August 30, 2013

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-___
May 2013 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 in the Commission's May 4 Order.

The attached report provides Chart 2 data for the month of May 2013. The attached Chart 2 report also includes the price impact analysis for the month of May 2013 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 May 2013.

Respectfully submitted,

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Exceptional Dispatch Report

Table 2: May 2013

Market Quality and Renewable Integration Aug 30, 2013

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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 15th of each month and one issued on the 30th of each month. This report provides data on the frequency, reasons and costs for Exceptional Dispatches issued in May 2013.

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 May is presented in Appendix B. This report also includes the degree of mitigation analysis for May 2013 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 May 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 (Pmin) 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 (Pmin) 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 May 2013, the ISO issued exceptional dispatches for the following generation and transmission operating requirements:

(1) 6510, SCIT
(2) 7110, Humboldt area,
(3) 7120, North Geysers Area 115 kV Lines
(4) 7230, Palermo Rio - Oso Area
(5) 7430, Fresno area
(6) 7720, Julian Hinds-Mirage 230 kV Line Overload Mitigation & Eagle Mountain 3A Bank Emergency Operation/Mitigation
(7) 7810, San Diego Area Generation Requirements

Most of the generation procedures are internal to the ISO and not available publicly on the ISO website; however, all of the transmission procedures are available on the ISO website.[1]

The following additional reason for exceptional dispatch instructions in May 2013 was not related to specific generation or transmission operating procedures: 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. There were a few other reasons used to explain exceptional dispatch instructions in May, which are self explanatory.

As mentioned earlier, the data shown in Table 1 is based on a template specified in the September 2009 order.[2] This table contains all the information published in Table 1 of the first report for May. 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 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)

[1] 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**

[2] 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.

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.[3]
- 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 these charge codes are a portion of the real-time instructed imbalance energy charge code (6470). [4]

[3] For further details regarding the Bid Cost Recovery process please refer to section 11.8 of the ISO tariff.

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

- The CC6482 column shows the real-time excess cost for the classification.[5]
- The CC6488 column shows the real-time exceptional dispatch uplift settlement for the classification.[6] 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. There was no designation of Exceptional Dispatch under Capacity Procurement Mechanism (CPM) in May 2013.

[5] For further details please refer to the BPM configuration Guide: Real Time Excess Cost for Instructed Energy Settlement published on the ISO's website.
[6] 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 May 2013

California Independent System Operator Corporation
Exceptional Dispatch Report
August 30, 2013

