage SCE	SCE	N/A	28-Apr-12	64- 169	Yes	INC	24	0:00	23:58	416.06	\$0	\$0	(\$5,698)	\$0	\$0	\$0	\$0	\$0	\$0
297	RT	Transmission Outage SCE	SCE	N/A	29-Apr-12	1- 4	No	DEC	24	0:00	23:58	-71.50	\$								

Number	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commitment	INC_DEC	Hours	Begin Time	End Time	Total MWH	Min Load Cost	Start Up Cost	CC6470	ED MWH (INC/DEC)	CC6470 INC	CC6470 DEC	CC6482	CC6488	CC6620
299	RT	Transmission Outage SCE	SCE	N/A	30-Apr-12	1- 16	No	DEC	24	0:00	23:58	-93.89	\$0	\$0	\$1,479	(\$34)	\$0	\$543	\$0	(\$276)	\$0
300	RT	Transmission Outage SCE	SCE	N/A	30-Apr-12	64- 130	Yes	INC	24	0:00	23:58	234.36	\$0	\$0	(\$4,167)	\$0	\$0	\$0	\$0	\$0	\$0
301	RT	Transmission Outage SDG&E	SDG&E	N/A	15-Apr-12	122	Yes	DEC	2	12:17	13:10	-93.42	\$0	\$0	\$1,289	(\$93)	\$0	\$1,289	\$0	(\$797)	\$0
302	RT	Transmission Outage SDG&E	SDG&E	N/A	15-Apr-12	310	No	INC	2	12:18	13:11	-172.21	\$0	\$0	\$2,335	(\$144)	\$0	\$1,984	\$0	(\$589)	\$0
303	RT	Transmission Outage SDG&E	SDG&E	San Diego	15-Apr-12	68	No	INC	16	6:45	21:59	775.51	\$59,682	\$0	(\$9,247)	\$0	(\$6)	\$0	\$0	\$0	\$0
304	RT	Transmission Outage SDG&E	SDG&E	San Diego	17-Apr-12	22- 114	No	DEC	12	8:10	19:59	-638.69	\$0	\$0	\$15,145	(\$108)	\$0	\$4,110	\$0	(\$989)	\$0
305	RT	Transmission Outage SDG&E	SDG&E	San Diego	17-Apr-12	100- 160	No	INC	12	8:10	19:59	1035.78	\$46,129	\$0	(\$21,783)	\$463	(\$8,726)	\$0	\$0	(\$4,755)	\$0
306	RT	Transmission Outage SDG&E	SDG&E	San Diego	25-Apr-12	20- 40	No	DEC	2	11:58	12:21	33.95	\$0	\$0	(\$1,474)	(\$1)	\$0	\$16	\$0	\$0	\$0
307	RT	Transmission Outage SDG&E	SDG&E	San Diego	25-Apr-12	0	No	INC	2	11:58	12:21	10.61	\$0	\$0	(\$586)	\$0	\$0	\$0	\$0	\$0	\$0
308	RT	Transmission Outage SDG&E	SDG&E	San Diego	28-Apr-12	20	No	INC	4	20:00	23:59	260.16	\$15,913	\$0	(\$31,825)	\$0	\$0	\$0	\$0	\$0	\$0
309	RT	Transmission Outage SDG&E	SDG&E	San Diego	29-Apr-12	20	No	INC	7	0:00	6:59	254.06	\$16,315	\$0	(\$4,435)	\$0	\$0	\$0	\$0	\$0	\$0
310	RT	Unit Testing	SDG&E	San Diego	4-Apr-12	565	No	INC	1	20:00	20:59	-2.87	\$0	\$0	\$189	\$0	\$0	\$0	\$0	\$0	\$0
311	RT	Voltage Support	PG&E	Fresno	1-Apr-12	83	Yes	INC	5	14:30	18:59	374.75	\$0	\$0	(\$3,033)	\$0	\$0	\$0	\$0	\$0	\$0
312	RT	Voltage Support	PG&E	Fresno	25-Apr-12	310	Yes	DEC	2	22:41	23:59	-494.63	\$0	\$0	\$74,701	\$0	\$0	\$0	\$0	\$0	\$0
313	RT	Voltage Support	PG&E	Fresno	26-Apr-12	7- 310	Yes	DEC	9	0:00	8:59	-2441.17	\$0	\$0	\$45,991	\$0	\$0	\$0	\$0	\$0	\$0
314	RT	Voltage Support	PG&E	Fresno	26-Apr-12	27- 217	Yes	INC	15	9:16	23:59	1321.49	\$0	\$0	(\$13,351)	\$991	\$0	\$0	\$0	\$0	\$0
315	RT	Voltage Support	PG&E	Fresno	27-Apr-12	303	Yes	DEC	2	22:00	23:59	-595.93	\$0	\$0	\$10,763	\$0	\$0	\$0	\$0	\$0	\$0
316	RT	Voltage Support	PG&E	Fresno	27-Apr-12	83	Yes	INC	22	0:00	21:59	1784.50	\$91,205	\$1,030	(\$21,043)	\$0	\$0	\$0	\$0	\$0	\$0
317	RT	Voltage Support	PG&E	Fresno	28-Apr-12	306	Yes	DEC	24	0:00	23:59	-4551.82	\$0	\$0	\$36,764	\$0	\$0	\$0	\$0	\$0	\$0
318	RT	Voltage Support	PG&E	Fresno	28-Apr-12	300	Yes	INC	11	13:31	23:24	958.50	\$0	\$0	(\$15,001)	\$1,216	\$0	\$0	\$0	\$0	\$0
319	RT	Voltage Support	PG&E	Fresno	29-Apr-12	311	Yes	DEC	10	0:00	9:59	-1736.36	\$0	\$0	\$28,271	\$0	\$0	\$0	\$0	\$0	\$0
320	RT	Voltage Support	PG&E	Fresno	29-Apr-12	0	Yes	INC	9	0:00	8:59	-25.92	\$0	\$0	\$392	\$0	\$0	\$0	\$0	\$0	\$0
321	RT	Voltage Support	PG&E	Fresno	30-Apr-12	8	Yes	INC	4	1:00	4:59	-23.25	\$0	\$0	\$355	\$0	\$0	\$0	\$0	\$0	\$0
322	RT	Voltage Support	PG&E	N/A	25-Apr-12	480	No	INC	2	22:48	23:59	880.18	\$12,747	\$0	(\$69,937)	\$13	(\$7,871)	\$0	\$0	\$0	\$0
323	RT	Voltage Support	PG&E	N/A	26-Apr-12	140- 425	Yes	INC	24	0:00	23:59	4624.95	\$90,671	\$0	(\$74,850)	\$246	(\$1,004)	\$0	\$0	(\$3,563)	\$0
324	RT	Voltage Support	PG&E	N/A	27-Apr-12	140- 492	Yes	INC	24	0:00	23:59	6638.63	\$127,334	\$94,576	(\$78,837)	\$608	\$0	\$0	\$0	\$0	\$0
325	RT	Voltage Support	PG&E	N/A	28-Apr-12	136- 300	Yes	INC	12	0:00	11:59	2934.55	\$98,181	\$0	(\$11,841)	\$0	\$0	\$0	\$0	\$0	\$0
326	RT	Voltage Support	PG&E	N/A	29-Apr-12	52	No	INC	24	0:00	23:59	5453.63	\$157,894	\$0	(\$104,609)	\$0	\$0	\$0	\$0	\$0	\$0
327	RT	Voltage Support	PG&E	N/A	30-Apr-12	52	No	INC	24	0:00	23:59	5403.93	\$165,804	\$0	(\$94,440)	\$0	\$0	\$0	\$0	\$0	\$0
328	RT	Voltage Support	SCE	LA Basin	30-Apr-12	71	No	DEC	4	0:51	3:21	-186.75	\$0	\$0	\$2,462	(\$182)	\$0	\$2,462	\$0	(\$1,859)	\$0

## Appendix A: Explanation by Example

All examples listed below are based on fictitious data. Many simplified assumptions are made to explain settlement charge codes, and not all assumptions are explicitly stated in these examples.

For instance settlement charge codes are calculated based on metered quantities, whereas, in these examples the dispatch quantities are assumed to be equal to metered quantities. These assumptions have been made to simplify the understanding of settlements calculations.

### Example 1: Exceptional Dispatch Instructions Prior to DAM

In this fictitious example the ISO issued an exceptional dispatch instruction for resource A to be committed at its Pmin of 50 MW from hours ending 5 through 10 for a generation procedure 7630. Similarly, the ISO issued additional instructions to resources B and C for the same reason as shown in Table 2. Generally, exceptional dispatches prior to the day-ahead market are commitments to minimum load. In this case the dispatch levels are all at minimum load. Table 2 below also shows the commitment costs and the total volume (MWh) of exceptional dispatch instruction for each resource. The minimum load costs and start up costs, shown in Table 2 are the eligible minimum load and start up costs which are different from the bid-in minimum load and start up costs<sup>7</sup>. Only those quantities which are relevant to pre-day-ahead unit commitments are shown in this table.

**Table 2: Instructions Prior to Day-Ahead Market**

Date	Market	Resource	Location	Local Reliability Area (LRA)	Begin Time	End Time	Dispatch level (MW)	Reason	Total Volume (MWh)	Min-Load Cost	Start- Up Cost	CC6620 (BCR)
01-Jul-09	DA	A	SCE	LA BASIN	05:00	10:00	50	7630	300	\$5000	\$0	0
01-Jul-09	DA	B	SCE	LA BASIN	08:00	20:00	30	7630	390	\$6000	\$500	\$4000
01-Jul-09	DA	C	SCE	LA BASIN	09:00	23:00	20	7630	300	\$400	\$1000	\$1000

This data is summarized as shown in Table 3, which is the prescribed format specified in the FERC order on September 02, 2009. This summary classifies the data by reason, resource location, local reliability area, and trade date. The MW column in Table 3 is the range of MW; in this case the minimum instruction MW is 20 MW for resource C which occurs from hours ending 21 through 23. The maximum instruction occurs in hour ending 10. In this hour resource A is committed at 50 MW, resource B is committed at 30 MW and resource C is committed at 20 MW. This adds up to 100 MW. Thus the MW column shows the minimum and maximum of the overlaps of all the exceptional dispatch instructions. The Commitment column shows whether a resource was committed between the begin time and end time. Commitments are broken out separately from energy dispatches. In the day-ahead, however the exceptional dispatches are nearly always just commitments, as in this example. The Begin Time column shows hour ending 5 as this was the hour ending for first dispatch of the day, and the End Time column shows hour ending 23, as this was the hour with last dispatch. It is also possible that there might be some hours between the begin time and the end time where there might not be exceptional dispatch instructions for the given reason, meaning that the range between the begin time and end time can include null hours with no dispatch. The total volume (MWh) is the sum of MWh quantity for each resource, which adds up to 990 MWh. Similarly, all cost information is sum of individual resource costs. It is possible that some resources bid-in zero start-up cost; as seen in this example, resource A bid in zero for its start up cost. Since the ISO does not explicitly pay a resource for bid-in minimum load costs and start-up costs; these costs are recovered through the charge code CC6620 (Bid Cost Recovery), this table shows the summary of CC6620 for the classification. In this case, it is the sum of CC6620 for all three resources which adds up to \$5000. This column shows the impact of exceptional dispatch on bid cost recovery for all pre-day-ahead exceptional dispatch commitments.

**Table 3: FERC Summary of Instructions Prior to DAM**

Number	Market Type	Reason	Location	Local Reliability Area (LRA)	Trade Date	MW	Commitment	INC/DEC	Hour	Begin Time	End Time	Total Volume (MWh)	Min-Load Cost	Start-Up Cost	CC6620
1	DA	7630	SCE	LA Basin	1-Jul-09	20-100	Yes	N/A	19	05:00	23:00	990	\$11,400	\$1,500	\$5000

<sup>7</sup> Please refer to the BPM configuration Guide: Bid Cost Recovery Settlements published on the ISO's website for details about eligible minimum load and start up costs.

### Example 2: Incremental Exceptional Dispatch Instructions in RTM

In this fictitious example the ISO issued an exceptional dispatch instruction to resource A to be committed at its Pmin of 30 MW from hours ending 7 through 11 after completion of the day-ahead market for the transmission procedure 7110. This resource did not have a day-ahead award in those hours. The ISO issued another exceptional dispatch instruction to resource B, to be dispatched at 40 MW from hours ending 8 through 9 in real-time for the transmission procedure 7110. This resource had a day-ahead schedule of 20 MW from the day-ahead market, which implies that this exceptional dispatch instruction was an incremental instruction and the exceptional dispatch MW was 20 MW. Similarly, the details of exceptional dispatch (ED) instruction for resource C is shown in Table 4. This table also shows volume (MWh) and various real-time charge codes associated with the exceptional dispatch instructions. The total MWh column for each resource shows the sum of all types of imbalance energy quantities for this resource between the begin time and end time which includes both the exceptional dispatch energy quantities and optimal energy quantities.

Resource A was committed at its Pmin so its total volume (MWh) is equal to its Pmin times the number of hours, which is calculated as 30 MW times 6 hours and is equal to 180 MWh. The resource Minimum load costs and the start up costs are its eligible commitment costs for that period. LMP at this resource is \$10/MWh for hours, so the charge code CC6470 is calculated at (180 MWh \* \$10/MWh) and is equal to 1800. Since this resource is not dispatched above its Pmin, it has a zero volume (MWh) of exceptional dispatch. As a result, all charge codes associated with the exceptional dispatch increment or decrement quantities are zero.

Resource B is dispatched 20 MW above its day-ahead schedule, so its total volume (MWH) is calculated as 20 MW times 3 hours which is equal to 60 MWh. Since the resource was committed in the Day-Ahead Market there are no minimum load quantity and start up costs associated with this resource. The resource had a bid price of \$100/MWh and the LMP at that resource was \$10/MWh. All of 60 MWh is considered as exceptional dispatch incremental quantity which is shown in ED Volume (MWH INC/DEC) column. The charge code CC6470 INC is calculated as 60 MWh \* resource LMP (\$10/MWh) which is equal to \$600. Since the only imbalance energy in this timeframe was the exceptional dispatch volume, the charge code CC6470 is equal to CC6470 INC. The charge code CC6488 is calculated as MWH quantity \*(bid price – LMP), which is equal to \$5400 (60 MWh \*(\$10/MWh-\$100/MWh)). Similarly, volumes and real-time charge codes are calculated for resource C.

**Table 4: Incremental Exceptional Dispatch Instructions in RTM**

Date	Market	Resource	Location	Local Reliability Area (LRA)	Begin Time	End Time	Dispatch level (MW)	Day-Ahead Award (MW)	Commitment	INC/DEC	ED (MW)	Reason	Total MWH	Min Load Cost	Start Up Cost	CC6470	ED MWH (INC/DEC)	CC6470 INC	CC6470 DEC	CC6482	CC6488
1-Jul-09	RT	A	PG&E	Humboldt	6:00	11:00	30	0	Yes	INC	30	7110	180	1000	50	800	60	600	0	0	5400
1-Jul-09	RT	B	PG&E	Humboldt	7:00	9:00	40	20	No	INC	20	7110	60	0	0	600	60	600	0	0	5400
1-Jul-09	RT	C	PG&E	Humboldt	12:00	15:00	50	50	No	INC	0	7110	0	0	0	0	0	0	0	0	0
1-Jul-09	RT	C	PG&E	Humboldt	16:00	20:00	50	40	No	INC	10	7110	50	0	0	300	20	300	0	0	200

This data is summarized as shown in Table 5 and is classified by reason, resource location, local reliability area, and trade date. The MW column in Table 5 is the range of MW; in this case the minimum instruction MW is 0 MW for resource C which occurs from hours ending 13 through 15. The maximum instruction occurs in hours ending 8 & 9, as during these two hours both resources A and B have an ED MW of 30MW and 20MW, respectively. This adds up to 50 MW. Thus the MW column shows the minimum and maximum of the overlaps of all the exceptional dispatch instructions. The Commitment column shows whether a resource was committed between the begin time and end time. This column shows a commitment if there was a single commitment in the entire interval of exceptional dispatch. The Begin Time column shows the time of the first dispatch of the day. This is a time not a range. Similarly, the End Time column shows a time and not a range. Exceptional dispatches occurred between these two times. Since there was a commitment between the begin time and end time then the Commitment column displays yes for the summary. Similarly, the INC/DEC column shows an INC as there was an incremental dispatch between the begin time and end time. As mentioned in the previous example it is possible that there might be some hours between the begin time and end time where there were no exceptional dispatch instructions for the given reason. Both volume and cost information columns are simply the summation for all the respective columns for resource A, B and C. For instance the Total volume (MWh) column is calculated as summation of 180,60,0 and 50 which are the individual volumes (MWh) for resources A, B and C for time periods shown in Table 4 on the previous page.

**Table 5: FERC Summary of ED Instructions in RTM**

Number	Market Type	Reason	Location	Local Reliability Area (LRA)	Trade Date	MW	Commitment	INC/DEC	Hour	Begin Time	End Time	Total MWH	Min Load Cost	Start Up Cost	CC6470	ED MWH (INC/DEC)	CC6470 INC	CC6470 DEC	CC6482	CC6488
1	RT	7110	PG&E	Humboldt	1-Jul-09	0-50	Yes	INC	15	6:00	20:00	290	1000	50	1700	140	1500	0	0	11000

Please note that it is possible that the ISO would dispatch a particular resource for instance at 10 MW from hours ending 1 through 4, and all or part of its energy might settle as optimal energy. This situation occurs when the LMP at the resource pricing node is above the resource bid price. This cost will only be captured in charge code 6470. It is also possible that ISO issues an exceptional dispatch for the resource to operate at a minimum of 10 MW which is its Pmin; however the market application might dispatch this resource above Pmin because the resource is economical. When this occurs, the charge code CC6470 and the total MWh quantity might overstate the actual exceptional dispatch MWh quantities. So, to best estimate the cost and volume (MWH) of exceptional dispatch it is appropriate to consider only the following columns: ED MWh (INC/DEC), CC6470 INC, CC6470 DEC, CC6482, CC6488.

### Example 3: Decremental Exceptional Dispatch Instructions in RTM

This example highlights decremental exceptional dispatch instructions in the real-time market. In this fictitious example the ISO issued an exceptional dispatch instruction to resource A to be committed at its Pmin of 20 MW from hours ending 15 through 20 after completion of the day-ahead market for the transmission procedure 7430. The ISO issued additional exceptional dispatch instructions for resources B and C; details of those instructions are shown in Table 6. This table also includes volume (MWh) and cost information.

Resource A is committed in real-time at its Pmin, its total volume (MWh) is 20MW \* 6 hours which is equal to 120 MWh. This resource has a zero MW of incremental dispatch in all hours, so all other relevant cost and volume columns result in zeros. Resource B has a decremental MW of 20 MW in 3 hours, which results in 60 MWh of decremental volume. Since this resource is not committed in real-time, both the minimum load cost and start up costs are zero. This resource had a bid price of \$50/MWh and LMP at the resource pricing node is \$10/ MWh. Based on this information CC6470-Dec is calculated as 60 MWh \* \$10/MWh which is equal to \$600. Since this resource has its ED volume (MWh) equal to its Total volume, CC6470 is equal to CC6470- DEC. The CC6488 is calculated as (60 MWh \* (\$50/MWh - \$10/MWh)) which is equal to \$2400. Resource C had a bid price of \$10/MWh and the LMP at its pricing node is \$50/MWh. Based on this information, volume and cost information is calculated for resource C.

**Table 6: Decremental Exceptional Dispatch Instructions in RTM**

Date	Market Type	Resource	Location	Local Reliability Area (LRA)	Begin Time	End Time	Dispatch level (MW)	Day-Ahead Award (MW)	Commitment	INC/DEC	ED (MW)	Reason	Total MWH	Min Load Cost	Start Up Cost	CC6470	ED MWH (INC/DEC)	CC6470 INC	CC6470 DEC	CC6482	CC6488
1-Jul-09	RT	A	PG&E	Fresno	15:00	20:00	20	0	Yes	INC	20	7430	120	\$ 120	\$ 100	\$ -	0	\$ -	\$ -	\$ -	\$ -
1-Jul-09	RT	B	PG&E	Fresno	7:00	9:00	40	60	No	DEC	20	7430	(60)	\$ -	\$ -	\$ 600	-60	\$ -	\$ 600	\$ -	\$2,400
1-Jul-09	RT	C	PG&E	Fresno	10:00	14:00	40	50	No	DEC	10	7430	(50)	\$ -	\$ -	\$ 500	-50	\$ -	\$ 500	\$ -	\$2,000

This data is summarized according to FERC convention as shown in Table 7. This summary classifies the data by reason, resource location, local reliability area, and trade date. Please note that incs and decs are broken out separately. The inc entry is self-explanatory and similar to the previous example. Regarding the dec entry the MW column is the range of MW; in this case the minimum dec instruction is 10 MW (actually -10MW as it is a dec) for resource C which occurs from hours ending 10 through 14. The maximum instruction occurs from hours ending 7 through 9, when resource B was issued a dec instruction of 20 MW. Thus the MW column shows the minimum and maximum of the overlaps of all the exceptional dispatch instructions. The Commitment column shows whether a resource was committed between the begin time and end time. The volume and cost information are summarized by INC and DEC classification.

**Table 7: FERC Summary of Decremental ED Instructions in RTM**

Number	Market Type	Reason	Location	Local Reliability Area (LRA)	Trade Date	MW	Commitment	INC/DEC	Hour	Begin Time	End Time	Total MWH	Min Load Cost	Start Up Cost	CC6470	ED MWH (INC/DEC)	CC6470 INC	CC6470 DEC	CC6482	CC6488
1	RT	7430	PG&E	Fresno	1-Jul-09	20	Yes	INC	6	15:00	20:00	120	\$ 120	\$ 100	\$ -	0	\$ -	\$ -	\$ -	\$ -
2	RT	7430	PG&E	Fresno	1-Jul-09	10-20	Yes	DEC	8	7:00	14:00	(110)	\$ -	\$ -	\$ (1,100)	\$ (110)	\$ -	\$ (1,100)	\$ -	\$ (4,400)

## Appendix B: Price Impact Analysis

In the September 2 FERC order, FERC requested the ISO to perform price impact analysis on two distinct pricing nodes for the entire reporting period. The order also mentioned that the ISO must pick two pricing nodes for the entire reporting period that are most impacted by the exceptional dispatch instructions, and the two pricing nodes must belong to two different load aggregation points (LAPs).

Based on this requirement the ISO implemented a methodology to perform price impact analysis. First, the ISO identified a heavily impacted pricing node from each of the Pacific Gas & Electric (PGAE) LAP and Southern California Edison (SCE) LAP. These two pricing nodes had the maximum amount of exceptional dispatch volume (MWh) in their respective LAP. Point A is in PGAE LAP and point B is in SCE LAP. Please note these two points correspond to an actual pricing node in the ISO system. Only one resource was connected to each of these pricing nodes. For each resource the following input parameters were obtained to perform the analysis:

- Exceptional dispatch information: constrained level, constraint type, start of exceptional dispatch instruction and end of exceptional dispatch instruction.
- Real-Time LMPs for each of the five minute intervals for the month.
- Real-Time hourly bid set for each trade hour.
- Day-Ahead award for the resources.

The exceptional dispatch intervals have a begin time and an end time which can span as small as one minute to as large as 24 hours. Since the market application dispatches resources on five-minute basis, the exceptional dispatch instructions for each of these resources were broken down into five-minute intervals. If the begin time or end time for an instruction was in the middle of the five-minute interval, that instruction was rounded up to the next five-minute interval. These five-minute intervals were then coupled with resource five-minute LMPs calculated by the real-time market application. Also, the hourly bid information and the hourly day-ahead schedule were put together to create a dataset that had all the necessary information to perform price impact analysis.

An exceptional dispatch instruction can be generally classified as a start up instruction, an instruction to be dispatched at or above the constrained level, an instruction to be dispatched at or below a constrained level, an instruction to be dispatched at a fixed constrained level, or a shut down instruction. In general, the Locational Marginal Price (LMP) is set by a resource which can provide the next incremental MW of energy. Based on this definition of LMP and the classification of exceptional dispatches based on constraint type, a resource is allowed to set the LMP in only those intervals in which the resource is eligible to move either up or down from its constrained level. Hence, in those intervals in which the resource was constrained up at its Pmax or, in other words, the resource was exceptionally dispatched to its Pmax and forced to generate at that level, the resource was considered ineligible to set the price as it had no room to move up. Similarly, if the resource was constrained down at its Pmin, then the resource was not eligible to set the price. All those intervals in which the resource was ineligible to set the price were dropped from the dataset under consideration. From this dataset of only eligible intervals, for both pricing nodes A and B, LMPs were calculated for all intervals based on the resource dispatch level and the its bid set. The calculated LMP is equal to that bid price corresponding to the constrained MW segment.

Table 8 shows the price impact analysis information for node A, which is located in the PGAE area. This table shows all the five minute intervals in which the resource at PNode A was issued an exceptional dispatch instruction. Out of the 8,640 five-minute intervals in April, this resource was issued exceptional dispatch instructions in 1593 five-minute intervals. This resource was eligible to set the LMP in 1045 intervals. Resource calculated LMP was larger than the market LMP in 999 of the 1045 intervals. In the 999 intervals, the average increase in five minute LMP was \$17.51/MWh. This implies that if the ISO was able to model the constraint for this exceptional dispatch, then this resource and all other pricing nodes associated with that constraint would observe an average increase of \$17.51/MWh. Note that 999 five minute intervals are approximately 11.56 percent of the total 8,640 five minute intervals.