Chart 2: Table of Exceptional Dispatches for Period 01/May/2013 - 31/May/2013

Number	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commitment	INC_DEC	Hours	Begin Time	End Time	Total MWH	Min Load cost	Startup Cost	CC6470	ED MWH (INC/DEC)	CC6470 INC	CC6470 DEC	CC6482	CC6488	CC6620
1	RT	6510	SCE	Big Creek-Ventura	8-May-13	50	Yes	INC	10	12:25	21:59	504.69	$20,786	$0	($55,731)	268	($14,175)	$0	($7,388)	$0	$0
2	RT	6510	SCE	LA Basin	8-May-13	71	Yes	INC	10	12:25	21:59	695.54	$0	$0	($69,493)	409	($21,485)	$0	($11,506)	$0	$0
3	RT	7110	PG&E	Humboldt	7-May-13	15	No	INC	3	15:17	17:11	29.54	$0	$103	($1,089)	1	($29)	$0	$0	($3)	$0
4	RT	7120	PG&E	NCNB	1-May-13	27-53	No	DEC	20	2:15	21:59	-754.62	$0	$0	$29,073	(748)	$0	$28,823	$0	($49,825)	$0
5	RT	7230	PG&E	Sierra	4-May-13	20-46	Yes	INC	8	16:17	23:44	181.24	$13,348	$540	($6,416)	19	($705)	$0	$0	($228)	$0
6	RT	7430	PG&E	Fresno	3-May-13	20	No	INC	7	15:30	21:59	269.45	$14,285	$0	($15,705)	0	($1)	$0	($0)	$0	$0
7	RT	7430	PG&E	Fresno	4-May-13	3	No	DEC	2	21:57	22:18	-1.82	$0	$0	$59	0	$0	$0	$0	$0	$0
8	RT	7430	PG&E	Fresno	4-May-13	20-300	Yes	INC	15	8:10	22:34	413.13	$14,018	$257	($19,597)	16	($710)	$0	$0	($78)	$0
9	RT	7430	PG&E	Fresno	7-May-13	25	Yes	DEC	3	21:15	23:59	27.50	$0	$0	($886)	0	$0	$0	$0	$0	$0
10	RT	7430	PG&E	Fresno	7-May-13	25	Yes	INC	3	21:45	23:59	137.30	$0	$0	($3,741)	0	$0	$0	$0	$0	$0
11	RT	7430	PG&E	Fresno	8-May-13	25-45	No	DEC	3	13:25	15:59	-166.57	$0	$0	$5,464	(135)	$0	$4,425	$0	($4,224)	$0
12	RT	7430	PG&E	Fresno	8-May-13	5- 10	No	INC	3	15:55	17:59	-2.74	$0	$0	$93	(0)	$0	$15	$0	($15)	$0
13	RT	7430	PG&E	Fresno	9-May-13	20	No	INC	6	10:17	15:59	149.02	$8,268	$165	($6,490)	0	$0	$0	$0	$0	$0
14	RT	7430	PG&E	Fresno	10-May-13	20-38	No	INC	2	20:18	21:29	42.96	$1,999	$224	($2,102)	2	($71)	$0	$0	($0)	$0
15	RT	7430	PG&E	Fresno	11-May-13	20	No	INC	11	12:50	22:59	447.65	$14,897	$0	($35,389)	0	($0)	$0	$0	($0)	$0
16	RT	7430	PG&E	Fresno	12-May-13	25-140	Yes	DEC	6	14:50	19:59	47.75	$0	$0	($2,478)	0	$0	$0	$0	$0	$0
17	RT	7430	PG&E	Fresno	12-May-13	20-370	Yes	INC	13	11:15	23:14	3447.46	$103,250	$2,182	($147,314)	1533	($60,602)	$0	$0	($111,112)	$0
18	RT	7430	PG&E	Fresno	13-May-13	20	No	INC	10	13:16	22:59	645.25	$23,214	$584	($55,720)	0	($18)	$0	$0	($0)	$0
19	RT	7430	PG&E	Fresno	14-May-13	20-103	Yes	INC	13	11:40	23:58	767.92	$49,763	$207	($30,425)	9	$271	$0	$0	($597)	$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	Startup Cost	CC6470	ED MWH (INC/DEC)	CC6470 INC	CC6470 DEC	CC6482	CC6488	CC6620
20	RT	7430	PG&E	Fresno	15-May-13	23-80	No	INC	23	0:00	22:59	424.11	$10,842	$211	($12,439)	207	($5,186)	$0	$0	($2,672)	$0
21	RT	7430	PG&E	Fresno	25-May-13	75	No	INC	1	14:39	14:47	11.22	$0	$0	($311)	10	($272)	$0	$0	$0	$0
22	RT	7430	PG&E	Fresno	26-May-13	25	Yes	INC	2	0:26	1:18	22.08	$0	$0	($378)	22	($369)	$0	$0	($433)	$0
23	RT	7430	PG&E	Fresno	30-May-13	20-50	No	INC	5	19:12	23:59	282.98	$9,809	$359	($16,544)	12	($389)	$0	$0	($192)	$0
24	RT	7430	PG&E	Fresno	31-May-13	20-40	No	INC	19	4:53	22:59	551.73	$27,469	$225	($23,258)	93	($3,712)	$0	$0	($607)	$0
25	RT	7430	SDG&E	San Diego-IV	12-May-13	20	No	INC	13	11:00	23:59	260.51	$45,244	$18,623	($13,289)	0	($4)	$0	($1)	$0	$0
26	RT	7720	SCE	N/A	11-May-13	400-408	No	INC	5	16:25	20:59	-341.30	$0	$0	$40,964	(40)	$0	$3,954	$0	($346)	$0
27	RT	7810	SDG&E	San Diego-IV	25-May-13	155	No	INC	1	23:00	23:59	387.34	$12,556	$0	($12,235)	0	$0	$0	$0	$0	$0
28	RT	7810	SDG&E	San Diego-IV	26-May-13	155	No	INC	10	0:00	9:59	2629.07	$107,525	$0	($139)	0	$0	$0	$0	$0	$0
29	RT	Bridging Schedules	SCE	Big Creek-Ventura	31-May-13	100	Yes	INC	1	23:30	23:59	354.76	$0	$0	($1,077)	0	$0	$0	$0	$0	$0
30	RT	Bridging Schedules	SCE	LA Basin	3-May-13	20-40	Yes	INC	2	22:00	23:59	146.08	$5,444	$0	($5,094)	0	($1)	$0	$0	$0	$0
31	RT	Bridging Schedules	SDG&E	San Diego-IV	13-May-13	20	Yes	INC	1	23:00	23:59	35.37	$0	$0	($1,164)	0	($1)	$0	$0	$0	$0
32	RT	Bridging Schedules	SDG&E	San Diego-IV	21-May-13	20	Yes	INC	3	21:00	23:59	59.67	$8,229	$0	($1,901)	0	$0	$0	$0	$0	$0
33	RT	COI Mitigation	PG&E	Fresno	22-May-13	0	No	INC	1	0:08	0:24	-40.00	$0	$0	($1,404)	0	$0	$0	$0	$0	$0
34	RT	Contingency	Intertie	N/A	14-May-13	34	No	DEC	1	13:15	13:36	-0.02	$0	$0	$160	(10)	$0	($21)	$0	$0	$0
35	RT	Contingency	Intertie	N/A	30-May-13	-30	No	INC	1	17:00	17:59	0.00	$0	$0	$0	0	$0	$0	$0	$0	$0
36	RT	Contingency	PG&E	Bay Area	30-May-13	47	No	INC	2	16:10	17:19	47.23	$1,254	$1,089	($9,326)	8	($215)	$0	($197)	$0	$0
37	RT	Contingency	PG&E	Fresno	29-May-13	48	Yes	INC	3	20:13	22:59	124.19	$541	$0	($7,690)	86	($4,811)	$0	$0	($952)	$0
38	RT	Contingency	PG&E	Fresno	30-May-13	166-808	Yes	INC	1	16:07	16:46	306.46	$0	$1,045	($67,547)	56	($10,220)	$0	$0	$0	$0
39	RT	Contingency	PG&E	N/A	30-May-13	141	Yes	INC	2	16:07	17:13	70.44	$13,323	$3,018	($16,916)	3	($94)	$0	($13)	$0	$0
40	RT	Contingency	SCE	Big Creek-Ventura	29-May-13	0	No	INC	1	1:15	1:39	0.00	$0	$0	$0	0	$0	$0	$0	$0	$0
41	RT	Contingency	SCE	Big Creek-Ventura	30-May-13	230-560	Yes	INC	2	16:07	17:15	306.78	$11,505	$1,361	($192,912)	64	($17,084)	$0	($262)	$0	$0
42	RT	Contingency	SCE	LA Basin	17-May-13	45	No	INC	2	5:10	6:59	132.54	$0	$0	($4,012)	105	($3,013)	$0	($2,037)	$0	$0
43	RT	Contingency	SCE	LA Basin	30-May-13	74-234	No	DEC	2	16:42	17:24	-85.66	$0	$0	$63,961	(5)	$0	$227	$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	Startup Cost	CC6470	ED MWH (INC/DEC)	CC6470 INC	CC6470 DEC	CC6482	CC6488	CC6620
44	RT	Contingency	SCE	LA Basin	30-May-13	376-448	Yes	INC	2	16:22	17:06	156.31	$2,346	$397	($116,385)	1	($489)	$0	$0	$0	$0
45	RT	Contingency	SDG&E	San Diego-IV	30-May-13	367	Yes	INC	2	16:30	17:44	175.26	$5,675	$1,053	($111,867)	32	($5,300)	$0	($4,771)	$0	$0
46	RT	Dispatch Modification	PG&E	N/A	15-May-13	0	Yes	INC	1	1:00	1:59	-11.71	$0	$0	$381	0	$0	$0	$0	$0	$0
47	RT	Fire	PG&E	Bay Area	2-May-13	92-112	Yes	INC	6	10:02	15:14	121.00	$3,565	$313	($4,566)	89	($3,348)	$0	$0	($1,500)	$0
48	RT	Fire	SCE	LA Basin	31-May-13	234-258	No	DEC	8	13:48	20:59	-1857.60	$0	$0	$77,539	0	$0	$0	$0	$0	$0
49	RT	Fire	SCE	LA Basin	31-May-13	380	Yes	INC	8	13:48	20:59	3407.71	$18,748	$0	($158,436)	1133	($64,893)	$0	$0	$0	$0
50	RT	Intertie Emergency Assistance	Intertie	N/A	12-May-13	100	No	INC	1	1:43	1:59	0.00	$0	$0	$0	0	$0	$0	$0	$0	$0
51	RT	Intertie Emergency Assistance	Intertie	N/A	15-May-13	125	No	INC	1	10:00	10:59	0.00	$0	$0	$0	0	$0	$0	$0	$0	$0
52	RT	Load Forecast Uncertainty	PG&E	Bay Area	9-May-13	180	Yes	INC	24	0:00	23:59	3712.13	$10,881	$4,127	($140,601)	0	($3)	$0	($0)	$0	$0
53	RT	Load Forecast Uncertainty	PG&E	N/A	13-May-13	180	Yes	INC	10	14:00	23:59	1402.58	$104,284	$28,334	($62,698)	0	($3)	$0	($2)	$0	$0
54	RT	Load Forecast Uncertainty	PG&E	N/A	23-May-13	140	Yes	INC	9	14:00	22:59	1486.97	$57,600	$11,850	($46,832)	0	$0	$0	$0	$0	$0
55	RT	Load Forecast Uncertainty	SCE	Big Creek-Ventura	30-May-13	40	Yes	INC	14	7:00	20:59	1818.71	$83,143	$7,547	($588,376)	5	($2,181)	$0	$0	$0	$0
56	RT	Load Forecast Uncertainty	SCE	LA Basin	4-May-13	20-60	Yes	INC	24	0:00	23:59	1600.62	$227,011	$0	($46,293)	1	($13)	$0	($14)	$0	$0
57	RT	Load Forecast Uncertainty	SCE	LA Basin	22-May-13	20	Yes	INC	20	0:00	19:59	400.00	$16,754	$0	($10,203)	0	$0	$0	$0	$0	$0
58	RT	Load Forecast Uncertainty	SCE	LA Basin	30-May-13	40	Yes	INC	24	0:00	23:59	3581.36	$141,902	$0	($850,820)	533	($38,656)	$0	($0)	$0	$0
59	RT	Load Forecast Uncertainty	SCE	N/A	23-May-13	40	Yes	INC	9	14:00	22:59	491.38	$48,930	$10,780	($16,728)	0	$0	$0	$0	$0	$0
60	RT	Over Generation	PG&E	Bay Area	2-May-13	0	Yes	DEC	6	10:02	15:14	1.66	$0	$0	($59)	0	$0	$0	$0	$0	$0
61	RT	Over Generation	PG&E	Bay Area	2-May-13	46	Yes	INC	6	10:02	15:14	118.13	$4,062	$505	($4,415)	67	($2,517)	$0	$0	($942)	$0
62	RT	Over Generation	PG&E	Bay Area	14-May-13	180	No	DEC	1	23:55	23:58	-7.50	$0	$0	($262)	(9)	$0	($328)	$0	$0	$0
63	RT	Over Generation	PG&E	Bay Area	26-May-13	420	No	INC	2	9:42	10:10	300.00	$13,223	$0	$7,540	0	$0	$0	$0	$0	$0
64	RT	Over Generation	PG&E	Fresno	10-May-13	66	No	INC	1	2:18	2:59	65.54	$3,754	$390	$2,071	0	$0	$0	$0	$0	$0
65	RT	Over Generation	PG&E	Fresno	26-May-13	297-340	Yes	DEC	3	9:20	11:29	-857.89	$0	$0	$14,546	(68)	$0	($338)	$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	Startup Cost	CC6470	ED MWH (INC/DEC)	CC6470 INC	CC6470 DEC	CC6482	CC6488	CC6620
66	RT	Over Generation	SCE	Big Creek-Ventura	10-May-13	347-348	No	DEC	2	1:33	2:59	-427.95	$0	$0	($15,057)	(210)	$0	($2,426)	$0	$0	$0
67	RT	Over Generation	SCE	Big Creek-Ventura	26-May-13	309	No	DEC	2	9:11	10:59	-459.06	$0	$0	($12,803)	(95)	$0	($740)	$0	$0	$0
68	RT	Over Generation	SDG&E	San Diego-IV	14-May-13	571	No	INC	1	23:53	23:58	-36.68	$0	$0	($1,265)	(15)	$0	($514)	$0	$0	$0
69	RT	Path 15	PG&E	Bay Area	24-May-13	253	No	INC	21	1:00	21:59	15434.53	$597,744	$0	($527,867)	0	$0	$0	$0	$0	$0
70	RT	Path 15	SCE	N/A	22-May-13	50-250	No	DEC	1	6:07	6:59	-224.59	$0	$0	$407	(188)	$0	$0	$0	$0	$0
71	RT	Path 26	SDG&E	San Diego-IV	15-May-13	63	No	INC	7	15:00	21:59	135.68	$6,601	$0	($6,724)	0	($7)	$0	$0	$0	$0
72	RT	Reverse Commitment Instruction	PG&E	Fresno	16-May-13	0	Yes	INC	1	23:27	23:58	0.00	$0	$0	$0	0	$0	$0	$0	$0	$0
73	RT	SCE SOB 204	SCE	Big Creek-Ventura	29-May-13	51	No	INC	3	17:20	19:59	139.98	$0	$0	($5,270)	131	($4,917)	$0	$0	($319)	$0
74	RT	SCE SOB 204	SCE	Big Creek-Ventura	30-May-13	76	No	INC	4	18:40	21:59	549.94	$0	$0	($301,909)	226	($22,251)	$0	$0	($166)	$0
75	RT	SP26 Capacity	PG&E	Fresno	13-May-13	800	Yes	INC	5	14:33	18:19	1747.17	$18,894	$2,606	($153,946)	826	($36,338)	$0	($38,959)	$0	$0
76	RT	SP26 Capacity	SCE	Big Creek-Ventura	12-May-13	20	Yes	INC	17	7:00	23:59	495.89	$47,510	$3,176	($24,829)	0	($6)	$0	($3)	$0	$0
77	RT	SP26 Capacity	SCE	Big Creek-Ventura	30-May-13	40	Yes	INC	3	21:00	23:59	299.99	$17,816	$1,617	($16,425)	0	($4)	$0	$0	$0	$0
78	RT	SP26 Capacity	SCE	LA Basin	7-May-13	70	Yes	INC	23	1:00	23:59	2411.03	$127,715	$0	($82,538)	0	($4)	$0	($0)	$0	$0
79	RT	SP26 Capacity	SCE	LA Basin	12-May-13	20	Yes	INC	17	7:00	23:59	473.18	$56,161	$17,596	($23,855)	0	($4)	$0	($3)	$0	$0
80	RT	SP26 Capacity	SCE	LA Basin	30-May-13	60-400	Yes	INC	7	17:50	23:59	3534.07	$35,032	$0	($791,113)	1439	($111,373)	$0	($0)	$0	$0
81	RT	SP26 Capacity	SCE	LA Basin	31-May-13	60	Yes	INC	24	0:00	23:59	5301.65	$146,689	$0	($239,695)	1081	($61,913)	$0	($9)	$0	$0
82	RT	SP26 Capacity	SDG&E	San Diego-IV	15-May-13	20	Yes	INC	5	17:00	21:59	99.60	$12,732	$0	($3,769)	0	($2)	$0	($2)	$0	$0
83	RT	SP26 Capacity	SDG&E	San Diego-IV	16-May-13	20	No	INC	22	2:00	23:59	439.28	$76,567	$0	($18,698)	0	$0	$0	$0	$0	$0
84	RT	SP26 Capacity	SDG&E	San Diego-IV	30-May-13	20-387	No	INC	5	19:37	23:59	1503.85	$86,012	$500	($445,618)	95	($6,339)	$0	($4)	$0	$0
85	RT	SP26 Capacity	SDG&E	San Diego-IV	31-May-13	20	No	INC	24	0:00	23:59	1449.56	$151,312	$0	($56,667)	0	$0	$0	$0	$0	$0
86	RT	Software Limitation	PG&E	Bay Area	15-May-13	600	No	INC	12	0:50	11:59	-234.21	$18,965	$0	$12,951	113	($4,394)	$0	$0	$0	$0
87	RT	Software Limitation	PG&E	Bay Area	26-May-13	380-	No	INC	12	10:11	21:29	5504.7	$211,80	$0	($193,9	594	($21,92	$0	($228)	$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	Startup Cost	CC6470	ED MWH (INC/DEC)	CC6470 INC	CC6470 DEC	CC6482	CC6488	CC6620
						500						5	1		80)		7)				
88	RT	Software Limitation	PG&E	Fresno	3-May-13	0	Yes	INC	2	21:20	22:19	0.00	$0	$74	($0)	0	$0	$0	$0	$0	$0
89	RT	Software Limitation	PG&E	Fresno	5-May-13	0	Yes	INC	2	1:05	2:04	2.92	$0	$0	($80)	0	$0	$0	$0	$0	$0
90	RT	Software Limitation	PG&E	Fresno	8-May-13	300	Yes	DEC	1	23:45	23:59	-52.50	$0	$0	($1,893)	0	$0	$0	$0	$0	$0
91	RT	Software Limitation	PG&E	Fresno	9-May-13	0	Yes	INC	13	0:00	12:29	-22.08	$0	$0	$98	0	$0	$0	$0	$0	$0
92	RT	Software Limitation	PG&E	Fresno	10-May-13	83	Yes	INC	12	10:05	21:59	1037.92	$62,039	$833	($45,515)	0	$0	$0	$0	$0	$0
93	RT	Software Limitation	PG&E	Fresno	16-May-13	300	No	DEC	1	6:00	6:19	-87.50	$0	$0	($2,187)	0	$0	$0	$0	$0	$0
94	RT	Software Limitation	PG&E	Fresno	28-May-13	0	Yes	INC	2	7:15	8:34	0.71	$0	$0	($38)	0	$0	$0	$0	$0	$0
95	RT	Software Limitation	PG&E	Fresno	30-May-13	0	No	INC	1	15:06	15:19	8.21	$474	$0	($269)	0	$0	$0	$0	$0	$0
96	RT	Software Limitation	PG&E	Humboldt	7-May-13	29	No	INC	4	17:12	20:18	72.50	$0	$6	($2,593)	0	$0	$0	$0	$0	$0
97	RT	Software Limitation	PG&E	N/A	5-May-13	52	No	INC	16	8:00	23:59	1030.74	$71,421	$122,618	($40,237)	0	($7)	$0	$0	$0	$0
98	RT	Software Limitation	PG&E	N/A	9-May-13	0	No	INC	3	0:05	2:04	14.71	$0	$0	$495	0	$0	$0	$0	$0	$0
99	RT	Software Limitation	PG&E	N/A	17-May-13	190	No	INC	1	23:34	23:58	45.40	$0	$0	($993)	20	($916)	$0	$0	$0	$0
100	RT	Software Limitation	PG&E	N/A	18-May-13	190	No	INC	1	0:00	0:19	46.00	$2,029	$0	($1,024)	0	$0	$0	$0	$0	$0
101	RT	Software Limitation	PG&E	N/A	22-May-13	330	No	INC	5	11:45	15:59	-383.13	$1,507	$0	$13,163	0	$0	$0	$0	$0	$0
102	RT	Software Limitation	PG&E	N/A	24-May-13	0	Yes	INC	2	19:00	20:04	0.00	$0	$0	($0)	0	$0	$0	$0	$0	$0
103	RT	Software Limitation	PG&E	NCNB	10-May-13	0	No	INC	2	18:47	19:31	0.00	$0	$0	$0	0	$0	$0	$0	$0	$0
104	RT	Software Limitation	SCE	Big Creek-Ventura	6-May-13	0	Yes	INC	2	0:20	1:19	0.00	$0	$0	($0)	0	$0	$0	$0	$0	$0
105	RT	Software Limitation	SCE	Big Creek-Ventura	10-May-13	294	No	INC	3	1:17	3:59	12.72	$0	$0	$526	(15)	$0	($398)	$0	$0	$0
106	RT	Software Limitation	SCE	LA Basin	3-May-13	0	Yes	INC	2	21:20	22:24	7.82	$0	$0	($287)	0	$0	$0	$0	$0	$0
107	RT	Software Limitation	SCE	LA Basin	6-May-13	0	Yes	INC	2	0:50	1:59	0.00	$0	$0	$0	0	$0	$0	$0	$0	$0
108	RT	Software Limitation	SCE	LA Basin	19-May-13	300	No	INC	4	20:10	23:59	-361.30	$0	$0	$14,095	(68)	$0	$2,317	$0	$0	$0
109	RT	Software Limitation	SCE	LA Basin	20-May-13	324	Yes	INC	11	0:10	10:49	114.91	$0	$150	($4,154)	32	($1,075)	$0	$0	$0	$0
110	RT	Software Limitation	SCE	LA Basin	21-May-13	70-324	Yes	INC	24	0:10	23:59	2313.93	$98,051	$42,478	($101,200)	27	($967)	$0	$0	$0	$0
111	RT	Software Limitation	SCE	LA Basin	28-May-13	20	No	INC	2	15:35	16:11	1.67	$0	$0	($53)	0	$0	$0	$0	$0	$0
112	RT	Software Limitation	SCE	N/A	10-May-13	0	Yes	INC	3	21:40	23:58	0.00	$0	$0	$0	0	$0	$0	$0	$0	$0
113	RT	Software Limitation	SCE	N/A	14-May-13	0	No	INC	1	0:25	0:54	0.00	$0	$0	$0	0	$0	$0	$0	$0	$0
114	RT	Software Limitation	SDG&E	San Diego-IV	13-May-13	44	No	DEC	3	17:55	19:19	-12.83	$0	$0	$0	(13)	$0	$0	$0	$0	$0
115	RT	Software Limitation	SDG&E	San Diego-IV	13-May-13	0	No	INC	8	16:00	23:59	-0.94	$0	$0	$76	0	$0	$0	$0	$0	$0
116	RT	Software Limitation	SDG&E	San Diego-IV	18-May-13	200	No	INC	4	0:00	3:59	1624.12	$47,395	$0	($26,178)	0	$0	$0	$0	$0	$0
117	RT	Thermal Margin	PG&E	Bay Area	29-May-13	253	No	INC	15	7:00	21:59	3795.2	$177,07	$15,35	($134,5	0	($5)	$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	Startup Cost	CC6470	ED MWH (INC/DEC)	CC6470 INC	CC6470 DEC	CC6482	CC6488	CC6620
												3	5	9	22)						
118	RT	Thermal Margin	PG&E	Fresno	13-May-13	49	Yes	INC	2	15:52	16:39	34.49	$1,981	$69	($1,433)	8	($335)	$0	($57)	$0	$0
119	RT	Thermal Margin	PG&E	N/A	13-May-13	40	No	INC	16	8:00	23:59	2175.23	$0	$0	($135,809)	0	$0	$0	$0	$0	$0
120	RT	Thermal Margin	SCE	Big Creek-Ventura	13-May-13	20-40	Yes	INC	23	1:00	23:59	3171.08	$118,775	$11,970	($318,400)	0	$0	$0	$0	$0	$0
121	RT	Thermal Margin	SCE	LA Basin	13-May-13	10-20	Yes	INC	24	0:00	23:59	1752.30	$47,116	$18,502	($387,548)	0	($7)	$0	($1)	$0	$0
122	RT	Thermal Margin	SCE	LA Basin	29-May-13	20	Yes	INC	24	0:00	23:59	516.38	$84,462	$0	($22,303)	0	($9)	$0	($5)	$0	$0
123	RT	Transmission Outage	SCE	LA Basin	28-May-13	20	Yes	INC	3	0:00	2:29	50.03	$8,798	$0	($1,848)	0	($1)	$0	($1)	$0	$0
124	RT	Transmission Outage	SCE	N/A	7-May-13	40	Yes	INC	23	1:00	23:59	1006.52	$125,043	$10,780	($32,212)	0	($2)	$0	$0	($0)	$0
125	RT	Transmission Outage PG&E	PG&E	Bay Area	1-May-13	2- 5	No	DEC	14	0:00	13:38	-31.39	$0	$0	$914	-31	$0	$904	$0	($864)	$0
126	RT	Transmission Outage PG&E	PG&E	Bay Area	1-May-13	0- 42	No	INC	14	0:00	13:38	84.04	$0	$0	($2,563)	0	$0	$0	$0	$0	$0
127	RT	Transmission Outage PG&E	PG&E	Bay Area	3-May-13	28	Yes	INC	4	14:01	17:59	121.27	$1,522	$1,152	($78,789)	0	$0	$0	$0	$0	$0
128	RT	Transmission Outage PG&E	PG&E	Bay Area	5-May-13	9- 42	No	INC	4	2:51	5:12	53.09	$0	$0	($1,058)	0	$0	$0	$0	$0	$0
129	RT	Transmission Outage PG&E	PG&E	Fresno	1-May-13	390	No	INC	17	6:00	22:59	-1627.06	$0	$0	$64,086	-1317	$0	$54,293	$0	($9,777)	$0
130	RT	Transmission Outage PG&E	PG&E	Fresno	2-May-13	390	No	INC	11	13:17	23:59	-990.86	$0	$0	$121,350	-985	$0	$120,845	$0	($86,165)	$0
131	RT	Transmission Outage PG&E	PG&E	Fresno	6-May-13	152	Yes	INC	1	23:15	23:59	142.79	$924	$1,462	($5,115)	115	($4,140)	$0	$0	($512)	$0
132	RT	Transmission Outage PG&E	PG&E	Fresno	7-May-13	25-52	Yes	INC	6	0:00	5:59	169.41	$13,095	$0	($6,872)	30	($983)	$0	$0	($840)	$0
133	RT	Transmission Outage PG&E	PG&E	Fresno	11-May-13	320-400	No	INC	5	16:28	20:59	-692.45	$0	$0	$48,036	-664	$0	$50,631	$0	($30,222)	$0
134	RT	Transmission Outage PG&E	PG&E	Fresno	17-May-13	260-555	No	INC	6	9:53	14:59	-1588.07	$0	$0	($22,664)	-960	$0	($21,697)	$0	($448)	$0
135	RT	Transmission Outage PG&E	PG&E	Fresno	20-May-13	425	No	INC	1	14:50	14:59	-5.57	$0	$0	$282	-3	$0	$162	$0	($122)	$0
136	RT	Transmission Outage PG&E	PG&E	Fresno	27-May-13	10	No	INC	1	1:15	1:19	0.42	$0	$0	($21)	0	($5)	$0	$0	$0	$0
137	RT	Transmission Outage PG&E	PG&E	Humboldt	8-May-13	29-80	No	INC	6	6:04	11:59	199.75	$0	$0	($8,398)	26	($1,084)	$0	$0	($61)	$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	Startup Cost	CC6470	ED MWH (INC/DEC)	CC6470 INC	CC6470 DEC	CC6482	CC6488	CC6620
138	RT	Transmission Outage PG&E	PG&E	Humboldt	20-May-13	29	No	INC	3	20:44	22:49	29.16	$0	$0	($255)	0	($3)	$0	$0	($1)	$0
139	RT	Transmission Outage PG&E	PG&E	Humboldt	21-May-13	15-30	No	INC	14	10:17	23:44	78.17	$143	$0	($2,835)	5	($188)	$0	$0	($24)	$0
140	RT	Transmission Outage PG&E	PG&E	Humboldt	22-May-13	29-32	No	INC	16	7:27	22:59	207.85	$0	$0	($7,905)	13	($518)	$0	$0	($65)	$0
141	RT	Transmission Outage PG&E	PG&E	Humboldt	23-May-13	29	No	INC	16	7:27	22:44	169.34	$0	$0	($5,530)	0	($4)	$0	$0	($1)	$0
142	RT	Transmission Outage PG&E	PG&E	Humboldt	24-May-13	15-30	No	INC	17	6:50	22:59	213.42	$0	$0	($8,028)	12	($467)	$0	$0	($36)	$0
143	RT	Transmission Outage PG&E	PG&E	Humboldt	25-May-13	32	No	INC	2	20:48	21:49	3.05	$0	$0	($111)	3	($111)	$0	$0	($18)	$0
144	RT	Transmission Outage PG&E	PG&E	Humboldt	27-May-13	32	No	INC	4	19:00	22:59	63.66	$0	$0	($7,592)	11	($1,316)	$0	$0	($0)	$0
145	RT	Transmission Outage PG&E	PG&E	Humboldt	28-May-13	32	No	INC	4	19:30	22:59	40.83	$0	$0	($1,735)	8	($353)	$0	$0	($32)	$0
146	RT	Transmission Outage PG&E	PG&E	N/A	5-May-13	119	No	DEC	4	15:45	18:59	-273.56	$0	$0	$5,471	-264	$0	$5,471	$0	$0	$0
147	RT	Transmission Outage PG&E	PG&E	N/A	5-May-13	0	No	INC	4	15:45	18:59	-4.97	$0	$0	$145	0	$0	$0	$0	$0	$0
148	RT	Transmission Outage PG&E	PG&E	N/A	11-May-13	240-359	Yes	INC	5	16:28	20:59	662.20	$93,310	$9,065	($58,877)	0	$0	$0	$0	$0	$0
149	RT	Transmission Outage PG&E	PG&E	N/A	16-May-13	119	No	DEC	4	10:00	13:59	-382.98	$0	$0	$7,058	-383	$0	$7,058	$0	$0	$0
150	RT	Transmission Outage PG&E	PG&E	N/A	17-May-13	119	No	DEC	3	10:08	12:59	-407.85	$0	$0	($17,864)	-383	$0	($19,000)	$0	$0	$0
151	RT	Transmission Outage PG&E	PG&E	N/A	17-May-13	1	No	INC	5	10:25	14:59	10.67	$0	$0	($84)	0	$0	$0	$0	$0	$0
152	RT	Transmission Outage PG&E	PG&E	NCNB	16-May-13	4- 40	No	DEC	10	9:25	18:59	-314.46	$0	$0	$7,158	-312	$0	$7,128	$0	($15,880)	$0
153	RT	Transmission Outage PG&E	PG&E	NCNB	16-May-13	0	No	INC	3	9:25	11:59	-7.08	$0	$0	$123	-7	$0	$115	$0	($315)	$0
154	RT	Transmission Outage PG&E	SCE	LA Basin	11-May-13	255	No	DEC	1	17:20	17:59	-132.32	$0	$0	$26,731	0	$0	$0	$0	$0	$0
155	RT	Transmission Outage SCE	SCE	Big Creek-Ventura	13-May-13	30-93	No	INC	3	17:26	19:59	97.33	$0	$0	($78,890)	24	($1,256)	$0	$0	$0	$0
156	RT	Transmission Outage SCE	SCE	Big Creek-Ventura	16-May-13	158	No	DEC	1	23:51	23:56	-27.59	$0	$0	($492)	0	$0	$0	$0	$0	$0
157	RT	Transmission Outage SCE	SCE	LA Basin	14-May-13	10	Yes	INC	15	9:00	23:59	151.61	$44,171	$0	($4,789)	0	($5)	$0	$0	($4)	$0
158	RT	Transmission Outage SCE	SCE	LA Basin	16-May-13	18-115	No	INC	2	19:57	20:08	17.29	$0	$0	($816)	0	($3)	$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	Startup Cost	CC6470	ED MWH (INC/DEC)	CC6470 INC	CC6470 DEC	CC6482	CC6488	CC6620
159	RT	Transmission Outage SCE	SCE	LA Basin	18-May-13	33-37	No	DEC	4	11:38	14:59	-157.32	$0	$0	$4,225	-155	$0	$4,184	$0	($839)	$0
160	RT	Transmission Outage SCE	SCE	LA Basin	18-May-13	0	No	INC	4	11:40	14:59	25.73	$0	$0	($977)	0	$0	$0	$0	$0	$0
161	RT	Transmission Outage SCE	SCE	LA Basin	28-May-13	20	Yes	INC	22	2:15	23:59	580.79	$76,837	$0	($31,255)	0	($9)	$0	($5)	$0	$0
162	RT	Transmission Outage SCE	SCE	N/A	8-May-13	0	No	INC	10	14:55	23:59	-9.37	$0	$0	$163	0	$0	$0	$0	$0	$0
163	RT	Transmission Outage SCE	SCE	N/A	9-May-13	5	No	INC	24	0:00	23:59	23.33	$0	$0	($647)	24	($541)	$0	$0	($0)	$0
164	RT	Transmission Outage SCE	SCE	N/A	10-May-13	5	No	INC	18	0:00	17:59	17.66	$0	$0	($86)	14	$66	$0	$0	$0	$0
165	RT	Transmission Outage SCE	SDG&E	San Diego-IV	17-May-13	40-123	Yes	INC	24	0:00	23:59	2804.90	$291,511	$12,334	($123,076)	0	($8)	$0	($0)	$0	$0
166	RT	Transmission Outage SCE	SDG&E	San Diego-IV	19-May-13	40-60	Yes	INC	24	0:00	23:59	1165.46	$160,679	$5,682	($41,023)	1	($20)	$0	($14)	$0	$0
167	RT	Transmission Outage SCE	SDG&E	San Diego-IV	22-May-13	60	Yes	INC	20	0:00	19:59	1200.81	$157,999	$0	($33,269)	0	$0	$0	$0	$0	$0
168	RT	Transmission Outage SDG&E	SDG&E	San Diego-IV	13-May-13	0	No	INC	3	10:45	12:09	3.39	$0	$0	($191)	0	$0	$0	$0	$0	$0
169	RT	Transmission Outage SDG&E	SDG&E	San Diego-IV	20-May-13	18	Yes	INC	8	11:39	18:59	150.00	$19,853	$490	($9,001)	0	$0	$0	$0	$0	$0
170	RT	Unit Testing	PG&E	Fresno	18-May-13	335	No	INC	2	14:15	15:59	-334.74	$0	$0	$4,231	-46	$0	$1,350	$0	$0	$0
171	RT	Unit Testing	PG&E	Fresno	23-May-13	200-400	Yes	INC	7	10:40	16:49	1489.59	$0	$0	($174,139)	994	($157,527)	$0	$0	$0	$0
172	RT	Unit Testing	PG&E	N/A	18-May-13	121-200	Yes	INC	7	9:10	15:59	1115.71	$0	$0	($33,370)	159	($7,926)	$0	$0	$0	$0
173	RT	Unit Testing	PG&E	N/A	19-May-13	124	Yes	INC	3	11:55	13:59	199.66	$0	$0	($8,723)	2	($78)	$0	$0	$0	$0
174	RT	Unit Testing	PG&E	N/A	22-May-13	120-365	Yes	INC	17	7:35	23:59	1972.82	$154,763	$3,417	($71,923)	566	($29,477)	$0	$0	$0	$0
175	RT	Unit Testing	PG&E	N/A	23-May-13	153-353	Yes	INC	17	7:05	23:59	2117.25	$0	$0	($74,859)	833	($43,086)	$0	$0	$0	$0
176	RT	Unit Testing	PG&E	N/A	24-May-13	121-300	Yes	INC	11	7:00	17:39	1734.74	$0	$0	($64,340)	250	($12,920)	$0	$0	$0	$0
177	RT	Unit Testing	PG&E	N/A	26-May-13	121	Yes	INC	3	7:00	9:59	672.10	$0	$0	$7,697	10	($492)	$0	$0	$0	$0
178	RT	Unit Testing	PG&E	N/A	27-May-13	119-150	Yes	INC	6	7:00	12:59	1023.93	$93,258	$2,786	($36,209)	4	($174)	$0	$0	$0	$0
179	RT	Unit Testing	PG&E	N/A	28-May-13	140-156	Yes	INC	11	13:10	23:59	75.78	$0	$0	($2,392)	0	$0	$0	$0	$0	$0
180	RT	Unit Testing	PG&E	N/A	29-May-13	120-359	Yes	INC	24	0:00	23:59	4343.41	$0	$0	($168,344)	1242	($49,937)	$0	$0	$0	$0
181	RT	Unit Testing	SCE	Big Creek-Ventura	30-May-13	100-741	Yes	INC	15	9:00	23:59	3644.21	$0	$0	($155,744)	2639	($122,345)	$0	$0	$0	$0
182	RT	Unit Testing	SCE	Big Creek-	31-May-13	100-	Yes	INC	24	0:00	23:29	4150.1	$0	$0	($233,4	2691	($176,3	$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	Startup Cost	CC6470	ED MWH (INC/DEC)	CC6470 INC	CC6470 DEC	CC6482	CC6488	CC6620
				Ventura		741						0			26)		13)				
183	RT	Unit Testing	SCE	LA Basin	13-May-13	16-376	No	DEC	18	6:00	23:59	-1957.93	$0	$0	$248,621	0	$0	$0	$0	$0	$0
184	RT	Unit Testing	SCE	LA Basin	13-May-13	0- 15	No	INC	18	6:00	23:59	-413.22	$0	$0	$18,118	0	($1)	$0	$0	$0	$0
185	RT	Unit Testing	SCE	LA Basin	14-May-13	52	No	DEC	4	16:05	19:59	-37.59	$0	$0	$1,297	0	$0	$0	$0	$0	$0
186	RT	Unit Testing	SCE	LA Basin	14-May-13	198-490	No	INC	8	12:15	19:59	2615.62	$0	$0	($118,680)	1704	($88,820)	$0	$0	$0	$0
187	RT	Unit Testing	SCE	LA Basin	15-May-13	16	No	DEC	18	6:00	23:59	-144.63	$0	$0	$6,309	0	$0	$0	$0	$0	$0
188	RT	Unit Testing	SCE	LA Basin	15-May-13	0	No	INC	18	6:00	23:59	-1221.19	$0	$0	$71,380	0	($4)	$0	$0	$0	$0
189	RT	Unit Testing	SCE	LA Basin	16-May-13	130-495	Yes	INC	21	0:00	20:59	3975.27	$348,943	$0	($133,128)	1168	($64,725)	$0	$0	$0	$0
190	RT	Unit Testing	SCE	LA Basin	17-May-13	120-495	Yes	INC	5	16:15	20:59	1525.32	$0	$0	($73,459)	1097	($60,085)	$0	$0	$0	$0
191	RT	Unit Testing	SCE	LA Basin	21-May-13	10	Yes	INC	13	11:00	23:59	327.08	$0	$0	($11,352)	0	$0	$0	$0	$0	$0
192	RT	Unit Testing	SCE	LA Basin	22-May-13	490	Yes	INC	24	0:00	23:59	3646.78	$152,973	$54,154	($144,338)	1464	($79,120)	$0	$0	$0	$0
193	RT	Unit Testing	SCE	LA Basin	23-May-13	130-450	Yes	INC	22	0:00	21:59	5623.77	$0	$0	($169,228)	940	($53,156)	$0	$0	$0	$0
194	RT	Unit Testing	SCE	LA Basin	24-May-13	130-320	Yes	INC	10	12:10	21:59	1682.86	$0	$0	($93,687)	1626	($90,664)	$0	$0	$0	$0
195	RT	Unit Testing	SCE	N/A	13-May-13	147	No	INC	9	8:25	16:59	439.77	$0	$0	($21,608)	0	$0	$0	$0	$0	$0
196	RT	Unit Testing	SCE	N/A	14-May-13	48-96	No	DEC	4	12:55	15:26	-107.82	$0	$0	$2,887	-44	$0	$1,172	$0	$0	$0
197	RT	Unit Testing	SCE	N/A	14-May-13	0	No	INC	3	13:41	15:22	-26.06	$0	$0	$820	0	$0	$0	$0	$0	$0
198	RT	Unit Testing	SCE	N/A	15-May-13	48	No	DEC	1	14:25	14:39	-13.17	$0	$0	$442	0	$0	$0	$0	$0	$0
199	RT	Unit Testing	SCE	N/A	15-May-13	175-369	Yes	INC	17	7:15	23:59	3048.57	$497	$13	($176,638)	425	($29,497)	$0	$0	$0	$0
200	RT	Unit Testing	SCE	N/A	16-May-13	147-186	No	INC	24	0:00	23:59	4358.44	$0	$0	($110,704)	729	($18,871)	$0	$0	$0	$0
201	RT	Unit Testing	SCE	N/A	17-May-13	147	No	INC	24	0:00	23:59	3530.40	$0	$0	($62,402)	0	$0	$0	$0	$0	$0
202	RT	Unit Testing	SCE	N/A	20-May-13	147	No	INC	18	6:30	23:59	1150.05	$0	$0	($44,676)	0	($4)	$0	$0	$0	$0
203	RT	Unit Testing	SCE	N/A	22-May-13	180-380	No	INC	17	7:10	23:59	4665.03	$0	$0	($114,738)	572	($22,436)	$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	Startup Cost	CC6470	ED MWH (INC/DEC)	CC6470 INC	CC6470 DEC	CC6482	CC6488	CC6620
204	RT	Unit Testing	SCE	N/A	23-May-13	186-459	No	INC	23	1:10	23:59	4534.15	$0	$0	($125,844)	920	($27,459)	$0	$0	$0	$0
205	RT	Unit Testing	SCE	N/A	24-May-13	180-186	No	INC	24	0:00	23:59	3401.29	$0	$0	($118,195)	386	($13,022)	$0	$0	$0	$0
206	RT	Unit Testing	SCE	N/A	25-May-13	180	No	INC	24	0:00	23:59	4158.89	$0	$0	($88,693)	628	($24,203)	$0	$0	$0	$0
207	RT	Unit Testing	SCE	N/A	26-May-13	147-190	No	INC	24	0:00	23:59	3413.32	$0	$0	($61,041)	390	($7,344)	$0	$0	$0	$0
208	RT	Unit Testing	SDG&E	San Diego-IV	24-May-13	186	No	INC	1	13:35	13:59	0.00	$0	$0	$0	0	$0	$0	$0	$0	$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[7]. 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 2, 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