Table 9 shows the price impact analysis information for node B, which is located in the SCE area. This table shows all the five minute intervals in which the resource at PNode B was issued an exceptional dispatch instruction. Out of the 8,640 five minute intervals, this resource was issued an exceptional dispatch instruction in 357 five minute intervals. It was eligible to set the LMP in all 357 intervals. Out of the 357 intervals, resource calculated LMP was larger than the market LMP in 349 intervals. In the 349 intervals, the average increase in five minute LMP was \$81.19/MWh. This implies that if the ISO was able to model the constraint for this exceptional dispatch, then this resource and all other pricing nodes associated with that constraint would observe an average increase of \$81.19/MWh. The 349 five minute intervals account for approximately 4.04 percent of the total 8,640 five minute intervals.

**Table 8: Price Impact Analysis Information for Pricing Node A in PGAE LAP**

Number	Trade Date	Trade Hour	Interval	Market LMP	Eligible Flag	Calculated LMP	Change in LMP
1	1-Apr-12	15	7	\$16.85	Yes	\$22.95	\$6.10
2	1-Apr-12	15	8	\$15.27	Yes	\$22.95	\$7.68
3	1-Apr-12	15	9	\$15.27	Yes	\$22.95	\$7.68
4	1-Apr-12	15	10	\$5.46	Yes	\$22.95	\$17.49
5	1-Apr-12	15	11	\$5.46	Yes	\$22.95	\$17.49
6	1-Apr-12	15	12	\$5.46	Yes	\$22.95	\$17.49
7	1-Apr-12	16	1	\$8.72	Yes	\$22.95	\$14.23
8	1-Apr-12	16	2	\$5.44	Yes	\$22.95	\$17.51
9	1-Apr-12	16	3	\$1.07	Yes	\$22.95	\$21.88
10	1-Apr-12	16	4	\$0.68	Yes	\$22.95	\$22.27
11	1-Apr-12	16	5	\$0.68	Yes	\$22.95	\$22.27
12	1-Apr-12	16	6	\$15.17	Yes	\$22.95	\$7.78
13	1-Apr-12	16	7	\$10.76	Yes	\$22.95	\$12.19
14	1-Apr-12	16	8	\$15.24	Yes	\$22.95	\$7.71
15	1-Apr-12	16	9	\$15.24	Yes	\$22.95	\$7.71
16	1-Apr-12	16	10	\$5.46	Yes	\$22.95	\$17.49
17	1-Apr-12	16	11	\$8.80	Yes	\$22.95	\$14.15
18	1-Apr-12	16	12	\$15.92	Yes	\$22.95	\$7.03
19	1-Apr-12	17	1	\$1.07	Yes	\$22.95	\$21.88
20	1-Apr-12	17	2	\$5.45	Yes	\$22.95	\$17.50
21	1-Apr-12	17	3	\$8.75	Yes	\$22.95	\$14.20
22	1-Apr-12	17	4	\$10.83	Yes	\$22.95	\$12.12
23	1-Apr-12	17	5	\$10.83	Yes	\$22.95	\$12.12
24	1-Apr-12	17	6	\$5.46	Yes	\$22.95	\$17.49
25	1-Apr-12	17	7	\$5.46	Yes	\$22.95	\$17.49
26	1-Apr-12	17	8	\$15.88	Yes	\$22.95	\$7.07
27	1-Apr-12	17	9	\$15.24	Yes	\$22.95	\$7.71
28	1-Apr-12	17	10	\$15.89	Yes	\$22.95	\$7.06
29	1-Apr-12	17	11	\$10.08	Yes	\$22.95	\$12.87
30	1-Apr-12	17	12	\$0.01	Yes	\$22.95	\$22.94
31	1-Apr-12	18	1	\$0.01	Yes	\$22.95	\$22.94
32	1-Apr-12	18	2	\$0.01	Yes	\$22.95	\$22.94
33	1-Apr-12	18	3	\$0.01	Yes	\$22.95	\$22.94
34	1-Apr-12	18	4	\$0.01	Yes	\$22.95	\$22.94
35	1-Apr-12	18	5	\$0.01	Yes	\$22.95	\$22.94
36	1-Apr-12	18	6	\$0.01	Yes	\$22.95	\$22.94
37	1-Apr-12	18	7	\$0.01	Yes	\$22.95	\$22.94
38	1-Apr-12	18	8	\$0.01	Yes	\$22.95	\$22.94
39	1-Apr-12	18	9	\$0.01	Yes	\$22.95	\$22.94
40	1-Apr-12	18	10	\$1.03	Yes	\$22.95	\$21.92
41	1-Apr-12	18	11	\$0.01	Yes	\$22.95	\$22.94
42	1-Apr-12	18	12	\$0.01	Yes	\$22.95	\$22.94

Number	Trade Date	Trade Hour	Interval	Market LMP	Eligible Flag	Calculated LMP	Change in LMP
43	1-Apr-12	19	1	\$0.58	Yes	\$22.95	\$22.37
44	1-Apr-12	19	2	\$1.08	Yes	\$22.95	\$21.87
45	1-Apr-12	19	3	\$14.70	Yes	\$22.95	\$8.25
46	1-Apr-12	19	4	\$14.58	Yes	\$22.95	\$8.37
47	1-Apr-12	19	5	\$15.53	Yes	\$22.95	\$7.42
48	1-Apr-12	19	6	\$16.96	Yes	\$22.95	\$5.99
49	1-Apr-12	19	7	\$17.08	Yes	\$22.95	\$5.87
50	1-Apr-12	19	8	\$19.72	Yes	\$22.95	\$3.23
51	1-Apr-12	19	9	\$19.72	Yes	\$22.95	\$3.23
52	1-Apr-12	19	10	\$19.72	Yes	\$22.95	\$3.23
53	1-Apr-12	19	11	\$20.73	Yes	\$22.95	\$2.22
54	1-Apr-12	19	12	\$19.94	Yes	\$22.95	\$3.01
55	2-Apr-12	1	11	\$28.70	No	\$22.95	(\$5.75)
56	2-Apr-12	1	12	\$30.51	No	\$22.95	(\$7.56)
57	7-Apr-12	6	1	\$19.02	No	\$22.95	\$3.93
58	7-Apr-12	6	2	\$19.34	No	\$22.95	\$3.61
59	7-Apr-12	6	3	\$133.60	No	\$22.95	(\$110.65)
60	10-Apr-12	24	8	\$18.22	No	\$22.95	\$4.73
61	10-Apr-12	24	9	\$16.76	No	\$22.95	\$6.19
62	10-Apr-12	24	10	\$11.54	No	\$22.95	\$11.41
63	10-Apr-12	24	11	\$10.33	No	\$22.95	\$12.62
64	10-Apr-12	24	12	\$0.01	No	\$22.95	\$22.94
65	13-Apr-12	10	2	\$26.34	Yes	\$42.12	\$15.78
66	13-Apr-12	10	3	\$37.95	Yes	\$42.12	\$4.17
67	13-Apr-12	10	4	\$47.50	Yes	\$42.12	(\$5.38)
68	13-Apr-12	10	5	\$315.88	Yes	\$42.12	(\$273.76)
69	13-Apr-12	10	6	\$1,018.96	Yes	\$42.12	(\$976.84)
70	13-Apr-12	10	7	\$1,018.96	Yes	\$42.12	(\$976.84)
71	13-Apr-12	10	8	\$1,018.96	No	\$22.95	(\$996.01)
72	13-Apr-12	10	9	\$979.90	No	\$22.95	(\$956.95)
73	13-Apr-12	10	10	\$979.90	No	\$22.95	(\$956.95)
74	13-Apr-12	10	11	\$346.57	No	\$22.95	(\$323.62)
75	13-Apr-12	10	12	\$328.05	No	\$22.95	(\$305.10)
76	13-Apr-12	11	1	\$392.01	Yes	\$28.16	(\$363.85)
77	13-Apr-12	11	2	\$391.81	Yes	\$28.16	(\$363.65)
78	13-Apr-12	11	3	\$382.98	Yes	\$28.16	(\$354.82)
79	13-Apr-12	11	4	\$330.80	Yes	\$28.16	(\$302.64)
80	13-Apr-12	11	5	\$332.66	Yes	\$28.16	(\$304.50)
81	13-Apr-12	11	6	\$330.80	Yes	\$28.16	(\$302.64)
82	13-Apr-12	11	7	\$345.51	Yes	\$28.16	(\$317.35)
83	13-Apr-12	11	8	\$319.83	Yes	\$28.16	(\$291.67)
84	13-Apr-12	11	9	\$318.29	Yes	\$28.16	(\$290.13)
85	13-Apr-12	11	10	\$300.24	Yes	\$28.16	(\$272.08)
86	13-Apr-12	11	11	\$293.92	Yes	\$28.16	(\$265.76)
87	13-Apr-12	11	12	\$319.28	Yes	\$28.16	(\$291.12)

Number	Trade Date	Trade Hour	Interval	Market LMP	Eligible Flag	Calculated LMP	Change in LMP
88	13-Apr-12	12	1	\$312.38	Yes	\$28.16	(\$284.22)
89	13-Apr-12	12	2	\$311.76	Yes	\$28.16	(\$283.60)
90	13-Apr-12	12	2	\$311.76	Yes	\$42.12	(\$269.64)
91	13-Apr-12	12	3	\$736.90	Yes	\$28.16	(\$708.74)
92	13-Apr-12	12	3	\$736.90	Yes	\$42.12	(\$694.78)
93	13-Apr-12	12	4	\$736.90	Yes	\$28.16	(\$708.74)
94	13-Apr-12	12	4	\$736.90	Yes	\$42.12	(\$694.78)
95	13-Apr-12	12	5	\$390.25	Yes	\$28.16	(\$362.09)
96	13-Apr-12	12	5	\$390.25	Yes	\$42.12	(\$348.13)
97	13-Apr-12	12	6	\$381.12	Yes	\$28.16	(\$352.96)
98	13-Apr-12	12	6	\$381.12	Yes	\$42.12	(\$339.00)
99	13-Apr-12	12	7	\$392.79	Yes	\$28.16	(\$364.63)
100	13-Apr-12	12	7	\$392.79	Yes	\$42.12	(\$350.67)
101	13-Apr-12	12	8	\$966.08	Yes	\$28.16	(\$937.92)
102	13-Apr-12	12	8	\$966.08	Yes	\$42.12	(\$923.96)
103	13-Apr-12	12	9	\$341.23	Yes	\$28.16	(\$313.07)
104	13-Apr-12	12	9	\$341.23	Yes	\$42.12	(\$299.11)
105	13-Apr-12	12	10	\$348.32	Yes	\$28.16	(\$320.16)
106	13-Apr-12	12	10	\$348.32	Yes	\$42.12	(\$306.20)
107	13-Apr-12	12	11	\$31.61	Yes	\$28.16	(\$3.45)
108	13-Apr-12	12	11	\$31.61	Yes	\$42.12	\$10.51
109	13-Apr-12	12	12	\$27.14	Yes	\$28.16	\$1.02
110	13-Apr-12	12	12	\$27.14	Yes	\$42.12	\$14.98
111	13-Apr-12	13	1	\$30.74	Yes	\$26.56	(\$4.18)
112	13-Apr-12	13	2	\$387.47	Yes	\$26.56	(\$360.91)
113	13-Apr-12	13	3	\$322.24	Yes	\$26.56	(\$295.68)
114	13-Apr-12	13	4	\$22.24	Yes	\$26.56	\$4.32
115	13-Apr-12	13	5	\$30.17	Yes	\$26.56	(\$3.61)
116	13-Apr-12	13	6	\$30.17	Yes	\$26.56	(\$3.61)
117	13-Apr-12	13	7	\$29.79	Yes	\$26.56	(\$3.23)
118	13-Apr-12	13	8	\$27.42	Yes	\$26.56	(\$0.86)
119	13-Apr-12	13	9	\$29.84	Yes	\$26.56	(\$3.28)
120	13-Apr-12	13	10	\$26.60	Yes	\$26.56	(\$0.04)
121	13-Apr-12	13	11	\$22.48	Yes	\$26.56	\$4.08
122	13-Apr-12	13	12	\$26.02	Yes	\$26.56	\$0.54
123	15-Apr-12	7	3	\$34.09	No	\$22.95	(\$11.14)
124	15-Apr-12	7	4	\$34.21	No	\$22.95	(\$11.26)
125	20-Apr-12	23	12	\$16.15	No	\$22.95	\$6.80
126	20-Apr-12	24	1	\$35.16	No	\$22.95	(\$12.21)
127	20-Apr-12	24	2	\$30.56	No	\$22.95	(\$7.61)
128	20-Apr-12	24	3	\$29.10	No	\$22.95	(\$6.15)
129	20-Apr-12	24	4	\$24.42	No	\$22.95	(\$1.47)
130	20-Apr-12	24	5	\$22.27	No	\$22.95	\$0.68
131	20-Apr-12	24	6	\$22.86	No	\$22.95	\$0.09
132	20-Apr-12	24	7	\$21.33	No	\$22.95	\$1.62

Number	Trade Date	Trade Hour	Interval	Market LMP	Eligible Flag	Calculated LMP	Change in LMP
133	20-Apr-12	24	8	\$20.34	No	\$22.95	\$2.61
134	20-Apr-12	24	9	\$19.96	No	\$22.95	\$2.99
135	20-Apr-12	24	10	\$10.23	No	\$22.95	\$12.72
136	20-Apr-12	24	11	\$10.29	No	\$22.95	\$12.66
137	20-Apr-12	24	12	\$1.40	No	\$22.95	\$21.55
138	21-Apr-12	1	1	\$18.33	No	\$22.95	\$4.62
139	21-Apr-12	1	2	\$20.32	No	\$22.95	\$2.63
140	21-Apr-12	1	3	\$20.52	No	\$22.95	\$2.43
141	21-Apr-12	1	4	\$15.73	No	\$22.95	\$7.22
142	21-Apr-12	1	5	\$17.42	No	\$22.95	\$5.53
143	21-Apr-12	1	6	\$18.28	No	\$22.95	\$4.67
144	21-Apr-12	1	7	\$18.38	No	\$22.95	\$4.57
145	21-Apr-12	1	8	\$18.17	No	\$22.95	\$4.78
146	21-Apr-12	1	9	\$15.69	No	\$22.95	\$7.26
147	21-Apr-12	1	10	\$13.71	No	\$22.95	\$9.24
148	21-Apr-12	1	11	\$14.57	No	\$22.95	\$8.38
149	21-Apr-12	1	12	\$11.59	No	\$22.95	\$11.36
150	21-Apr-12	2	1	\$24.51	No	\$22.95	(\$1.56)
151	21-Apr-12	2	2	\$19.41	No	\$22.95	\$3.54
152	21-Apr-12	2	3	\$17.96	No	\$22.95	\$4.99
153	21-Apr-12	2	4	\$9.36	No	\$22.95	\$13.59
154	21-Apr-12	2	5	\$10.02	No	\$22.95	\$12.93
155	21-Apr-12	2	6	\$10.02	No	\$22.95	\$12.93
156	21-Apr-12	2	7	\$13.63	No	\$22.95	\$9.32
157	21-Apr-12	2	8	\$14.63	No	\$22.95	\$8.32
158	21-Apr-12	2	9	\$14.63	No	\$22.95	\$8.32
159	21-Apr-12	2	10	\$13.57	No	\$22.95	\$9.38
160	21-Apr-12	2	11	\$9.98	No	\$22.95	\$12.97
161	21-Apr-12	2	12	\$17.13	No	\$22.95	\$5.82
162	21-Apr-12	3	1	\$17.74	No	\$22.95	\$5.21
163	21-Apr-12	3	2	\$17.49	No	\$22.95	\$5.46
164	21-Apr-12	3	3	\$15.73	No	\$22.95	\$7.22
165	21-Apr-12	3	4	\$14.66	No	\$22.95	\$8.29
166	21-Apr-12	3	5	\$14.66	No	\$22.95	\$8.29
167	21-Apr-12	3	6	\$14.66	No	\$22.95	\$8.29
168	21-Apr-12	3	7	\$15.68	No	\$22.95	\$7.27
169	21-Apr-12	3	8	\$15.65	No	\$22.95	\$7.30
170	21-Apr-12	3	9	\$15.65	No	\$22.95	\$7.30
171	21-Apr-12	3	10	\$15.64	No	\$22.95	\$7.31
172	21-Apr-12	3	11	\$14.81	No	\$22.95	\$8.14
173	21-Apr-12	3	12	\$13.78	No	\$22.95	\$9.17
174	21-Apr-12	6	1	\$13.64	No	\$22.95	\$9.31
175	21-Apr-12	6	2	\$13.66	No	\$22.95	\$9.29
176	21-Apr-12	6	3	\$15.61	No	\$22.95	\$7.34
177	21-Apr-12	6	4	\$14.62	No	\$22.95	\$8.33

Number	Trade Date	Trade Hour	Interval	Market LMP	Eligible Flag	Calculated LMP	Change in LMP
178	21-Apr-12	6	5	\$14.62	No	\$22.95	\$8.33
179	21-Apr-12	6	6	\$14.62	No	\$22.95	\$8.33
180	21-Apr-12	6	7	\$14.77	No	\$22.95	\$8.18
181	21-Apr-12	6	8	\$16.03	No	\$22.95	\$6.92
182	21-Apr-12	6	9	\$16.03	No	\$22.95	\$6.92
183	21-Apr-12	6	10	\$16.11	No	\$22.95	\$6.84
184	21-Apr-12	6	11	\$16.43	No	\$22.95	\$6.52
185	21-Apr-12	6	12	\$17.61	No	\$22.95	\$5.34
186	21-Apr-12	7	1	\$9.24	No	\$22.95	\$13.71
187	21-Apr-12	7	2	\$9.86	No	\$22.95	\$13.09
188	21-Apr-12	7	3	\$14.58	No	\$22.95	\$8.37
189	21-Apr-12	7	4	\$8.34	No	\$22.95	\$14.61
190	21-Apr-12	7	5	\$14.50	No	\$22.95	\$8.45
191	21-Apr-12	7	6	\$9.23	No	\$22.95	\$13.72
192	21-Apr-12	7	7	\$9.93	No	\$22.95	\$13.02
193	21-Apr-12	7	8	\$10.00	No	\$22.95	\$12.95
194	21-Apr-12	7	9	\$10.00	No	\$22.95	\$12.95
195	21-Apr-12	7	10	\$9.92	No	\$22.95	\$13.03
196	21-Apr-12	7	11	\$9.92	No	\$22.95	\$13.03
197	21-Apr-12	7	12	\$8.38	No	\$22.95	\$14.57
198	21-Apr-12	8	1	\$5.04	No	\$22.95	\$17.91
199	21-Apr-12	8	2	\$5.04	No	\$22.95	\$17.91
200	21-Apr-12	8	3	\$7.16	No	\$22.95	\$15.79
201	21-Apr-12	8	4	\$13.48	No	\$22.95	\$9.47
202	21-Apr-12	8	5	\$13.48	No	\$22.95	\$9.47
203	21-Apr-12	8	6	\$13.97	No	\$22.95	\$8.98
204	21-Apr-12	8	7	\$14.53	No	\$22.95	\$8.42
205	21-Apr-12	8	8	\$14.13	No	\$22.95	\$8.82
206	21-Apr-12	8	9	\$15.15	No	\$22.95	\$7.80
207	21-Apr-12	8	10	\$14.57	No	\$22.95	\$8.38
208	21-Apr-12	8	11	\$17.34	No	\$22.95	\$5.61
209	21-Apr-12	8	12	\$18.02	No	\$22.95	\$4.93
210	23-Apr-12	18	5	\$17.26	Yes	\$32.97	\$15.71
211	23-Apr-12	18	6	\$17.35	Yes	\$32.97	\$15.62
212	23-Apr-12	18	7	\$17.29	Yes	\$32.97	\$15.68
213	23-Apr-12	18	8	\$17.19	Yes	\$32.97	\$15.78
214	23-Apr-12	18	9	\$17.29	Yes	\$32.97	\$15.68
215	23-Apr-12	18	10	\$17.27	Yes	\$32.97	\$15.70
216	23-Apr-12	18	11	\$17.14	Yes	\$32.97	\$15.83
217	23-Apr-12	18	12	\$15.43	Yes	\$32.97	\$17.54
218	23-Apr-12	19	1	\$15.64	Yes	\$32.97	\$17.33
219	23-Apr-12	19	2	\$15.35	Yes	\$32.97	\$17.62
220	23-Apr-12	19	3	\$15.43	Yes	\$32.97	\$17.54
221	23-Apr-12	19	4	\$15.69	Yes	\$32.97	\$17.28
222	23-Apr-12	19	5	\$15.51	Yes	\$32.97	\$17.46

Number	Trade Date	Trade Hour	Interval	Market LMP	Eligible Flag	Calculated LMP	Change in LMP
223	23-Apr-12	19	6	\$15.69	Yes	\$32.97	\$17.28
224	23-Apr-12	19	7	\$15.71	Yes	\$32.97	\$17.26
225	23-Apr-12	19	8	\$15.75	Yes	\$32.97	\$17.22
226	23-Apr-12	19	9	\$15.75	Yes	\$32.97	\$17.22
227	23-Apr-12	19	10	\$15.81	Yes	\$32.97	\$17.16
228	23-Apr-12	19	11	\$15.81	Yes	\$32.97	\$17.16
229	23-Apr-12	19	12	\$15.65	Yes	\$32.97	\$17.32
230	23-Apr-12	20	5	\$15.84	Yes	\$27.48	\$11.64
231	23-Apr-12	20	6	\$15.93	Yes	\$27.48	\$11.55
232	23-Apr-12	20	7	\$15.82	Yes	\$27.48	\$11.66
233	23-Apr-12	20	7	\$15.82	Yes	\$29.52	\$13.70
234	23-Apr-12	20	8	\$15.93	Yes	\$27.48	\$11.55
235	23-Apr-12	20	8	\$15.93	Yes	\$34.37	\$18.44
236	23-Apr-12	20	9	\$15.95	Yes	\$27.48	\$11.53
237	23-Apr-12	20	9	\$15.95	Yes	\$34.37	\$18.42
238	23-Apr-12	20	10	\$16.53	Yes	\$27.48	\$10.95
239	23-Apr-12	20	10	\$16.53	Yes	\$34.37	\$17.84
240	23-Apr-12	20	11	\$17.11	Yes	\$27.48	\$10.37
241	23-Apr-12	20	11	\$17.11	Yes	\$34.37	\$17.26
242	23-Apr-12	20	12	\$19.03	Yes	\$27.48	\$8.45
243	23-Apr-12	20	12	\$19.03	Yes	\$34.37	\$15.34
244	23-Apr-12	21	1	\$20.48	Yes	\$34.37	\$13.89
245	23-Apr-12	21	2	\$18.78	Yes	\$34.37	\$15.59
246	23-Apr-12	21	3	\$20.48	Yes	\$34.37	\$13.89
247	23-Apr-12	21	4	\$18.89	Yes	\$34.37	\$15.48
248	23-Apr-12	21	5	\$17.16	Yes	\$34.37	\$17.21
249	23-Apr-12	21	6	\$16.38	Yes	\$34.37	\$17.99
250	23-Apr-12	21	7	\$15.34	Yes	\$31.29	\$15.95
251	23-Apr-12	21	7	\$15.34	Yes	\$34.37	\$19.03
252	23-Apr-12	21	8	\$15.64	Yes	\$31.29	\$15.65
253	23-Apr-12	21	8	\$15.64	Yes	\$34.37	\$18.73
254	23-Apr-12	21	9	\$15.64	Yes	\$31.29	\$15.65
255	23-Apr-12	21	9	\$15.64	Yes	\$34.37	\$18.73
256	23-Apr-12	21	10	\$15.26	Yes	\$31.29	\$16.03
257	23-Apr-12	21	10	\$15.26	Yes	\$34.37	\$19.11
258	23-Apr-12	21	11	\$15.26	Yes	\$31.29	\$16.03
259	23-Apr-12	21	11	\$15.26	Yes	\$34.37	\$19.11
260	23-Apr-12	21	12	\$14.65	Yes	\$31.29	\$16.64
261	23-Apr-12	21	12	\$14.65	Yes	\$34.37	\$19.72
262	23-Apr-12	22	1	\$15.27	Yes	\$37.54	\$22.27
263	23-Apr-12	22	2	\$15.27	Yes	\$37.54	\$22.27
264	23-Apr-12	22	3	\$15.27	Yes	\$37.54	\$22.27
265	23-Apr-12	22	4	\$15.23	Yes	\$37.54	\$22.31
266	23-Apr-12	22	5	\$15.52	Yes	\$32.97	\$17.45
267	23-Apr-12	22	5	\$15.52	Yes	\$37.54	\$22.02