[7] 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 6:00 through 11:00 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 7:00 through 9:00 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	1800	0	0	0	0	0
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 a 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 8928 five-minute intervals in May, this resource was issued exceptional dispatch instructions in 311 five-minute intervals. This resource was eligible to set the LMP in 289 intervals. Resource calculated LMP was larger than the market LMP in 213 of the 289 intervals. In the 213 intervals, the average increase in five minute LMP was $20.33/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 $20.33/MWh. Note that 213 five minute intervals are approximately 2.39 percent of the total 8928 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 8928 five minute intervals, this resource was issued an exceptional dispatch instruction in 1123 five minute intervals. This resource was eligible to set the LMP in all 1123 intervals. Out of the 1123 intervals, resource calculated LMP was larger than the market LMP in 1117 intervals. In the 1117 intervals, the average increase in five minute LMP was $51.12/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 $51.12/MWh. The 1117 five minute intervals account for approximately 12.51 percent of the total 8928 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	6-May-13	24	10	$36.45	No	$44.12	$7.67
2	6-May-13	24	11	$36.19	No	$44.12	$7.93
3	6-May-13	24	12	$33.67	No	$44.12	$10.45
4	7-May-13	1	1	$36.37	No	$44.12	$7.75
5	7-May-13	1	2	$34.71	No	$44.12	$9.41
6	7-May-13	1	3	$34.52	No	$44.12	$9.60
7	7-May-13	1	4	$34.04	No	$44.12	$10.08
8	7-May-13	1	5	$43.19	No	$44.12	$0.93
9	7-May-13	1	6	$42.56	No	$44.12	$1.56
10	7-May-13	1	7	$34.65	No	$44.12	$9.47
11	7-May-13	1	8	$31.26	No	$44.12	$12.86
12	7-May-13	1	9	$30.73	No	$44.12	$13.39
13	7-May-13	1	10	$34.04	No	$44.12	$10.08
14	7-May-13	1	11	$34.04	No	$44.12	$10.08
15	7-May-13	1	12	$32.89	No	$44.12	$11.23
16	10-May-13	14	10	$36.21	Yes	$44.12	$7.91
17	10-May-13	14	11	$35.39	Yes	$44.12	$8.73
18	10-May-13	14	12	$35.39	Yes	$44.12	$8.73
19	10-May-13	15	1	$38.41	Yes	$44.12	$5.71
20	10-May-13	15	2	$35.49	Yes	$44.12	$8.63
21	10-May-13	15	3	$38.41	Yes	$44.12	$5.71
22	10-May-13	15	4	$40.44	Yes	$44.12	$3.68
23	10-May-13	15	5	$42.03	Yes	$44.12	$2.09
24	10-May-13	15	6	$42.90	Yes	$44.12	$1.22
25	10-May-13	15	7	$43.18	Yes	$44.12	$0.94
26	10-May-13	15	8	$43.18	Yes	$44.12	$0.94
27	10-May-13	15	9	$43.18	Yes	$44.12	$0.94
28	10-May-13	15	10	$48.51	Yes	$44.12	($4.39)
29	10-May-13	15	11	$42.90	Yes	$44.12	$1.22
30	10-May-13	15	12	$45.98	Yes	$44.12	($1.86)
31	10-May-13	16	1	$50.44	Yes	$44.12	($6.32)
32	10-May-13	16	2	$51.30	Yes	$44.12	($7.18)
33	10-May-13	16	3	$50.44	Yes	$44.12	($6.32)
34	10-May-13	16	4	$44.83	Yes	$44.12	($0.71)
35	10-May-13	16	5	$34.47	Yes	$44.12	$9.65
36	10-May-13	16	6	$34.90	Yes	$44.12	$9.22
37	10-May-13	16	7	$35.21	Yes	$44.12	$8.91
38	10-May-13	16	8	$34.17	Yes	$44.12	$9.95
39	10-May-13	16	9	$35.21	Yes	$44.12	$8.91
40	10-May-13	16	10	$32.98	Yes	$44.12	$11.14
41	10-May-13	16	11	$32.42	Yes	$44.12	$11.70
42	10-May-13	16	12	$32.43	Yes	$44.12	$11.69

Number	Trade Date	Trade Hour	Interval	Market LMP	Eligible Flag	Calculated LMP	Change in LMP
43	10-May-13	17	1	$32.27	Yes	$44.12	$11.85
44	10-May-13	17	2	$32.61	Yes	$44.12	$11.51
45	10-May-13	17	3	$33.24	Yes	$44.12	$10.88
46	10-May-13	17	4	$37.30	Yes	$44.12	$6.82
47	10-May-13	17	5	$37.30	Yes	$44.12	$6.82
48	10-May-13	17	6	$35.06	Yes	$44.12	$9.06
49	10-May-13	17	7	$33.24	Yes	$44.12	$10.88
50	10-May-13	17	8	$33.24	Yes	$44.12	$10.88
51	10-May-13	17	9	$34.25	Yes	$44.12	$9.87
52	10-May-13	17	10	$35.21	Yes	$44.12	$8.91
53	10-May-13	17	11	$37.67	Yes	$44.12	$6.45
54	10-May-13	17	12	$37.67	Yes	$44.12	$6.45
55	10-May-13	18	1	$45.65	Yes	$44.12	($1.53)
56	10-May-13	18	2	$49.94	Yes	$44.12	($5.82)
57	10-May-13	18	3	$49.94	Yes	$44.12	($5.82)
58	10-May-13	18	4	$50.76	Yes	$44.12	($6.64)
59	10-May-13	18	5	$49.44	Yes	$44.12	($5.32)
60	10-May-13	18	6	$49.44	Yes	$44.12	($5.32)
61	10-May-13	18	7	$43.48	Yes	$44.12	$0.64
62	10-May-13	18	8	$43.48	Yes	$44.12	$0.64
63	10-May-13	18	9	$38.50	Yes	$44.12	$5.62
64	10-May-13	18	10	$38.34	Yes	$44.12	$5.78
65	10-May-13	18	11	$38.31	Yes	$44.12	$5.81
66	10-May-13	18	12	$38.77	Yes	$44.12	$5.35
67	10-May-13	19	1	$38.42	Yes	$44.12	$5.70
68	10-May-13	19	2	$50.34	Yes	$44.12	($6.22)
69	10-May-13	19	3	$51.02	Yes	$44.12	($6.90)
70	10-May-13	19	4	$51.03	Yes	$44.12	($6.91)
71	10-May-13	19	5	$51.03	Yes	$44.12	($6.91)
72	10-May-13	19	6	$50.95	Yes	$44.12	($6.83)
73	10-May-13	19	7	$51.14	Yes	$44.12	($7.02)
74	10-May-13	19	8	$50.65	Yes	$44.12	($6.53)
75	10-May-13	19	9	$50.42	Yes	$44.12	($6.30)
76	10-May-13	19	10	$49.97	Yes	$44.12	($5.85)
77	10-May-13	19	11	$43.60	Yes	$44.12	$0.52
78	10-May-13	19	12	$38.42	Yes	$44.12	$5.70
79	10-May-13	20	1	$33.91	Yes	$44.12	$10.21
80	10-May-13	20	2	$33.91	Yes	$44.12	$10.21
81	10-May-13	20	3	$37.27	Yes	$44.12	$6.85
82	10-May-13	20	4	$37.89	Yes	$44.12	$6.23
83	10-May-13	20	5	$37.89	Yes	$44.12	$6.23
84	10-May-13	20	6	$43.07	Yes	$44.12	$1.05
85	10-May-13	20	7	$37.11	Yes	$44.12	$7.01
86	10-May-13	20	8	$37.11	Yes	$44.12	$7.01
87	10-May-13	20	9	$37.11	Yes	$44.12	$7.01

Number	Trade Date	Trade Hour	Interval	Market LMP	Eligible Flag	Calculated LMP	Change in LMP
88	10-May-13	20	10	$37.56	Yes	$44.12	$6.56
89	10-May-13	20	11	$37.56	Yes	$44.12	$6.56
90	10-May-13	20	12	$33.74	Yes	$44.12	$10.38
91	10-May-13	21	1	$31.98	Yes	$44.12	$12.14
92	10-May-13	21	2	$32.62	Yes	$44.12	$11.50
93	10-May-13	21	3	$33.07	Yes	$44.12	$11.05
94	10-May-13	21	4	$34.02	Yes	$44.12	$10.10
95	10-May-13	21	5	$42.98	Yes	$44.12	$1.14
96	10-May-13	21	6	$43.00	Yes	$44.12	$1.12
97	10-May-13	21	7	$46.35	Yes	$44.12	($2.23)
98	10-May-13	21	8	$50.93	Yes	$44.12	($6.81)
99	10-May-13	21	9	$50.25	Yes	$44.12	($6.13)
100	10-May-13	21	10	$47.23	Yes	$44.12	($3.11)
101	10-May-13	21	11	$47.23	Yes	$44.12	($3.11)
102	10-May-13	21	12	$47.21	Yes	$44.12	($3.09)
103	10-May-13	22	1	$59.12	Yes	$44.12	($15.00)
104	10-May-13	22	2	$53.82	Yes	$44.12	($9.70)
105	10-May-13	22	3	$51.53	Yes	$44.12	($7.41)
106	10-May-13	22	4	$50.54	Yes	$44.12	($6.42)
107	10-May-13	22	5	$50.13	Yes	$44.12	($6.01)
108	10-May-13	22	6	$43.42	Yes	$44.12	$0.70
109	10-May-13	22	7	$43.24	Yes	$44.12	$0.88
110	10-May-13	22	8	$38.21	Yes	$44.12	$5.91
111	10-May-13	22	9	$38.21	Yes	$44.12	$5.91
112	10-May-13	22	10	$29.23	Yes	$44.12	$14.89
113	10-May-13	22	11	$33.03	Yes	$44.12	$11.09
114	10-May-13	22	12	$29.84	Yes	$44.12	$14.28
115	12-May-13	12	4	$37.35	Yes	$85.94	$48.59
116	12-May-13	12	5	$33.98	Yes	$85.94	$51.96
117	12-May-13	12	6	$35.67	Yes	$85.94	$50.27
118	12-May-13	12	7	$33.80	Yes	$85.94	$52.14
119	12-May-13	12	8	$33.80	Yes	$85.94	$52.14
120	12-May-13	12	9	$34.70	Yes	$85.94	$51.24
121	12-May-13	12	10	$37.05	Yes	$85.94	$48.89
122	12-May-13	12	11	$40.60	Yes	$85.94	$45.34
123	12-May-13	12	12	$39.57	Yes	$85.94	$46.37
124	12-May-13	13	1	$35.32	Yes	$85.94	$50.62
125	12-May-13	13	2	$38.21	Yes	$85.94	$47.73
126	12-May-13	13	3	$41.71	Yes	$85.94	$44.23
127	12-May-13	13	4	$39.83	Yes	$85.94	$46.11
128	12-May-13	13	5	$37.09	Yes	$85.94	$48.85
129	12-May-13	13	6	$38.25	Yes	$85.94	$47.69
130	12-May-13	13	7	$34.33	Yes	$85.94	$51.61
131	12-May-13	13	8	$35.21	Yes	$85.94	$50.73
132	12-May-13	13	9	$34.33	Yes	$85.94	$51.61

Number	Trade Date	Trade Hour	Interval	Market LMP	Eligible Flag	Calculated LMP	Change in LMP
133	12-May-13	13	10	$35.05	Yes	$85.94	$50.89
134	12-May-13	13	11	$35.05	Yes	$85.94	$50.89
135	12-May-13	13	12	$35.56	Yes	$85.94	$50.38
136	12-May-13	14	1	$29.44	Yes	$85.94	$56.50
137	12-May-13	14	2	$31.46	Yes	$85.94	$54.48
138	12-May-13	14	3	$32.36	Yes	$85.94	$53.58
139	12-May-13	14	4	$32.04	Yes	$85.94	$53.90
140	12-May-13	14	5	$32.12	Yes	$85.94	$53.82
141	12-May-13	14	6	$32.91	Yes	$85.94	$53.03
142	12-May-13	14	7	$32.29	Yes	$85.94	$53.65
143	12-May-13	14	8	$33.62	Yes	$85.94	$52.32
144	12-May-13	14	9	$34.16	Yes	$85.94	$51.78
145	12-May-13	14	10	$33.84	Yes	$85.94	$52.10
146	12-May-13	14	11	$34.98	Yes	$85.94	$50.96
147	12-May-13	14	12	$35.99	Yes	$85.94	$49.95
148	12-May-13	15	1	$35.79	Yes	$85.94	$50.15
149	12-May-13	15	2	$34.53	Yes	$85.94	$51.41
150	12-May-13	15	3	$34.53	Yes	$85.94	$51.41
151	12-May-13	15	4	$33.60	Yes	$85.94	$52.34
152	12-May-13	15	5	$34.29	Yes	$85.94	$51.65
153	12-May-13	15	6	$34.75	Yes	$85.94	$51.19
154	12-May-13	15	7	$35.98	Yes	$85.94	$49.96
155	12-May-13	15	8	$35.98	Yes	$85.94	$49.96
156	12-May-13	15	9	$36.90	Yes	$85.94	$49.04
157	12-May-13	15	10	$44.48	Yes	$85.94	$41.46
158	12-May-13	15	11	$43.62	Yes	$85.94	$42.32
159	12-May-13	15	12	$43.62	Yes	$85.94	$42.32
160	12-May-13	16	1	$39.18	Yes	$46.82	$7.64
161	12-May-13	16	2	$39.18	Yes	$46.82	$7.64
162	12-May-13	16	3	$43.81	Yes	$46.82	$3.01
163	12-May-13	16	4	$44.69	Yes	$46.82	$2.13
164	12-May-13	16	5	$46.93	Yes	$46.82	($0.11)
165	12-May-13	16	6	$46.93	Yes	$46.82	($0.11)
166	12-May-13	16	7	$49.90	Yes	$46.82	($3.08)
167	12-May-13	16	8	$50.30	Yes	$46.82	($3.48)
168	12-May-13	16	9	$50.71	Yes	$46.82	($3.89)
169	12-May-13	16	10	$51.17	Yes	$46.82	($4.35)
170	12-May-13	16	11	$51.57	Yes	$46.82	($4.75)
171	12-May-13	16	12	$51.98	Yes	$46.82	($5.16)
172	12-May-13	17	1	$50.69	Yes	$46.82	($3.87)
173	12-May-13	17	2	$50.98	Yes	$46.82	($4.16)
174	12-May-13	17	3	$51.23	Yes	$46.82	($4.41)
175	12-May-13	17	4	$51.82	Yes	$46.82	($5.00)
176	12-May-13	17	5	$52.23	Yes	$46.82	($5.41)
177	12-May-13	17	6	$52.63	Yes	$46.82	($5.81)

Number	Trade Date	Trade Hour	Interval	Market LMP	Eligible Flag	Calculated LMP	Change in LMP
178	12-May-13	17	7	$53.13	Yes	$46.82	($6.31)
179	12-May-13	17	8	$53.65	Yes	$46.82	($6.83)
180	12-May-13	17	9	$53.65	Yes	$46.82	($6.83)
181	12-May-13	17	10	$55.59	Yes	$46.82	($8.77)
182	12-May-13	17	11	$53.00	Yes	$46.82	($6.18)
183	12-May-13	17	12	$52.28	Yes	$46.82	($5.46)
184	12-May-13	17	12	$52.28	Yes	$85.94	$33.66
185	12-May-13	18	1	$56.75	Yes	$85.94	$29.19
186	12-May-13	18	2	$54.71	Yes	$85.94	$31.23
187	12-May-13	18	3	$52.25	Yes	$85.94	$33.69
188	12-May-13	18	4	$47.35	Yes	$85.94	$38.59
189	12-May-13	18	5	$49.96	Yes	$85.94	$35.98
190	12-May-13	18	6	$49.96	Yes	$85.94	$35.98
191	12-May-13	18	7	$52.24	Yes	$85.94	$33.70
192	12-May-13	18	8	$52.13	Yes	$85.94	$33.81
193	12-May-13	18	9	$52.13	Yes	$85.94	$33.81
194	12-May-13	18	10	$46.80	Yes	$85.94	$39.14
195	12-May-13	18	11	$50.50	Yes	$85.94	$35.44
196	12-May-13	18	12	$50.50	Yes	$85.94	$35.44
197	12-May-13	19	1	$52.41	Yes	$85.94	$33.53
198	12-May-13	19	2	$52.83	Yes	$85.94	$33.11
199	12-May-13	19	3	$52.83	Yes	$85.94	$33.11
200	12-May-13	19	4	$52.54	Yes	$85.94	$33.40
201	12-May-13	19	5	$52.76	Yes	$85.94	$33.18
202	12-May-13	19	6	$63.06	Yes	$85.94	$22.88
203	12-May-13	19	7	$55.81	Yes	$85.94	$30.13
204	12-May-13	19	8	$52.35	Yes	$85.94	$33.59
205	12-May-13	19	9	$52.35	Yes	$85.94	$33.59
206	12-May-13	19	10	$51.80	Yes	$85.94	$34.14
207	12-May-13	19	11	$52.86	Yes	$85.94	$33.08
208	12-May-13	19	12	$104.31	Yes	$85.94	($18.37)
209	12-May-13	20	1	$61.45	Yes	$46.82	($14.63)
210	12-May-13	20	2	$65.64	Yes	$46.82	($18.82)
211	12-May-13	20	3	$61.45	Yes	$46.82	($14.63)
212	12-May-13	20	4	$52.02	Yes	$46.82	($5.20)
213	12-May-13	20	5	$55.18	Yes	$46.82	($8.36)
214	12-May-13	20	6	$49.67	Yes	$46.82	($2.85)
215	12-May-13	20	7	$49.84	Yes	$46.82	($3.02)
216	12-May-13	20	8	$50.24	Yes	$46.82	($3.42)
217	12-May-13	20	9	$61.95	Yes	$46.82	($15.13)
218	12-May-13	20	10	$67.24	Yes	$46.82	($20.42)
219	12-May-13	20	11	$52.55	Yes	$46.82	($5.73)
220	12-May-13	20	12	$50.34	Yes	$46.82	($3.52)
221	13-May-13	15	8	$317.74	Yes	$80.98	($236.76)
222	13-May-13	15	9	$326.17	Yes	$80.98	($245.19)

Number	Trade Date	Trade Hour	Interval	Market LMP	Eligible Flag	Calculated LMP	Change in LMP
223	13-May-13	15	10	$512.30	Yes	$80.98	($431.32)
224	13-May-13	15	11	$318.98	Yes	$80.98	($238.00)
225	13-May-13	15	12	$74.61	Yes	$80.98	$6.37
226	13-May-13	16	1	$392.34	Yes	$80.98	($311.36)
227	13-May-13	16	2	$81.25	Yes	$80.98	($0.27)
228	13-May-13	16	3	$49.67	Yes	$80.98	$31.31
229	13-May-13	16	4	$45.46	Yes	$80.98	$35.52
230	13-May-13	16	5	$42.04	Yes	$80.98	$38.94
231	13-May-13	16	6	$50.30	Yes	$62.45	$12.15
232	13-May-13	16	6	$50.30	Yes	$80.98	$30.68
233	13-May-13	16	7	$43.71	Yes	$62.45	$18.74
234	13-May-13	16	7	$43.71	Yes	$80.98	$37.27
235	13-May-13	16	8	$51.28	Yes	$62.45	$11.17
236	13-May-13	16	8	$51.28	Yes	$80.98	$29.70
237	13-May-13	16	9	$51.13	Yes	$62.45	$11.32
238	13-May-13	16	9	$51.13	Yes	$80.98	$29.85
239	13-May-13	16	10	$42.96	Yes	$62.45	$19.49
240	13-May-13	16	10	$42.96	Yes	$80.98	$38.02
241	13-May-13	16	11	$42.18	Yes	$62.45	$20.27
242	13-May-13	16	11	$42.18	Yes	$80.98	$38.80
243	13-May-13	16	12	$42.96	Yes	$62.45	$19.49
244	13-May-13	16	12	$42.96	Yes	$80.98	$38.02
245	13-May-13	17	3	$61.40	Yes	$62.45	$1.05
246	13-May-13	17	4	$50.35	Yes	$62.45	$12.10
247	13-May-13	17	5	$42.28	Yes	$62.45	$20.17
248	13-May-13	17	6	$42.54	Yes	$62.45	$19.91
249	13-May-13	17	7	$34.85	Yes	$62.45	$27.60
250	13-May-13	17	8	$35.10	Yes	$62.45	$27.35
251	13-May-13	17	9	$35.72	Yes	$62.45	$26.73
252	13-May-13	17	10	$35.73	Yes	$62.45	$26.72
253	13-May-13	17	11	$37.47	Yes	$62.45	$24.98
254	13-May-13	17	12	$47.07	Yes	$62.45	$15.38
255	14-May-13	19	5	$35.84	Yes	$44.12	$8.28
256	14-May-13	19	6	$36.26	Yes	$44.12	$7.86
257	14-May-13	19	7	$41.35	Yes	$44.12	$2.77
258	14-May-13	19	8	$41.30	Yes	$44.12	$2.82
259	14-May-13	19	9	$39.78	Yes	$44.12	$4.34
260	14-May-13	19	10	$42.37	Yes	$44.12	$1.75
261	14-May-13	19	11	$42.39	Yes	$44.12	$1.73
262	14-May-13	19	12	$40.85	Yes	$44.12	$3.27
263	14-May-13	20	1	$34.82	Yes	$44.12	$9.30
264	14-May-13	20	2	$42.05	Yes	$44.12	$2.07
265	14-May-13	20	3	$42.05	Yes	$44.12	$2.07
266	14-May-13	20	4	$42.97	Yes	$44.12	$1.15
267	14-May-13	20	5	$42.98	Yes	$44.12	$1.14

Number	Trade Date	Trade Hour	Interval	Market LMP	Eligible Flag	Calculated LMP	Change in LMP
268	14-May-13	20	6	$42.98	Yes	$44.12	$1.14
269	14-May-13	20	7	$43.02	Yes	$44.12	$1.10
270	14-May-13	20	8	$43.02	Yes	$44.12	$1.10
271	14-May-13	20	9	$43.01	Yes	$44.12	$1.11
272	14-May-13	20	10	$43.06	Yes	$44.12	$1.06
273	14-May-13	20	11	$43.06	Yes	$44.12	$1.06
274	14-May-13	20	12	$43.06	Yes	$44.12	$1.06
275	14-May-13	21	1	$42.99	Yes	$44.12	$1.13
276	14-May-13	21	2	$42.98	Yes	$44.12	$1.14
277	14-May-13	21	3	$42.98	Yes	$44.12	$1.14
278	14-May-13	21	4	$43.16	Yes	$44.12	$0.96
279	14-May-13	21	5	$43.15	Yes	$44.12	$0.97
280	14-May-13	21	6	$43.14	Yes	$44.12	$0.98
281	14-May-13	21	7	$45.01	Yes	$44.12	($0.89)
282	14-May-13	21	8	$44.82	Yes	$44.12	($0.70)
283	14-May-13	21	9	$43.43	Yes	$44.12	$0.69
284	14-May-13	21	10	$43.23	Yes	$44.12	$0.89
285	14-May-13	21	11	$43.23	Yes	$44.12	$0.89
286	14-May-13	21	12	$43.23	Yes	$44.12	$0.89
287	14-May-13	22	1	$42.70	Yes	$44.12	$1.42
288	14-May-13	22	2	$42.69	Yes	$44.12	$1.43
289	14-May-13	22	3	$42.69	Yes	$44.12	$1.43
290	14-May-13	22	4	$40.86	Yes	$44.12	$3.26
291	14-May-13	22	5	$39.79	Yes	$44.12	$4.33
292	14-May-13	22	6	$41.41	Yes	$44.12	$2.71
293	14-May-13	22	7	$43.42	Yes	$44.12	$0.70
294	14-May-13	22	8	$43.42	Yes	$44.12	$0.70
295	14-May-13	22	9	$43.46	Yes	$44.12	$0.66
296	14-May-13	22	10	$43.15	Yes	$44.12	$0.97
297	14-May-13	22	11	$43.16	Yes	$44.12	$0.96
298	14-May-13	22	12	$43.16	Yes	$44.12	$0.96
299	14-May-13	23	1	$50.55	Yes	$44.12	($6.43)
300	14-May-13	23	2	$48.19	Yes	$44.12	($4.07)
301	14-May-13	23	3	$46.79	Yes	$44.12	($2.67)
302	14-May-13	23	4	$36.67	Yes	$44.12	$7.45
303	14-May-13	23	5	$35.44	Yes	$44.12	$8.68
304	14-May-13	23	6	$35.40	Yes	$44.12	$8.72
305	16-May-13	24	6	$34.48	No	$44.12	$9.64
306	16-May-13	24	7	$32.85	No	$44.12	$11.27
307	16-May-13	24	8	$30.11	No	$44.12	$14.01
308	16-May-13	24	9	$29.55	No	$44.12	$14.57
309	16-May-13	24	10	$23.86	No	$44.12	$20.26
310	16-May-13	24	11	$0.01	No	$44.12	$44.11
311	16-May-13	24	12	($34.13)	No	$44.12	$78.25

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	15-May-13	7	1	($31.93)	Yes	$95.57	$127.50
2	15-May-13	7	2	($30.33)	Yes	$95.57	$125.90
3	15-May-13	7	3	($30.33)	Yes	$95.57	$125.90
4	15-May-13	7	4	($32.18)	Yes	$95.57	$127.75
5	15-May-13	7	5	($4.19)	Yes	$95.57	$99.76
6	15-May-13	7	6	$0.01	Yes	$95.57	$95.56
7	15-May-13	7	7	$0.01	Yes	$95.57	$95.56
8	15-May-13	7	8	$27.89	Yes	$95.57	$67.68
9	15-May-13	7	9	$34.28	Yes	$95.57	$61.29
10	15-May-13	7	10	$33.28	Yes	$95.57	$62.29
11	15-May-13	7	11	$33.28	Yes	$95.57	$62.29
12	15-May-13	7	12	$30.84	Yes	$95.57	$64.73
13	15-May-13	8	1	$0.01	Yes	$95.57	$95.56
14	15-May-13	8	2	($30.31)	Yes	$95.57	$125.88
15	15-May-13	8	3	($30.89)	Yes	$95.57	$126.46
16	15-May-13	8	4	($4.24)	Yes	$95.57	$99.81
17	15-May-13	8	5	$0.01	Yes	$95.57	$95.56
18	15-May-13	8	6	$16.05	Yes	$95.57	$79.52
19	15-May-13	8	7	$30.64	Yes	$95.57	$64.93
20	15-May-13	8	8	$21.93	Yes	$95.57	$73.64
21	15-May-13	8	9	$26.15	Yes	$95.57	$69.42
22	15-May-13	8	10	($4.21)	Yes	$95.57	$99.78
23	15-May-13	8	11	$0.01	Yes	$95.57	$95.56
24	15-May-13	8	12	$0.01	Yes	$95.57	$95.56
25	15-May-13	9	1	$0.01	Yes	$95.57	$95.56
26	15-May-13	9	2	($32.77)	Yes	$95.57	$128.34
27	15-May-13	9	3	($71.58)	Yes	$95.57	$167.15
28	15-May-13	9	4	($71.43)	Yes	$95.57	$167.00
29	15-May-13	9	5	($71.43)	Yes	$95.57	$167.00
30	15-May-13	9	6	($71.43)	Yes	$95.57	$167.00
31	15-May-13	9	7	($79.70)	Yes	$95.57	$175.27
32	15-May-13	9	8	($79.70)	Yes	$95.57	$175.27
33	15-May-13	9	9	($79.70)	Yes	$95.57	$175.27
34	15-May-13	9	10	($79.63)	Yes	$95.57	$175.20
35	15-May-13	9	11	($30.66)	Yes	$95.57	$126.23
36	15-May-13	9	12	($30.74)	Yes	$95.57	$126.31
37	15-May-13	10	1	($30.74)	Yes	$95.57	$126.31
38	15-May-13	10	2	($30.00)	Yes	$95.57	$125.57
39	15-May-13	10	3	($30.06)	Yes	$95.57	$125.63
40	15-May-13	10	4	($30.06)	Yes	$95.57	$125.63
41	15-May-13	10	5	($30.06)	Yes	$95.57	$125.63

Number	Trade Date	Trade Hour	Interval	Market LMP	Eligible Flag	Calculated LMP	Change in LMP
42	15-May-13	10	6	($30.06)	Yes	$95.57	$125.63
43	15-May-13	10	7	($79.95)	Yes	$95.57	$175.52
44	15-May-13	10	8	($79.95)	Yes	$95.57	$175.52
45	15-May-13	10	9	($79.86)	Yes	$95.57	$175.43
46	15-May-13	10	10	($80.72)	Yes	$95.57	$176.29
47	15-May-13	10	11	($80.92)	Yes	$95.57	$176.49
48	15-May-13	10	12	($29.99)	Yes	$95.57	$125.56
49	15-May-13	11	1	$0.00	Yes	$95.57	$95.57
50	15-May-13	11	2	$0.00	Yes	$95.57	$95.57
51	15-May-13	11	3	$0.00	Yes	$95.57	$95.57
52	15-May-13	11	4	$0.00	Yes	$95.57	$95.57
53	15-May-13	11	5	$19.77	Yes	$95.57	$75.80
54	15-May-13	11	6	$23.86	Yes	$95.57	$71.71
55	15-May-13	11	7	$25.18	Yes	$95.57	$70.39
56	15-May-13	11	8	$22.13	Yes	$95.57	$73.44
57	15-May-13	11	9	$24.89	Yes	$95.57	$70.68
58	15-May-13	11	10	$31.49	Yes	$95.57	$64.08
59	15-May-13	11	11	$31.47	Yes	$95.57	$64.10
60	15-May-13	11	12	$25.64	Yes	$95.57	$69.93
61	15-May-13	12	1	$29.15	Yes	$95.57	$66.42
62	15-May-13	12	2	$29.15	Yes	$95.57	$66.42
63	15-May-13	12	3	$31.49	Yes	$95.57	$64.08
64	15-May-13	12	4	$31.61	Yes	$95.57	$63.96
65	15-May-13	12	5	$31.61	Yes	$95.57	$63.96
66	15-May-13	12	6	$31.61	Yes	$95.57	$63.96
67	15-May-13	12	7	$31.46	Yes	$95.57	$64.11
68	15-May-13	12	8	$31.46	Yes	$95.57	$64.11
69	15-May-13	12	9	$32.86	Yes	$95.57	$62.71
70	15-May-13	12	10	$29.06	Yes	$95.57	$66.51
71	15-May-13	12	11	$29.06	Yes	$95.57	$66.51
72	15-May-13	12	12	$28.85	Yes	$95.57	$66.72
73	15-May-13	13	1	$29.26	Yes	$95.57	$66.31
74	15-May-13	13	2	$28.94	Yes	$95.57	$66.63
75	15-May-13	13	3	$29.84	Yes	$95.57	$65.73
76	15-May-13	13	4	$29.43	Yes	$95.57	$66.14
77	15-May-13	13	5	$32.40	Yes	$95.57	$63.17
78	15-May-13	13	6	$34.32	Yes	$95.57	$61.25
79	15-May-13	13	7	$33.73	Yes	$95.57	$61.84
80	15-May-13	13	8	$33.59	Yes	$95.57	$61.98
81	15-May-13	13	9	$33.59	Yes	$95.57	$61.98
82	15-May-13	13	10	$33.56	Yes	$95.57	$62.01
83	15-May-13	13	11	$32.85	Yes	$95.57	$62.72
84	15-May-13	13	12	$30.41	Yes	$95.57	$65.16
85	15-May-13	14	1	$27.82	Yes	$95.57	$67.75
86	15-May-13	14	2	$28.39	Yes	$95.57	$67.18