Number	Trade Date	Trade Hour	Interval	Market LMP	Eligible Flag	Calculated LMP	Change in LMP
268	23-Apr-12	22	6	\$15.23	Yes	\$32.97	\$17.74
269	23-Apr-12	22	6	\$15.23	Yes	\$37.54	\$22.31
270	23-Apr-12	22	7	\$13.95	Yes	\$32.97	\$19.02
271	23-Apr-12	22	7	\$13.95	Yes	\$37.54	\$23.59
272	23-Apr-12	22	8	\$13.91	Yes	\$32.97	\$19.06
273	23-Apr-12	22	8	\$13.91	Yes	\$37.54	\$23.63
274	23-Apr-12	22	9	\$12.06	Yes	\$32.97	\$20.91
275	23-Apr-12	22	9	\$12.06	Yes	\$37.54	\$25.48
276	23-Apr-12	22	10	\$13.07	Yes	\$32.97	\$19.90
277	23-Apr-12	22	10	\$13.07	Yes	\$37.54	\$24.47
278	23-Apr-12	22	11	\$13.71	Yes	\$32.97	\$19.26
279	23-Apr-12	22	11	\$13.71	Yes	\$37.54	\$23.83
280	23-Apr-12	22	12	\$10.09	Yes	\$32.97	\$22.88
281	23-Apr-12	22	12	\$10.09	Yes	\$37.54	\$27.45
282	25-Apr-12	23	9	\$19.89	No	\$30.60	\$10.71
283	25-Apr-12	23	10	\$23.01	No	\$30.60	\$7.59
284	25-Apr-12	23	11	\$22.09	No	\$30.60	\$8.51
285	25-Apr-12	23	12	\$43.07	No	\$30.60	(\$12.47)
286	25-Apr-12	24	1	\$43.07	No	\$30.60	(\$12.47)
287	25-Apr-12	24	2	\$1,011.60	No	\$30.60	(\$981.00)
288	25-Apr-12	24	3	\$224.26	No	\$30.60	(\$193.66)
289	25-Apr-12	24	4	\$35.84	No	\$30.60	(\$5.24)
290	25-Apr-12	24	5	\$22.87	No	\$30.60	\$7.73
291	25-Apr-12	24	6	\$19.47	No	\$30.60	\$11.13
292	25-Apr-12	24	7	\$19.57	No	\$30.60	\$11.03
293	25-Apr-12	24	8	\$21.01	No	\$30.60	\$9.59
294	25-Apr-12	24	9	\$30.12	No	\$30.60	\$0.48
295	25-Apr-12	24	10	\$24.24	No	\$30.60	\$6.36
296	25-Apr-12	24	11	\$20.20	No	\$30.60	\$10.40
297	25-Apr-12	24	12	\$20.20	No	\$30.60	\$10.40
298	26-Apr-12	1	1	\$23.60	No	\$30.60	\$7.00
299	26-Apr-12	1	2	\$23.39	No	\$30.60	\$7.21
300	26-Apr-12	1	3	\$19.63	No	\$30.60	\$10.97
301	26-Apr-12	1	4	\$18.79	No	\$30.60	\$11.81
302	26-Apr-12	1	5	\$18.88	No	\$30.60	\$11.72
303	26-Apr-12	1	6	\$19.61	No	\$30.60	\$10.99
304	26-Apr-12	1	7	\$19.65	No	\$30.60	\$10.95
305	26-Apr-12	1	8	\$23.28	No	\$30.60	\$7.32
306	26-Apr-12	1	9	\$31.36	No	\$30.60	(\$0.76)
307	26-Apr-12	1	10	\$29.99	No	\$30.60	\$0.61
308	26-Apr-12	1	11	\$19.78	No	\$30.60	\$10.82
309	26-Apr-12	1	12	\$19.40	No	\$30.60	\$11.20
310	26-Apr-12	2	1	\$19.66	No	\$30.60	\$10.94
311	26-Apr-12	2	2	\$19.66	No	\$30.60	\$10.94
312	26-Apr-12	2	3	\$18.55	No	\$30.60	\$12.05

Number	Trade Date	Trade Hour	Interval	Market LMP	Eligible Flag	Calculated LMP	Change in LMP
313	26-Apr-12	2	4	\$16.47	No	\$30.60	\$14.13
314	26-Apr-12	2	5	\$18.32	No	\$30.60	\$12.28
315	26-Apr-12	2	6	\$19.70	No	\$30.60	\$10.90
316	26-Apr-12	2	7	\$19.28	No	\$30.60	\$11.32
317	26-Apr-12	2	8	\$18.21	No	\$30.60	\$12.39
318	26-Apr-12	2	9	\$18.21	No	\$30.60	\$12.39
319	26-Apr-12	2	10	\$17.71	No	\$30.60	\$12.89
320	26-Apr-12	2	11	\$17.89	No	\$30.60	\$12.71
321	26-Apr-12	2	12	\$17.92	No	\$30.60	\$12.68
322	26-Apr-12	3	1	\$18.31	No	\$30.60	\$12.29
323	26-Apr-12	3	2	\$18.73	No	\$30.60	\$11.87
324	26-Apr-12	3	3	\$18.95	No	\$30.60	\$11.65
325	26-Apr-12	3	4	\$18.32	No	\$30.60	\$12.28
326	26-Apr-12	3	5	\$17.96	No	\$30.60	\$12.64
327	26-Apr-12	3	6	\$17.69	No	\$30.60	\$12.91
328	26-Apr-12	3	7	\$17.40	No	\$30.60	\$13.20
329	26-Apr-12	3	8	\$17.76	No	\$30.60	\$12.84
330	26-Apr-12	3	9	\$17.76	No	\$30.60	\$12.84
331	26-Apr-12	3	10	\$17.43	No	\$30.60	\$13.17
332	26-Apr-12	3	11	\$17.71	No	\$30.60	\$12.89
333	26-Apr-12	3	12	\$17.71	No	\$30.60	\$12.89
334	26-Apr-12	4	1	\$17.77	No	\$30.60	\$12.84
335	26-Apr-12	4	2	\$17.75	No	\$30.60	\$12.85
336	26-Apr-12	4	3	\$17.75	No	\$30.60	\$12.85
337	26-Apr-12	4	4	\$17.79	No	\$30.60	\$12.81
338	26-Apr-12	4	5	\$17.81	No	\$30.60	\$12.79
339	26-Apr-12	4	6	\$17.77	No	\$30.60	\$12.83
340	26-Apr-12	4	7	\$17.79	No	\$30.60	\$12.81
341	26-Apr-12	4	8	\$17.70	No	\$30.60	\$12.90
342	26-Apr-12	4	9	\$17.70	No	\$30.60	\$12.90
343	26-Apr-12	4	10	\$18.31	No	\$30.60	\$12.29
344	26-Apr-12	4	11	\$17.68	No	\$30.60	\$12.92
345	26-Apr-12	4	12	\$17.68	No	\$30.60	\$12.92
346	26-Apr-12	5	1	\$17.99	No	\$30.60	\$12.61
347	26-Apr-12	5	2	\$17.86	No	\$30.60	\$12.74
348	26-Apr-12	5	3	\$17.79	No	\$30.60	\$12.81
349	26-Apr-12	5	4	\$17.30	No	\$30.60	\$13.30
350	26-Apr-12	5	5	\$17.72	No	\$30.60	\$12.88
351	26-Apr-12	5	6	\$17.80	No	\$30.60	\$12.80
352	26-Apr-12	5	7	\$17.96	No	\$30.60	\$12.64
353	26-Apr-12	5	8	\$17.89	No	\$30.60	\$12.71
354	26-Apr-12	5	9	\$17.95	No	\$30.60	\$12.65
355	26-Apr-12	5	10	\$18.11	No	\$30.60	\$12.49
356	26-Apr-12	5	11	\$18.11	No	\$30.60	\$12.49
357	26-Apr-12	5	12	\$18.42	No	\$30.60	\$12.18

Number	Trade Date	Trade Hour	Interval	Market LMP	Eligible Flag	Calculated LMP	Change in LMP
358	26-Apr-12	6	1	\$16.56	No	\$30.60	\$14.04
359	26-Apr-12	6	2	\$16.56	No	\$30.60	\$14.04
360	26-Apr-12	6	3	\$17.62	No	\$30.60	\$12.98
361	26-Apr-12	6	4	\$17.49	No	\$30.60	\$13.11
362	26-Apr-12	6	5	\$18.00	No	\$30.60	\$12.60
363	26-Apr-12	6	6	\$19.20	No	\$30.60	\$11.40
364	26-Apr-12	6	7	\$19.30	No	\$30.60	\$11.30
365	26-Apr-12	6	8	\$23.49	No	\$30.60	\$7.11
366	26-Apr-12	6	9	\$31.30	No	\$30.60	(\$0.70)
367	26-Apr-12	6	10	\$27.80	No	\$30.60	\$2.80
368	26-Apr-12	6	11	\$27.80	No	\$30.60	\$2.80
369	26-Apr-12	6	12	\$32.37	No	\$30.60	(\$1.77)
370	26-Apr-12	7	1	\$9.93	No	\$30.60	\$20.67
371	26-Apr-12	7	2	\$15.54	No	\$30.60	\$15.06
372	26-Apr-12	7	3	\$15.77	No	\$30.60	\$14.83
373	26-Apr-12	7	4	\$15.69	No	\$30.60	\$14.91
374	26-Apr-12	7	5	\$16.54	No	\$30.60	\$14.06
375	26-Apr-12	7	6	\$16.54	No	\$30.60	\$14.06
376	26-Apr-12	7	7	\$17.06	No	\$30.60	\$13.54
377	26-Apr-12	7	8	\$19.78	No	\$30.60	\$10.82
378	26-Apr-12	7	9	\$20.71	No	\$30.60	\$9.89
379	26-Apr-12	7	10	\$19.94	No	\$30.60	\$10.66
380	26-Apr-12	7	11	\$20.14	No	\$30.60	\$10.46
381	26-Apr-12	7	12	\$21.97	No	\$30.60	\$8.63
382	26-Apr-12	8	1	\$16.11	No	\$30.60	\$14.49
383	26-Apr-12	8	2	\$16.57	No	\$30.60	\$14.03
384	26-Apr-12	8	3	\$16.57	No	\$30.60	\$14.03
385	26-Apr-12	8	4	\$16.62	No	\$30.60	\$13.98
386	26-Apr-12	8	5	\$16.62	No	\$30.60	\$13.98
387	26-Apr-12	8	6	\$17.32	No	\$30.60	\$13.28
388	26-Apr-12	8	7	\$16.61	No	\$30.60	\$13.99
389	26-Apr-12	8	8	\$16.86	No	\$30.60	\$13.74
390	26-Apr-12	8	9	\$16.86	No	\$30.60	\$13.74
391	26-Apr-12	8	10	\$17.96	No	\$30.60	\$12.64
392	26-Apr-12	8	11	\$16.85	No	\$30.60	\$13.75
393	26-Apr-12	8	12	\$16.85	No	\$30.60	\$13.75
394	26-Apr-12	9	1	\$16.65	No	\$30.60	\$13.95
395	26-Apr-12	9	2	\$16.83	No	\$30.60	\$13.77
396	26-Apr-12	9	3	\$16.83	No	\$30.60	\$13.77
397	26-Apr-12	9	4	\$19.39	No	\$30.60	\$11.21
398	26-Apr-12	9	5	\$19.33	No	\$30.60	\$11.27
399	26-Apr-12	9	6	\$17.91	No	\$30.60	\$12.69
400	26-Apr-12	9	7	\$20.77	No	\$30.60	\$9.83
401	26-Apr-12	9	8	\$16.59	No	\$30.60	\$14.01
402	26-Apr-12	9	9	\$17.05	No	\$30.60	\$13.55

Number	Trade Date	Trade Hour	Interval	Market LMP	Eligible Flag	Calculated LMP	Change in LMP
403	26-Apr-12	9	10	\$16.84	No	\$30.60	\$13.76
404	26-Apr-12	9	11	\$15.54	No	\$30.60	\$15.06
405	26-Apr-12	9	12	\$16.53	No	\$30.60	\$14.07
406	26-Apr-12	10	4	\$14.07	Yes	\$30.60	\$16.53
407	26-Apr-12	10	5	\$14.07	Yes	\$30.60	\$16.53
408	26-Apr-12	10	6	\$14.25	Yes	\$30.60	\$16.35
409	26-Apr-12	10	7	\$12.11	Yes	\$30.60	\$18.49
410	26-Apr-12	10	8	\$12.00	Yes	\$30.60	\$18.60
411	26-Apr-12	10	9	\$12.95	Yes	\$30.60	\$17.65
412	26-Apr-12	10	10	\$11.98	Yes	\$30.60	\$18.62
413	26-Apr-12	10	11	\$14.20	Yes	\$30.60	\$16.40
414	26-Apr-12	10	12	\$14.93	Yes	\$30.60	\$15.67
415	26-Apr-12	11	1	\$18.92	Yes	\$30.60	\$11.68
416	26-Apr-12	11	2	\$17.70	Yes	\$30.60	\$12.90
417	26-Apr-12	11	3	\$17.94	Yes	\$30.60	\$12.66
418	26-Apr-12	11	4	\$17.50	Yes	\$30.60	\$13.10
419	26-Apr-12	11	5	\$18.70	Yes	\$30.60	\$11.90
420	26-Apr-12	11	6	\$19.86	Yes	\$30.60	\$10.74
421	26-Apr-12	11	7	\$20.34	Yes	\$30.60	\$10.26
422	26-Apr-12	11	8	\$20.04	Yes	\$30.60	\$10.56
423	26-Apr-12	11	9	\$20.04	Yes	\$30.60	\$10.56
424	26-Apr-12	11	10	\$19.45	Yes	\$30.60	\$11.15
425	26-Apr-12	11	11	\$19.55	Yes	\$30.60	\$11.05
426	26-Apr-12	11	12	\$20.50	Yes	\$30.60	\$10.10
427	26-Apr-12	12	1	\$20.10	Yes	\$30.60	\$10.50
428	26-Apr-12	12	2	\$20.10	Yes	\$30.60	\$10.50
429	26-Apr-12	12	3	\$20.10	Yes	\$30.60	\$10.50
430	26-Apr-12	12	4	\$18.20	Yes	\$30.60	\$12.40
431	26-Apr-12	12	5	\$18.20	Yes	\$30.60	\$12.40
432	26-Apr-12	12	6	\$19.98	Yes	\$30.60	\$10.62
433	26-Apr-12	12	7	\$22.42	Yes	\$30.60	\$8.18
434	26-Apr-12	12	8	\$22.42	Yes	\$30.60	\$8.18
435	26-Apr-12	12	9	\$22.42	Yes	\$30.60	\$8.18
436	26-Apr-12	12	10	\$21.63	Yes	\$30.60	\$8.97
437	26-Apr-12	12	11	\$20.03	Yes	\$30.60	\$10.57
438	26-Apr-12	12	12	\$23.22	Yes	\$30.60	\$7.38
439	26-Apr-12	13	1	\$28.54	Yes	\$30.60	\$2.06
440	26-Apr-12	13	2	\$26.69	Yes	\$30.60	\$3.91
441	26-Apr-12	13	3	\$29.63	Yes	\$30.60	\$0.97
442	26-Apr-12	13	4	\$29.63	Yes	\$30.60	\$0.97
443	26-Apr-12	13	5	\$26.90	Yes	\$30.60	\$3.70
444	26-Apr-12	13	6	\$26.90	Yes	\$30.60	\$3.70
445	26-Apr-12	13	7	\$20.71	Yes	\$30.60	\$9.89
446	26-Apr-12	13	8	\$36.35	Yes	\$30.60	(\$5.75)
447	26-Apr-12	13	9	\$24.40	Yes	\$30.60	\$6.20

Number	Trade Date	Trade Hour	Interval	Market LMP	Eligible Flag	Calculated LMP	Change in LMP
448	26-Apr-12	13	10	\$22.86	Yes	\$30.60	\$7.74
449	26-Apr-12	13	11	\$19.63	Yes	\$30.60	\$10.97
450	26-Apr-12	13	12	\$19.15	Yes	\$30.60	\$11.45
451	26-Apr-12	14	1	\$14.97	Yes	\$30.60	\$15.63
452	26-Apr-12	14	2	\$9.63	Yes	\$30.60	\$20.97
453	26-Apr-12	14	3	\$5.24	Yes	\$30.60	\$25.36
454	26-Apr-12	14	4	\$11.94	Yes	\$30.60	\$18.66
455	26-Apr-12	14	5	\$14.89	Yes	\$30.60	\$15.71
456	26-Apr-12	14	6	\$14.89	Yes	\$30.60	\$15.71
457	26-Apr-12	14	7	\$14.09	Yes	\$30.60	\$16.51
458	26-Apr-12	14	8	\$8.93	Yes	\$30.60	\$21.67
459	26-Apr-12	14	9	\$9.61	Yes	\$30.60	\$20.99
460	26-Apr-12	14	10	\$9.58	Yes	\$30.60	\$21.02
461	26-Apr-12	14	11	\$9.69	Yes	\$30.60	\$20.91
462	26-Apr-12	14	12	\$9.58	Yes	\$30.60	\$21.02
463	26-Apr-12	15	1	\$0.01	Yes	\$30.60	\$30.59
464	26-Apr-12	15	2	\$5.90	Yes	\$30.60	\$24.70
465	26-Apr-12	15	3	\$14.95	Yes	\$30.60	\$15.65
466	26-Apr-12	15	4	\$8.55	Yes	\$30.60	\$22.05
467	26-Apr-12	15	5	\$8.92	Yes	\$30.60	\$21.68
468	26-Apr-12	15	6	\$8.92	Yes	\$30.60	\$21.68
469	26-Apr-12	15	7	\$8.59	Yes	\$30.60	\$22.01
470	26-Apr-12	15	8	\$8.73	Yes	\$30.60	\$21.87
471	26-Apr-12	15	9	\$7.66	Yes	\$30.60	\$22.94
472	26-Apr-12	15	10	\$5.91	Yes	\$30.60	\$24.69
473	26-Apr-12	15	11	\$7.62	Yes	\$30.60	\$22.98
474	26-Apr-12	15	12	\$6.19	Yes	\$30.60	\$24.41
475	26-Apr-12	16	1	\$7.56	Yes	\$30.60	\$23.04
476	26-Apr-12	16	2	\$8.62	Yes	\$30.60	\$21.98
477	26-Apr-12	16	3	\$7.56	Yes	\$30.60	\$23.04
478	26-Apr-12	16	4	\$7.59	Yes	\$30.60	\$23.01
479	26-Apr-12	16	4	\$7.59	Yes	\$32.97	\$25.38
480	26-Apr-12	16	5	\$8.65	Yes	\$30.60	\$21.95
481	26-Apr-12	16	5	\$8.65	Yes	\$32.97	\$24.32
482	26-Apr-12	16	6	\$7.59	Yes	\$30.60	\$23.01
483	26-Apr-12	16	6	\$7.59	Yes	\$32.97	\$25.38
484	26-Apr-12	16	7	\$6.39	Yes	\$30.60	\$24.21
485	26-Apr-12	16	7	\$6.39	Yes	\$32.97	\$26.58
486	26-Apr-12	16	8	\$0.01	Yes	\$30.60	\$30.59
487	26-Apr-12	16	8	\$0.01	Yes	\$32.97	\$32.96
488	26-Apr-12	16	9	\$5.09	Yes	\$30.60	\$25.51
489	26-Apr-12	16	9	\$5.09	Yes	\$32.97	\$27.88
490	26-Apr-12	16	10	\$0.01	Yes	\$30.60	\$30.59
491	26-Apr-12	16	10	\$0.01	Yes	\$32.97	\$32.96
492	26-Apr-12	16	11	\$0.01	Yes	\$30.60	\$30.59

Number	Trade Date	Trade Hour	Interval	Market LMP	Eligible Flag	Calculated LMP	Change in LMP
493	26-Apr-12	16	11	\$0.01	Yes	\$32.97	\$32.96
494	26-Apr-12	16	12	\$0.01	Yes	\$30.60	\$30.59
495	26-Apr-12	16	12	\$0.01	Yes	\$32.97	\$32.96
496	26-Apr-12	17	1	\$0.42	Yes	\$32.97	\$32.55
497	26-Apr-12	17	2	\$7.58	Yes	\$32.97	\$25.39
498	26-Apr-12	17	3	\$6.26	Yes	\$32.97	\$26.71
499	26-Apr-12	17	4	\$5.90	Yes	\$32.97	\$27.07
500	26-Apr-12	17	5	\$5.90	Yes	\$32.97	\$27.07
501	26-Apr-12	17	6	\$5.90	Yes	\$32.97	\$27.07
502	26-Apr-12	17	7	\$8.92	Yes	\$32.97	\$24.05
503	26-Apr-12	17	8	\$9.59	Yes	\$32.97	\$23.38
504	26-Apr-12	17	9	\$8.65	Yes	\$32.97	\$24.32
505	26-Apr-12	17	10	\$0.42	Yes	\$32.97	\$32.55
506	26-Apr-12	17	11	\$5.90	Yes	\$32.97	\$27.07
507	26-Apr-12	17	12	\$5.90	Yes	\$32.97	\$27.07
508	26-Apr-12	18	1	\$8.65	Yes	\$32.97	\$24.32
509	26-Apr-12	18	2	\$11.97	Yes	\$32.97	\$21.00
510	26-Apr-12	18	3	\$11.97	Yes	\$32.97	\$21.00
511	26-Apr-12	18	4	\$15.02	Yes	\$32.97	\$17.95
512	26-Apr-12	18	5	\$5.13	Yes	\$32.97	\$27.84
513	26-Apr-12	18	6	\$0.41	Yes	\$32.97	\$32.56
514	26-Apr-12	18	7	\$14.24	Yes	\$32.97	\$18.73
515	26-Apr-12	18	8	\$14.17	Yes	\$32.97	\$18.80
516	26-Apr-12	18	9	\$8.96	Yes	\$32.97	\$24.01
517	26-Apr-12	18	10	\$7.64	Yes	\$32.97	\$25.33
518	26-Apr-12	18	11	\$7.64	Yes	\$32.97	\$25.33
519	26-Apr-12	18	12	\$5.92	Yes	\$32.97	\$27.05
520	26-Apr-12	19	1	\$5.92	Yes	\$32.97	\$27.05
521	26-Apr-12	19	2	\$0.41	Yes	\$32.97	\$32.56
522	26-Apr-12	19	3	\$0.41	Yes	\$32.97	\$32.56
523	26-Apr-12	19	4	\$0.40	Yes	\$32.97	\$32.57
524	26-Apr-12	19	5	\$0.40	Yes	\$32.97	\$32.57
525	26-Apr-12	19	6	\$4.27	Yes	\$32.97	\$28.70
526	26-Apr-12	19	7	\$4.36	Yes	\$32.97	\$28.61
527	26-Apr-12	19	8	\$7.64	Yes	\$32.97	\$25.33
528	26-Apr-12	19	9	\$7.64	Yes	\$32.97	\$25.33
529	26-Apr-12	19	10	\$5.93	Yes	\$32.97	\$27.04
530	26-Apr-12	19	11	\$0.41	Yes	\$32.97	\$32.56
531	26-Apr-12	19	12	\$0.41	Yes	\$32.97	\$32.56
532	26-Apr-12	20	1	\$0.79	Yes	\$27.48	\$26.69
533	26-Apr-12	20	2	\$0.01	Yes	\$27.48	\$27.47
534	26-Apr-12	20	3	-\$31.93	Yes	\$27.48	\$59.41
535	26-Apr-12	20	4	\$0.00	Yes	\$27.48	\$27.48
536	26-Apr-12	20	5	\$0.01	Yes	\$27.48	\$27.47
537	26-Apr-12	20	6	\$0.01	Yes	\$27.48	\$27.47