Number	Trade Date	Trade Hour	Interval	Market LMP	Eligible Flag	Calculated LMP	Change in LMP
87	15-May-13	14	3	$29.28	Yes	$95.57	$66.29
88	15-May-13	14	4	$29.32	Yes	$95.57	$66.25
89	15-May-13	14	5	$30.46	Yes	$95.57	$65.11
90	15-May-13	14	6	$32.08	Yes	$95.57	$63.49
91	15-May-13	14	7	$33.54	Yes	$95.57	$62.03
92	15-May-13	14	8	$34.11	Yes	$95.57	$61.46
93	15-May-13	14	9	$33.54	Yes	$95.57	$62.03
94	15-May-13	14	10	$34.53	Yes	$95.57	$61.04
95	15-May-13	14	11	$47.94	Yes	$95.57	$47.63
96	15-May-13	14	12	$166.73	Yes	$95.57	($71.16)
97	15-May-13	15	1	$1,399.84	Yes	$95.57	($1,304.27)
98	15-May-13	15	2	$1,399.84	Yes	$95.57	($1,304.27)
99	15-May-13	15	3	$1,399.84	Yes	$95.57	($1,304.27)
100	15-May-13	15	4	$1,598.93	Yes	$95.57	($1,503.36)
101	15-May-13	15	5	$32.20	Yes	$95.57	$63.37
102	15-May-13	15	6	$32.17	Yes	$95.57	$63.40
103	15-May-13	15	7	$33.90	Yes	$95.57	$61.67
104	15-May-13	15	8	$35.74	Yes	$95.57	$59.83
105	15-May-13	15	9	$35.18	Yes	$95.57	$60.39
106	15-May-13	15	10	$31.90	Yes	$95.57	$63.67
107	15-May-13	15	11	$31.90	Yes	$95.57	$63.67
108	15-May-13	15	12	$31.90	Yes	$95.57	$63.67
109	15-May-13	16	1	$35.94	Yes	$95.57	$59.63
110	15-May-13	16	2	$36.31	Yes	$95.57	$59.26
111	15-May-13	16	3	$36.33	Yes	$95.57	$59.24
112	15-May-13	16	4	$45.25	Yes	$95.57	$50.32
113	15-May-13	16	5	$54.85	Yes	$95.57	$40.72
114	15-May-13	16	6	$46.57	Yes	$95.57	$49.00
115	15-May-13	16	7	$36.35	Yes	$95.57	$59.22
116	15-May-13	16	8	$36.32	Yes	$95.57	$59.25
117	15-May-13	16	9	$36.31	Yes	$95.57	$59.26
118	15-May-13	16	10	$54.94	Yes	$95.57	$40.63
119	15-May-13	16	11	$55.08	Yes	$95.57	$40.49
120	15-May-13	16	12	$36.29	Yes	$95.57	$59.28
121	15-May-13	17	1	$35.39	Yes	$52.64	$17.25
122	15-May-13	17	2	$34.86	Yes	$52.64	$17.78
123	15-May-13	17	3	$33.45	Yes	$52.64	$19.19
124	15-May-13	17	4	$33.50	Yes	$52.64	$19.14
125	15-May-13	17	5	$32.48	Yes	$52.64	$20.16
126	15-May-13	17	6	$32.39	Yes	$52.64	$20.25
127	15-May-13	17	7	$35.04	Yes	$52.64	$17.60
128	15-May-13	17	8	$34.82	Yes	$52.64	$17.82
129	15-May-13	17	9	$36.20	Yes	$52.64	$16.44
130	15-May-13	17	10	$35.01	Yes	$52.64	$17.63
131	15-May-13	17	11	$35.01	Yes	$52.64	$17.63

Number	Trade Date	Trade Hour	Interval	Market LMP	Eligible Flag	Calculated LMP	Change in LMP
132	15-May-13	17	12	$36.22	Yes	$52.64	$16.42
133	15-May-13	18	1	$34.12	Yes	$95.57	$61.45
134	15-May-13	18	2	$34.73	Yes	$95.57	$60.84
135	15-May-13	18	3	$35.68	Yes	$95.57	$59.89
136	15-May-13	18	4	$34.74	Yes	$95.57	$60.83
137	15-May-13	18	5	$34.69	Yes	$95.57	$60.88
138	15-May-13	18	6	$34.69	Yes	$95.57	$60.88
139	15-May-13	18	7	$34.10	Yes	$95.57	$61.47
140	15-May-13	18	8	$34.22	Yes	$95.57	$61.35
141	15-May-13	18	9	$34.22	Yes	$95.57	$61.35
142	15-May-13	18	10	$31.06	Yes	$95.57	$64.51
143	15-May-13	18	11	$31.58	Yes	$95.57	$63.99
144	15-May-13	18	12	$29.09	Yes	$95.57	$66.48
145	15-May-13	19	1	$31.04	Yes	$52.64	$21.60
146	15-May-13	19	2	$23.22	Yes	$52.64	$29.42
147	15-May-13	19	3	$23.69	Yes	$52.64	$28.95
148	15-May-13	19	4	$23.22	Yes	$52.64	$29.42
149	15-May-13	19	5	$23.69	Yes	$52.64	$28.95
150	15-May-13	19	6	$26.50	Yes	$52.64	$26.14
151	15-May-13	19	7	$31.09	Yes	$52.64	$21.55
152	15-May-13	19	8	$31.09	Yes	$52.64	$21.55
153	15-May-13	19	9	$31.09	Yes	$52.64	$21.55
154	15-May-13	19	10	$31.04	Yes	$52.64	$21.60
155	15-May-13	19	11	$31.04	Yes	$52.64	$21.60
156	15-May-13	19	12	$31.60	Yes	$52.64	$21.04
157	15-May-13	20	1	$29.81	Yes	$95.57	$65.76
158	15-May-13	20	2	$31.73	Yes	$95.57	$63.84
159	15-May-13	20	3	$31.32	Yes	$95.57	$64.25
160	15-May-13	20	4	$30.92	Yes	$95.57	$64.65
161	15-May-13	20	5	$31.76	Yes	$95.57	$63.81
162	15-May-13	20	6	$31.96	Yes	$95.57	$63.61
163	15-May-13	20	7	$31.83	Yes	$95.57	$63.74
164	15-May-13	20	8	$32.27	Yes	$95.57	$63.30
165	15-May-13	20	9	$32.35	Yes	$95.57	$63.22
166	15-May-13	20	10	$32.30	Yes	$95.57	$63.27
167	15-May-13	20	11	$32.26	Yes	$95.57	$63.31
168	15-May-13	20	12	$32.81	Yes	$95.57	$62.76
169	15-May-13	21	1	$32.25	Yes	$95.57	$63.32
170	15-May-13	21	2	$32.53	Yes	$95.57	$63.04
171	15-May-13	21	3	$32.74	Yes	$95.57	$62.83
172	15-May-13	21	4	$33.21	Yes	$95.57	$62.36
173	15-May-13	21	5	$33.32	Yes	$95.57	$62.25
174	15-May-13	21	6	$33.32	Yes	$95.57	$62.25
175	15-May-13	21	7	$34.73	Yes	$95.57	$60.84
176	15-May-13	21	8	$34.55	Yes	$95.57	$61.02

Number	Trade Date	Trade Hour	Interval	Market LMP	Eligible Flag	Calculated LMP	Change in LMP
177	15-May-13	21	9	$33.82	Yes	$95.57	$61.75
178	15-May-13	21	10	$34.19	Yes	$95.57	$61.38
179	15-May-13	21	11	$33.82	Yes	$95.57	$61.75
180	15-May-13	21	12	$33.82	Yes	$95.57	$61.75
181	15-May-13	22	1	$34.19	Yes	$95.57	$61.38
182	15-May-13	22	2	$35.13	Yes	$95.57	$60.44
183	15-May-13	22	3	$35.32	Yes	$95.57	$60.25
184	15-May-13	22	4	$33.84	Yes	$95.57	$61.73
185	15-May-13	22	5	$33.84	Yes	$95.57	$61.73
186	15-May-13	22	6	$34.48	Yes	$95.57	$61.09
187	15-May-13	22	7	$33.58	Yes	$95.57	$61.99
188	15-May-13	22	8	$33.07	Yes	$95.57	$62.50
189	15-May-13	22	9	$32.60	Yes	$95.57	$62.97
190	15-May-13	22	10	$34.47	Yes	$95.57	$61.10
191	15-May-13	22	11	$34.00	Yes	$95.57	$61.57
192	15-May-13	22	12	$32.86	Yes	$95.57	$62.71
193	15-May-13	23	1	$48.38	Yes	$95.57	$47.19
194	15-May-13	23	2	$48.19	Yes	$95.57	$47.38
195	15-May-13	23	3	$34.90	Yes	$95.57	$60.67
196	15-May-13	23	4	$33.81	Yes	$95.57	$61.76
197	15-May-13	23	5	$33.69	Yes	$95.57	$61.88
198	15-May-13	23	6	$33.44	Yes	$95.57	$62.13
199	15-May-13	23	7	$24.70	Yes	$95.57	$70.87
200	15-May-13	23	8	$22.80	Yes	$95.57	$72.77
201	15-May-13	23	9	$25.54	Yes	$95.57	$70.03
202	15-May-13	23	10	$26.31	Yes	$95.57	$69.26
203	15-May-13	23	11	$21.73	Yes	$95.57	$73.84
204	15-May-13	23	12	$16.05	Yes	$95.57	$79.52
205	15-May-13	24	1	$33.50	Yes	$95.57	$62.07
206	15-May-13	24	2	$32.82	Yes	$95.57	$62.75
207	15-May-13	24	3	$32.59	Yes	$95.57	$62.98
208	15-May-13	24	4	$32.59	Yes	$95.57	$62.98
209	15-May-13	24	5	$33.28	Yes	$95.57	$62.29
210	15-May-13	24	6	$33.49	Yes	$95.57	$62.08
211	15-May-13	24	7	$0.01	Yes	$95.57	$95.56
212	15-May-13	24	8	$0.01	Yes	$95.57	$95.56
213	15-May-13	24	9	$0.01	Yes	$95.57	$95.56
214	15-May-13	24	10	$0.01	Yes	$95.57	$95.56
215	15-May-13	24	11	($30.46)	Yes	$95.57	$126.03
216	15-May-13	24	12	($32.22)	Yes	$95.57	$127.79
217	16-May-13	1	1	($32.22)	Yes	$95.57	$127.79
218	16-May-13	1	2	($30.60)	Yes	$95.57	$126.17
219	16-May-13	1	3	$33.42	Yes	$95.57	$62.15
220	16-May-13	1	4	$33.27	Yes	$95.57	$62.30
221	16-May-13	1	5	$30.93	Yes	$95.57	$64.64

Number	Trade Date	Trade Hour	Interval	Market LMP	Eligible Flag	Calculated LMP	Change in LMP
222	16-May-13	1	6	$30.93	Yes	$95.57	$64.64
223	16-May-13	1	7	$31.81	Yes	$95.57	$63.76
224	16-May-13	1	8	$30.55	Yes	$95.57	$65.02
225	16-May-13	1	9	$28.46	Yes	$95.57	$67.11
226	16-May-13	1	10	($29.95)	Yes	$95.57	$125.52
227	16-May-13	1	11	($29.52)	Yes	$95.57	$125.09
228	16-May-13	1	12	$20.92	Yes	$95.57	$74.65
229	16-May-13	2	1	($31.55)	Yes	$95.57	$127.12
230	16-May-13	2	2	$25.24	Yes	$95.57	$70.33
231	16-May-13	2	3	$33.06	Yes	$95.57	$62.51
232	16-May-13	2	4	$36.75	Yes	$95.57	$58.82
233	16-May-13	2	5	$35.28	Yes	$95.57	$60.29
234	16-May-13	2	6	$34.93	Yes	$95.57	$60.64
235	16-May-13	2	7	$35.37	Yes	$95.57	$60.20
236	16-May-13	2	8	$35.37	Yes	$95.57	$60.20
237	16-May-13	2	9	$36.21	Yes	$95.57	$59.36
238	16-May-13	2	10	$33.06	Yes	$95.57	$62.51
239	16-May-13	2	11	$34.11	Yes	$95.57	$61.46
240	16-May-13	2	12	$35.88	Yes	$95.57	$59.69
241	16-May-13	3	1	$35.88	Yes	$95.57	$59.69
242	16-May-13	3	2	$35.88	Yes	$95.57	$59.69
243	16-May-13	3	3	$35.88	Yes	$95.57	$59.69
244	16-May-13	3	4	$37.76	Yes	$95.57	$57.81
245	16-May-13	3	5	$36.79	Yes	$95.57	$58.78
246	16-May-13	3	6	$36.79	Yes	$95.57	$58.78
247	16-May-13	3	7	$34.64	Yes	$95.57	$60.93
248	16-May-13	3	8	$34.74	Yes	$95.57	$60.83
249	16-May-13	3	9	$34.64	Yes	$95.57	$60.93
250	16-May-13	3	10	$33.06	Yes	$95.57	$62.51
251	16-May-13	3	11	$34.38	Yes	$95.57	$61.19
252	16-May-13	3	12	$34.00	Yes	$95.57	$61.57
253	16-May-13	4	1	$35.88	Yes	$95.57	$59.69
254	16-May-13	4	2	$35.88	Yes	$95.57	$59.69
255	16-May-13	4	3	$35.88	Yes	$95.57	$59.69
256	16-May-13	4	4	$46.79	Yes	$95.57	$48.78
257	16-May-13	4	5	$44.74	Yes	$95.57	$50.83
258	16-May-13	4	6	$46.79	Yes	$95.57	$48.78
259	16-May-13	4	7	$34.64	Yes	$95.57	$60.93
260	16-May-13	4	8	$34.64	Yes	$95.57	$60.93
261	16-May-13	4	9	$35.88	Yes	$95.57	$59.69
262	16-May-13	4	10	$35.88	Yes	$95.57	$59.69
263	16-May-13	4	11	$35.94	Yes	$95.57	$59.63
264	16-May-13	4	12	$34.85	Yes	$95.57	$60.72
265	16-May-13	5	1	$33.06	Yes	$95.57	$62.51
266	16-May-13	5	2	$0.01	Yes	$95.57	$95.56

Number	Trade Date	Trade Hour	Interval	Market LMP	Eligible Flag	Calculated LMP	Change in LMP
267	16-May-13	5	3	$26.76	Yes	$95.57	$68.81
268	16-May-13	5	4	$32.33	Yes	$95.57	$63.24
269	16-May-13	5	5	$0.01	Yes	$95.57	$95.56
270	16-May-13	5	6	($29.31)	Yes	$95.57	$124.88
271	16-May-13	5	7	$0.01	Yes	$95.57	$95.56
272	16-May-13	5	8	$31.85	Yes	$95.57	$63.72
273	16-May-13	5	9	$27.25	Yes	$95.57	$68.32
274	16-May-13	5	10	$36.94	Yes	$95.57	$58.63
275	16-May-13	5	11	$34.95	Yes	$95.57	$60.62
276	16-May-13	5	12	$49.75	Yes	$95.57	$45.82
277	16-May-13	6	1	$35.06	Yes	$95.57	$60.51
278	16-May-13	6	2	$47.31	Yes	$95.57	$48.26
279	16-May-13	6	3	$47.37	Yes	$95.57	$48.20
280	16-May-13	6	4	$54.33	Yes	$95.57	$41.24
281	16-May-13	6	5	$54.57	Yes	$95.57	$41.00
282	16-May-13	6	6	$51.40	Yes	$95.57	$44.17
283	16-May-13	6	7	$50.23	Yes	$95.57	$45.34
284	16-May-13	6	8	$50.06	Yes	$95.57	$45.51
285	16-May-13	6	9	$43.68	Yes	$95.57	$51.89
286	16-May-13	6	10	$50.11	Yes	$95.57	$45.46
287	16-May-13	6	11	$46.72	Yes	$95.57	$48.85
288	16-May-13	6	12	$51.54	Yes	$95.57	$44.03
289	16-May-13	7	1	($35.24)	Yes	$95.57	$130.81
290	16-May-13	7	2	($35.24)	Yes	$95.57	$130.81
291	16-May-13	7	3	($34.35)	Yes	$95.57	$129.92
292	16-May-13	7	4	($0.70)	Yes	$95.57	$96.27
293	16-May-13	7	5	($0.55)	Yes	$95.57	$96.12
294	16-May-13	7	6	($0.64)	Yes	$95.57	$96.21
295	16-May-13	7	7	($0.70)	Yes	$95.57	$96.27
296	16-May-13	7	8	$28.65	Yes	$95.57	$66.92
297	16-May-13	7	9	$37.49	Yes	$95.57	$58.08
298	16-May-13	7	10	$36.35	Yes	$95.57	$59.22
299	16-May-13	7	11	$52.34	Yes	$95.57	$43.23
300	16-May-13	7	12	$52.34	Yes	$95.57	$43.23
301	16-May-13	8	1	$32.95	Yes	$95.57	$62.62
302	16-May-13	8	2	$32.95	Yes	$95.57	$62.62
303	16-May-13	8	3	$34.64	Yes	$95.57	$60.93
304	16-May-13	8	4	$34.85	Yes	$95.57	$60.72
305	16-May-13	8	5	$50.10	Yes	$95.57	$45.47
306	16-May-13	8	6	$50.10	Yes	$95.57	$45.47
307	16-May-13	8	7	$50.10	Yes	$95.57	$45.47
308	16-May-13	8	8	$34.62	Yes	$95.57	$60.95
309	16-May-13	8	9	$34.85	Yes	$95.57	$60.72
310	16-May-13	8	10	$34.62	Yes	$95.57	$60.95
311	16-May-13	8	11	$34.85	Yes	$95.57	$60.72

Number	Trade Date	Trade Hour	Interval	Market LMP	Eligible Flag	Calculated LMP	Change in LMP
312	16-May-13	8	12	$34.74	Yes	$95.57	$60.83
313	16-May-13	9	1	$29.54	Yes	$95.57	$66.03
314	16-May-13	9	2	($0.12)	Yes	$95.57	$95.69
315	16-May-13	9	3	$11.72	Yes	$95.57	$83.85
316	16-May-13	9	4	$20.92	Yes	$95.57	$74.65
317	16-May-13	9	5	$23.85	Yes	$95.57	$71.72
318	16-May-13	9	6	$20.92	Yes	$95.57	$74.65
319	16-May-13	9	7	$20.92	Yes	$95.57	$74.65
320	16-May-13	9	8	$20.92	Yes	$95.57	$74.65
321	16-May-13	9	9	$20.92	Yes	$95.57	$74.65
322	16-May-13	9	10	($100.78)	Yes	$95.57	$196.35
323	16-May-13	9	11	($38.49)	Yes	$95.57	$134.06
324	16-May-13	9	12	($1.44)	Yes	$95.57	$97.01
325	16-May-13	10	1	($0.82)	Yes	$95.57	$96.39
326	16-May-13	10	2	($0.91)	Yes	$95.57	$96.48
327	16-May-13	10	3	($0.91)	Yes	$95.57	$96.48
328	16-May-13	10	4	($1.02)	Yes	$95.57	$96.59
329	16-May-13	10	5	($1.00)	Yes	$95.57	$96.57
330	16-May-13	10	6	($1.00)	Yes	$95.57	$96.57
331	16-May-13	10	7	($129.28)	Yes	$95.57	$224.85
332	16-May-13	10	8	($87.98)	Yes	$95.57	$183.55
333	16-May-13	10	9	($37.82)	Yes	$95.57	$133.39
334	16-May-13	10	10	($0.14)	Yes	$95.57	$95.71
335	16-May-13	10	11	($0.92)	Yes	$95.57	$96.49
336	16-May-13	10	12	($1.05)	Yes	$95.57	$96.62
337	16-May-13	11	1	($0.92)	Yes	$95.57	$96.49
338	16-May-13	11	2	$18.75	Yes	$95.57	$76.82
339	16-May-13	11	3	$20.92	Yes	$95.57	$74.65
340	16-May-13	11	4	$20.94	Yes	$95.57	$74.63
341	16-May-13	11	5	$19.86	Yes	$95.57	$75.71
342	16-May-13	11	6	$20.92	Yes	$95.57	$74.65
343	16-May-13	11	7	$36.52	Yes	$95.57	$59.05
344	16-May-13	11	8	$35.85	Yes	$95.57	$59.72
345	16-May-13	11	9	$34.44	Yes	$95.57	$61.13
346	16-May-13	11	10	$19.75	Yes	$95.57	$75.82
347	16-May-13	11	11	$29.55	Yes	$95.57	$66.02
348	16-May-13	11	12	$19.86	Yes	$95.57	$75.71
349	16-May-13	12	1	$19.86	Yes	$95.57	$75.71
350	16-May-13	12	2	$19.86	Yes	$95.57	$75.71
351	16-May-13	12	3	$19.86	Yes	$95.57	$75.71
352	16-May-13	12	4	$18.35	Yes	$95.57	$77.22
353	16-May-13	12	5	$18.35	Yes	$95.57	$77.22
354	16-May-13	12	6	$16.78	Yes	$95.57	$78.79
355	16-May-13	12	7	$16.05	Yes	$95.57	$79.52
356	16-May-13	12	8	$16.64	Yes	$95.57	$78.93