Number	Trade Date	Trade Hour	Interval	Market LMP	Eligible Flag	Calculated LMP	Change in LMP
538	26-Apr-12	20	7	\$5.92	Yes	\$27.48	\$21.56
539	26-Apr-12	20	8	\$9.74	Yes	\$27.48	\$17.74
540	26-Apr-12	20	9	\$13.65	Yes	\$27.48	\$13.83
541	26-Apr-12	20	10	\$12.29	Yes	\$27.48	\$15.19
542	26-Apr-12	20	11	\$16.02	Yes	\$27.48	\$11.46
543	26-Apr-12	20	12	\$13.73	Yes	\$27.48	\$13.75
544	26-Apr-12	21	1	\$17.95	Yes	\$27.48	\$9.53
545	26-Apr-12	21	2	\$17.48	Yes	\$27.48	\$10.00
546	26-Apr-12	21	3	\$15.48	Yes	\$27.48	\$12.00
547	26-Apr-12	21	4	\$16.05	Yes	\$27.48	\$11.43
548	26-Apr-12	21	5	\$17.65	Yes	\$27.48	\$9.83
549	26-Apr-12	21	5	\$17.65	Yes	\$31.29	\$13.64
550	26-Apr-12	21	6	\$17.65	Yes	\$27.48	\$9.83
551	26-Apr-12	21	6	\$17.65	Yes	\$31.29	\$13.64
552	26-Apr-12	21	7	\$16.06	Yes	\$27.48	\$11.42
553	26-Apr-12	21	7	\$16.06	Yes	\$36.09	\$20.03
554	26-Apr-12	21	8	\$16.18	Yes	\$27.48	\$11.30
555	26-Apr-12	21	8	\$16.18	Yes	\$36.09	\$19.91
556	26-Apr-12	21	9	\$16.18	Yes	\$27.48	\$11.30
557	26-Apr-12	21	9	\$16.18	Yes	\$36.09	\$19.91
558	26-Apr-12	21	10	\$15.06	Yes	\$27.48	\$12.42
559	26-Apr-12	21	10	\$15.06	Yes	\$36.09	\$21.03
560	26-Apr-12	21	11	\$15.06	Yes	\$27.48	\$12.42
561	26-Apr-12	21	11	\$15.06	Yes	\$36.09	\$21.03
562	26-Apr-12	21	12	\$15.04	Yes	\$27.48	\$12.44
563	26-Apr-12	21	12	\$15.04	Yes	\$34.37	\$19.33
564	26-Apr-12	21	12	\$15.04	Yes	\$36.09	\$21.05
565	26-Apr-12	22	1	\$20.95	Yes	\$34.37	\$13.42
566	26-Apr-12	22	2	\$20.26	Yes	\$34.37	\$14.11
567	26-Apr-12	22	3	\$16.04	Yes	\$31.29	\$15.25
568	26-Apr-12	22	3	\$16.04	Yes	\$34.37	\$18.33
569	26-Apr-12	22	4	\$16.12	Yes	\$31.29	\$15.17
570	26-Apr-12	22	4	\$16.12	Yes	\$34.37	\$18.25
571	26-Apr-12	22	5	\$17.21	Yes	\$31.29	\$14.08
572	26-Apr-12	22	5	\$17.21	Yes	\$34.37	\$17.16
573	26-Apr-12	22	6	\$17.54	Yes	\$31.29	\$13.75
574	26-Apr-12	22	6	\$17.54	Yes	\$34.37	\$16.83
575	26-Apr-12	22	7	\$17.16	Yes	\$31.29	\$14.13
576	26-Apr-12	22	7	\$17.16	Yes	\$34.37	\$17.21
577	26-Apr-12	22	8	\$16.17	Yes	\$31.29	\$15.12
578	26-Apr-12	22	8	\$16.17	Yes	\$34.37	\$18.20
579	26-Apr-12	22	9	\$15.81	Yes	\$31.29	\$15.48
580	26-Apr-12	22	9	\$15.81	Yes	\$34.37	\$18.56
581	26-Apr-12	22	10	\$13.72	Yes	\$31.29	\$17.57
582	26-Apr-12	22	10	\$13.72	Yes	\$34.37	\$20.65

Number	Trade Date	Trade Hour	Interval	Market LMP	Eligible Flag	Calculated LMP	Change in LMP
583	26-Apr-12	22	11	\$13.72	Yes	\$31.29	\$17.57
584	26-Apr-12	22	11	\$13.72	Yes	\$34.37	\$20.65
585	26-Apr-12	22	12	\$9.57	Yes	\$31.29	\$21.72
586	26-Apr-12	22	12	\$9.57	Yes	\$34.37	\$24.80
587	26-Apr-12	23	1	\$35.42	Yes	\$37.54	\$2.12
588	26-Apr-12	23	2	\$24.85	Yes	\$37.54	\$12.69
589	26-Apr-12	23	3	\$23.18	Yes	\$37.54	\$14.36
590	26-Apr-12	23	4	\$22.70	Yes	\$37.54	\$14.84
591	26-Apr-12	23	5	\$22.70	Yes	\$37.54	\$14.84
592	26-Apr-12	23	6	\$17.37	Yes	\$37.54	\$20.17
593	26-Apr-12	23	7	\$15.99	Yes	\$37.54	\$21.55
594	26-Apr-12	23	8	\$15.89	Yes	\$35.42	\$19.53
595	26-Apr-12	23	9	\$9.88	Yes	\$35.42	\$25.54
596	26-Apr-12	23	10	\$14.93	Yes	\$35.42	\$20.49
597	26-Apr-12	23	11	\$14.62	Yes	\$35.42	\$20.80
598	26-Apr-12	23	12	\$4.53	Yes	\$35.42	\$30.89
599	26-Apr-12	24	1	\$19.20	Yes	\$35.42	\$16.22
600	26-Apr-12	24	2	\$16.00	Yes	\$35.42	\$19.42
601	26-Apr-12	24	3	\$15.96	Yes	\$32.97	\$17.01
602	26-Apr-12	24	3	\$15.96	Yes	\$35.42	\$19.46
603	26-Apr-12	24	4	\$5.10	Yes	\$32.97	\$27.87
604	26-Apr-12	24	4	\$5.10	Yes	\$35.42	\$30.32
605	26-Apr-12	24	5	\$15.06	Yes	\$32.97	\$17.91
606	26-Apr-12	24	5	\$15.06	Yes	\$35.42	\$20.36
607	26-Apr-12	24	6	\$14.27	Yes	\$32.97	\$18.70
608	26-Apr-12	24	6	\$14.27	Yes	\$35.42	\$21.15
609	26-Apr-12	24	7	\$15.62	Yes	\$30.60	\$14.98
610	26-Apr-12	24	7	\$15.62	Yes	\$32.97	\$17.35
611	26-Apr-12	24	7	\$15.62	Yes	\$35.42	\$19.80
612	26-Apr-12	24	8	\$5.10	Yes	\$30.60	\$25.50
613	26-Apr-12	24	8	\$5.10	Yes	\$32.97	\$27.87
614	26-Apr-12	24	8	\$5.10	Yes	\$35.42	\$30.32
615	26-Apr-12	24	9	\$0.00	Yes	\$30.60	\$30.60
616	26-Apr-12	24	9	\$0.00	Yes	\$32.97	\$32.97
617	26-Apr-12	24	9	\$0.00	Yes	\$35.42	\$35.42
618	26-Apr-12	24	10	-\$30.62	Yes	\$30.60	\$61.22
619	26-Apr-12	24	10	-\$30.62	Yes	\$32.97	\$63.59
620	26-Apr-12	24	10	-\$30.62	Yes	\$35.42	\$66.04
621	26-Apr-12	24	11	-\$30.76	Yes	\$30.60	\$61.36
622	26-Apr-12	24	11	-\$30.76	Yes	\$32.97	\$63.73
623	26-Apr-12	24	11	-\$30.76	Yes	\$35.42	\$66.18
624	26-Apr-12	24	12	\$0.01	Yes	\$30.60	\$30.59
625	26-Apr-12	24	12	\$0.01	Yes	\$32.97	\$32.96
626	26-Apr-12	24	12	\$0.01	Yes	\$35.42	\$35.41
627	27-Apr-12	1	1	\$15.03	Yes	\$30.60	\$15.57

Number	Trade Date	Trade Hour	Interval	Market LMP	Eligible Flag	Calculated LMP	Change in LMP
628	27-Apr-12	1	2	\$17.73	Yes	\$30.60	\$12.87
629	27-Apr-12	1	3	\$17.13	Yes	\$30.60	\$13.47
630	27-Apr-12	1	4	\$15.23	Yes	\$30.60	\$15.37
631	27-Apr-12	1	5	\$18.72	Yes	\$30.60	\$11.88
632	27-Apr-12	1	6	\$16.11	Yes	\$30.60	\$14.49
633	27-Apr-12	1	7	\$16.14	Yes	\$30.60	\$14.46
634	27-Apr-12	1	8	\$14.09	Yes	\$30.60	\$16.51
635	27-Apr-12	1	9	\$13.94	Yes	\$30.60	\$16.66
636	27-Apr-12	1	10	\$15.22	Yes	\$30.60	\$15.38
637	27-Apr-12	1	11	\$11.25	Yes	\$30.60	\$19.35
638	27-Apr-12	1	12	\$5.97	Yes	\$30.60	\$24.63
639	27-Apr-12	2	1	\$11.14	Yes	\$30.60	\$19.46
640	27-Apr-12	2	2	\$11.25	Yes	\$30.60	\$19.35
641	27-Apr-12	2	3	\$0.07	Yes	\$30.60	\$30.53
642	27-Apr-12	2	4	\$0.05	Yes	\$30.60	\$30.55
643	27-Apr-12	2	5	-\$30.61	Yes	\$30.60	\$61.21
644	27-Apr-12	2	6	-\$30.75	Yes	\$30.60	\$61.35
645	27-Apr-12	2	7	-\$30.82	Yes	\$30.60	\$61.42
646	27-Apr-12	2	8	-\$30.83	Yes	\$30.60	\$61.43
647	27-Apr-12	2	9	-\$30.99	Yes	\$30.60	\$61.59
648	27-Apr-12	2	10	-\$30.24	Yes	\$30.60	\$60.84
649	27-Apr-12	2	11	-\$30.18	Yes	\$30.60	\$60.78
650	27-Apr-12	2	12	-\$30.87	Yes	\$30.60	\$61.47
651	27-Apr-12	3	1	-\$30.53	Yes	\$30.60	\$61.13
652	27-Apr-12	3	2	-\$30.53	Yes	\$30.60	\$61.13
653	27-Apr-12	3	3	-\$30.53	Yes	\$30.60	\$61.13
654	27-Apr-12	3	4	-\$30.29	Yes	\$30.60	\$60.89
655	27-Apr-12	3	5	-\$30.72	Yes	\$30.60	\$61.32
656	27-Apr-12	3	6	-\$30.72	Yes	\$30.60	\$61.32
657	27-Apr-12	3	7	-\$30.35	Yes	\$30.60	\$60.95
658	27-Apr-12	3	8	-\$30.51	Yes	\$30.60	\$61.11
659	27-Apr-12	3	9	-\$30.56	Yes	\$30.60	\$61.16
660	27-Apr-12	3	10	-\$30.39	Yes	\$30.60	\$60.99
661	27-Apr-12	3	11	-\$30.35	Yes	\$30.60	\$60.95
662	27-Apr-12	3	12	-\$30.48	Yes	\$30.60	\$61.08
663	27-Apr-12	4	1	-\$31.87	Yes	\$30.60	\$62.47
664	27-Apr-12	4	2	\$0.04	Yes	\$30.60	\$30.56
665	27-Apr-12	4	3	\$0.04	Yes	\$30.60	\$30.56
666	27-Apr-12	4	4	\$0.06	Yes	\$30.60	\$30.54
667	27-Apr-12	4	5	\$4.20	Yes	\$30.60	\$26.40
668	27-Apr-12	4	6	\$0.09	Yes	\$30.60	\$30.51
669	27-Apr-12	4	7	\$0.08	Yes	\$30.60	\$30.52
670	27-Apr-12	4	8	\$0.03	Yes	\$30.60	\$30.57
671	27-Apr-12	4	9	\$0.01	Yes	\$30.60	\$30.59
672	27-Apr-12	4	10	\$0.05	Yes	\$30.60	\$30.55

Number	Trade Date	Trade Hour	Interval	Market LMP	Eligible Flag	Calculated LMP	Change in LMP
673	27-Apr-12	4	11	\$0.04	Yes	\$30.60	\$30.56
674	27-Apr-12	4	12	\$0.05	Yes	\$30.60	\$30.55
675	27-Apr-12	5	1	\$14.02	Yes	\$30.60	\$16.58
676	27-Apr-12	5	2	\$15.11	Yes	\$30.60	\$15.49
677	27-Apr-12	5	3	\$15.11	Yes	\$30.60	\$15.49
678	27-Apr-12	5	4	\$14.89	Yes	\$30.60	\$15.71
679	27-Apr-12	5	5	\$14.89	Yes	\$30.60	\$15.71
680	27-Apr-12	5	6	\$16.01	Yes	\$30.60	\$14.59
681	27-Apr-12	5	7	\$15.34	Yes	\$30.60	\$15.26
682	27-Apr-12	5	8	\$16.21	Yes	\$30.60	\$14.39
683	27-Apr-12	5	9	\$17.39	Yes	\$30.60	\$13.21
684	27-Apr-12	5	10	\$16.03	Yes	\$30.60	\$14.57
685	27-Apr-12	5	11	\$17.35	Yes	\$30.60	\$13.25
686	27-Apr-12	5	12	\$16.13	Yes	\$30.60	\$14.47
687	27-Apr-12	6	1	\$17.89	Yes	\$30.60	\$12.71
688	27-Apr-12	6	2	\$16.05	Yes	\$30.60	\$14.55
689	27-Apr-12	6	3	\$16.05	Yes	\$30.60	\$14.55
690	27-Apr-12	6	4	\$16.06	Yes	\$30.60	\$14.54
691	27-Apr-12	6	5	\$17.88	Yes	\$30.60	\$12.72
692	27-Apr-12	6	6	\$16.83	Yes	\$30.60	\$13.77
693	27-Apr-12	6	7	\$17.90	Yes	\$30.60	\$12.70
694	27-Apr-12	6	8	\$17.93	Yes	\$30.60	\$12.67
695	27-Apr-12	6	9	\$20.32	Yes	\$30.60	\$10.28
696	27-Apr-12	6	10	\$19.00	Yes	\$30.60	\$11.60
697	27-Apr-12	6	11	\$20.37	Yes	\$30.60	\$10.23
698	27-Apr-12	6	12	\$22.24	Yes	\$30.60	\$8.36
699	27-Apr-12	7	1	\$9.78	Yes	\$30.60	\$20.82
700	27-Apr-12	7	2	\$0.48	Yes	\$30.60	\$30.12
701	27-Apr-12	7	3	\$0.43	Yes	\$30.60	\$30.17
702	27-Apr-12	7	4	\$0.40	Yes	\$30.60	\$30.20
703	27-Apr-12	7	5	\$0.40	Yes	\$30.60	\$30.20
704	27-Apr-12	7	6	\$9.67	Yes	\$30.60	\$20.93
705	27-Apr-12	7	7	\$15.70	Yes	\$30.60	\$14.90
706	27-Apr-12	7	8	\$16.34	Yes	\$30.60	\$14.26
707	27-Apr-12	7	9	\$16.30	Yes	\$30.60	\$14.30
708	27-Apr-12	7	10	\$16.36	Yes	\$30.60	\$14.24
709	27-Apr-12	7	11	\$16.40	Yes	\$30.60	\$14.20
710	27-Apr-12	7	12	\$18.05	Yes	\$30.60	\$12.55
711	27-Apr-12	8	1	\$8.01	Yes	\$30.60	\$22.59
712	27-Apr-12	8	2	\$8.01	Yes	\$30.60	\$22.59
713	27-Apr-12	8	3	\$10.31	Yes	\$30.60	\$20.29
714	27-Apr-12	8	4	\$15.75	Yes	\$30.60	\$14.85
715	27-Apr-12	8	5	\$15.99	Yes	\$30.60	\$14.61
716	27-Apr-12	8	6	\$16.49	Yes	\$30.60	\$14.11
717	27-Apr-12	8	7	\$15.20	Yes	\$30.60	\$15.40

Number	Trade Date	Trade Hour	Interval	Market LMP	Eligible Flag	Calculated LMP	Change in LMP
718	27-Apr-12	8	8	\$14.58	Yes	\$30.60	\$16.02
719	27-Apr-12	8	9	\$15.67	Yes	\$30.60	\$14.93
720	27-Apr-12	8	10	\$16.41	Yes	\$30.60	\$14.19
721	27-Apr-12	8	11	\$20.04	Yes	\$30.60	\$10.56
722	27-Apr-12	8	12	\$20.04	Yes	\$30.60	\$10.56
723	27-Apr-12	9	1	\$18.91	Yes	\$30.60	\$11.69
724	27-Apr-12	9	2	\$18.98	Yes	\$30.60	\$11.62
725	27-Apr-12	9	3	\$16.39	Yes	\$30.60	\$14.21
726	27-Apr-12	9	4	\$18.95	Yes	\$30.60	\$11.65
727	27-Apr-12	9	5	\$18.94	Yes	\$30.60	\$11.66
728	27-Apr-12	9	6	\$18.94	Yes	\$30.60	\$11.66
729	27-Apr-12	9	7	\$18.30	Yes	\$30.60	\$12.30
730	27-Apr-12	9	8	\$18.19	Yes	\$30.60	\$12.41
731	27-Apr-12	9	9	\$18.05	Yes	\$30.60	\$12.55
732	27-Apr-12	9	10	\$18.92	Yes	\$30.60	\$11.68
733	27-Apr-12	9	11	\$18.91	Yes	\$30.60	\$11.69
734	27-Apr-12	9	12	\$18.86	Yes	\$30.60	\$11.74
735	27-Apr-12	10	1	\$13.91	Yes	\$30.60	\$16.69
736	27-Apr-12	10	2	\$13.89	Yes	\$30.60	\$16.71
737	27-Apr-12	10	3	\$13.87	Yes	\$30.60	\$16.73
738	27-Apr-12	10	4	\$15.35	Yes	\$30.60	\$15.25
739	27-Apr-12	10	5	\$15.35	Yes	\$30.60	\$15.25
740	27-Apr-12	10	6	\$15.35	Yes	\$30.60	\$15.25
741	27-Apr-12	10	7	\$16.87	Yes	\$30.60	\$13.73
742	27-Apr-12	10	8	\$17.49	Yes	\$30.60	\$13.11
743	27-Apr-12	10	9	\$17.49	Yes	\$30.60	\$13.11
744	27-Apr-12	10	10	\$17.81	Yes	\$30.60	\$12.79
745	27-Apr-12	10	11	\$18.06	Yes	\$30.60	\$12.54
746	27-Apr-12	10	12	\$18.06	Yes	\$30.60	\$12.54
747	27-Apr-12	11	1	\$17.49	Yes	\$30.60	\$13.11
748	27-Apr-12	11	2	\$16.33	Yes	\$30.60	\$14.27
749	27-Apr-12	11	3	\$17.48	Yes	\$30.60	\$13.12
750	27-Apr-12	11	4	\$18.01	Yes	\$30.60	\$12.59
751	27-Apr-12	11	5	\$18.08	Yes	\$30.60	\$12.52
752	27-Apr-12	11	6	\$18.96	Yes	\$30.60	\$11.64
753	27-Apr-12	11	7	\$18.95	Yes	\$30.60	\$11.65
754	27-Apr-12	11	8	\$18.98	Yes	\$30.60	\$11.62
755	27-Apr-12	11	9	\$18.98	Yes	\$30.60	\$11.62
756	27-Apr-12	11	10	\$19.00	Yes	\$30.60	\$11.60
757	27-Apr-12	11	11	\$19.00	Yes	\$30.60	\$11.60
758	27-Apr-12	11	12	\$19.00	Yes	\$30.60	\$11.60
759	27-Apr-12	12	1	\$19.15	Yes	\$30.60	\$11.45
760	27-Apr-12	12	2	\$19.13	Yes	\$30.60	\$11.47
761	27-Apr-12	12	3	\$19.14	Yes	\$30.60	\$11.46
762	27-Apr-12	12	4	\$19.42	Yes	\$30.60	\$11.18

Number	Trade Date	Trade Hour	Interval	Market LMP	Eligible Flag	Calculated LMP	Change in LMP
763	27-Apr-12	12	5	\$19.42	Yes	\$30.60	\$11.18
764	27-Apr-12	12	6	\$19.42	Yes	\$30.60	\$11.18
765	27-Apr-12	12	7	\$19.41	Yes	\$30.60	\$11.19
766	27-Apr-12	12	8	\$19.80	Yes	\$30.60	\$10.80
767	27-Apr-12	12	9	\$19.37	Yes	\$30.60	\$11.23
768	27-Apr-12	12	10	\$19.01	Yes	\$30.60	\$11.59
769	27-Apr-12	12	11	\$19.03	Yes	\$30.60	\$11.57
770	27-Apr-12	12	12	\$19.06	Yes	\$30.60	\$11.54
771	27-Apr-12	13	1	\$16.32	Yes	\$30.60	\$14.28
772	27-Apr-12	13	2	\$18.01	Yes	\$30.60	\$12.59
773	27-Apr-12	13	3	\$16.32	Yes	\$30.60	\$14.28
774	27-Apr-12	13	4	\$16.43	Yes	\$30.60	\$14.17
775	27-Apr-12	13	5	\$16.43	Yes	\$30.60	\$14.17
776	27-Apr-12	13	6	\$16.43	Yes	\$30.60	\$14.17
777	27-Apr-12	13	7	\$16.48	Yes	\$30.60	\$14.12
778	27-Apr-12	13	8	\$17.37	Yes	\$30.60	\$13.23
779	27-Apr-12	13	9	\$17.93	Yes	\$30.60	\$12.67
780	27-Apr-12	13	10	\$17.93	Yes	\$30.60	\$12.67
781	27-Apr-12	13	11	\$17.69	Yes	\$30.60	\$12.91
782	27-Apr-12	13	12	\$17.38	Yes	\$30.60	\$13.22
783	27-Apr-12	14	1	\$20.58	Yes	\$30.60	\$10.02
784	27-Apr-12	14	2	\$19.24	Yes	\$30.60	\$11.36
785	27-Apr-12	14	3	\$22.20	Yes	\$30.60	\$8.40
786	27-Apr-12	14	4	\$20.43	Yes	\$30.60	\$10.17
787	27-Apr-12	14	5	\$19.07	Yes	\$30.60	\$11.53
788	27-Apr-12	14	6	\$19.07	Yes	\$30.60	\$11.53
789	27-Apr-12	14	7	\$19.08	Yes	\$30.60	\$11.52
790	27-Apr-12	14	8	\$18.99	Yes	\$30.60	\$11.61
791	27-Apr-12	14	9	\$19.00	Yes	\$30.60	\$11.60
792	27-Apr-12	14	10	\$21.13	Yes	\$30.60	\$9.47
793	27-Apr-12	14	11	\$20.49	Yes	\$30.60	\$10.11
794	27-Apr-12	14	12	\$19.66	Yes	\$30.60	\$10.94
795	27-Apr-12	15	1	\$19.78	Yes	\$30.60	\$10.82
796	27-Apr-12	15	2	\$19.78	Yes	\$30.60	\$10.82
797	27-Apr-12	15	3	\$22.50	Yes	\$30.60	\$8.10
798	27-Apr-12	15	4	\$20.38	Yes	\$30.60	\$10.22
799	27-Apr-12	15	5	\$19.97	Yes	\$30.60	\$10.63
800	27-Apr-12	15	6	\$19.01	Yes	\$30.60	\$11.59
801	27-Apr-12	15	7	\$19.02	Yes	\$30.60	\$11.58
802	27-Apr-12	15	8	\$18.90	Yes	\$30.60	\$11.70
803	27-Apr-12	15	9	\$18.90	Yes	\$30.60	\$11.70
804	27-Apr-12	15	10	\$18.81	Yes	\$30.60	\$11.79
805	27-Apr-12	15	11	\$18.02	Yes	\$30.60	\$12.58
806	27-Apr-12	15	12	\$18.00	Yes	\$30.60	\$12.60
807	27-Apr-12	16	1	\$17.88	Yes	\$30.60	\$12.72

Number	Trade Date	Trade Hour	Interval	Market LMP	Eligible Flag	Calculated LMP	Change in LMP
808	27-Apr-12	16	2	\$17.56	Yes	\$30.60	\$13.04
809	27-Apr-12	16	3	\$17.56	Yes	\$30.60	\$13.04
810	27-Apr-12	16	4	\$18.13	Yes	\$30.60	\$12.47
811	27-Apr-12	16	5	\$17.57	Yes	\$30.60	\$13.03
812	27-Apr-12	16	6	\$16.84	Yes	\$30.60	\$13.76
813	27-Apr-12	16	7	\$16.85	Yes	\$30.60	\$13.75
814	27-Apr-12	16	8	\$16.48	Yes	\$30.60	\$14.12
815	27-Apr-12	16	9	\$16.31	Yes	\$30.60	\$14.29
816	27-Apr-12	16	10	\$16.10	Yes	\$30.60	\$14.50
817	27-Apr-12	16	11	\$16.32	Yes	\$30.60	\$14.28
818	27-Apr-12	16	12	\$16.32	Yes	\$30.60	\$14.28
819	27-Apr-12	17	1	\$16.11	Yes	\$30.60	\$14.49
820	27-Apr-12	17	2	\$16.11	Yes	\$30.60	\$14.49
821	27-Apr-12	17	3	\$16.11	Yes	\$30.60	\$14.49
822	27-Apr-12	17	4	\$15.07	Yes	\$30.60	\$15.53
823	27-Apr-12	17	5	\$15.07	Yes	\$30.60	\$15.53
824	27-Apr-12	17	6	\$15.07	Yes	\$30.60	\$15.53
825	27-Apr-12	17	7	\$14.04	Yes	\$30.60	\$16.56
826	27-Apr-12	17	8	\$15.01	Yes	\$30.60	\$15.59
827	27-Apr-12	17	9	\$13.99	Yes	\$30.60	\$16.61
828	27-Apr-12	17	10	\$16.26	Yes	\$30.60	\$14.34
829	27-Apr-12	17	11	\$16.26	Yes	\$30.60	\$14.34
830	27-Apr-12	17	12	\$16.26	Yes	\$30.60	\$14.34
831	27-Apr-12	18	1	\$16.58	Yes	\$30.60	\$14.02
832	27-Apr-12	18	2	\$16.37	Yes	\$30.60	\$14.23
833	27-Apr-12	18	3	\$14.02	Yes	\$30.60	\$16.58
834	27-Apr-12	18	4	\$16.00	Yes	\$30.60	\$14.60
835	27-Apr-12	18	5	\$16.00	Yes	\$30.60	\$14.60
836	27-Apr-12	18	6	\$16.00	Yes	\$30.60	\$14.60
837	27-Apr-12	18	7	\$16.31	Yes	\$30.60	\$14.29
838	27-Apr-12	18	8	\$16.39	Yes	\$30.60	\$14.21
839	27-Apr-12	18	9	\$16.32	Yes	\$30.60	\$14.28
840	27-Apr-12	18	10	\$16.05	Yes	\$30.60	\$14.55
841	27-Apr-12	18	11	\$16.36	Yes	\$30.60	\$14.24
842	27-Apr-12	18	12	\$15.10	Yes	\$30.60	\$15.50
843	27-Apr-12	19	1	\$15.09	Yes	\$30.60	\$15.51
844	27-Apr-12	19	2	\$15.09	Yes	\$30.60	\$15.51
845	27-Apr-12	19	3	\$15.09	Yes	\$30.60	\$15.51
846	27-Apr-12	19	4	\$14.18	Yes	\$30.60	\$16.42
847	27-Apr-12	19	5	\$14.18	Yes	\$30.60	\$16.42
848	27-Apr-12	19	6	\$15.11	Yes	\$30.60	\$15.49
849	27-Apr-12	19	7	\$14.17	Yes	\$30.60	\$16.43
850	27-Apr-12	19	8	\$14.20	Yes	\$30.60	\$16.40
851	27-Apr-12	19	9	\$16.14	Yes	\$30.60	\$14.46
852	27-Apr-12	19	10	\$16.21	Yes	\$30.60	\$14.39