Number	Trade Date	Trade Hour	Interval	Market LMP	Eligible Flag	Calculated LMP	Change in LMP
357	16-May-13	12	9	$16.64	Yes	$95.57	$78.93
358	16-May-13	12	10	$16.05	Yes	$95.57	$79.52
359	16-May-13	12	11	$16.64	Yes	$95.57	$78.93
360	16-May-13	12	12	$17.60	Yes	$95.57	$77.97
361	16-May-13	13	1	($1.20)	Yes	$95.57	$96.77
362	16-May-13	13	2	($1.20)	Yes	$95.57	$96.77
363	16-May-13	13	3	($0.92)	Yes	$95.57	$96.49
364	16-May-13	13	4	($1.20)	Yes	$95.57	$96.77
365	16-May-13	13	5	($1.20)	Yes	$95.57	$96.77
366	16-May-13	13	6	$17.26	Yes	$95.57	$78.31
367	16-May-13	13	7	$22.85	Yes	$95.57	$72.72
368	16-May-13	13	8	$20.25	Yes	$95.57	$75.32
369	16-May-13	13	9	$20.25	Yes	$95.57	$75.32
370	16-May-13	13	10	$20.00	Yes	$95.57	$75.57
371	16-May-13	13	11	$20.19	Yes	$95.57	$75.38
372	16-May-13	13	12	$19.95	Yes	$95.57	$75.62
373	16-May-13	14	1	$19.80	Yes	$95.57	$75.77
374	16-May-13	14	2	$20.83	Yes	$95.57	$74.74
375	16-May-13	14	3	$20.66	Yes	$95.57	$74.91
376	16-May-13	14	4	$23.09	Yes	$95.57	$72.48
377	16-May-13	14	5	$23.09	Yes	$95.57	$72.48
378	16-May-13	14	6	$26.42	Yes	$95.57	$69.15
379	16-May-13	14	7	$26.35	Yes	$95.57	$69.22
380	16-May-13	14	8	$22.51	Yes	$95.57	$73.06
381	16-May-13	14	9	$23.25	Yes	$95.57	$72.32
382	16-May-13	14	10	$26.67	Yes	$95.57	$68.90
383	16-May-13	14	11	$26.67	Yes	$95.57	$68.90
384	16-May-13	14	12	$26.62	Yes	$95.57	$68.95
385	16-May-13	15	1	$26.83	Yes	$95.57	$68.74
386	16-May-13	15	2	$27.12	Yes	$95.57	$68.45
387	16-May-13	15	3	$32.32	Yes	$95.57	$63.25
388	16-May-13	15	4	$31.81	Yes	$95.57	$63.76
389	16-May-13	15	5	$29.26	Yes	$95.57	$66.31
390	16-May-13	15	6	$29.26	Yes	$95.57	$66.31
391	16-May-13	15	7	$31.81	Yes	$95.57	$63.76
392	16-May-13	15	8	$31.81	Yes	$95.57	$63.76
393	16-May-13	15	9	$31.78	Yes	$95.57	$63.79
394	16-May-13	15	10	$29.06	Yes	$95.57	$66.51
395	16-May-13	15	11	$26.99	Yes	$95.57	$68.58
396	16-May-13	15	12	$31.82	Yes	$95.57	$63.75
397	16-May-13	16	1	$29.24	Yes	$95.57	$66.33
398	16-May-13	16	2	$30.40	Yes	$95.57	$65.17
399	16-May-13	16	3	$31.76	Yes	$95.57	$63.81
400	16-May-13	16	4	$31.47	Yes	$95.57	$64.10
401	16-May-13	16	5	$31.62	Yes	$95.57	$63.95

Number	Trade Date	Trade Hour	Interval	Market LMP	Eligible Flag	Calculated LMP	Change in LMP
402	16-May-13	16	6	$31.62	Yes	$95.57	$63.95
403	16-May-13	16	7	$31.53	Yes	$95.57	$64.04
404	16-May-13	16	8	$31.53	Yes	$95.57	$64.04
405	16-May-13	16	9	$31.60	Yes	$95.57	$63.97
406	16-May-13	16	10	$31.42	Yes	$95.57	$64.15
407	16-May-13	16	11	$26.54	Yes	$95.57	$69.03
408	16-May-13	16	12	$26.81	Yes	$95.57	$68.76
409	16-May-13	17	1	$29.21	Yes	$95.57	$66.36
410	16-May-13	17	2	$28.54	Yes	$95.57	$67.03
411	16-May-13	17	3	$26.89	Yes	$95.57	$68.68
412	16-May-13	17	4	$26.63	Yes	$95.57	$68.94
413	16-May-13	17	5	$29.07	Yes	$95.57	$66.50
414	16-May-13	17	6	$29.07	Yes	$95.57	$66.50
415	16-May-13	17	7	$28.73	Yes	$95.57	$66.84
416	16-May-13	17	8	$26.33	Yes	$95.57	$69.24
417	16-May-13	17	9	$26.33	Yes	$95.57	$69.24
418	16-May-13	17	10	$26.27	Yes	$95.57	$69.30
419	16-May-13	17	11	$25.61	Yes	$95.57	$69.96
420	16-May-13	17	12	$26.26	Yes	$95.57	$69.31
421	16-May-13	18	1	$51.95	Yes	$95.57	$43.62
422	16-May-13	18	2	$34.98	Yes	$95.57	$60.59
423	16-May-13	18	3	$35.15	Yes	$95.57	$60.42
424	16-May-13	18	4	$31.62	Yes	$95.57	$63.95
425	16-May-13	18	5	$34.21	Yes	$95.57	$61.36
426	16-May-13	18	6	$34.18	Yes	$95.57	$61.39
427	16-May-13	18	7	$35.36	Yes	$95.57	$60.21
428	16-May-13	18	8	$35.21	Yes	$95.57	$60.36
429	16-May-13	18	9	$35.17	Yes	$95.57	$60.40
430	16-May-13	18	10	$20.97	Yes	$95.57	$74.60
431	16-May-13	18	11	$32.76	Yes	$95.57	$62.81
432	16-May-13	18	12	$32.47	Yes	$95.57	$63.10
433	16-May-13	19	1	$31.11	Yes	$95.57	$64.46
434	16-May-13	19	2	$31.25	Yes	$95.57	$64.32
435	16-May-13	19	3	$31.23	Yes	$95.57	$64.34
436	16-May-13	19	4	$30.95	Yes	$95.57	$64.62
437	16-May-13	19	5	$32.85	Yes	$95.57	$62.72
438	16-May-13	19	6	$31.38	Yes	$95.57	$64.19
439	16-May-13	19	7	$22.51	Yes	$95.57	$73.06
440	16-May-13	19	8	$24.25	Yes	$95.57	$71.32
441	16-May-13	19	9	$22.78	Yes	$95.57	$72.79
442	16-May-13	19	10	$35.62	Yes	$95.57	$59.95
443	16-May-13	19	11	$34.78	Yes	$95.57	$60.79
444	16-May-13	19	12	$33.90	Yes	$95.57	$61.67
445	16-May-13	20	1	$35.21	Yes	$95.57	$60.36
446	16-May-13	20	2	$35.18	Yes	$95.57	$60.39

Number	Trade Date	Trade Hour	Interval	Market LMP	Eligible Flag	Calculated LMP	Change in LMP
447	16-May-13	20	3	$35.26	Yes	$95.57	$60.31
448	16-May-13	20	4	$30.83	Yes	$95.57	$64.74
449	16-May-13	20	5	$30.83	Yes	$95.57	$64.74
450	16-May-13	20	6	$31.22	Yes	$95.57	$64.35
451	16-May-13	20	7	$30.92	Yes	$95.57	$64.65
452	16-May-13	20	8	$35.25	Yes	$95.57	$60.32
453	16-May-13	20	9	$37.71	Yes	$95.57	$57.86
454	16-May-13	20	10	$36.77	Yes	$95.57	$58.80
455	16-May-13	20	11	$36.83	Yes	$95.57	$58.74
456	16-May-13	20	12	$35.71	Yes	$95.57	$59.86
457	16-May-13	21	1	$33.10	Yes	$95.57	$62.47
458	16-May-13	21	2	$32.37	Yes	$95.57	$63.20
459	16-May-13	21	3	$34.90	Yes	$95.57	$60.67
460	16-May-13	21	4	$35.89	Yes	$95.57	$59.68
461	16-May-13	21	5	$35.17	Yes	$95.57	$60.40
462	16-May-13	21	6	$35.45	Yes	$95.57	$60.12
463	16-May-13	21	7	$35.86	Yes	$95.57	$59.71
464	16-May-13	21	8	$35.86	Yes	$95.57	$59.71
465	16-May-13	21	9	$35.86	Yes	$95.57	$59.71
466	16-May-13	21	10	$36.38	Yes	$95.57	$59.19
467	16-May-13	21	11	$36.19	Yes	$95.57	$59.38
468	16-May-13	21	12	$35.61	Yes	$95.57	$59.96
469	17-May-13	17	4	($0.70)	Yes	$95.57	$96.27
470	17-May-13	17	5	$9.70	Yes	$95.57	$85.87
471	17-May-13	17	6	($0.70)	Yes	$95.57	$96.27
472	17-May-13	17	7	($0.51)	Yes	$95.57	$96.08
473	17-May-13	17	8	($0.59)	Yes	$95.57	$96.16
474	17-May-13	17	9	($0.59)	Yes	$95.57	$96.16
475	17-May-13	17	10	($0.54)	Yes	$95.57	$96.11
476	17-May-13	17	11	($0.54)	Yes	$95.57	$96.11
477	17-May-13	17	12	($0.56)	Yes	$95.57	$96.13
478	17-May-13	18	1	($0.45)	Yes	$95.57	$96.02
479	17-May-13	18	2	($0.65)	Yes	$95.57	$96.22
480	17-May-13	18	3	($0.67)	Yes	$95.57	$96.24
481	17-May-13	18	4	($0.73)	Yes	$95.57	$96.30
482	17-May-13	18	5	($0.73)	Yes	$95.57	$96.30
483	17-May-13	18	6	($0.73)	Yes	$95.57	$96.30
484	17-May-13	18	7	($0.57)	Yes	$95.57	$96.14
485	17-May-13	18	8	($0.83)	Yes	$95.57	$96.40
486	17-May-13	18	9	($0.83)	Yes	$95.57	$96.40
487	17-May-13	18	10	($1.00)	Yes	$95.57	$96.57
488	17-May-13	18	11	($1.00)	Yes	$95.57	$96.57
489	17-May-13	18	12	($1.00)	Yes	$95.57	$96.57
490	17-May-13	19	1	($0.98)	Yes	$95.57	$96.55
491	17-May-13	19	2	($0.98)	Yes	$95.57	$96.55

Number	Trade Date	Trade Hour	Interval	Market LMP	Eligible Flag	Calculated LMP	Change in LMP
492	17-May-13	19	3	($0.98)	Yes	$95.57	$96.55
493	17-May-13	19	4	$9.40	Yes	$95.57	$86.17
494	17-May-13	19	5	$9.40	Yes	$95.57	$86.17
495	17-May-13	19	6	$9.40	Yes	$95.57	$86.17
496	17-May-13	19	7	$21.14	Yes	$95.57	$74.43
497	17-May-13	19	8	$20.95	Yes	$95.57	$74.62
498	17-May-13	19	9	$28.96	Yes	$95.57	$66.61
499	17-May-13	19	10	$29.18	Yes	$95.57	$66.39
500	17-May-13	19	11	$27.83	Yes	$95.57	$67.74
501	17-May-13	19	12	$21.38	Yes	$95.57	$74.19
502	17-May-13	20	1	$29.40	Yes	$95.57	$66.17
503	17-May-13	20	2	$29.46	Yes	$95.57	$66.11
504	17-May-13	20	3	$30.20	Yes	$95.57	$65.37
505	17-May-13	20	4	$29.88	Yes	$95.57	$65.69
506	17-May-13	20	5	$31.86	Yes	$95.57	$63.71
507	17-May-13	20	6	$33.34	Yes	$95.57	$62.23
508	17-May-13	20	7	$33.53	Yes	$95.57	$62.04
509	17-May-13	20	8	$33.53	Yes	$95.57	$62.04
510	17-May-13	20	9	$35.91	Yes	$95.57	$59.66
511	17-May-13	20	10	$36.02	Yes	$95.57	$59.55
512	17-May-13	20	11	$34.62	Yes	$95.57	$60.95
513	17-May-13	20	12	$34.03	Yes	$95.57	$61.54
514	17-May-13	21	1	$34.00	Yes	$95.57	$61.57
515	17-May-13	21	2	$33.96	Yes	$95.57	$61.61
516	17-May-13	21	3	$32.53	Yes	$95.57	$63.04
517	17-May-13	21	4	$48.95	Yes	$95.57	$46.62
518	17-May-13	21	5	$37.80	Yes	$95.57	$57.77
519	17-May-13	21	6	$37.80	Yes	$95.57	$57.77
520	17-May-13	21	7	$61.59	Yes	$95.57	$33.99
521	17-May-13	21	8	$60.77	Yes	$95.57	$34.80
522	17-May-13	21	9	$60.24	Yes	$95.57	$35.33
523	17-May-13	21	10	$53.01	Yes	$95.57	$42.56
524	17-May-13	21	11	$41.31	Yes	$95.57	$54.26
525	17-May-13	21	12	$44.35	Yes	$95.57	$51.22
526	22-May-13	7	1	$19.72	Yes	$64.68	$44.96
527	22-May-13	7	2	$0.36	Yes	$64.68	$64.32
528	22-May-13	7	3	$0.83	Yes	$64.68	$63.85
529	22-May-13	7	4	$20.40	Yes	$64.68	$44.28
530	22-May-13	7	5	$20.40	Yes	$64.68	$44.28
531	22-May-13	7	6	$26.14	Yes	$64.68	$38.54
532	22-May-13	7	7	$34.78	Yes	$64.68	$29.90
533	22-May-13	7	8	$35.38	Yes	$64.68	$29.30
534	22-May-13	7	9	$36.44	Yes	$64.68	$28.24
535	22-May-13	7	10	$36.65	Yes	$64.68	$28.03
536	22-May-13	7	11	$36.73	Yes	$64.68	$27.95

Number	Trade Date	Trade Hour	Interval	Market LMP	Eligible Flag	Calculated LMP	Change in LMP
537	22-May-13	7	12	$37.76	Yes	$64.68	$26.92
538	22-May-13	8	1	$23.51	Yes	$64.68	$41.17
539	22-May-13	8	2	$0.40	Yes	$64.68	$64.28
540	22-May-13	8	3	($68.41)	Yes	$64.68	$133.09
541	22-May-13	8	4	$0.40	Yes	$64.68	$64.28
542	22-May-13	8	5	$31.62	Yes	$64.68	$33.06
543	22-May-13	8	6	$26.64	Yes	$64.68	$38.04
544	22-May-13	8	7	$23.62	Yes	$64.68	$41.06
545	22-May-13	8	8	$1.32	Yes	$64.68	$63.36
546	22-May-13	8	9	$23.60	Yes	$64.68	$41.08
547	22-May-13	8	10	$1.10	Yes	$64.68	$63.58
548	22-May-13	8	11	$11.19	Yes	$64.68	$53.49
549	22-May-13	8	12	$32.05	Yes	$64.68	$32.63
550	22-May-13	9	1	$27.23	Yes	$64.68	$37.45
551	22-May-13	9	2	$27.53	Yes	$64.68	$37.15
552	22-May-13	9	3	$29.28	Yes	$64.68	$35.40
553	22-May-13	9	4	$32.15	Yes	$64.68	$32.53
554	22-May-13	9	5	$36.25	Yes	$64.68	$28.43
555	22-May-13	9	6	$32.15	Yes	$64.68	$32.53
556	22-May-13	9	7	$36.41	Yes	$64.68	$28.27
557	22-May-13	9	8	$27.63	Yes	$64.68	$37.05
558	22-May-13	9	9	$27.64	Yes	$64.68	$37.04
559	22-May-13	9	10	$27.66	Yes	$64.68	$37.02
560	22-May-13	9	11	$0.96	Yes	$64.68	$63.72
561	22-May-13	9	12	$1.04	Yes	$64.68	$63.64
562	22-May-13	10	1	($87.55)	Yes	$64.68	$152.23
563	22-May-13	10	2	($82.96)	Yes	$64.68	$147.64
564	22-May-13	10	3	($87.55)	Yes	$64.68	$152.23
565	22-May-13	10	4	($38.20)	Yes	$64.68	$102.88
566	22-May-13	10	5	($77.70)	Yes	$64.68	$142.38
567	22-May-13	10	6	($52.61)	Yes	$64.68	$117.29
568	22-May-13	10	7	($87.85)	Yes	$64.68	$152.53
569	22-May-13	10	8	($83.94)	Yes	$64.68	$148.62
570	22-May-13	10	9	($77.90)	Yes	$64.68	$142.58
571	22-May-13	10	10	($41.70)	Yes	$64.68	$106.38
572	22-May-13	10	11	($105.42)	Yes	$64.68	$170.10
573	22-May-13	10	12	$0.31	Yes	$64.68	$64.37
574	22-May-13	11	1	($1.01)	Yes	$64.68	$65.69
575	22-May-13	11	2	($0.99)	Yes	$64.68	$65.67
576	22-May-13	11	3	($1.07)	Yes	$64.68	$65.75
577	22-May-13	11	4	($0.51)	Yes	$64.68	$65.19
578	22-May-13	11	5	$19.36	Yes	$64.68	$45.32
579	22-May-13	11	6	($0.55)	Yes	$64.68	$65.23
580	22-May-13	11	7	$0.30	Yes	$64.68	$64.38
581	22-May-13	11	8	($0.43)	Yes	$64.68	$65.11

Number	Trade Date	Trade Hour	Interval	Market LMP	Eligible Flag	Calculated LMP	Change in LMP
582	22-May-13	11	9	($0.43)	Yes	$64.68	$65.11
583	22-May-13	11	10	$19.34	Yes	$64.68	$45.34
584	22-May-13	11	11	$25.13	Yes	$64.68	$39.55
585	22-May-13	11	12	$36.53	Yes	$64.68	$28.15
586	22-May-13	12	1	$36.84	Yes	$64.68	$27.84
587	22-May-13	12	2	$37.62	Yes	$64.68	$27.06
588	22-May-13	12	3	$38.78	Yes	$64.68	$25.90
589	22-May-13	12	4	$36.88	Yes	$64.68	$27.80
590	22-May-13	12	5	$37.20	Yes	$64.68	$27.48
591	22-May-13	12	6	$36.22	Yes	$64.68	$28.46
592	22-May-13	12	7	$36.92	Yes	$64.68	$27.76
593	22-May-13	12	8	$38.77	Yes	$64.68	$25.91
594	22-May-13	12	9	$36.92	Yes	$64.68	$27.76
595	22-May-13	12	10	$36.80	Yes	$64.68	$27.88
596	22-May-13	12	11	$26.99	Yes	$64.68	$37.69
597	22-May-13	12	12	$26.99	Yes	$64.68	$37.69
598	22-May-13	13	1	$28.07	Yes	$64.68	$36.61
599	22-May-13	13	2	$37.00	Yes	$64.68	$27.68
600	22-May-13	13	3	$37.11	Yes	$64.68	$27.57
601	22-May-13	13	4	$36.91	Yes	$64.68	$27.77
602	22-May-13	13	5	$37.02	Yes	$64.68	$27.66
603	22-May-13	13	6	$37.02	Yes	$64.68	$27.66
604	22-May-13	13	7	$36.98	Yes	$64.68	$27.70
605	22-May-13	13	8	$36.97	Yes	$64.68	$27.71
606	22-May-13	13	9	$36.98	Yes	$64.68	$27.70
607	22-May-13	13	10	$37.03	Yes	$64.68	$27.65
608	22-May-13	13	11	$37.03	Yes	$64.68	$27.65
609	22-May-13	13	12	$42.97	Yes	$64.68	$21.71
610	22-May-13	14	1	$32.84	Yes	$64.68	$31.84
611	22-May-13	14	2	$36.85	Yes	$64.68	$27.83
612	22-May-13	14	3	$36.85	Yes	$64.68	$27.83
613	22-May-13	14	4	$36.85	Yes	$64.68	$27.83
614	22-May-13	14	5	$36.76	Yes	$64.68	$27.92
615	22-May-13	14	6	$36.88	Yes	$64.68	$27.80
616	22-May-13	14	7	$36.58	Yes	$64.68	$28.10
617	22-May-13	14	8	$37.13	Yes	$64.68	$27.55
618	22-May-13	14	9	$37.13	Yes	$64.68	$27.55
619	22-May-13	14	10	$51.69	Yes	$64.68	$12.99
620	22-May-13	14	11	$49.50	Yes	$64.68	$15.18
621	22-May-13	14	12	$44.00	Yes	$64.68	$20.68
622	22-May-13	15	1	$44.27	Yes	$64.68	$20.41
623	22-May-13	15	2	$43.04	Yes	$64.68	$21.64
624	22-May-13	15	3	$37.01	Yes	$64.68	$27.67
625	22-May-13	15	4	$37.16	Yes	$64.68	$27.52
626	22-May-13	15	5	$37.16	Yes	$64.68	$27.52