Number	Trade Date	Trade Hour	Interval	Market LMP	Eligible Flag	Calculated LMP	Change in LMP
853	27-Apr-12	19	11	\$15.11	Yes	\$30.60	\$15.49
854	27-Apr-12	19	12	\$9.69	Yes	\$30.60	\$20.91
855	27-Apr-12	20	1	\$9.69	Yes	\$30.60	\$20.91
856	27-Apr-12	20	2	\$0.44	Yes	\$30.60	\$30.16
857	27-Apr-12	20	3	\$0.41	Yes	\$30.60	\$30.19
858	27-Apr-12	20	4	\$12.96	Yes	\$30.60	\$17.64
859	27-Apr-12	20	5	\$15.51	Yes	\$30.60	\$15.09
860	27-Apr-12	20	6	\$15.94	Yes	\$30.60	\$14.66
861	27-Apr-12	20	7	\$15.99	Yes	\$30.60	\$14.61
862	27-Apr-12	20	8	\$15.87	Yes	\$30.60	\$14.73
863	27-Apr-12	20	9	\$17.98	Yes	\$30.60	\$12.62
864	27-Apr-12	20	10	\$18.25	Yes	\$30.60	\$12.35
865	27-Apr-12	20	11	\$19.12	Yes	\$30.60	\$11.48
866	27-Apr-12	20	12	\$18.93	Yes	\$30.60	\$11.67
867	27-Apr-12	21	1	\$17.13	Yes	\$30.60	\$13.47
868	27-Apr-12	21	2	\$17.27	Yes	\$30.60	\$13.33
869	27-Apr-12	21	3	\$17.27	Yes	\$30.60	\$13.33
870	27-Apr-12	21	4	\$22.34	Yes	\$30.60	\$8.26
871	27-Apr-12	21	5	\$22.07	Yes	\$30.60	\$8.53
872	27-Apr-12	21	6	\$20.17	Yes	\$30.60	\$10.43
873	27-Apr-12	21	7	\$18.33	Yes	\$30.60	\$12.27
874	27-Apr-12	21	8	\$15.76	Yes	\$30.60	\$14.85
875	27-Apr-12	21	9	\$15.19	Yes	\$30.60	\$15.41
876	27-Apr-12	21	10	\$15.54	Yes	\$30.60	\$15.06
877	27-Apr-12	21	11	\$16.37	Yes	\$30.60	\$14.23
878	27-Apr-12	21	12	\$16.38	Yes	\$30.60	\$14.22
879	27-Apr-12	22	1	\$16.82	Yes	\$30.60	\$13.78
880	27-Apr-12	22	2	\$17.31	Yes	\$30.60	\$13.29
881	27-Apr-12	22	3	\$18.11	Yes	\$30.60	\$12.49
882	27-Apr-12	22	4	\$17.56	Yes	\$30.60	\$13.04
883	27-Apr-12	22	5	\$17.00	Yes	\$30.60	\$13.60
884	27-Apr-12	22	6	\$17.03	No	\$30.60	\$13.57
885	27-Apr-12	22	6	\$17.03	Yes	\$30.60	\$13.57
886	27-Apr-12	22	7	\$16.84	No	\$30.60	\$13.76
887	27-Apr-12	22	7	\$16.84	Yes	\$30.60	\$13.76
888	27-Apr-12	22	8	\$16.25	No	\$30.60	\$14.35
889	27-Apr-12	22	8	\$16.25	Yes	\$30.60	\$14.35
890	27-Apr-12	22	9	\$16.25	No	\$30.60	\$14.35
891	27-Apr-12	22	9	\$16.25	Yes	\$30.60	\$14.35
892	27-Apr-12	22	10	\$15.77	No	\$30.60	\$14.83
893	27-Apr-12	22	10	\$15.77	Yes	\$30.60	\$14.83
894	27-Apr-12	22	11	\$15.23	No	\$30.60	\$15.37
895	27-Apr-12	22	11	\$15.23	Yes	\$30.60	\$15.37
896	27-Apr-12	22	12	\$15.24	No	\$30.60	\$15.36
897	27-Apr-12	22	12	\$15.24	Yes	\$30.60	\$15.36

Number	Trade Date	Trade Hour	Interval	Market LMP	Eligible Flag	Calculated LMP	Change in LMP
898	27-Apr-12	23	1	\$22.64	No	\$30.60	\$7.96
899	27-Apr-12	23	2	\$22.25	No	\$30.60	\$8.35
900	27-Apr-12	23	3	\$23.27	No	\$30.60	\$7.33
901	27-Apr-12	23	4	\$23.25	No	\$30.60	\$7.35
902	27-Apr-12	23	5	\$22.77	No	\$30.60	\$7.83
903	27-Apr-12	23	6	\$20.26	No	\$30.60	\$10.34
904	27-Apr-12	23	7	\$22.66	No	\$30.60	\$7.94
905	27-Apr-12	23	8	\$19.92	No	\$30.60	\$10.68
906	27-Apr-12	23	9	\$18.39	No	\$30.60	\$12.21
907	27-Apr-12	23	10	\$16.83	No	\$30.60	\$13.77
908	27-Apr-12	23	11	\$15.23	No	\$30.60	\$15.37
909	27-Apr-12	23	12	\$15.23	No	\$30.60	\$15.37
910	27-Apr-12	24	1	\$18.09	No	\$30.60	\$12.51
911	27-Apr-12	24	2	\$21.06	No	\$30.60	\$9.54
912	27-Apr-12	24	3	\$21.06	No	\$30.60	\$9.54
913	27-Apr-12	24	4	\$22.88	No	\$30.60	\$7.72
914	27-Apr-12	24	5	\$22.88	No	\$30.60	\$7.72
915	27-Apr-12	24	6	\$19.50	No	\$30.60	\$11.10
916	27-Apr-12	24	7	\$19.46	No	\$30.60	\$11.14
917	27-Apr-12	24	8	\$16.32	No	\$30.60	\$14.28
918	27-Apr-12	24	9	\$9.89	No	\$30.60	\$20.71
919	27-Apr-12	24	10	\$16.15	No	\$30.60	\$14.45
920	27-Apr-12	24	11	\$5.34	No	\$30.60	\$25.26
921	27-Apr-12	24	12	\$0.01	No	\$30.60	\$30.59
922	28-Apr-12	1	1	\$15.94	No	\$30.60	\$14.66
923	28-Apr-12	1	2	\$18.66	No	\$30.60	\$11.94
924	28-Apr-12	1	3	\$18.66	No	\$30.60	\$11.94
925	28-Apr-12	1	4	\$25.00	No	\$30.60	\$5.60
926	28-Apr-12	1	5	\$20.11	No	\$30.60	\$10.49
927	28-Apr-12	1	6	\$17.89	No	\$30.60	\$12.71
928	28-Apr-12	1	7	\$17.90	No	\$30.60	\$12.70
929	28-Apr-12	1	8	\$12.06	No	\$30.60	\$18.54
930	28-Apr-12	1	9	\$17.76	No	\$30.60	\$12.84
931	28-Apr-12	1	10	\$15.52	No	\$30.60	\$15.08
932	28-Apr-12	1	11	\$15.62	No	\$30.60	\$14.98
933	28-Apr-12	1	12	\$11.50	No	\$30.60	\$19.10
934	28-Apr-12	2	1	\$17.65	No	\$30.60	\$12.95
935	28-Apr-12	2	2	\$17.65	No	\$30.60	\$12.95
936	28-Apr-12	2	3	\$17.65	No	\$30.60	\$12.95
937	28-Apr-12	2	4	\$17.58	No	\$30.60	\$13.02
938	28-Apr-12	2	5	\$17.59	No	\$30.60	\$13.01
939	28-Apr-12	2	6	\$17.55	No	\$30.60	\$13.05
940	28-Apr-12	2	7	\$17.52	No	\$30.60	\$13.08
941	28-Apr-12	2	8	\$13.02	No	\$30.60	\$17.58
942	28-Apr-12	2	9	\$13.02	No	\$30.60	\$17.58

Number	Trade Date	Trade Hour	Interval	Market LMP	Eligible Flag	Calculated LMP	Change in LMP
943	28-Apr-12	2	10	\$11.43	No	\$30.60	\$19.17
944	28-Apr-12	2	11	\$11.41	No	\$30.60	\$19.19
945	28-Apr-12	2	12	\$9.80	No	\$30.60	\$20.80
946	28-Apr-12	3	1	\$14.80	No	\$30.60	\$15.80
947	28-Apr-12	3	2	\$14.80	No	\$30.60	\$15.80
948	28-Apr-12	3	3	\$14.80	No	\$30.60	\$15.80
949	28-Apr-12	3	4	\$0.18	No	\$30.60	\$30.42
950	28-Apr-12	3	5	\$0.18	No	\$30.60	\$30.42
951	28-Apr-12	3	6	\$0.12	No	\$30.60	\$30.48
952	28-Apr-12	3	7	\$0.12	No	\$30.60	\$30.48
953	28-Apr-12	3	8	-\$38.28	No	\$30.60	\$68.88
954	28-Apr-12	3	9	-\$38.28	No	\$30.60	\$68.88
955	28-Apr-12	3	10	-\$35.26	No	\$30.60	\$65.86
956	28-Apr-12	3	11	\$0.13	No	\$30.60	\$30.47
957	28-Apr-12	3	12	-\$38.22	No	\$30.60	\$68.82
958	28-Apr-12	4	1	-\$31.46	No	\$30.60	\$62.06
959	28-Apr-12	4	2	\$0.08	No	\$30.60	\$30.52
960	28-Apr-12	4	3	-\$38.06	No	\$30.60	\$68.66
961	28-Apr-12	4	4	-\$38.01	No	\$30.60	\$68.61
962	28-Apr-12	4	5	\$0.08	No	\$30.60	\$30.52
963	28-Apr-12	4	6	\$0.08	No	\$30.60	\$30.52
964	28-Apr-12	4	7	\$0.08	No	\$30.60	\$30.52
965	28-Apr-12	4	8	\$0.08	No	\$30.60	\$30.52
966	28-Apr-12	4	9	\$0.08	No	\$30.60	\$30.52
967	28-Apr-12	4	10	\$0.08	No	\$30.60	\$30.52
968	28-Apr-12	4	11	\$0.08	No	\$30.60	\$30.52
969	28-Apr-12	4	12	-\$38.10	No	\$30.60	\$68.70
970	28-Apr-12	5	1	\$0.01	No	\$30.60	\$30.59
971	28-Apr-12	5	2	-\$36.13	No	\$30.60	\$66.73
972	28-Apr-12	5	3	\$0.01	No	\$30.60	\$30.59
973	28-Apr-12	5	4	-\$36.10	No	\$30.60	\$66.70
974	28-Apr-12	5	5	-\$36.10	No	\$30.60	\$66.70
975	28-Apr-12	5	6	\$0.01	No	\$30.60	\$30.59
976	28-Apr-12	5	7	\$0.01	No	\$30.60	\$30.59
977	28-Apr-12	5	8	\$0.01	No	\$30.60	\$30.59
978	28-Apr-12	5	9	\$4.36	No	\$30.60	\$26.24
979	28-Apr-12	5	10	\$11.33	No	\$30.60	\$19.27
980	28-Apr-12	5	11	\$11.33	No	\$30.60	\$19.27
981	28-Apr-12	5	12	\$15.82	No	\$30.60	\$14.78
982	28-Apr-12	6	1	\$4.38	No	\$30.60	\$26.22
983	28-Apr-12	6	2	\$0.39	No	\$30.60	\$30.21
984	28-Apr-12	6	3	\$0.01	No	\$30.60	\$30.59
985	28-Apr-12	6	4	\$0.08	No	\$30.60	\$30.52
986	28-Apr-12	6	5	-\$37.99	No	\$30.60	\$68.59
987	28-Apr-12	6	6	\$0.08	No	\$30.60	\$30.52

Number	Trade Date	Trade Hour	Interval	Market LMP	Eligible Flag	Calculated LMP	Change in LMP
988	28-Apr-12	6	7	\$0.08	No	\$30.60	\$30.52
989	28-Apr-12	6	8	\$0.01	No	\$30.60	\$30.59
990	28-Apr-12	6	9	\$0.40	No	\$30.60	\$30.20
991	28-Apr-12	6	10	\$0.15	No	\$30.60	\$30.45
992	28-Apr-12	6	11	\$0.43	No	\$30.60	\$30.17
993	28-Apr-12	6	12	\$0.42	No	\$30.60	\$30.18
994	28-Apr-12	7	1	-\$35.76	No	\$30.60	\$66.36
995	28-Apr-12	7	2	\$0.01	No	\$30.60	\$30.59
996	28-Apr-12	7	3	\$0.01	No	\$30.60	\$30.59
997	28-Apr-12	7	4	\$0.01	No	\$30.60	\$30.59
998	28-Apr-12	7	5	\$0.01	No	\$30.60	\$30.59
999	28-Apr-12	7	6	\$0.01	No	\$30.60	\$30.59
1000	28-Apr-12	7	7	\$0.01	No	\$30.60	\$30.59
1001	28-Apr-12	7	8	\$0.01	No	\$30.60	\$30.59
1002	28-Apr-12	7	9	\$0.01	No	\$30.60	\$30.59
1003	28-Apr-12	7	10	\$0.01	No	\$30.60	\$30.59
1004	28-Apr-12	7	11	\$0.01	No	\$30.60	\$30.59
1005	28-Apr-12	7	12	\$0.01	No	\$30.60	\$30.59
1006	28-Apr-12	8	1	\$0.01	No	\$30.60	\$30.59
1007	28-Apr-12	8	2	\$0.01	No	\$30.60	\$30.59
1008	28-Apr-12	8	3	\$0.40	No	\$30.60	\$30.20
1009	28-Apr-12	8	4	\$0.40	No	\$30.60	\$30.20
1010	28-Apr-12	8	5	\$11.35	No	\$30.60	\$19.25
1011	28-Apr-12	8	6	\$14.85	No	\$30.60	\$15.75
1012	28-Apr-12	8	7	\$15.27	No	\$30.60	\$15.33
1013	28-Apr-12	8	8	\$17.58	No	\$30.60	\$13.02
1014	28-Apr-12	8	9	\$16.44	No	\$30.60	\$14.16
1015	28-Apr-12	8	10	\$16.44	No	\$30.60	\$14.16
1016	28-Apr-12	8	11	\$16.44	No	\$30.60	\$14.16
1017	28-Apr-12	8	12	\$17.24	No	\$30.60	\$13.36
1018	28-Apr-12	9	1	\$10.00	No	\$30.60	\$20.60
1019	28-Apr-12	9	2	\$0.53	No	\$30.60	\$30.07
1020	28-Apr-12	9	3	\$0.53	No	\$30.60	\$30.07
1021	28-Apr-12	9	4	\$0.51	No	\$30.60	\$30.09
1022	28-Apr-12	9	5	\$9.29	No	\$30.60	\$21.31
1023	28-Apr-12	9	6	\$10.02	No	\$30.60	\$20.58
1024	28-Apr-12	9	7	\$10.37	No	\$30.60	\$20.23
1025	28-Apr-12	9	8	\$15.19	No	\$30.60	\$15.41
1026	28-Apr-12	9	9	\$15.19	No	\$30.60	\$15.41
1027	28-Apr-12	9	10	\$15.24	No	\$30.60	\$15.36
1028	28-Apr-12	9	11	\$16.41	No	\$30.60	\$14.19
1029	28-Apr-12	9	12	\$16.41	No	\$30.60	\$14.19
1030	28-Apr-12	10	1	\$16.20	No	\$30.60	\$14.40
1031	28-Apr-12	10	2	\$16.11	No	\$30.60	\$14.49
1032	28-Apr-12	10	3	\$16.11	No	\$30.60	\$14.49

Number	Trade Date	Trade Hour	Interval	Market LMP	Eligible Flag	Calculated LMP	Change in LMP
1033	28-Apr-12	10	4	\$16.31	No	\$30.60	\$14.29
1034	28-Apr-12	10	5	\$16.90	No	\$30.60	\$13.70
1035	28-Apr-12	10	6	\$17.32	No	\$30.60	\$13.28
1036	28-Apr-12	10	7	\$17.29	No	\$30.60	\$13.31
1037	28-Apr-12	10	8	\$16.44	No	\$30.60	\$14.17
1038	28-Apr-12	10	9	\$16.85	No	\$30.60	\$13.75
1039	28-Apr-12	10	10	\$19.55	No	\$30.60	\$11.05
1040	28-Apr-12	10	11	\$19.55	No	\$30.60	\$11.05
1041	28-Apr-12	10	12	\$19.80	No	\$30.60	\$10.80
1042	28-Apr-12	11	1	\$19.52	No	\$30.60	\$11.08
1043	28-Apr-12	11	2	\$19.52	No	\$30.60	\$11.08
1044	28-Apr-12	11	3	\$19.52	No	\$30.60	\$11.08
1045	28-Apr-12	11	4	\$17.27	No	\$30.60	\$13.33
1046	28-Apr-12	11	5	\$19.48	No	\$30.60	\$11.12
1047	28-Apr-12	11	6	\$19.49	No	\$30.60	\$11.11
1048	28-Apr-12	11	7	\$19.52	No	\$30.60	\$11.08
1049	28-Apr-12	11	8	\$22.22	No	\$30.60	\$8.38
1050	28-Apr-12	11	9	\$19.59	No	\$30.60	\$11.01
1051	28-Apr-12	11	10	\$23.38	No	\$30.60	\$7.22
1052	28-Apr-12	11	11	\$23.98	No	\$30.60	\$6.62
1053	28-Apr-12	11	12	\$23.26	No	\$30.60	\$7.34
1054	28-Apr-12	12	1	\$17.18	No	\$30.60	\$13.42
1055	28-Apr-12	12	2	\$19.22	No	\$30.60	\$11.38
1056	28-Apr-12	12	3	\$19.22	No	\$30.60	\$11.38
1057	28-Apr-12	12	4	\$21.49	No	\$30.60	\$9.11
1058	28-Apr-12	12	5	\$21.32	No	\$30.60	\$9.28
1059	28-Apr-12	12	6	\$21.49	No	\$30.60	\$9.11
1060	28-Apr-12	12	7	\$21.57	No	\$30.60	\$9.03
1061	28-Apr-12	12	8	\$21.94	No	\$30.60	\$8.66
1062	28-Apr-12	12	9	\$22.55	No	\$30.60	\$8.05
1063	28-Apr-12	12	10	\$21.95	No	\$30.60	\$8.65
1064	28-Apr-12	12	11	\$21.45	No	\$30.60	\$9.15
1065	28-Apr-12	12	12	\$20.66	No	\$30.60	\$9.94
1066	28-Apr-12	13	1	\$19.34	No	\$30.60	\$11.26
1067	28-Apr-12	13	2	\$19.34	No	\$30.60	\$11.26
1068	28-Apr-12	13	3	\$19.34	No	\$30.60	\$11.26
1069	28-Apr-12	13	4	\$19.66	No	\$30.60	\$10.94
1070	28-Apr-12	13	5	\$19.71	No	\$30.60	\$10.89
1071	28-Apr-12	13	6	\$19.71	No	\$30.60	\$10.89
1072	28-Apr-12	13	7	\$19.21	No	\$30.60	\$11.39
1073	28-Apr-12	13	8	\$19.45	No	\$30.60	\$11.15
1074	28-Apr-12	13	9	\$19.43	No	\$30.60	\$11.17
1075	28-Apr-12	13	10	\$19.66	No	\$30.60	\$10.94
1076	28-Apr-12	13	11	\$19.45	No	\$30.60	\$11.15
1077	28-Apr-12	13	12	\$19.66	No	\$30.60	\$10.94

Number	Trade Date	Trade Hour	Interval	Market LMP	Eligible Flag	Calculated LMP	Change in LMP
1078	28-Apr-12	14	1	\$20.02	No	\$30.60	\$10.58
1079	28-Apr-12	14	2	\$19.75	No	\$30.60	\$10.85
1080	28-Apr-12	14	3	\$19.55	No	\$30.60	\$11.05
1081	28-Apr-12	14	4	\$20.23	No	\$30.60	\$10.37
1082	28-Apr-12	14	5	\$20.23	No	\$30.60	\$10.37
1083	28-Apr-12	14	6	\$20.23	No	\$30.60	\$10.37
1084	28-Apr-12	14	7	\$20.44	No	\$30.60	\$10.16
1085	28-Apr-12	14	7	\$20.44	Yes	\$30.60	\$10.16
1086	28-Apr-12	14	8	\$19.40	No	\$30.60	\$11.20
1087	28-Apr-12	14	8	\$19.40	Yes	\$30.60	\$11.20
1088	28-Apr-12	14	9	\$17.42	No	\$30.60	\$13.18
1089	28-Apr-12	14	9	\$17.42	Yes	\$30.60	\$13.18
1090	28-Apr-12	14	10	\$19.20	No	\$30.60	\$11.40
1091	28-Apr-12	14	10	\$19.20	Yes	\$30.60	\$11.40
1092	28-Apr-12	14	11	\$20.19	No	\$30.60	\$10.41
1093	28-Apr-12	14	11	\$20.19	Yes	\$30.60	\$10.41
1094	28-Apr-12	14	12	\$21.60	No	\$30.60	\$9.00
1095	28-Apr-12	14	12	\$21.60	Yes	\$30.60	\$9.00
1096	28-Apr-12	15	1	\$15.91	Yes	\$30.60	\$14.69
1097	28-Apr-12	15	2	\$16.81	Yes	\$30.60	\$13.79
1098	28-Apr-12	15	3	\$16.09	Yes	\$30.60	\$14.51
1099	28-Apr-12	15	4	\$16.20	Yes	\$30.60	\$14.40
1100	28-Apr-12	15	5	\$16.09	Yes	\$30.60	\$14.51
1101	28-Apr-12	15	6	\$15.89	Yes	\$30.60	\$14.71
1102	28-Apr-12	15	7	\$15.90	Yes	\$30.60	\$14.70
1103	28-Apr-12	15	8	\$15.99	Yes	\$30.60	\$14.61
1104	28-Apr-12	15	9	\$16.71	Yes	\$30.60	\$13.89
1105	28-Apr-12	15	10	\$16.09	Yes	\$30.60	\$14.51
1106	28-Apr-12	15	11	\$16.74	Yes	\$30.60	\$13.86
1107	28-Apr-12	15	12	\$16.71	Yes	\$30.60	\$13.89
1108	28-Apr-12	16	1	\$16.68	Yes	\$30.60	\$13.92
1109	28-Apr-12	16	2	\$16.06	Yes	\$30.60	\$14.54
1110	28-Apr-12	16	3	\$16.07	Yes	\$30.60	\$14.53
1111	28-Apr-12	16	4	\$16.07	Yes	\$30.60	\$14.53
1112	28-Apr-12	16	5	\$16.13	Yes	\$30.60	\$14.47
1113	28-Apr-12	16	6	\$16.13	Yes	\$30.60	\$14.47
1114	28-Apr-12	16	7	\$16.13	Yes	\$30.60	\$14.47
1115	28-Apr-12	16	8	\$16.75	Yes	\$30.60	\$13.85
1116	28-Apr-12	16	9	\$16.06	Yes	\$30.60	\$14.54
1117	28-Apr-12	16	9	\$16.06	Yes	\$32.97	\$16.91
1118	28-Apr-12	16	10	\$16.07	Yes	\$30.60	\$14.53
1119	28-Apr-12	16	10	\$16.07	Yes	\$32.97	\$16.90
1120	28-Apr-12	16	11	\$16.09	Yes	\$30.60	\$14.51
1121	28-Apr-12	16	11	\$16.09	Yes	\$32.97	\$16.88
1122	28-Apr-12	16	12	\$15.92	Yes	\$30.60	\$14.68

Number	Trade Date	Trade Hour	Interval	Market LMP	Eligible Flag	Calculated LMP	Change in LMP
1123	28-Apr-12	16	12	\$15.92	Yes	\$32.97	\$17.05
1124	28-Apr-12	16	12	\$15.92	Yes	\$41.24	\$25.32
1125	28-Apr-12	17	1	\$16.01	Yes	\$41.24	\$25.23
1126	28-Apr-12	17	2	\$16.01	Yes	\$41.24	\$25.23
1127	28-Apr-12	17	3	\$16.01	Yes	\$41.24	\$25.23
1128	28-Apr-12	17	4	\$15.95	Yes	\$41.24	\$25.29
1129	28-Apr-12	17	5	\$15.95	Yes	\$41.24	\$25.29
1130	28-Apr-12	17	6	\$15.95	Yes	\$41.24	\$25.29
1131	28-Apr-12	17	7	\$15.94	Yes	\$41.24	\$25.30
1132	28-Apr-12	17	8	\$15.93	Yes	\$41.24	\$25.31
1133	28-Apr-12	17	9	\$15.93	Yes	\$41.24	\$25.31
1134	28-Apr-12	17	10	\$16.00	Yes	\$41.24	\$25.24
1135	28-Apr-12	17	11	\$16.00	Yes	\$41.24	\$25.24
1136	28-Apr-12	17	12	\$16.00	Yes	\$41.24	\$25.24
1137	28-Apr-12	18	1	\$16.01	Yes	\$41.24	\$25.23
1138	28-Apr-12	18	2	\$16.02	Yes	\$41.24	\$25.22
1139	28-Apr-12	18	3	\$16.07	Yes	\$41.24	\$25.17
1140	28-Apr-12	18	4	\$16.08	Yes	\$41.24	\$25.16
1141	28-Apr-12	18	5	\$16.08	Yes	\$41.24	\$25.16
1142	28-Apr-12	18	6	\$16.09	Yes	\$41.24	\$25.15
1143	28-Apr-12	18	7	\$16.04	Yes	\$41.24	\$25.20
1144	28-Apr-12	18	8	\$16.09	Yes	\$41.24	\$25.15
1145	28-Apr-12	18	9	\$16.09	Yes	\$41.24	\$25.15
1146	28-Apr-12	18	10	\$16.08	Yes	\$41.24	\$25.16
1147	28-Apr-12	18	11	\$16.08	Yes	\$41.24	\$25.16
1148	28-Apr-12	18	12	\$16.08	Yes	\$41.24	\$25.16
1149	28-Apr-12	19	1	\$18.89	Yes	\$41.24	\$22.35
1150	28-Apr-12	19	2	\$18.87	Yes	\$41.24	\$22.37
1151	28-Apr-12	19	3	\$16.89	Yes	\$41.24	\$24.35
1152	28-Apr-12	19	4	\$18.34	Yes	\$41.24	\$22.90
1153	28-Apr-12	19	5	\$18.34	Yes	\$41.24	\$22.90
1154	28-Apr-12	19	6	\$16.00	Yes	\$41.24	\$25.24
1155	28-Apr-12	19	7	\$16.89	Yes	\$41.24	\$24.35
1156	28-Apr-12	19	8	\$14.73	Yes	\$41.24	\$26.51
1157	28-Apr-12	19	9	\$15.69	Yes	\$41.24	\$25.55
1158	28-Apr-12	19	10	\$15.72	Yes	\$43.31	\$27.59
1159	28-Apr-12	19	11	\$15.97	Yes	\$43.31	\$27.34
1160	28-Apr-12	19	12	\$15.97	Yes	\$43.31	\$27.34
1161	28-Apr-12	20	1	\$11.04	Yes	\$43.31	\$32.27
1162	28-Apr-12	20	2	\$14.68	Yes	\$43.31	\$28.63
1163	28-Apr-12	20	3	\$14.67	Yes	\$43.31	\$28.64
1164	28-Apr-12	20	4	\$15.55	Yes	\$43.31	\$27.76
1165	28-Apr-12	20	5	\$15.57	Yes	\$43.31	\$27.74
1166	28-Apr-12	20	6	\$15.67	Yes	\$41.24	\$25.57
1167	28-Apr-12	20	6	\$15.67	Yes	\$43.31	\$27.64

Number	Trade Date	Trade Hour	Interval	Market LMP	Eligible Flag	Calculated LMP	Change in LMP
1168	28-Apr-12	20	7	\$15.11	Yes	\$41.24	\$26.13
1169	28-Apr-12	20	7	\$15.11	Yes	\$43.31	\$28.20
1170	28-Apr-12	20	8	\$15.13	Yes	\$41.24	\$26.11
1171	28-Apr-12	20	8	\$15.13	Yes	\$43.31	\$28.18
1172	28-Apr-12	20	9	\$15.23	Yes	\$41.24	\$26.01
1173	28-Apr-12	20	9	\$15.23	Yes	\$43.31	\$28.08
1174	28-Apr-12	20	10	\$15.62	Yes	\$41.24	\$25.62
1175	28-Apr-12	20	10	\$15.62	Yes	\$43.31	\$27.69
1176	28-Apr-12	20	11	\$15.87	Yes	\$41.24	\$25.37
1177	28-Apr-12	20	11	\$15.87	Yes	\$43.31	\$27.44
1178	28-Apr-12	20	12	\$15.83	Yes	\$41.24	\$25.41
1179	28-Apr-12	20	12	\$15.83	Yes	\$43.31	\$27.48
1180	28-Apr-12	21	1	\$15.83	Yes	\$41.24	\$25.41
1181	28-Apr-12	21	2	\$18.18	Yes	\$41.24	\$23.06
1182	28-Apr-12	21	3	\$25.58	Yes	\$41.24	\$15.66
1183	28-Apr-12	21	4	\$15.84	Yes	\$41.24	\$25.40
1184	28-Apr-12	21	5	\$18.70	Yes	\$41.24	\$22.54
1185	28-Apr-12	21	6	\$18.58	Yes	\$41.24	\$22.66
1186	28-Apr-12	21	7	\$15.66	Yes	\$41.24	\$25.58
1187	28-Apr-12	21	8	\$15.49	Yes	\$41.24	\$25.75
1188	28-Apr-12	21	9	\$15.49	Yes	\$37.54	\$22.05
1189	28-Apr-12	21	9	\$15.49	Yes	\$41.24	\$25.75
1190	28-Apr-12	21	10	\$15.92	Yes	\$37.54	\$21.62
1191	28-Apr-12	21	10	\$15.92	Yes	\$41.24	\$25.32
1192	28-Apr-12	21	11	\$15.92	Yes	\$37.54	\$21.62
1193	28-Apr-12	21	11	\$15.92	Yes	\$41.24	\$25.32
1194	28-Apr-12	21	12	\$15.74	Yes	\$37.54	\$21.80
1195	28-Apr-12	21	12	\$15.74	Yes	\$41.24	\$25.50
1196	28-Apr-12	22	1	\$18.85	Yes	\$37.54	\$18.69
1197	28-Apr-12	22	2	\$16.07	Yes	\$37.54	\$21.47
1198	28-Apr-12	22	3	\$16.06	Yes	\$37.54	\$21.48
1199	28-Apr-12	22	4	\$18.93	Yes	\$32.97	\$14.04
1200	28-Apr-12	22	4	\$18.93	Yes	\$37.54	\$18.61
1201	28-Apr-12	22	5	\$16.04	Yes	\$32.97	\$16.93
1202	28-Apr-12	22	5	\$16.04	Yes	\$37.54	\$21.50
1203	28-Apr-12	22	6	\$16.06	Yes	\$32.97	\$16.91
1204	28-Apr-12	22	6	\$16.06	Yes	\$37.54	\$21.48
1205	28-Apr-12	22	7	\$15.98	Yes	\$32.97	\$16.99
1206	28-Apr-12	22	7	\$15.98	Yes	\$37.54	\$21.56
1207	28-Apr-12	22	8	\$15.67	Yes	\$32.97	\$17.30
1208	28-Apr-12	22	8	\$15.67	Yes	\$37.54	\$21.87
1209	28-Apr-12	22	9	\$15.90	Yes	\$32.97	\$17.07
1210	28-Apr-12	22	9	\$15.90	Yes	\$37.54	\$21.64
1211	28-Apr-12	22	10	\$15.68	Yes	\$32.97	\$17.29
1212	28-Apr-12	22	10	\$15.68	Yes	\$37.54	\$21.86

Number	Trade Date	Trade Hour	Interval	Market LMP	Eligible Flag	Calculated LMP	Change in LMP
1213	28-Apr-12	22	11	\$15.68	Yes	\$32.97	\$17.29
1214	28-Apr-12	22	11	\$15.68	Yes	\$37.54	\$21.86
1215	28-Apr-12	22	12	\$15.11	Yes	\$32.97	\$17.86
1216	28-Apr-12	22	12	\$15.11	Yes	\$37.54	\$22.43
1217	28-Apr-12	23	1	\$18.82	Yes	\$32.97	\$14.15
1218	28-Apr-12	23	2	\$16.79	Yes	\$32.97	\$16.18
1219	28-Apr-12	23	3	\$16.79	Yes	\$32.97	\$16.18
1220	28-Apr-12	23	4	\$15.96	Yes	\$32.97	\$17.01
1221	28-Apr-12	23	5	\$16.05	Yes	\$32.97	\$16.92
1222	28-Apr-12	23	6	\$16.13	Yes	\$32.97	\$16.84
1223	28-Apr-12	23	7	\$16.41	Yes	\$32.97	\$16.56
1224	28-Apr-12	23	8	\$15.66	Yes	\$32.97	\$17.31
1225	28-Apr-12	23	9	\$15.65	Yes	\$32.97	\$17.32
1226	28-Apr-12	23	10	\$14.79	No	\$30.60	\$15.81
1227	28-Apr-12	23	10	\$14.79	Yes	\$32.97	\$18.18
1228	28-Apr-12	23	11	\$14.85	No	\$30.60	\$15.75
1229	28-Apr-12	23	11	\$14.85	Yes	\$32.97	\$18.12
1230	28-Apr-12	23	12	\$9.69	No	\$30.60	\$20.91
1231	28-Apr-12	23	12	\$9.69	Yes	\$32.97	\$23.28
1232	28-Apr-12	24	1	\$22.93	No	\$30.60	\$7.67
1233	28-Apr-12	24	2	\$19.31	No	\$30.60	\$11.29
1234	28-Apr-12	24	3	\$18.83	No	\$30.60	\$11.77
1235	28-Apr-12	24	4	\$18.63	No	\$30.60	\$11.97
1236	28-Apr-12	24	5	\$35.69	No	\$30.60	(\$5.09)
1237	28-Apr-12	24	6	\$22.93	No	\$30.60	\$7.67
1238	28-Apr-12	24	7	\$18.74	No	\$30.60	\$11.86
1239	28-Apr-12	24	8	\$17.28	No	\$30.60	\$13.32
1240	28-Apr-12	24	9	\$17.23	No	\$30.60	\$13.37
1241	28-Apr-12	24	10	\$19.43	No	\$30.60	\$11.17
1242	28-Apr-12	24	11	\$19.22	No	\$30.60	\$11.38
1243	28-Apr-12	24	12	\$11.13	No	\$30.60	\$19.47
1244	29-Apr-12	1	1	\$21.65	No	\$30.60	\$8.95
1245	29-Apr-12	1	2	\$20.18	No	\$30.60	\$10.42
1246	29-Apr-12	1	3	\$28.01	No	\$30.60	\$2.59
1247	29-Apr-12	1	4	\$22.88	No	\$30.60	\$7.72
1248	29-Apr-12	1	5	\$21.97	No	\$30.60	\$8.63
1249	29-Apr-12	1	6	\$17.26	No	\$30.60	\$13.34
1250	29-Apr-12	1	7	\$19.40	No	\$30.60	\$11.20
1251	29-Apr-12	1	8	\$19.15	No	\$30.60	\$11.45
1252	29-Apr-12	1	9	\$24.03	No	\$30.60	\$6.57
1253	29-Apr-12	1	10	\$23.99	No	\$30.60	\$6.61
1254	29-Apr-12	1	11	\$23.48	No	\$30.60	\$7.12
1255	29-Apr-12	1	12	\$19.92	No	\$30.60	\$10.68
1256	29-Apr-12	2	1	\$24.22	No	\$30.60	\$6.38
1257	29-Apr-12	2	2	\$24.22	No	\$30.60	\$6.38

Number	Trade Date	Trade Hour	Interval	Market LMP	Eligible Flag	Calculated LMP	Change in LMP
1258	29-Apr-12	2	3	\$25.92	No	\$30.60	\$4.68
1259	29-Apr-12	2	4	\$22.11	No	\$30.60	\$8.49
1260	29-Apr-12	2	5	\$19.95	No	\$30.60	\$10.65
1261	29-Apr-12	2	6	\$19.75	No	\$30.60	\$10.85
1262	29-Apr-12	2	7	\$19.25	No	\$30.60	\$11.35
1263	29-Apr-12	2	8	\$19.40	No	\$30.60	\$11.20
1264	29-Apr-12	2	9	\$19.33	No	\$30.60	\$11.27
1265	29-Apr-12	2	10	\$19.31	No	\$30.60	\$11.29
1266	29-Apr-12	2	11	\$17.91	No	\$30.60	\$12.69
1267	29-Apr-12	2	12	\$17.91	No	\$30.60	\$12.69
1268	29-Apr-12	3	1	\$18.22	No	\$30.60	\$12.38
1269	29-Apr-12	3	2	\$18.22	No	\$30.60	\$12.38
1270	29-Apr-12	3	3	\$18.22	No	\$30.60	\$12.38
1271	29-Apr-12	3	4	\$16.49	No	\$30.60	\$14.11
1272	29-Apr-12	3	5	\$18.20	No	\$30.60	\$12.40
1273	29-Apr-12	3	6	\$17.65	No	\$30.60	\$12.95
1274	29-Apr-12	3	7	\$18.20	No	\$30.60	\$12.40
1275	29-Apr-12	3	8	\$17.92	No	\$30.60	\$12.68
1276	29-Apr-12	3	9	\$17.73	No	\$30.60	\$12.87
1277	29-Apr-12	3	10	\$18.02	No	\$30.60	\$12.58
1278	29-Apr-12	3	11	\$18.02	No	\$30.60	\$12.58
1279	29-Apr-12	3	12	\$18.02	No	\$30.60	\$12.58
1280	29-Apr-12	7	1	\$1.11	No	\$30.60	\$29.49
1281	29-Apr-12	7	2	\$1.11	No	\$30.60	\$29.49
1282	29-Apr-12	7	3	\$0.84	No	\$30.60	\$29.76
1283	29-Apr-12	7	4	\$0.73	No	\$30.60	\$29.87
1284	29-Apr-12	7	5	-\$31.29	No	\$30.60	\$61.89
1285	29-Apr-12	7	6	-\$31.11	No	\$30.60	\$61.71
1286	29-Apr-12	7	7	-\$31.28	No	\$30.60	\$61.88
1287	29-Apr-12	7	8	\$0.01	No	\$30.60	\$30.59
1288	29-Apr-12	7	9	\$0.02	No	\$30.60	\$30.58
1289	29-Apr-12	7	10	\$0.01	No	\$30.60	\$30.59
1290	29-Apr-12	7	11	\$0.37	No	\$30.60	\$30.23
1291	29-Apr-12	7	12	\$15.89	No	\$30.60	\$14.71
1292	29-Apr-12	8	1	\$0.01	No	\$30.60	\$30.59
1293	29-Apr-12	8	2	\$0.01	No	\$30.60	\$30.59
1294	29-Apr-12	8	3	-\$31.19	No	\$30.60	\$61.79
1295	29-Apr-12	8	4	\$0.38	No	\$30.60	\$30.22
1296	29-Apr-12	8	5	-\$30.61	No	\$30.60	\$61.21
1297	29-Apr-12	8	6	-\$30.50	No	\$30.60	\$61.10
1298	29-Apr-12	8	7	\$0.38	No	\$30.60	\$30.22
1299	29-Apr-12	8	8	\$4.89	No	\$30.60	\$25.71
1300	29-Apr-12	8	9	\$15.30	No	\$30.60	\$15.30
1301	29-Apr-12	8	10	\$17.25	No	\$30.60	\$13.35
1302	29-Apr-12	8	11	\$17.25	No	\$30.60	\$13.35

Number	Trade Date	Trade Hour	Interval	Market LMP	Eligible Flag	Calculated LMP	Change in LMP
1303	29-Apr-12	8	12	\$17.25	No	\$30.60	\$13.35
1304	29-Apr-12	9	1	\$19.15	No	\$30.60	\$11.45
1305	29-Apr-12	9	2	\$16.04	No	\$30.60	\$14.56
1306	29-Apr-12	9	3	\$16.30	No	\$30.60	\$14.30
1307	29-Apr-12	9	4	\$17.17	No	\$30.60	\$13.43
1308	29-Apr-12	9	5	\$19.05	No	\$30.60	\$11.55
1309	29-Apr-12	9	6	\$19.05	No	\$30.60	\$11.55
1310	29-Apr-12	9	7	\$19.12	No	\$30.60	\$11.48
1311	29-Apr-12	9	8	\$19.02	No	\$30.60	\$11.58
1312	29-Apr-12	9	9	\$19.03	No	\$30.60	\$11.57
1313	29-Apr-12	9	10	\$19.04	No	\$30.60	\$11.56
1314	29-Apr-12	9	11	\$19.04	No	\$30.60	\$11.56
1315	29-Apr-12	9	12	\$19.04	No	\$30.60	\$11.56
1316	29-Apr-12	10	1	\$19.14	No	\$30.60	\$11.46
1317	29-Apr-12	10	2	\$19.14	No	\$30.60	\$11.46
1318	29-Apr-12	10	3	\$18.53	No	\$30.60	\$12.07
1319	29-Apr-12	10	4	\$19.51	No	\$30.60	\$11.09
1320	29-Apr-12	10	5	\$19.19	No	\$30.60	\$11.41
1321	29-Apr-12	10	6	\$19.51	No	\$30.60	\$11.09
1322	29-Apr-12	10	7	\$19.55	No	\$30.60	\$11.05
1323	29-Apr-12	10	8	\$19.44	No	\$30.60	\$11.16
1324	29-Apr-12	10	9	\$19.44	No	\$30.60	\$11.16
1325	29-Apr-12	10	10	\$19.61	No	\$30.60	\$10.99
1326	29-Apr-12	10	11	\$19.61	No	\$30.60	\$10.99
1327	29-Apr-12	10	12	\$22.20	No	\$30.60	\$8.40
1328	29-Apr-12	14	11	\$21.78	Yes	\$30.60	\$8.82
1329	29-Apr-12	14	12	\$19.81	Yes	\$30.60	\$10.79
1330	29-Apr-12	15	1	\$21.74	Yes	\$30.60	\$8.86
1331	29-Apr-12	15	2	\$19.21	Yes	\$30.60	\$11.39
1332	29-Apr-12	15	3	\$19.22	Yes	\$30.60	\$11.38
1333	29-Apr-12	15	4	\$19.05	Yes	\$30.60	\$11.55
1334	29-Apr-12	15	5	\$22.45	Yes	\$30.60	\$8.15
1335	29-Apr-12	15	6	\$22.43	Yes	\$30.60	\$8.17
1336	29-Apr-12	15	7	\$22.53	Yes	\$30.60	\$8.07
1337	29-Apr-12	15	8	\$24.85	Yes	\$30.60	\$5.75
1338	29-Apr-12	15	9	\$23.32	Yes	\$30.60	\$7.28
1339	29-Apr-12	15	10	\$22.92	Yes	\$30.60	\$7.68
1340	29-Apr-12	15	11	\$22.41	Yes	\$30.60	\$8.19
1341	29-Apr-12	15	12	\$22.45	Yes	\$30.60	\$8.15
1342	29-Apr-12	16	1	\$22.36	Yes	\$30.60	\$8.24
1343	29-Apr-12	16	2	\$23.04	Yes	\$30.60	\$7.56
1344	29-Apr-12	16	3	\$24.80	Yes	\$30.60	\$5.80
1345	29-Apr-12	16	3	\$24.80	Yes	\$32.97	\$8.17
1346	29-Apr-12	16	4	\$24.74	Yes	\$30.60	\$5.86
1347	29-Apr-12	16	4	\$24.74	Yes	\$32.97	\$8.23

Number	Trade Date	Trade Hour	Interval	Market LMP	Eligible Flag	Calculated LMP	Change in LMP
1348	29-Apr-12	16	5	\$24.74	Yes	\$30.60	\$5.86
1349	29-Apr-12	16	5	\$24.74	Yes	\$32.97	\$8.23
1350	29-Apr-12	16	6	\$24.93	Yes	\$30.60	\$5.67
1351	29-Apr-12	16	6	\$24.93	Yes	\$32.97	\$8.04
1352	29-Apr-12	16	7	\$25.08	Yes	\$30.60	\$5.52
1353	29-Apr-12	16	7	\$25.08	Yes	\$32.97	\$7.89
1354	29-Apr-12	16	8	\$25.07	Yes	\$30.60	\$5.53
1355	29-Apr-12	16	8	\$25.07	Yes	\$32.97	\$7.90
1356	29-Apr-12	16	9	\$25.07	Yes	\$30.60	\$5.53
1357	29-Apr-12	16	9	\$25.07	Yes	\$32.97	\$7.90
1358	29-Apr-12	16	10	\$25.23	Yes	\$30.60	\$5.37
1359	29-Apr-12	16	10	\$25.23	Yes	\$32.97	\$7.74
1360	29-Apr-12	16	11	\$23.09	Yes	\$30.60	\$7.51
1361	29-Apr-12	16	11	\$23.09	Yes	\$32.97	\$9.88
1362	29-Apr-12	16	12	\$25.23	Yes	\$30.60	\$5.37
1363	29-Apr-12	16	12	\$25.23	Yes	\$32.97	\$7.74
1364	29-Apr-12	17	1	\$20.84	Yes	\$30.60	\$9.76
1365	29-Apr-12	17	1	\$20.84	Yes	\$32.97	\$12.13
1366	29-Apr-12	17	2	\$23.09	Yes	\$30.60	\$7.51
1367	29-Apr-12	17	2	\$23.09	Yes	\$32.97	\$9.88
1368	29-Apr-12	17	3	\$24.11	Yes	\$30.60	\$6.49
1369	29-Apr-12	17	3	\$24.11	Yes	\$32.97	\$8.86
1370	29-Apr-12	17	4	\$24.66	Yes	\$30.60	\$5.94
1371	29-Apr-12	17	4	\$24.66	Yes	\$32.97	\$8.31
1372	29-Apr-12	17	5	\$24.66	Yes	\$30.60	\$5.94
1373	29-Apr-12	17	5	\$24.66	Yes	\$32.97	\$8.31
1374	29-Apr-12	17	6	\$24.81	Yes	\$30.60	\$5.79
1375	29-Apr-12	17	6	\$24.81	Yes	\$32.97	\$8.16
1376	29-Apr-12	17	7	\$25.35	Yes	\$30.60	\$5.25
1377	29-Apr-12	17	7	\$25.35	Yes	\$32.97	\$7.62
1378	29-Apr-12	17	8	\$25.26	Yes	\$30.60	\$5.34
1379	29-Apr-12	17	8	\$25.26	Yes	\$32.97	\$7.71
1380	29-Apr-12	17	9	\$25.26	Yes	\$30.60	\$5.34
1381	29-Apr-12	17	9	\$25.26	Yes	\$32.97	\$7.71
1382	29-Apr-12	17	10	\$25.83	Yes	\$30.60	\$4.77
1383	29-Apr-12	17	10	\$25.83	Yes	\$32.97	\$7.14
1384	29-Apr-12	17	11	\$25.42	Yes	\$30.60	\$5.18
1385	29-Apr-12	17	11	\$25.42	Yes	\$32.97	\$7.55
1386	29-Apr-12	17	12	\$25.22	Yes	\$30.60	\$5.38
1387	29-Apr-12	17	12	\$25.22	Yes	\$32.97	\$7.75
1388	29-Apr-12	18	1	\$25.10	Yes	\$30.60	\$5.50
1389	29-Apr-12	18	1	\$25.10	Yes	\$32.97	\$7.87
1390	29-Apr-12	18	2	\$24.82	Yes	\$30.60	\$5.78
1391	29-Apr-12	18	2	\$24.82	Yes	\$32.97	\$8.15
1392	29-Apr-12	18	3	\$24.71	Yes	\$30.60	\$5.89