Number	Trade Date	Trade Hour	Interval	Market LMP	Eligible Flag	Calculated LMP	Change in LMP
627	22-May-13	15	6	$37.16	Yes	$64.68	$27.52
628	22-May-13	15	7	$35.80	Yes	$64.68	$28.88
629	22-May-13	15	8	$30.20	Yes	$64.68	$34.48
630	22-May-13	15	9	$30.20	Yes	$64.68	$34.48
631	22-May-13	15	10	$28.63	Yes	$64.68	$36.05
632	22-May-13	15	11	$28.63	Yes	$64.68	$36.05
633	22-May-13	15	12	$28.63	Yes	$64.68	$36.05
634	22-May-13	16	1	$28.66	Yes	$64.68	$36.02
635	22-May-13	16	2	$28.38	Yes	$64.68	$36.30
636	22-May-13	16	3	$34.60	Yes	$64.68	$30.08
637	22-May-13	16	4	$33.12	Yes	$64.68	$31.56
638	22-May-13	16	5	$36.79	Yes	$64.68	$27.89
639	22-May-13	16	6	$33.12	Yes	$64.68	$31.56
640	22-May-13	16	7	$36.93	Yes	$64.68	$27.75
641	22-May-13	16	8	$36.81	Yes	$64.68	$27.87
642	22-May-13	16	9	$36.81	Yes	$64.68	$27.87
643	22-May-13	16	10	$34.69	Yes	$64.68	$29.99
644	22-May-13	16	11	$30.93	Yes	$64.68	$33.75
645	22-May-13	16	12	$34.69	Yes	$64.68	$29.99
646	22-May-13	17	1	$31.74	Yes	$51.23	$19.49
647	22-May-13	17	2	$31.74	Yes	$51.23	$19.49
648	22-May-13	17	3	$31.74	Yes	$51.23	$19.49
649	22-May-13	17	4	$34.46	Yes	$51.23	$16.77
650	22-May-13	17	5	$33.00	Yes	$51.23	$18.23
651	22-May-13	17	6	$31.70	Yes	$51.23	$19.53
652	22-May-13	17	7	$32.95	Yes	$51.23	$18.28
653	22-May-13	17	8	$32.95	Yes	$51.23	$18.28
654	22-May-13	17	9	$32.95	Yes	$51.23	$18.28
655	22-May-13	17	10	$34.35	Yes	$51.23	$16.88
656	22-May-13	17	11	$35.64	Yes	$51.23	$15.59
657	22-May-13	17	12	$36.13	Yes	$51.23	$15.10
658	22-May-13	18	1	$36.68	Yes	$51.23	$14.55
659	22-May-13	18	2	$36.79	Yes	$51.23	$14.44
660	22-May-13	18	3	$36.68	Yes	$51.23	$14.55
661	22-May-13	18	4	$35.92	Yes	$51.23	$15.31
662	22-May-13	18	5	$34.81	Yes	$51.23	$16.42
663	22-May-13	18	6	$31.73	Yes	$51.23	$19.50
664	22-May-13	18	7	$35.49	Yes	$51.23	$15.74
665	22-May-13	18	8	$35.49	Yes	$51.23	$15.74
666	22-May-13	18	9	$35.48	Yes	$51.23	$15.75
667	22-May-13	18	10	$34.13	Yes	$51.23	$17.10
668	22-May-13	18	11	$35.44	Yes	$51.23	$15.79
669	22-May-13	18	12	$34.13	Yes	$51.23	$17.10
670	22-May-13	19	1	$30.43	Yes	$51.97	$21.54
671	22-May-13	19	2	$28.33	Yes	$51.97	$23.64

Number	Trade Date	Trade Hour	Interval	Market LMP	Eligible Flag	Calculated LMP	Change in LMP
672	22-May-13	19	3	$28.33	Yes	$51.97	$23.64
673	22-May-13	19	4	$22.69	Yes	$51.97	$29.28
674	22-May-13	19	5	$22.69	Yes	$51.97	$29.28
675	22-May-13	19	6	$24.68	Yes	$51.97	$27.29
676	22-May-13	19	7	$24.62	Yes	$51.97	$27.35
677	22-May-13	19	8	$24.62	Yes	$51.97	$27.35
678	22-May-13	19	9	$24.62	Yes	$51.97	$27.35
679	22-May-13	19	10	$24.68	Yes	$51.97	$27.29
680	22-May-13	19	11	$24.74	Yes	$51.97	$27.23
681	22-May-13	19	12	$24.68	Yes	$51.97	$27.29
682	22-May-13	20	1	$22.79	Yes	$64.68	$41.89
683	22-May-13	20	2	$24.73	Yes	$64.68	$39.95
684	22-May-13	20	3	$22.81	Yes	$64.68	$41.87
685	22-May-13	20	4	$24.66	Yes	$64.68	$40.02
686	22-May-13	20	5	$24.66	Yes	$64.68	$40.02
687	22-May-13	20	6	$29.91	Yes	$64.68	$34.77
688	22-May-13	20	7	$30.60	Yes	$64.68	$34.08
689	22-May-13	20	8	$32.47	Yes	$64.68	$32.21
690	22-May-13	20	9	$32.47	Yes	$64.68	$32.21
691	22-May-13	20	10	$35.26	Yes	$64.68	$29.42
692	22-May-13	20	11	$33.94	Yes	$64.68	$30.74
693	22-May-13	20	12	$32.80	Yes	$64.68	$31.88
694	22-May-13	21	1	$35.03	Yes	$64.68	$29.65
695	22-May-13	21	2	$33.21	Yes	$64.68	$31.47
696	22-May-13	21	3	$35.47	Yes	$64.68	$29.21
697	22-May-13	21	4	$36.03	Yes	$64.68	$28.65
698	22-May-13	21	5	$36.86	Yes	$64.68	$27.82
699	22-May-13	21	6	$36.86	Yes	$64.68	$27.82
700	22-May-13	21	7	$36.79	Yes	$64.68	$27.89
701	22-May-13	21	8	$36.79	Yes	$64.68	$27.89
702	22-May-13	21	9	$36.79	Yes	$64.68	$27.89
703	22-May-13	21	10	$36.79	Yes	$64.68	$27.89
704	22-May-13	21	11	$35.80	Yes	$64.68	$28.88
705	22-May-13	21	12	$35.90	Yes	$64.68	$28.78
706	22-May-13	22	1	$47.98	Yes	$64.68	$16.70
707	22-May-13	22	2	$52.76	Yes	$64.68	$11.92
708	22-May-13	22	3	$52.76	Yes	$64.68	$11.92
709	22-May-13	22	4	$47.73	Yes	$64.68	$16.95
710	22-May-13	22	5	$50.50	Yes	$64.68	$14.18
711	22-May-13	22	6	$44.19	Yes	$64.68	$20.49
712	22-May-13	22	7	$37.19	Yes	$64.68	$27.49
713	22-May-13	22	8	$36.74	Yes	$64.68	$27.94
714	22-May-13	22	9	$36.74	Yes	$64.68	$27.94
715	22-May-13	22	10	$35.89	Yes	$64.68	$28.79
716	22-May-13	22	11	$35.65	Yes	$64.68	$29.03

Number	Trade Date	Trade Hour	Interval	Market LMP	Eligible Flag	Calculated LMP	Change in LMP
717	22-May-13	22	12	$35.06	Yes	$64.68	$29.62
718	22-May-13	23	1	$79.00	Yes	$64.68	($14.32)
719	22-May-13	23	2	$55.00	Yes	$64.68	$9.68
720	22-May-13	23	3	$52.89	Yes	$64.68	$11.79
721	22-May-13	23	4	$50.16	Yes	$64.68	$14.52
722	22-May-13	23	5	$49.25	Yes	$64.68	$15.43
723	22-May-13	23	6	$49.09	Yes	$64.68	$15.59
724	22-May-13	23	7	$37.45	Yes	$64.68	$27.23
725	22-May-13	23	8	$36.11	Yes	$64.68	$28.57
726	22-May-13	23	9	$34.18	Yes	$64.68	$30.50
727	22-May-13	23	10	$21.47	Yes	$64.68	$43.21
728	22-May-13	23	11	$21.47	Yes	$64.68	$43.21
729	22-May-13	23	12	$22.70	Yes	$64.68	$41.98
730	22-May-13	24	1	$35.99	Yes	$64.68	$28.69
731	22-May-13	24	2	$33.88	Yes	$64.68	$30.80
732	22-May-13	24	3	$32.02	Yes	$64.68	$32.66
733	22-May-13	24	4	$31.66	Yes	$64.68	$33.02
734	22-May-13	24	5	$22.40	Yes	$64.68	$42.28
735	22-May-13	24	6	$26.13	Yes	$64.68	$38.55
736	22-May-13	24	7	$0.01	Yes	$64.68	$64.67
737	22-May-13	24	8	$0.01	Yes	$64.68	$64.67
738	22-May-13	24	9	$0.01	Yes	$64.68	$64.67
739	22-May-13	24	10	$22.37	Yes	$64.68	$42.31
740	22-May-13	24	11	$22.37	Yes	$64.68	$42.31
741	22-May-13	24	12	$0.01	Yes	$64.68	$64.67
742	23-May-13	1	1	$0.01	Yes	$58.25	$58.24
743	23-May-13	1	2	$1.80	Yes	$58.25	$56.45
744	23-May-13	1	3	$36.15	Yes	$58.25	$22.10
745	23-May-13	1	4	$35.64	Yes	$58.25	$22.61
746	23-May-13	1	5	$35.64	Yes	$58.25	$22.61
747	23-May-13	1	6	$32.49	Yes	$58.25	$25.76
748	23-May-13	1	7	$32.44	Yes	$58.25	$25.81
749	23-May-13	1	8	$33.81	Yes	$58.25	$24.44
750	23-May-13	1	9	$35.89	Yes	$58.25	$22.36
751	23-May-13	1	10	$33.80	Yes	$58.25	$24.45
752	23-May-13	1	11	$32.52	Yes	$58.25	$25.73
753	23-May-13	1	12	$0.01	Yes	$58.25	$58.24
754	23-May-13	2	1	$31.55	Yes	$58.25	$26.70
755	23-May-13	2	2	$31.55	Yes	$58.25	$26.70
756	23-May-13	2	3	$26.07	Yes	$58.25	$32.18
757	23-May-13	2	4	$0.01	Yes	$58.25	$58.24
758	23-May-13	2	5	$0.01	Yes	$58.25	$58.24
759	23-May-13	2	6	$0.01	Yes	$58.25	$58.24
760	23-May-13	2	7	$0.01	Yes	$58.25	$58.24
761	23-May-13	2	8	$0.01	Yes	$58.25	$58.24

Number	Trade Date	Trade Hour	Interval	Market LMP	Eligible Flag	Calculated LMP	Change in LMP
762	23-May-13	2	9	$0.01	Yes	$58.25	$58.24
763	23-May-13	2	10	$26.10	Yes	$58.25	$32.15
764	23-May-13	2	11	$31.51	Yes	$58.25	$26.74
765	23-May-13	2	12	$29.63	Yes	$58.25	$28.62
766	23-May-13	3	1	$29.85	Yes	$58.25	$28.40
767	23-May-13	3	2	$29.85	Yes	$58.25	$28.40
768	23-May-13	3	3	$29.85	Yes	$58.25	$28.40
769	23-May-13	3	4	$29.82	Yes	$58.25	$28.43
770	23-May-13	3	5	$29.82	Yes	$58.25	$28.43
771	23-May-13	3	6	$29.82	Yes	$58.25	$28.43
772	23-May-13	3	7	$29.76	Yes	$58.25	$28.49
773	23-May-13	3	8	$26.49	Yes	$58.25	$31.76
774	23-May-13	3	9	$0.01	Yes	$58.25	$58.24
775	23-May-13	3	10	($30.67)	Yes	$58.25	$88.92
776	23-May-13	3	11	$0.01	Yes	$58.25	$58.24
777	23-May-13	3	12	($31.11)	Yes	$58.25	$89.36
778	23-May-13	4	1	$0.01	Yes	$58.25	$58.24
779	23-May-13	4	2	$23.47	Yes	$58.25	$34.78
780	23-May-13	4	3	$31.44	Yes	$58.25	$26.81
781	23-May-13	4	4	$32.54	Yes	$58.25	$25.71
782	23-May-13	4	5	$32.54	Yes	$58.25	$25.71
783	23-May-13	4	6	$32.54	Yes	$58.25	$25.71
784	23-May-13	4	7	$31.49	Yes	$58.25	$26.76
785	23-May-13	4	8	$31.49	Yes	$58.25	$26.76
786	23-May-13	4	9	$31.49	Yes	$58.25	$26.76
787	23-May-13	4	10	$32.54	Yes	$58.25	$25.71
788	23-May-13	4	11	$31.51	Yes	$58.25	$26.74
789	23-May-13	4	12	$21.09	Yes	$58.25	$37.16
790	23-May-13	5	1	$21.07	Yes	$58.25	$37.18
791	23-May-13	5	2	$0.01	Yes	$58.25	$58.24
792	23-May-13	5	3	$0.01	Yes	$58.25	$58.24
793	23-May-13	5	4	$26.47	Yes	$58.25	$31.78
794	23-May-13	5	5	$32.09	Yes	$58.25	$26.16
795	23-May-13	5	6	$33.77	Yes	$58.25	$24.48
796	23-May-13	5	7	$34.01	Yes	$58.25	$24.24
797	23-May-13	5	8	$34.01	Yes	$58.25	$24.24
798	23-May-13	5	9	$35.65	Yes	$58.25	$22.60
799	23-May-13	5	10	$36.08	Yes	$58.25	$22.17
800	23-May-13	5	11	$36.08	Yes	$58.25	$22.17
801	23-May-13	5	12	$36.49	Yes	$58.25	$21.76
802	23-May-13	6	1	$35.55	Yes	$58.25	$22.70
803	23-May-13	6	2	$35.55	Yes	$58.25	$22.70
804	23-May-13	6	3	$35.55	Yes	$58.25	$22.70
805	23-May-13	6	4	$33.54	Yes	$58.25	$24.71
806	23-May-13	6	5	$36.30	Yes	$58.25	$21.95

Number	Trade Date	Trade Hour	Interval	Market LMP	Eligible Flag	Calculated LMP	Change in LMP
807	23-May-13	6	6	$36.30	Yes	$58.25	$21.95
808	23-May-13	6	7	$36.52	Yes	$58.25	$21.73
809	23-May-13	6	8	$36.52	Yes	$58.25	$21.73
810	23-May-13	6	9	$38.06	Yes	$58.25	$20.19
811	23-May-13	6	10	$36.50	Yes	$58.25	$21.75
812	23-May-13	6	11	$36.50	Yes	$58.25	$21.75
813	23-May-13	6	12	$31.42	Yes	$58.25	$26.83
814	23-May-13	7	1	$0.01	Yes	$58.25	$58.24
815	23-May-13	7	2	($30.53)	Yes	$58.25	$88.78
816	23-May-13	7	3	$0.01	Yes	$58.25	$58.24
817	23-May-13	7	4	$35.89	Yes	$58.25	$22.36
818	23-May-13	7	5	$30.95	Yes	$58.25	$27.30
819	23-May-13	7	6	$35.90	Yes	$58.25	$22.35
820	23-May-13	7	7	$36.76	Yes	$58.25	$21.49
821	23-May-13	7	8	$36.76	Yes	$58.25	$21.49
822	23-May-13	7	9	$36.76	Yes	$58.25	$21.49
823	23-May-13	7	10	$36.78	Yes	$58.25	$21.47
824	23-May-13	7	11	$36.78	Yes	$58.25	$21.47
825	23-May-13	7	12	$37.34	Yes	$58.25	$20.91
826	23-May-13	8	1	$23.01	Yes	$58.25	$35.24
827	23-May-13	8	2	$31.53	Yes	$58.25	$26.72
828	23-May-13	8	3	$31.41	Yes	$58.25	$26.84
829	23-May-13	8	4	$31.61	Yes	$58.25	$26.64
830	23-May-13	8	5	$35.84	Yes	$58.25	$22.41
831	23-May-13	8	6	$36.69	Yes	$58.25	$21.56
832	23-May-13	8	7	$31.65	Yes	$58.25	$26.60
833	23-May-13	8	8	$35.03	Yes	$58.25	$23.22
834	23-May-13	8	9	$35.74	Yes	$58.25	$22.51
835	23-May-13	8	10	$31.44	Yes	$58.25	$26.81
836	23-May-13	8	11	$35.70	Yes	$58.25	$22.55
837	23-May-13	8	12	$35.71	Yes	$58.25	$22.54
838	23-May-13	9	1	$27.19	Yes	$58.25	$31.06
839	23-May-13	9	2	$21.70	Yes	$58.25	$36.55
840	23-May-13	9	3	$21.70	Yes	$58.25	$36.55
841	23-May-13	9	4	$27.25	Yes	$58.25	$31.00
842	23-May-13	9	5	$35.84	Yes	$58.25	$22.41
843	23-May-13	9	6	$35.84	Yes	$58.25	$22.41
844	23-May-13	9	7	$30.88	Yes	$58.25	$27.37
845	23-May-13	9	8	$27.76	Yes	$58.25	$30.49
846	23-May-13	9	9	$26.98	Yes	$58.25	$31.27
847	23-May-13	9	10	$27.91	Yes	$58.25	$30.34
848	23-May-13	9	11	$27.10	Yes	$58.25	$31.15
849	23-May-13	9	12	$23.07	Yes	$58.25	$35.18
850	23-May-13	10	1	$22.90	Yes	$58.25	$35.35
851	23-May-13	10	2	$0.91	Yes	$58.25	$57.34