Number	Trade Date	Trade Hour	Interval	Market LMP	Eligible Flag	Calculated LMP	Change in LMP
1393	29-Apr-12	18	3	\$24.71	Yes	\$32.97	\$8.26
1394	29-Apr-12	18	4	\$25.23	Yes	\$30.60	\$5.37
1395	29-Apr-12	18	4	\$25.23	Yes	\$32.97	\$7.74
1396	29-Apr-12	18	5	\$25.23	Yes	\$30.60	\$5.37
1397	29-Apr-12	18	5	\$25.23	Yes	\$32.97	\$7.74
1398	29-Apr-12	18	6	\$25.04	Yes	\$30.60	\$5.56
1399	29-Apr-12	18	6	\$25.04	Yes	\$32.97	\$7.93
1400	29-Apr-12	18	7	\$25.18	Yes	\$30.60	\$5.42
1401	29-Apr-12	18	7	\$25.18	Yes	\$32.97	\$7.79
1402	29-Apr-12	18	8	\$25.31	Yes	\$30.60	\$5.29
1403	29-Apr-12	18	8	\$25.31	Yes	\$32.97	\$7.66
1404	29-Apr-12	18	9	\$25.31	Yes	\$30.60	\$5.29
1405	29-Apr-12	18	9	\$25.31	Yes	\$32.97	\$7.66
1406	29-Apr-12	18	10	\$25.63	Yes	\$30.60	\$4.97
1407	29-Apr-12	18	10	\$25.63	Yes	\$32.97	\$7.34
1408	29-Apr-12	18	11	\$29.71	Yes	\$30.60	\$0.89
1409	29-Apr-12	18	11	\$29.71	Yes	\$32.97	\$3.26
1410	29-Apr-12	18	12	\$29.71	Yes	\$30.60	\$0.89
1411	29-Apr-12	18	12	\$29.71	Yes	\$32.97	\$3.26
1412	29-Apr-12	19	1	\$29.72	Yes	\$30.60	\$0.88
1413	29-Apr-12	19	1	\$29.72	Yes	\$32.97	\$3.25
1414	29-Apr-12	19	2	\$29.72	Yes	\$30.60	\$0.88
1415	29-Apr-12	19	2	\$29.72	Yes	\$32.97	\$3.25
1416	29-Apr-12	19	3	\$27.49	Yes	\$30.60	\$3.11
1417	29-Apr-12	19	3	\$27.49	Yes	\$32.97	\$5.48
1418	29-Apr-12	19	4	\$29.01	Yes	\$30.60	\$1.59
1419	29-Apr-12	19	4	\$29.01	Yes	\$32.97	\$3.96
1420	29-Apr-12	19	5	\$28.53	Yes	\$30.60	\$2.07
1421	29-Apr-12	19	5	\$28.53	Yes	\$32.97	\$4.44
1422	29-Apr-12	19	6	\$26.70	Yes	\$30.60	\$3.90
1423	29-Apr-12	19	6	\$26.70	Yes	\$32.97	\$6.27
1424	29-Apr-12	19	7	\$26.98	Yes	\$30.60	\$3.62
1425	29-Apr-12	19	7	\$26.98	Yes	\$32.97	\$5.99
1426	29-Apr-12	19	8	\$25.92	Yes	\$30.60	\$4.68
1427	29-Apr-12	19	8	\$25.92	Yes	\$32.97	\$7.05
1428	29-Apr-12	19	9	\$25.92	Yes	\$30.60	\$4.68
1429	29-Apr-12	19	9	\$25.92	Yes	\$32.97	\$7.05
1430	29-Apr-12	19	10	\$25.71	Yes	\$30.60	\$4.89
1431	29-Apr-12	19	10	\$25.71	Yes	\$32.97	\$7.26
1432	29-Apr-12	19	11	\$25.51	Yes	\$30.60	\$5.09
1433	29-Apr-12	19	11	\$25.51	Yes	\$32.97	\$7.46
1434	29-Apr-12	19	12	\$29.09	Yes	\$30.60	\$1.51
1435	29-Apr-12	19	12	\$29.09	Yes	\$32.97	\$3.88
1436	29-Apr-12	20	1	\$19.24	Yes	\$30.60	\$11.36
1437	29-Apr-12	20	1	\$19.24	Yes	\$32.97	\$13.73

Number	Trade Date	Trade Hour	Interval	Market LMP	Eligible Flag	Calculated LMP	Change in LMP
1438	29-Apr-12	20	2	\$22.57	Yes	\$30.60	\$8.03
1439	29-Apr-12	20	2	\$22.57	Yes	\$32.97	\$10.40
1440	29-Apr-12	20	3	\$22.21	Yes	\$30.60	\$8.39
1441	29-Apr-12	20	3	\$22.21	Yes	\$32.97	\$10.76
1442	29-Apr-12	20	4	\$21.73	Yes	\$30.60	\$8.87
1443	29-Apr-12	20	4	\$21.73	Yes	\$32.97	\$11.24
1444	29-Apr-12	20	5	\$21.77	Yes	\$30.60	\$8.83
1445	29-Apr-12	20	5	\$21.77	Yes	\$32.97	\$11.20
1446	29-Apr-12	20	6	\$18.35	Yes	\$30.60	\$12.25
1447	29-Apr-12	20	6	\$18.35	Yes	\$32.97	\$14.62
1448	29-Apr-12	20	7	\$22.37	Yes	\$30.60	\$8.23
1449	29-Apr-12	20	7	\$22.37	Yes	\$32.97	\$10.60
1450	29-Apr-12	20	8	\$18.20	Yes	\$30.60	\$12.40
1451	29-Apr-12	20	8	\$18.20	Yes	\$32.97	\$14.77
1452	29-Apr-12	20	9	\$25.43	Yes	\$30.60	\$5.17
1453	29-Apr-12	20	9	\$25.43	Yes	\$32.97	\$7.54
1454	29-Apr-12	20	10	\$25.49	Yes	\$30.60	\$5.11
1455	29-Apr-12	20	10	\$25.49	Yes	\$32.97	\$7.48
1456	29-Apr-12	20	11	\$25.69	Yes	\$30.60	\$4.91
1457	29-Apr-12	20	11	\$25.69	Yes	\$32.97	\$7.28
1458	29-Apr-12	20	12	\$25.29	Yes	\$30.60	\$5.31
1459	29-Apr-12	20	12	\$25.29	Yes	\$32.97	\$7.68
1460	30-Apr-12	2	1	\$16.97	No	\$30.60	\$13.63
1461	30-Apr-12	2	2	\$17.71	No	\$30.60	\$12.89
1462	30-Apr-12	2	3	\$18.31	No	\$30.60	\$12.29
1463	30-Apr-12	2	4	\$17.70	No	\$30.60	\$12.90
1464	30-Apr-12	2	5	\$17.68	No	\$30.60	\$12.92
1465	30-Apr-12	2	6	\$17.58	No	\$30.60	\$13.02
1466	30-Apr-12	2	7	\$17.58	No	\$30.60	\$13.02
1467	30-Apr-12	2	8	\$17.41	No	\$30.60	\$13.19
1468	30-Apr-12	2	9	\$16.92	No	\$30.60	\$13.68
1469	30-Apr-12	2	10	\$16.94	No	\$30.60	\$13.66
1470	30-Apr-12	2	11	\$16.36	No	\$30.60	\$14.24
1471	30-Apr-12	2	12	\$12.54	No	\$30.60	\$18.06
1472	30-Apr-12	5	1	-\$30.23	No	\$30.60	\$60.83
1473	30-Apr-12	5	2	\$0.01	No	\$30.60	\$30.59
1474	30-Apr-12	5	3	\$0.01	No	\$30.60	\$30.59
1475	30-Apr-12	5	4	\$10.96	No	\$30.60	\$19.64
1476	30-Apr-12	5	5	\$16.28	No	\$30.60	\$14.32
1477	30-Apr-12	5	6	\$15.50	No	\$30.60	\$15.10
1478	30-Apr-12	5	7	\$15.23	No	\$30.60	\$15.37
1479	30-Apr-12	5	8	\$15.13	No	\$30.60	\$15.47
1480	30-Apr-12	5	9	\$15.13	No	\$30.60	\$15.47
1481	30-Apr-12	5	10	\$15.25	No	\$30.60	\$15.35
1482	30-Apr-12	5	11	\$11.29	No	\$30.60	\$19.31

Number	Trade Date	Trade Hour	Interval	Market LMP	Eligible Flag	Calculated LMP	Change in LMP
1483	30-Apr-12	5	12	\$14.75	No	\$30.60	\$15.85
1484	30-Apr-12	16	8	\$25.79	Yes	\$32.97	\$7.18
1485	30-Apr-12	16	9	\$24.71	Yes	\$32.97	\$8.26
1486	30-Apr-12	16	10	\$16.28	Yes	\$32.97	\$16.69
1487	30-Apr-12	16	11	\$16.10	Yes	\$32.97	\$16.87
1488	30-Apr-12	16	12	\$16.55	Yes	\$32.97	\$16.42
1489	30-Apr-12	17	1	\$19.49	Yes	\$32.97	\$13.48
1490	30-Apr-12	17	2	\$19.50	Yes	\$32.97	\$13.47
1491	30-Apr-12	17	2	\$19.50	Yes	\$37.54	\$18.04
1492	30-Apr-12	17	3	\$22.81	Yes	\$32.97	\$10.16
1493	30-Apr-12	17	3	\$22.81	Yes	\$37.54	\$14.73
1494	30-Apr-12	17	4	\$19.73	Yes	\$32.97	\$13.24
1495	30-Apr-12	17	4	\$19.73	Yes	\$37.54	\$17.81
1496	30-Apr-12	17	5	\$25.51	Yes	\$37.54	\$12.03
1497	30-Apr-12	17	6	\$23.64	Yes	\$37.54	\$13.90
1498	30-Apr-12	17	7	\$22.88	Yes	\$37.54	\$14.66
1499	30-Apr-12	17	8	\$22.92	Yes	\$37.54	\$14.62
1500	30-Apr-12	17	9	\$23.59	Yes	\$37.54	\$13.95
1501	30-Apr-12	17	10	\$23.29	Yes	\$37.54	\$14.25
1502	30-Apr-12	17	11	\$25.12	Yes	\$37.54	\$12.42
1503	30-Apr-12	17	12	\$25.12	Yes	\$37.54	\$12.42
1504	30-Apr-12	18	1	\$19.65	Yes	\$37.54	\$17.89
1505	30-Apr-12	18	2	\$19.65	Yes	\$37.54	\$17.89
1506	30-Apr-12	18	3	\$22.47	Yes	\$37.54	\$15.07
1507	30-Apr-12	18	4	\$19.73	Yes	\$37.54	\$17.81
1508	30-Apr-12	18	5	\$19.73	Yes	\$37.54	\$17.81
1509	30-Apr-12	18	6	\$19.73	Yes	\$37.54	\$17.81
1510	30-Apr-12	18	7	\$19.86	Yes	\$37.54	\$17.68
1511	30-Apr-12	18	8	\$19.66	Yes	\$37.54	\$17.88
1512	30-Apr-12	18	9	\$21.32	Yes	\$37.54	\$16.22
1513	30-Apr-12	18	10	\$22.70	Yes	\$37.54	\$14.84
1514	30-Apr-12	18	11	\$20.12	Yes	\$37.54	\$17.42
1515	30-Apr-12	18	12	\$19.51	Yes	\$37.54	\$18.03
1516	30-Apr-12	19	1	\$22.68	Yes	\$37.54	\$14.86
1517	30-Apr-12	19	2	\$22.68	Yes	\$37.54	\$14.86
1518	30-Apr-12	19	3	\$21.12	Yes	\$37.54	\$16.42
1519	30-Apr-12	19	4	\$24.95	Yes	\$37.54	\$12.59
1520	30-Apr-12	19	5	\$25.15	Yes	\$37.54	\$12.39
1521	30-Apr-12	19	6	\$24.74	Yes	\$37.54	\$12.80
1522	30-Apr-12	19	7	\$24.29	Yes	\$37.54	\$13.25
1523	30-Apr-12	19	8	\$24.78	Yes	\$37.54	\$12.76
1524	30-Apr-12	19	9	\$24.96	Yes	\$37.54	\$12.58
1525	30-Apr-12	19	10	\$25.29	Yes	\$37.54	\$12.25
1526	30-Apr-12	19	11	\$19.39	Yes	\$37.54	\$18.15
1527	30-Apr-12	19	12	\$19.15	Yes	\$37.54	\$18.39

Number	Trade Date	Trade Hour	Interval	Market LMP	Eligible Flag	Calculated LMP	Change in LMP
1528	30-Apr-12	20	1	\$19.03	Yes	\$31.29	\$12.26
1529	30-Apr-12	20	2	\$19.02	Yes	\$31.29	\$12.27
1530	30-Apr-12	20	3	\$16.94	Yes	\$31.29	\$14.35
1531	30-Apr-12	20	4	\$16.93	Yes	\$31.29	\$14.36
1532	30-Apr-12	20	5	\$16.93	Yes	\$31.29	\$14.36
1533	30-Apr-12	20	6	\$18.49	Yes	\$31.29	\$12.80
1534	30-Apr-12	20	7	\$18.55	Yes	\$31.29	\$12.74
1535	30-Apr-12	20	8	\$19.17	Yes	\$31.29	\$12.12
1536	30-Apr-12	20	9	\$18.97	Yes	\$31.29	\$12.32
1537	30-Apr-12	20	9	\$18.97	Yes	\$36.09	\$17.12
1538	30-Apr-12	20	10	\$19.36	Yes	\$31.29	\$11.93
1539	30-Apr-12	20	10	\$19.36	Yes	\$36.09	\$16.73
1540	30-Apr-12	20	11	\$19.38	Yes	\$31.29	\$11.91
1541	30-Apr-12	20	11	\$19.38	Yes	\$36.09	\$16.71
1542	30-Apr-12	20	12	\$19.39	Yes	\$31.29	\$11.90
1543	30-Apr-12	20	12	\$19.39	Yes	\$36.09	\$16.70
1544	30-Apr-12	21	1	\$16.95	Yes	\$36.09	\$19.14
1545	30-Apr-12	21	2	\$16.19	Yes	\$36.09	\$19.90
1546	30-Apr-12	21	3	\$16.19	Yes	\$36.09	\$19.90
1547	30-Apr-12	21	4	\$16.20	Yes	\$36.09	\$19.89
1548	30-Apr-12	21	5	\$16.20	Yes	\$36.09	\$19.89
1549	30-Apr-12	21	6	\$16.30	Yes	\$36.09	\$19.79
1550	30-Apr-12	21	7	\$15.97	Yes	\$36.09	\$20.12
1551	30-Apr-12	21	8	\$16.24	Yes	\$36.09	\$19.85
1552	30-Apr-12	21	9	\$17.76	Yes	\$36.09	\$18.33
1553	30-Apr-12	21	10	\$17.69	Yes	\$36.09	\$18.40
1554	30-Apr-12	21	11	\$17.69	Yes	\$36.09	\$18.40
1555	30-Apr-12	21	12	\$17.69	Yes	\$36.09	\$18.40
1556	30-Apr-12	22	1	\$25.13	Yes	\$43.31	\$18.18
1557	30-Apr-12	22	2	\$25.13	Yes	\$43.31	\$18.18
1558	30-Apr-12	22	3	\$25.02	Yes	\$43.31	\$18.29
1559	30-Apr-12	22	4	\$23.93	Yes	\$43.31	\$19.38
1560	30-Apr-12	22	5	\$19.86	Yes	\$43.31	\$23.45
1561	30-Apr-12	22	6	\$17.96	Yes	\$43.31	\$25.35
1562	30-Apr-12	22	7	\$15.98	Yes	\$43.31	\$27.33
1563	30-Apr-12	22	8	\$15.48	Yes	\$43.31	\$27.83
1564	30-Apr-12	22	9	\$14.96	Yes	\$43.31	\$28.35
1565	30-Apr-12	22	10	\$15.16	Yes	\$43.31	\$28.15
1566	30-Apr-12	22	11	\$14.40	Yes	\$43.31	\$28.91
1567	30-Apr-12	22	12	\$11.33	Yes	\$43.31	\$31.98
1568	30-Apr-12	23	1	\$21.71	Yes	\$43.31	\$21.60
1569	30-Apr-12	23	2	\$18.10	Yes	\$43.31	\$25.21
1570	30-Apr-12	23	3	\$19.12	Yes	\$32.97	\$13.85
1571	30-Apr-12	23	4	\$17.99	Yes	\$32.97	\$14.98
1572	30-Apr-12	23	5	\$18.19	Yes	\$32.97	\$14.78

Number	Trade Date	Trade Hour	Interval	Market LMP	Eligible Flag	Calculated LMP	Change in LMP
1573	30-Apr-12	23	6	\$17.94	Yes	\$32.97	\$15.03
1574	30-Apr-12	23	7	\$15.23	Yes	\$32.97	\$17.74
1575	30-Apr-12	23	8	\$15.04	Yes	\$32.97	\$17.93
1576	30-Apr-12	23	9	\$9.63	Yes	\$32.97	\$23.34
1577	30-Apr-12	23	9	\$9.63	Yes	\$37.54	\$27.91
1578	30-Apr-12	23	10	\$15.02	Yes	\$32.97	\$17.95
1579	30-Apr-12	23	10	\$15.02	Yes	\$37.54	\$22.52
1580	30-Apr-12	23	11	\$15.06	Yes	\$32.97	\$17.91
1581	30-Apr-12	23	11	\$15.06	Yes	\$37.54	\$22.48
1582	30-Apr-12	23	12	\$14.07	Yes	\$32.97	\$18.90
1583	30-Apr-12	23	12	\$14.07	Yes	\$37.54	\$23.47
1584	30-Apr-12	24	1	\$17.49	Yes	\$37.54	\$20.05
1585	30-Apr-12	24	2	\$17.54	Yes	\$37.54	\$20.00
1586	30-Apr-12	24	3	\$17.49	Yes	\$37.54	\$20.05
1587	30-Apr-12	24	4	\$16.71	Yes	\$37.54	\$20.83
1588	30-Apr-12	24	5	\$16.14	Yes	\$37.54	\$21.40
1589	30-Apr-12	24	6	\$15.25	Yes	\$37.54	\$22.29
1590	30-Apr-12	24	9	\$15.83	Yes	\$37.54	\$21.71
1591	30-Apr-12	24	10	\$0.01	Yes	\$37.54	\$37.53
1592	30-Apr-12	24	11	\$0.01	Yes	\$37.54	\$37.53
1593	30-Apr-12	24	12	\$0.03	Yes	\$37.54	\$37.51

**Table 9: Price Impact Analysis Information for Pricing Node B in SCE LAP**

Number	Trade Date	Trade Hour	Interval	Market LMP	Eligible Flag	Calculated LMP	Change in LMP
1	13-Apr-12	11	12	\$38.51	Yes	\$100.00	\$138.51
2	13-Apr-12	12	1	\$30.19	Yes	\$100.00	\$130.19
3	13-Apr-12	12	2	\$29.32	Yes	\$100.00	\$129.32
4	13-Apr-12	12	3	\$740.11	Yes	\$100.00	\$840.11
5	13-Apr-12	12	4	\$740.11	Yes	\$100.00	\$840.11
6	13-Apr-12	12	5	\$392.03	Yes	\$100.00	\$492.03
7	13-Apr-12	12	6	\$382.86	Yes	\$100.00	\$482.86
8	13-Apr-12	12	7	\$392.59	Yes	\$100.00	\$492.59
9	13-Apr-12	12	8	\$976.63	Yes	\$100.00	\$1,076.63
10	13-Apr-12	12	9	\$96.02	Yes	\$100.00	\$196.02
11	13-Apr-12	12	10	\$99.96	Yes	\$100.00	\$199.96
12	13-Apr-12	12	11	\$30.62	Yes	\$100.00	\$130.62
13	13-Apr-12	12	12	\$26.97	Yes	\$100.00	\$126.97
14	13-Apr-12	13	1	\$30.41	Yes	\$100.00	\$130.41
15	13-Apr-12	13	2	\$151.84	Yes	\$100.00	\$251.84
16	13-Apr-12	13	3	\$59.07	Yes	\$100.00	\$159.07
17	13-Apr-12	13	4	\$22.19	Yes	\$100.00	\$122.19
18	13-Apr-12	13	5	\$30.11	Yes	\$100.00	\$130.11
19	13-Apr-12	13	6	\$30.11	Yes	\$100.00	\$130.11
20	13-Apr-12	13	7	\$29.72	Yes	\$100.00	\$129.72
21	13-Apr-12	13	8	\$27.34	Yes	\$100.00	\$127.34
22	13-Apr-12	13	9	\$29.75	Yes	\$100.00	\$129.75
23	13-Apr-12	13	10	\$26.12	Yes	\$100.00	\$126.12
24	13-Apr-12	13	11	\$22.08	Yes	\$100.00	\$122.08
25	13-Apr-12	13	12	\$25.55	Yes	\$100.00	\$125.55
26	13-Apr-12	14	1	\$29.70	Yes	\$100.00	\$129.70
27	13-Apr-12	14	2	\$25.71	Yes	\$100.00	\$125.71
28	13-Apr-12	14	3	\$21.46	Yes	\$100.00	\$121.46
29	13-Apr-12	14	4	\$21.61	Yes	\$100.00	\$121.61
30	13-Apr-12	14	5	\$23.28	Yes	\$100.00	\$123.28
31	13-Apr-12	14	6	\$21.73	Yes	\$100.00	\$121.73
32	13-Apr-12	14	7	\$24.87	Yes	\$100.00	\$124.87
33	13-Apr-12	14	8	\$21.72	Yes	\$100.00	\$121.72
34	13-Apr-12	14	9	\$20.92	Yes	\$100.00	\$120.92
35	13-Apr-12	14	10	\$22.91	Yes	\$100.00	\$122.91
36	13-Apr-12	14	11	\$22.22	Yes	\$100.00	\$122.22
37	13-Apr-12	14	12	\$17.84	Yes	\$100.00	\$117.84
38	13-Apr-12	18	1	\$10.16	Yes	\$100.00	\$110.16
39	13-Apr-12	18	2	\$10.16	Yes	\$100.00	\$110.16
40	13-Apr-12	18	3	\$10.16	Yes	\$100.00	\$110.16
41	13-Apr-12	18	4	\$11.27	Yes	\$100.00	\$111.27
42	13-Apr-12	18	5	\$15.21	Yes	\$100.00	\$115.21

Number	Trade Date	Trade Hour	Interval	Market LMP	Eligible Flag	Calculated LMP	Change in LMP
43	13-Apr-12	18	6	\$15.21	Yes	\$100.00	\$115.21
44	13-Apr-12	18	7	\$11.68	Yes	\$100.00	\$111.68
45	13-Apr-12	18	8	\$10.11	Yes	\$100.00	\$110.11
46	13-Apr-12	18	9	\$11.66	Yes	\$100.00	\$111.66
47	13-Apr-12	18	10	\$15.15	Yes	\$100.00	\$115.15
48	13-Apr-12	18	11	\$11.13	Yes	\$100.00	\$111.13
49	13-Apr-12	18	12	\$8.58	Yes	\$100.00	\$108.58
50	13-Apr-12	19	1	\$9.61	Yes	\$100.00	\$109.61
51	13-Apr-12	19	2	\$10.06	Yes	\$100.00	\$110.06
52	13-Apr-12	19	3	\$9.61	Yes	\$100.00	\$109.61
53	13-Apr-12	19	4	\$11.93	Yes	\$100.00	\$111.93
54	13-Apr-12	19	5	\$11.93	Yes	\$100.00	\$111.93
55	13-Apr-12	19	6	\$15.45	Yes	\$100.00	\$115.45
56	13-Apr-12	19	7	\$14.42	Yes	\$100.00	\$114.42
57	13-Apr-12	19	8	\$14.43	Yes	\$100.00	\$114.43
58	13-Apr-12	19	9	\$14.43	Yes	\$100.00	\$114.43
59	13-Apr-12	19	10	\$14.45	Yes	\$100.00	\$114.45
60	13-Apr-12	19	11	\$15.04	Yes	\$100.00	\$115.04
61	13-Apr-12	19	12	\$16.55	Yes	\$100.00	\$116.55
62	13-Apr-12	20	1	\$8.74	Yes	\$100.00	\$108.74
63	13-Apr-12	20	2	\$8.74	Yes	\$100.00	\$108.74
64	13-Apr-12	20	3	\$8.40	Yes	\$100.00	\$108.40
65	13-Apr-12	20	4	\$9.16	Yes	\$100.00	\$109.16
66	13-Apr-12	20	5	\$12.36	Yes	\$100.00	\$112.36
67	13-Apr-12	20	6	\$17.62	Yes	\$100.00	\$117.62
68	13-Apr-12	20	7	\$15.73	Yes	\$100.00	\$115.73
69	13-Apr-12	20	8	\$18.33	Yes	\$100.00	\$118.33
70	13-Apr-12	20	9	\$18.80	Yes	\$100.00	\$118.80
71	13-Apr-12	20	10	\$23.08	Yes	\$100.00	\$123.08
72	13-Apr-12	20	11	25.51249	Yes	100	(\$0.08)
73	13-Apr-12	20	12	\$24.76	Yes	\$100.00	\$124.76
74	13-Apr-12	21	1	\$22.36	Yes	\$100.00	\$122.36
75	13-Apr-12	21	2	\$19.07	Yes	\$100.00	\$119.07
76	13-Apr-12	21	3	\$17.54	Yes	\$100.00	\$117.54
77	13-Apr-12	21	4	\$18.58	Yes	\$100.00	\$118.58
78	13-Apr-12	21	5	\$18.58	Yes	\$100.00	\$118.58
79	13-Apr-12	21	6	\$18.55	Yes	\$100.00	\$118.55
80	13-Apr-12	21	7	\$18.30	Yes	\$100.00	\$118.30
81	13-Apr-12	21	8	\$18.28	Yes	\$100.00	\$118.28
82	13-Apr-12	21	9	\$18.28	Yes	\$100.00	\$118.28
83	13-Apr-12	21	10	\$18.44	Yes	\$100.00	\$118.44
84	13-Apr-12	21	11	\$18.26	Yes	\$100.00	\$118.26
85	13-Apr-12	21	12	\$17.40	Yes	\$100.00	\$117.40
86	13-Apr-12	22	1	\$19.22	Yes	\$100.00	\$119.22
87	13-Apr-12	22	2	\$19.28	Yes	\$100.00	\$119.28

Number	Trade Date	Trade Hour	Interval	Market LMP	Eligible Flag	Calculated LMP	Change in LMP
88	13-Apr-12	22	3	\$22.11	Yes	\$100.00	\$122.11
89	13-Apr-12	22	4	\$19.23	Yes	\$100.00	\$119.23
90	13-Apr-12	22	5	\$18.56	Yes	\$100.00	\$118.56
91	13-Apr-12	22	6	\$18.26	Yes	\$100.00	\$118.26
92	13-Apr-12	22	7	\$15.67	Yes	\$100.00	\$115.67
93	13-Apr-12	22	8	\$15.24	Yes	\$100.00	\$115.24
94	13-Apr-12	22	9	\$14.98	Yes	\$100.00	\$114.98
95	13-Apr-12	22	10	\$15.64	Yes	\$100.00	\$115.64
96	13-Apr-12	22	11	\$15.17	Yes	\$100.00	\$115.17
97	13-Apr-12	22	12	\$12.63	Yes	\$100.00	\$112.63
98	14-Apr-12	18	4	\$5.13	Yes	\$100.00	\$105.13
99	14-Apr-12	18	5	5.97228	Yes	100	(\$0.57)
100	14-Apr-12	18	6	\$5.97	Yes	\$100.00	\$105.97
101	14-Apr-12	18	7	\$5.97	Yes	\$100.00	\$105.97
102	14-Apr-12	18	8	\$8.22	Yes	\$100.00	\$108.22
103	14-Apr-12	18	9	\$5.96	Yes	\$100.00	\$105.96
104	14-Apr-12	18	10	\$8.19	Yes	\$100.00	\$108.19
105	14-Apr-12	18	11	\$8.19	Yes	\$100.00	\$108.19
106	14-Apr-12	18	12	\$5.96	Yes	\$100.00	\$105.96
107	14-Apr-12	19	1	\$5.13	Yes	\$100.00	\$105.13
108	14-Apr-12	19	2	5.95657	Yes	100	(\$0.83)
109	14-Apr-12	19	3	\$5.13	Yes	\$100.00	\$105.13
110	14-Apr-12	19	4	\$8.21	Yes	\$100.00	\$108.21
111	14-Apr-12	19	5	\$8.21	Yes	\$100.00	\$108.21
112	14-Apr-12	19	6	\$8.21	Yes	\$100.00	\$108.21
113	14-Apr-12	19	7	\$8.46	Yes	\$100.00	\$108.46
114	14-Apr-12	19	8	\$8.17	Yes	\$100.00	\$108.17
115	14-Apr-12	19	9	\$9.14	Yes	\$100.00	\$109.14
116	14-Apr-12	19	10	\$9.84	Yes	\$100.00	\$109.84
117	14-Apr-12	19	11	\$10.17	Yes	\$100.00	\$110.17
118	14-Apr-12	19	12	\$14.64	Yes	\$100.00	\$114.64
119	14-Apr-12	20	1	\$0.01	Yes	\$100.00	\$100.01
120	14-Apr-12	20	2	-\$31.11	Yes	\$100.00	\$68.89
121	14-Apr-12	20	3	-\$29.97	Yes	\$100.00	\$70.03
122	14-Apr-12	20	4	-\$31.45	Yes	\$100.00	\$68.55
123	14-Apr-12	20	5	-\$30.26	Yes	\$100.00	\$69.74
124	14-Apr-12	20	6	\$8.55	Yes	\$100.00	\$108.55
125	14-Apr-12	20	7	\$8.69	Yes	\$100.00	\$108.69
126	14-Apr-12	20	8	\$8.71	Yes	\$100.00	\$108.71
127	14-Apr-12	20	9	\$14.38	Yes	\$100.00	\$114.38
128	14-Apr-12	20	10	\$13.43	Yes	\$100.00	\$113.43
129	14-Apr-12	20	11	\$13.43	Yes	\$100.00	\$113.43
130	14-Apr-12	20	12	\$13.40	Yes	\$100.00	\$113.40
131	14-Apr-12	21	1	\$14.72	Yes	\$100.00	\$114.72
132	14-Apr-12	21	2	\$14.29	Yes	\$100.00	\$114.29

Number	Trade Date	Trade Hour	Interval	Market LMP	Eligible Flag	Calculated LMP	Change in LMP
133	14-Apr-12	21	3	\$8.69	Yes	\$100.00	\$108.69
134	14-Apr-12	21	4	\$14.23	Yes	\$100.00	\$114.23
135	14-Apr-12	21	5	\$14.23	Yes	\$100.00	\$114.23
136	14-Apr-12	21	6	\$14.23	Yes	\$100.00	\$114.23
137	14-Apr-12	21	7	\$13.33	Yes	\$100.00	\$113.33
138	14-Apr-12	21	8	\$9.08	Yes	\$100.00	\$109.08
139	14-Apr-12	21	9	\$13.30	Yes	\$100.00	\$113.30
140	14-Apr-12	21	10	\$13.36	Yes	\$100.00	\$113.36
141	14-Apr-12	21	11	\$14.19	Yes	\$100.00	\$114.19
142	14-Apr-12	21	12	\$12.49	Yes	\$100.00	\$112.49
143	14-Apr-12	22	1	\$17.48	Yes	\$100.00	\$117.48
144	14-Apr-12	22	2	\$17.48	Yes	\$100.00	\$117.48
145	14-Apr-12	22	3	\$17.51	Yes	\$100.00	\$117.51
146	14-Apr-12	22	4	\$17.32	Yes	\$100.00	\$117.32
147	14-Apr-12	22	5	\$15.07	Yes	\$100.00	\$115.07
148	14-Apr-12	22	6	\$15.07	Yes	\$100.00	\$115.07
149	14-Apr-12	22	7	\$15.11	Yes	\$100.00	\$115.11
150	14-Apr-12	22	8	\$14.95	Yes	\$100.00	\$114.95
151	14-Apr-12	22	9	\$14.95	Yes	\$100.00	\$114.95
152	14-Apr-12	22	10	\$14.45	Yes	\$100.00	\$114.45
153	14-Apr-12	22	11	\$14.00	Yes	\$100.00	\$114.00
154	14-Apr-12	22	12	\$13.31	Yes	\$100.00	\$113.31
155	15-Apr-12	18	1	\$0.01	Yes	\$100.00	\$100.01
156	15-Apr-12	18	2	\$0.01	Yes	\$100.00	\$100.01
157	15-Apr-12	18	3	-\$32.01	Yes	\$100.00	\$67.99
158	15-Apr-12	18	4	-\$30.91	Yes	\$100.00	\$69.09
159	15-Apr-12	18	5	-\$31.90	Yes	\$100.00	\$68.10
160	15-Apr-12	18	6	-\$30.91	Yes	\$100.00	\$69.09
161	15-Apr-12	18	7	\$0.01	Yes	\$100.00	\$100.01
162	15-Apr-12	18	8	\$8.57	Yes	\$100.00	\$108.57
163	15-Apr-12	18	9	\$9.82	Yes	\$100.00	\$109.82
164	15-Apr-12	18	10	\$8.63	Yes	\$100.00	\$108.63
165	15-Apr-12	18	11	\$8.63	Yes	\$100.00	\$108.63
166	15-Apr-12	18	12	\$10.89	Yes	\$100.00	\$110.89
167	15-Apr-12	19	1	\$9.20	Yes	\$100.00	\$109.20
168	15-Apr-12	19	2	\$10.21	Yes	\$100.00	\$110.21
169	15-Apr-12	19	3	\$10.21	Yes	\$100.00	\$110.21
170	15-Apr-12	19	4	\$9.85	Yes	\$100.00	\$109.85
171	15-Apr-12	19	5	\$9.85	Yes	\$100.00	\$109.85
172	15-Apr-12	19	6	\$10.78	Yes	\$100.00	\$110.78
173	15-Apr-12	19	7	\$10.80	Yes	\$100.00	\$110.80
174	15-Apr-12	19	8	\$11.33	Yes	\$100.00	\$111.33
175	15-Apr-12	19	9	\$13.37	Yes	\$100.00	\$113.37
176	15-Apr-12	19	10	\$13.39	Yes	\$100.00	\$113.39
177	15-Apr-12	19	11	\$12.18	Yes	\$100.00	\$112.18

Number	Trade Date	Trade Hour	Interval	Market LMP	Eligible Flag	Calculated LMP	Change in LMP
178	15-Apr-12	19	12	\$11.85	Yes	\$100.00	\$111.85
179	15-Apr-12	20	1	\$8.66	Yes	\$100.00	\$108.66
180	15-Apr-12	20	2	\$9.18	Yes	\$100.00	\$109.18
181	15-Apr-12	20	3	\$8.99	Yes	\$100.00	\$108.99
182	15-Apr-12	20	4	\$9.20	Yes	\$100.00	\$109.20
183	15-Apr-12	20	5	\$9.82	Yes	\$100.00	\$109.82
184	15-Apr-12	20	6	\$9.82	Yes	\$100.00	\$109.82
185	15-Apr-12	20	7	\$11.33	Yes	\$100.00	\$111.33
186	15-Apr-12	20	8	\$12.91	Yes	\$100.00	\$112.91
187	15-Apr-12	20	9	\$13.28	Yes	\$100.00	\$113.28
188	15-Apr-12	20	10	\$15.06	Yes	\$100.00	\$115.06
189	15-Apr-12	20	11	\$16.10	Yes	\$100.00	\$116.10
190	15-Apr-12	20	12	\$19.02	Yes	\$100.00	\$119.02
191	15-Apr-12	21	1	\$19.90	Yes	\$100.00	\$119.90
192	15-Apr-12	21	2	\$19.90	Yes	\$100.00	\$119.90
193	15-Apr-12	21	3	\$18.82	Yes	\$100.00	\$118.82
194	15-Apr-12	21	4	\$18.19	Yes	\$100.00	\$118.19
195	15-Apr-12	21	5	\$16.22	Yes	\$100.00	\$116.22
196	15-Apr-12	21	6	\$16.22	Yes	\$100.00	\$116.22
197	15-Apr-12	21	7	\$16.19	Yes	\$100.00	\$116.19
198	15-Apr-12	21	8	\$16.15	Yes	\$100.00	\$116.15
199	15-Apr-12	21	9	\$16.15	Yes	\$100.00	\$116.15
200	15-Apr-12	21	10	\$16.01	Yes	\$100.00	\$116.01
201	15-Apr-12	21	11	\$15.37	Yes	\$100.00	\$115.37
202	15-Apr-12	21	12	\$14.33	Yes	\$100.00	\$114.33
203	15-Apr-12	22	1	\$16.03	Yes	\$100.00	\$116.03
204	15-Apr-12	22	2	\$16.03	Yes	\$100.00	\$116.03
205	15-Apr-12	22	3	\$15.02	Yes	\$100.00	\$115.02
206	15-Apr-12	22	4	\$15.81	Yes	\$100.00	\$115.81
207	15-Apr-12	22	5	\$15.81	Yes	\$100.00	\$115.81
208	15-Apr-12	22	6	\$15.81	Yes	\$100.00	\$115.81
209	15-Apr-12	22	7	\$15.19	Yes	\$100.00	\$115.19
210	15-Apr-12	22	8	\$13.55	Yes	\$100.00	\$113.55
211	15-Apr-12	22	9	\$12.17	Yes	\$100.00	\$112.17
212	15-Apr-12	22	10	\$9.86	Yes	\$100.00	\$109.86
213	15-Apr-12	22	11	\$10.25	Yes	\$100.00	\$110.25
214	15-Apr-12	22	12	\$9.86	Yes	\$100.00	\$109.86
215	17-Apr-12	18	1	\$16.60	Yes	\$100.00	\$116.60
216	17-Apr-12	18	2	\$16.58	Yes	\$100.00	\$116.58
217	17-Apr-12	18	3	\$16.58	Yes	\$100.00	\$116.58
218	17-Apr-12	18	4	\$14.52	Yes	\$100.00	\$114.52
219	17-Apr-12	18	5	\$15.45	Yes	\$100.00	\$115.45
220	17-Apr-12	18	6	\$14.04	Yes	\$100.00	\$114.04
221	17-Apr-12	18	7	\$15.37	Yes	\$100.00	\$115.37
222	17-Apr-12	18	8	\$15.44	Yes	\$100.00	\$115.44

Number	Trade Date	Trade Hour	Interval	Market LMP	Eligible Flag	Calculated LMP	Change in LMP
223	17-Apr-12	18	9	\$15.44	Yes	\$100.00	\$115.44
224	17-Apr-12	18	10	\$14.54	Yes	\$100.00	\$114.54
225	17-Apr-12	18	11	\$15.28	Yes	\$100.00	\$115.28
226	17-Apr-12	18	12	\$14.54	Yes	\$100.00	\$114.54
227	17-Apr-12	19	1	\$15.54	Yes	\$100.00	\$115.54
228	17-Apr-12	19	2	\$15.54	Yes	\$100.00	\$115.54
229	17-Apr-12	19	3	\$16.63	Yes	\$100.00	\$116.63
230	17-Apr-12	19	4	\$16.67	Yes	\$100.00	\$116.67
231	17-Apr-12	19	5	\$16.67	Yes	\$100.00	\$116.67
232	17-Apr-12	19	6	\$16.67	Yes	\$100.00	\$116.67
233	17-Apr-12	19	7	\$16.63	Yes	\$100.00	\$116.63
234	17-Apr-12	19	8	\$16.66	Yes	\$100.00	\$116.66
235	17-Apr-12	19	9	\$16.66	Yes	\$100.00	\$116.66
236	17-Apr-12	19	10	\$16.63	Yes	\$100.00	\$116.63
237	17-Apr-12	19	11	\$16.63	Yes	\$100.00	\$116.63
238	17-Apr-12	19	12	\$16.68	Yes	\$100.00	\$116.68
239	17-Apr-12	20	1	\$14.65	Yes	\$100.00	\$114.65
240	17-Apr-12	20	2	\$14.36	Yes	\$100.00	\$114.36
241	17-Apr-12	20	3	\$12.56	Yes	\$100.00	\$112.56
242	17-Apr-12	20	4	\$14.37	Yes	\$100.00	\$114.37
243	17-Apr-12	20	5	\$15.52	Yes	\$100.00	\$115.52
244	17-Apr-12	20	6	\$15.74	Yes	\$100.00	\$115.74
245	17-Apr-12	20	7	\$16.81	Yes	\$100.00	\$116.81
246	17-Apr-12	20	8	\$17.84	Yes	\$100.00	\$117.84
247	17-Apr-12	20	9	\$17.90	Yes	\$100.00	\$117.90
248	17-Apr-12	20	10	\$18.34	Yes	\$100.00	\$118.34
249	17-Apr-12	20	11	\$21.23	Yes	\$100.00	\$121.23
250	17-Apr-12	20	12	\$19.95	Yes	\$100.00	\$119.95
251	17-Apr-12	21	1	\$19.11	Yes	\$100.00	\$119.11
252	17-Apr-12	21	2	\$19.11	Yes	\$100.00	\$119.11
253	17-Apr-12	21	3	\$18.45	Yes	\$100.00	\$118.45
254	17-Apr-12	21	4	\$19.16	Yes	\$100.00	\$119.16
255	17-Apr-12	21	5	\$18.96	Yes	\$100.00	\$118.96
256	17-Apr-12	21	6	\$18.17	Yes	\$100.00	\$118.17
257	17-Apr-12	21	7	\$19.06	Yes	\$100.00	\$119.06
258	17-Apr-12	21	8	\$18.14	Yes	\$100.00	\$118.14
259	17-Apr-12	21	9	\$16.82	Yes	\$100.00	\$116.82
260	17-Apr-12	21	10	\$16.76	Yes	\$100.00	\$116.76
261	17-Apr-12	21	11	\$16.78	Yes	\$100.00	\$116.78
262	17-Apr-12	21	12	\$17.21	Yes	\$100.00	\$117.21
263	17-Apr-12	22	1	\$20.76	Yes	\$100.00	\$120.76
264	17-Apr-12	22	2	\$20.42	Yes	\$100.00	\$120.42
265	17-Apr-12	22	3	19.75316	Yes	100	(\$0.43)
266	17-Apr-12	22	4	19.13793	Yes	100	(\$0.69)
267	17-Apr-12	22	5	17.85124	Yes	100	(\$0.69)

Number	Trade Date	Trade Hour	Interval	Market LMP	Eligible Flag	Calculated LMP	Change in LMP
268	17-Apr-12	22	6	17.04967	Yes	100	(\$0.99)
269	17-Apr-12	22	7	\$16.90	Yes	\$100.00	\$116.90
270	17-Apr-12	22	8	\$17.85	Yes	\$100.00	\$117.85
271	17-Apr-12	22	9	\$17.54	Yes	\$100.00	\$117.54
272	17-Apr-12	22	10	\$15.61	Yes	\$100.00	\$115.61
273	17-Apr-12	22	11	\$16.51	Yes	\$100.00	\$116.51
274	17-Apr-12	22	12	\$8.86	Yes	\$100.00	\$108.86
275	21-Apr-12	16	1	\$22.17	Yes	\$100.00	\$122.17
276	21-Apr-12	16	2	\$27.61	Yes	\$100.00	\$127.61
277	21-Apr-12	16	3	\$17.75	Yes	\$100.00	\$117.75
278	21-Apr-12	16	4	\$23.82	Yes	\$100.00	\$123.82
279	21-Apr-12	16	5	\$24.73	Yes	\$100.00	\$124.73
280	21-Apr-12	16	6	\$34.03	Yes	\$100.00	\$134.03
281	21-Apr-12	16	7	\$27.09	Yes	\$100.00	\$127.09
282	21-Apr-12	16	8	\$29.83	Yes	\$100.00	\$129.83
283	21-Apr-12	16	9	\$32.74	Yes	\$100.00	\$132.74
284	21-Apr-12	16	10	\$33.69	Yes	\$100.00	\$133.69
285	21-Apr-12	16	11	\$52.72	Yes	\$100.00	\$152.72
286	21-Apr-12	16	12	\$33.99	Yes	\$100.00	\$133.99
287	21-Apr-12	17	2	\$33.82	Yes	\$100.00	\$133.82
288	21-Apr-12	17	3	\$29.41	Yes	\$100.00	\$129.41
289	21-Apr-12	17	4	\$20.98	Yes	\$100.00	\$120.98
290	21-Apr-12	17	5	\$29.52	Yes	\$100.00	\$129.52
291	21-Apr-12	17	6	\$30.54	Yes	\$100.00	\$130.54
292	21-Apr-12	17	7	\$39.66	Yes	\$100.00	\$139.66
293	21-Apr-12	17	8	\$34.63	Yes	\$100.00	\$134.63
294	21-Apr-12	17	9	\$99.04	Yes	\$100.00	\$199.04
295	21-Apr-12	17	10	\$32.87	Yes	\$100.00	\$132.87
296	21-Apr-12	17	11	\$33.75	Yes	\$100.00	\$133.75
297	21-Apr-12	17	12	\$94.61	Yes	\$100.00	\$194.61
298	21-Apr-12	18	1	\$100.00	Yes	\$100.00	\$200.00
299	21-Apr-12	18	2	\$100.00	Yes	\$100.00	\$200.00
300	21-Apr-12	18	3	\$100.00	Yes	\$100.00	\$200.00
301	21-Apr-12	18	4	\$27.09	Yes	\$100.00	\$127.09
302	21-Apr-12	18	5	\$28.60	Yes	\$100.00	\$128.60
303	21-Apr-12	18	6	\$29.75	Yes	\$100.00	\$129.75
304	21-Apr-12	18	7	\$28.56	Yes	\$100.00	\$128.56
305	21-Apr-12	18	8	\$29.52	Yes	\$100.00	\$129.52
306	21-Apr-12	18	9	\$28.44	Yes	\$100.00	\$128.44
307	21-Apr-12	18	10	\$30.49	Yes	\$100.00	\$130.49
308	21-Apr-12	18	11	\$43.23	Yes	\$100.00	\$143.23
309	21-Apr-12	18	12	\$38.79	Yes	\$100.00	\$138.79
310	21-Apr-12	19	1	\$29.06	Yes	\$100.00	\$129.06
311	21-Apr-12	19	2	\$29.80	Yes	\$100.00	\$129.80
312	21-Apr-12	19	3	\$30.56	Yes	\$100.00	\$130.56

Number	Trade Date	Trade Hour	Interval	Market LMP	Eligible Flag	Calculated LMP	Change in LMP
313	21-Apr-12	19	4	\$29.64	Yes	\$100.00	\$129.64
314	21-Apr-12	19	5	\$29.64	Yes	\$100.00	\$129.64
315	21-Apr-12	19	6	\$29.64	Yes	\$100.00	\$129.64
316	21-Apr-12	19	7	\$29.96	Yes	\$100.00	\$129.96
317	21-Apr-12	19	8	\$29.72	Yes	\$100.00	\$129.72
318	21-Apr-12	19	9	\$29.72	Yes	\$100.00	\$129.72
319	21-Apr-12	19	10	\$29.44	Yes	\$100.00	\$129.44
320	21-Apr-12	19	11	\$29.44	Yes	\$100.00	\$129.44
321	21-Apr-12	19	12	\$28.24	Yes	\$100.00	\$128.24
322	21-Apr-12	20	1	\$19.26	Yes	\$100.00	\$119.26
323	21-Apr-12	20	2	\$17.64	Yes	\$100.00	\$117.64
324	21-Apr-12	20	3	\$17.12	Yes	\$100.00	\$117.12
325	21-Apr-12	20	4	\$19.09	Yes	\$100.00	\$119.09
326	21-Apr-12	20	5	\$19.45	Yes	\$100.00	\$119.45
327	21-Apr-12	20	6	\$19.45	Yes	\$100.00	\$119.45
328	21-Apr-12	20	7	\$19.93	Yes	\$100.00	\$119.93
329	21-Apr-12	20	8	\$21.95	Yes	\$100.00	\$121.95
330	21-Apr-12	20	9	\$22.14	Yes	\$100.00	\$122.14
331	21-Apr-12	20	10	\$25.40	Yes	\$100.00	\$125.40
332	21-Apr-12	20	11	\$25.57	Yes	\$100.00	\$125.57
333	21-Apr-12	20	12	\$25.57	Yes	\$100.00	\$125.57
334	21-Apr-12	21	1	\$51.53	Yes	\$100.00	\$151.53
335	21-Apr-12	21	2	\$28.30	Yes	\$100.00	\$128.30
336	21-Apr-12	21	3	\$24.50	Yes	\$100.00	\$124.50
337	21-Apr-12	21	4	\$26.71	Yes	\$100.00	\$126.71
338	21-Apr-12	21	5	\$25.66	Yes	\$100.00	\$125.66
339	21-Apr-12	21	6	\$24.61	Yes	\$100.00	\$124.61
340	21-Apr-12	21	7	\$20.98	Yes	\$100.00	\$120.98
341	21-Apr-12	21	8	\$19.44	Yes	\$100.00	\$119.44
342	21-Apr-12	21	9	\$19.28	Yes	\$100.00	\$119.28
343	21-Apr-12	21	10	\$18.89	Yes	\$100.00	\$118.89
344	21-Apr-12	21	11	\$19.14	Yes	\$100.00	\$119.14
345	21-Apr-12	21	12	\$17.90	Yes	\$100.00	\$117.90
346	21-Apr-12	22	1	\$61.10	Yes	\$100.00	\$161.10
347	21-Apr-12	22	2	\$104.59	Yes	\$100.00	\$204.59
348	21-Apr-12	22	3	\$32.38	Yes	\$100.00	\$132.38
349	21-Apr-12	22	4	\$29.24	Yes	\$100.00	\$129.24
350	21-Apr-12	22	5	\$29.31	Yes	\$100.00	\$129.31
351	21-Apr-12	22	6	\$29.31	Yes	\$100.00	\$129.31
352	21-Apr-12	22	7	\$27.74	Yes	\$100.00	\$127.74
353	21-Apr-12	22	8	\$25.56	Yes	\$100.00	\$125.56
354	21-Apr-12	22	9	\$23.75	Yes	\$100.00	\$123.75
355	21-Apr-12	22	10	\$23.05	Yes	\$100.00	\$123.05
356	21-Apr-12	22	11	\$22.20	Yes	\$100.00	\$122.20
357	21-Apr-12	22	12	\$21.05	Yes	\$100.00	\$121.05



## Appendix C: Exceptional Dispatch Bid Mitigation Analysis

In April 2012, the ISO applied the exceptional dispatch bid mitigation to the exceptional dispatches due to noncompetitive constraints. Table 10 shows the costs by instruction type in April. With exceptional dispatch bid mitigation, the costs for these types of exceptional dispatches were \$316,396. Without the exceptional dispatch bid mitigation, the costs for these types of exceptional dispatches would be \$991,891. The cost saving from the exceptional dispatch bid mitigation was \$675,495.

**Table 10: Bid Mitigation Analysis for April**

Type	Number of Resources	Costs without Bid Mitigation	Costs with Bid Mitigation	Cost Saving
NONTMOD	6	\$930,446.24	\$289,127.13	\$641,319.11
TMODEL4	1	\$43,767.83	\$12,718.46	\$31,049.37
TMODEL5	1	\$2,932.00	\$1,071.10	\$1,860.90
TMODEL7	3	\$14,745.07	\$13,479.32	\$1,265.75
	11	\$991,891.14	\$316,396.01	\$675,495.13

## **CERTIFICATE OF SERVICE**

I hereby certify that I have served the foregoing document upon the parties listed on the official service lists in the above-referenced 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 at Folsom, California this 30<sup>th</sup> day of April 2012.

/s/ Anna Pascuzzo  
Anna Pascuzzo