Number	Trade Date	Trade Hour	Interval	Market LMP	Eligible Flag	Calculated LMP	Change in LMP
852	23-May-13	10	3	$22.90	Yes	$58.25	$35.35
853	23-May-13	10	4	$27.82	Yes	$58.25	$30.43
854	23-May-13	10	5	$23.02	Yes	$58.25	$35.23
855	23-May-13	10	6	($1.13)	Yes	$58.25	$59.38
856	23-May-13	10	7	($3.01)	Yes	$58.25	$61.26
857	23-May-13	10	8	$29.69	Yes	$58.25	$28.56
858	23-May-13	10	9	$29.67	Yes	$58.25	$28.58
859	23-May-13	10	10	($2.71)	Yes	$58.25	$60.96
860	23-May-13	10	11	$29.62	Yes	$58.25	$28.63
861	23-May-13	10	12	$23.02	Yes	$58.25	$35.23
862	23-May-13	11	1	$27.50	Yes	$58.25	$30.75
863	23-May-13	11	2	$27.50	Yes	$58.25	$30.75
864	23-May-13	11	3	$30.90	Yes	$58.25	$27.35
865	23-May-13	11	4	$28.10	Yes	$58.25	$30.15
866	23-May-13	11	5	$28.10	Yes	$58.25	$30.15
867	23-May-13	11	6	$30.18	Yes	$58.25	$28.07
868	23-May-13	11	7	$31.04	Yes	$58.25	$27.21
869	23-May-13	11	8	$28.18	Yes	$58.25	$30.07
870	23-May-13	11	9	$30.27	Yes	$58.25	$27.98
871	23-May-13	11	10	$30.27	Yes	$58.25	$27.98
872	23-May-13	11	11	$30.27	Yes	$58.25	$27.98
873	23-May-13	11	12	$22.95	Yes	$58.25	$35.30
874	23-May-13	12	1	$22.01	Yes	$58.25	$36.24
875	23-May-13	12	2	$21.33	Yes	$58.25	$36.92
876	23-May-13	12	3	$20.94	Yes	$58.25	$37.31
877	23-May-13	12	4	$22.55	Yes	$58.25	$35.70
878	23-May-13	12	5	$22.55	Yes	$58.25	$35.70
879	23-May-13	12	6	$21.36	Yes	$58.25	$36.89
880	23-May-13	12	7	$9.16	Yes	$58.25	$49.09
881	23-May-13	12	8	$20.93	Yes	$58.25	$37.32
882	23-May-13	12	9	$20.93	Yes	$58.25	$37.32
883	23-May-13	12	10	$16.95	Yes	$58.25	$41.30
884	23-May-13	12	11	$22.59	Yes	$58.25	$35.66
885	23-May-13	12	12	$22.63	Yes	$58.25	$35.62
886	23-May-13	13	1	$22.02	Yes	$58.25	$36.23
887	23-May-13	13	2	$27.77	Yes	$58.25	$30.48
888	23-May-13	13	3	$22.73	Yes	$58.25	$35.52
889	23-May-13	13	4	$22.79	Yes	$58.25	$35.46
890	23-May-13	13	5	$22.08	Yes	$58.25	$36.17
891	23-May-13	13	6	$22.79	Yes	$58.25	$35.46
892	23-May-13	13	7	$22.14	Yes	$58.25	$36.11
893	23-May-13	13	8	$22.14	Yes	$58.25	$36.11
894	23-May-13	13	9	$22.14	Yes	$58.25	$36.11
895	23-May-13	13	10	$27.79	Yes	$58.25	$30.46
896	23-May-13	13	11	$22.37	Yes	$58.25	$35.88

Number	Trade Date	Trade Hour	Interval	Market LMP	Eligible Flag	Calculated LMP	Change in LMP
897	23-May-13	13	12	$27.79	Yes	$58.25	$30.46
898	23-May-13	14	1	$21.55	Yes	$58.25	$36.70
899	23-May-13	14	2	$21.55	Yes	$58.25	$36.70
900	23-May-13	14	3	$21.55	Yes	$58.25	$36.70
901	23-May-13	14	4	$21.10	Yes	$58.25	$37.15
902	23-May-13	14	5	$9.52	Yes	$58.25	$48.73
903	23-May-13	14	6	$16.22	Yes	$58.25	$42.03
904	23-May-13	14	7	$14.39	Yes	$58.25	$43.86
905	23-May-13	14	8	$16.58	Yes	$58.25	$41.67
906	23-May-13	14	9	$21.45	Yes	$58.25	$36.80
907	23-May-13	14	10	$19.57	Yes	$58.25	$38.68
908	23-May-13	14	11	$19.86	Yes	$58.25	$38.39
909	23-May-13	14	12	($3.19)	Yes	$58.25	$61.44
910	23-May-13	15	1	($31.76)	Yes	$58.25	$90.01
911	23-May-13	15	2	$0.89	Yes	$58.25	$57.36
912	23-May-13	15	3	$17.48	Yes	$58.25	$40.77
913	23-May-13	15	4	$21.16	Yes	$58.25	$37.09
914	23-May-13	15	5	$9.56	Yes	$58.25	$48.69
915	23-May-13	15	6	$9.56	Yes	$58.25	$48.69
916	23-May-13	15	7	$14.50	Yes	$58.25	$43.75
917	23-May-13	15	8	$21.39	Yes	$58.25	$36.86
918	23-May-13	15	9	$21.05	Yes	$58.25	$37.20
919	23-May-13	15	10	$21.05	Yes	$58.25	$37.20
920	23-May-13	15	11	$21.05	Yes	$58.25	$37.20
921	23-May-13	15	12	$21.05	Yes	$58.25	$37.20
922	23-May-13	16	1	$21.51	Yes	$58.25	$36.74
923	23-May-13	16	2	$21.01	Yes	$58.25	$37.24
924	23-May-13	16	3	$21.51	Yes	$58.25	$36.74
925	23-May-13	16	4	$21.50	Yes	$58.25	$36.75
926	23-May-13	16	5	$21.20	Yes	$58.25	$37.05
927	23-May-13	16	6	$21.59	Yes	$58.25	$36.66
928	23-May-13	16	7	$21.98	Yes	$58.25	$36.27
929	23-May-13	16	8	$21.22	Yes	$58.25	$37.03
930	23-May-13	16	9	$21.22	Yes	$58.25	$37.03
931	23-May-13	16	10	$21.37	Yes	$58.25	$36.88
932	23-May-13	16	11	$21.50	Yes	$58.25	$36.75
933	23-May-13	16	12	$21.06	Yes	$58.25	$37.19
934	23-May-13	17	1	$21.55	Yes	$58.25	$36.70
935	23-May-13	17	2	$19.92	Yes	$58.25	$38.33
936	23-May-13	17	3	$20.82	Yes	$58.25	$37.43
937	23-May-13	17	4	$20.72	Yes	$58.25	$37.53
938	23-May-13	17	5	$21.12	Yes	$58.25	$37.13
939	23-May-13	17	6	$27.48	Yes	$58.25	$30.77
940	23-May-13	17	7	$28.65	Yes	$58.25	$29.60
941	23-May-13	17	8	$28.65	Yes	$58.25	$29.60

Number	Trade Date	Trade Hour	Interval	Market LMP	Eligible Flag	Calculated LMP	Change in LMP
942	23-May-13	17	9	$29.01	Yes	$58.25	$29.24
943	23-May-13	17	10	$21.36	Yes	$58.25	$36.89
944	23-May-13	17	11	$30.56	Yes	$58.25	$27.69
945	23-May-13	17	12	$40.61	Yes	$58.25	$17.64
946	23-May-13	18	1	$36.37	Yes	$58.25	$21.88
947	23-May-13	18	2	$35.02	Yes	$58.25	$23.23
948	23-May-13	18	3	$30.36	Yes	$58.25	$27.89
949	23-May-13	18	4	$32.10	Yes	$58.25	$26.15
950	23-May-13	18	5	$33.29	Yes	$58.25	$24.96
951	23-May-13	18	6	$34.11	Yes	$58.25	$24.14
952	23-May-13	18	7	$33.13	Yes	$58.25	$25.12
953	23-May-13	18	8	$33.13	Yes	$58.25	$25.12
954	23-May-13	18	9	$29.67	Yes	$58.25	$28.58
955	23-May-13	18	10	$26.57	Yes	$58.25	$31.68
956	23-May-13	18	11	$21.14	Yes	$58.25	$37.11
957	23-May-13	18	12	$22.85	Yes	$58.25	$35.40
958	23-May-13	19	1	$26.26	Yes	$58.25	$31.99
959	23-May-13	19	2	$27.37	Yes	$58.25	$30.88
960	23-May-13	19	3	$29.34	Yes	$58.25	$28.91
961	23-May-13	19	4	$27.42	Yes	$58.25	$30.83
962	23-May-13	19	5	$29.38	Yes	$58.25	$28.87
963	23-May-13	19	6	$29.96	Yes	$58.25	$28.29
964	23-May-13	19	7	$30.75	Yes	$58.25	$27.50
965	23-May-13	19	8	$30.75	Yes	$58.25	$27.50
966	23-May-13	19	9	$30.75	Yes	$58.25	$27.50
967	23-May-13	19	10	$30.02	Yes	$58.25	$28.23
968	23-May-13	19	11	$30.55	Yes	$58.25	$27.70
969	23-May-13	19	12	$29.49	Yes	$58.25	$28.76
970	23-May-13	20	1	$27.21	Yes	$58.25	$31.04
971	23-May-13	20	2	$29.69	Yes	$58.25	$28.56
972	23-May-13	20	3	$29.76	Yes	$58.25	$28.49
973	23-May-13	20	4	$29.84	Yes	$58.25	$28.41
974	23-May-13	20	5	$34.72	Yes	$58.25	$23.53
975	23-May-13	20	6	$36.32	Yes	$58.25	$21.93
976	23-May-13	20	7	$36.48	Yes	$58.25	$21.77
977	23-May-13	20	8	$36.60	Yes	$58.25	$21.65
978	23-May-13	20	9	$36.62	Yes	$58.25	$21.63
979	23-May-13	20	10	$36.75	Yes	$58.25	$21.50
980	23-May-13	20	11	$36.73	Yes	$58.25	$21.52
981	23-May-13	20	12	$36.75	Yes	$58.25	$21.50
982	23-May-13	21	1	$36.80	Yes	$58.25	$21.45
983	23-May-13	21	2	$36.80	Yes	$58.25	$21.45
984	23-May-13	21	3	$36.80	Yes	$58.25	$21.45
985	23-May-13	21	4	$51.57	Yes	$58.25	$6.68
986	23-May-13	21	5	$52.64	Yes	$58.25	$5.61

Number	Trade Date	Trade Hour	Interval	Market LMP	Eligible Flag	Calculated LMP	Change in LMP
987	23-May-13	21	6	$52.57	Yes	$58.25	$5.68
988	23-May-13	21	7	$52.11	Yes	$58.25	$6.14
989	23-May-13	21	8	$44.20	Yes	$58.25	$14.05
990	23-May-13	21	9	$50.14	Yes	$58.25	$8.11
991	23-May-13	21	10	$50.85	Yes	$58.25	$7.40
992	23-May-13	21	11	$51.88	Yes	$58.25	$6.37
993	23-May-13	21	12	$51.83	Yes	$58.25	$6.42
994	23-May-13	22	1	$52.66	Yes	$58.25	$5.59
995	23-May-13	22	2	$51.79	Yes	$58.25	$6.46
996	23-May-13	22	3	$37.66	Yes	$58.25	$20.59
997	23-May-13	22	4	$36.72	Yes	$58.25	$21.53
998	23-May-13	22	5	$36.73	Yes	$58.25	$21.52
999	23-May-13	22	6	$36.73	Yes	$58.25	$21.52
1000	23-May-13	22	7	$36.28	Yes	$58.25	$21.97
1001	23-May-13	22	8	$35.94	Yes	$58.25	$22.31
1002	23-May-13	22	9	$35.49	Yes	$58.25	$22.76
1003	23-May-13	22	10	$35.39	Yes	$58.25	$22.86
1004	23-May-13	22	11	$34.30	Yes	$58.25	$23.95
1005	23-May-13	22	12	$30.00	Yes	$58.25	$28.25
1006	24-May-13	13	3	$35.92	Yes	$57.75	$21.83
1007	24-May-13	13	4	$35.94	Yes	$57.75	$21.81
1008	24-May-13	13	5	$36.74	Yes	$57.75	$21.01
1009	24-May-13	13	6	$36.74	Yes	$57.75	$21.01
1010	24-May-13	13	7	$36.58	Yes	$57.75	$21.17
1011	24-May-13	13	8	$35.80	Yes	$57.75	$21.95
1012	24-May-13	13	9	$36.02	Yes	$57.75	$21.73
1013	24-May-13	13	10	$36.46	Yes	$57.75	$21.29
1014	24-May-13	13	11	$36.58	Yes	$57.75	$21.17
1015	24-May-13	13	12	$36.46	Yes	$57.75	$21.29
1016	24-May-13	14	1	$34.29	Yes	$57.75	$23.46
1017	24-May-13	14	2	$33.85	Yes	$57.75	$23.90
1018	24-May-13	14	3	$33.85	Yes	$57.75	$23.90
1019	24-May-13	14	4	$34.57	Yes	$57.75	$23.18
1020	24-May-13	14	5	$33.81	Yes	$57.75	$23.94
1021	24-May-13	14	6	$33.86	Yes	$57.75	$23.89
1022	24-May-13	14	7	$34.09	Yes	$57.75	$23.66
1023	24-May-13	14	8	$35.16	Yes	$57.75	$22.59
1024	24-May-13	14	9	$35.07	Yes	$57.75	$22.68
1025	24-May-13	14	10	$34.11	Yes	$57.75	$23.64
1026	24-May-13	14	11	$35.03	Yes	$57.75	$22.72
1027	24-May-13	14	12	$35.11	Yes	$57.75	$22.64
1028	24-May-13	15	1	$34.94	Yes	$57.75	$22.81
1029	24-May-13	15	2	$36.01	Yes	$57.75	$21.74
1030	24-May-13	15	3	$35.02	Yes	$57.75	$22.73
1031	24-May-13	15	4	$35.03	Yes	$57.75	$22.72

Number	Trade Date	Trade Hour	Interval	Market LMP	Eligible Flag	Calculated LMP	Change in LMP
1032	24-May-13	15	5	$35.03	Yes	$57.75	$22.72
1033	24-May-13	15	6	$35.03	Yes	$57.75	$22.72
1034	24-May-13	15	7	$35.00	Yes	$57.75	$22.75
1035	24-May-13	15	8	$35.00	Yes	$57.75	$22.75
1036	24-May-13	15	9	$33.64	Yes	$57.75	$24.11
1037	24-May-13	15	10	$29.51	Yes	$57.75	$28.24
1038	24-May-13	15	11	$29.88	Yes	$57.75	$27.87
1039	24-May-13	15	12	$31.55	Yes	$57.75	$26.20
1040	24-May-13	16	1	$32.00	Yes	$57.75	$25.75
1041	24-May-13	16	2	$31.52	Yes	$57.75	$26.23
1042	24-May-13	16	3	$32.95	Yes	$57.75	$24.80
1043	24-May-13	16	4	$34.75	Yes	$57.75	$23.00
1044	24-May-13	16	5	$34.82	Yes	$57.75	$22.93
1045	24-May-13	16	6	$34.75	Yes	$57.75	$23.00
1046	24-May-13	16	7	$34.69	Yes	$57.75	$23.06
1047	24-May-13	16	8	$32.97	Yes	$57.75	$24.78
1048	24-May-13	16	9	$32.97	Yes	$57.75	$24.78
1049	24-May-13	16	10	$32.92	Yes	$57.75	$24.83
1050	24-May-13	16	11	$34.04	Yes	$57.75	$23.71
1051	24-May-13	16	12	$32.92	Yes	$57.75	$24.83
1052	24-May-13	17	1	$33.16	Yes	$57.75	$24.59
1053	24-May-13	17	2	$34.71	Yes	$57.75	$23.04
1054	24-May-13	17	3	$34.71	Yes	$57.75	$23.04
1055	24-May-13	17	4	$34.56	Yes	$57.75	$23.19
1056	24-May-13	17	5	$34.56	Yes	$57.75	$23.19
1057	24-May-13	17	6	$33.68	Yes	$57.75	$24.07
1058	24-May-13	17	7	$33.56	Yes	$57.75	$24.19
1059	24-May-13	17	8	$33.66	Yes	$57.75	$24.09
1060	24-May-13	17	9	$33.66	Yes	$57.75	$24.09
1061	24-May-13	17	10	$33.65	Yes	$57.75	$24.10
1062	24-May-13	17	11	$33.65	Yes	$57.75	$24.10
1063	24-May-13	17	12	$33.65	Yes	$57.75	$24.10
1064	24-May-13	18	1	$36.30	Yes	$57.75	$21.45
1065	24-May-13	18	2	$36.19	Yes	$57.75	$21.56
1066	24-May-13	18	3	$35.56	Yes	$57.75	$22.19
1067	24-May-13	18	4	$35.04	Yes	$57.75	$22.71
1068	24-May-13	18	5	$35.19	Yes	$57.75	$22.56
1069	24-May-13	18	6	$35.04	Yes	$57.75	$22.71
1070	24-May-13	18	7	$34.81	Yes	$57.75	$22.94
1071	24-May-13	18	8	$34.66	Yes	$57.75	$23.09
1072	24-May-13	18	9	$35.53	Yes	$57.75	$22.22
1073	24-May-13	18	10	$35.40	Yes	$57.75	$22.35
1074	24-May-13	18	11	$35.20	Yes	$57.75	$22.55
1075	24-May-13	18	12	$34.29	Yes	$57.75	$23.46
1076	24-May-13	19	1	$35.28	Yes	$57.75	$22.47

Number	Trade Date	Trade Hour	Interval	Market LMP	Eligible Flag	Calculated LMP	Change in LMP
1077	24-May-13	19	2	$35.28	Yes	$57.75	$22.47
1078	24-May-13	19	3	$35.86	Yes	$57.75	$21.89
1079	24-May-13	19	4	$35.95	Yes	$57.75	$21.80
1080	24-May-13	19	5	$35.95	Yes	$57.75	$21.80
1081	24-May-13	19	6	$35.95	Yes	$57.75	$21.80
1082	24-May-13	19	7	$35.87	Yes	$57.75	$21.88
1083	24-May-13	19	8	$35.87	Yes	$57.75	$21.88
1084	24-May-13	19	9	$35.87	Yes	$57.75	$21.88
1085	24-May-13	19	10	$36.12	Yes	$57.75	$21.63
1086	24-May-13	19	11	$36.13	Yes	$57.75	$21.62
1087	24-May-13	19	12	$36.01	Yes	$57.75	$21.74
1088	24-May-13	20	1	$36.22	Yes	$57.75	$21.53
1089	24-May-13	20	2	$36.11	Yes	$57.75	$21.64
1090	24-May-13	20	3	$36.11	Yes	$57.75	$21.64
1091	24-May-13	20	4	$36.15	Yes	$57.75	$21.60
1092	24-May-13	20	5	$36.15	Yes	$57.75	$21.60
1093	24-May-13	20	6	$37.27	Yes	$57.75	$20.48
1094	24-May-13	20	7	$37.77	Yes	$57.75	$19.98
1095	24-May-13	20	8	$43.36	Yes	$57.75	$14.39
1096	24-May-13	20	9	$44.96	Yes	$57.75	$12.79
1097	24-May-13	20	10	$43.48	Yes	$57.75	$14.27
1098	24-May-13	20	11	$43.48	Yes	$57.75	$14.27
1099	24-May-13	20	12	$38.00	Yes	$57.75	$19.75
1100	24-May-13	21	1	$35.38	Yes	$57.75	$22.37
1101	24-May-13	21	2	$35.38	Yes	$57.75	$22.37
1102	24-May-13	21	3	$35.38	Yes	$57.75	$22.37
1103	24-May-13	21	4	$36.42	Yes	$57.75	$21.33
1104	24-May-13	21	5	$36.58	Yes	$57.75	$21.17
1105	24-May-13	21	6	$36.42	Yes	$57.75	$21.33
1106	24-May-13	21	7	$37.31	Yes	$57.75	$20.44
1107	24-May-13	21	8	$37.31	Yes	$57.75	$20.44
1108	24-May-13	21	9	$37.31	Yes	$57.75	$20.44
1109	24-May-13	21	10	$37.52	Yes	$57.75	$20.23
1110	24-May-13	21	11	$37.52	Yes	$57.75	$20.23
1111	24-May-13	21	12	$36.36	Yes	$57.75	$21.39
1112	24-May-13	22	1	$36.95	Yes	$57.75	$20.80
1113	24-May-13	22	2	$36.94	Yes	$57.75	$20.81
1114	24-May-13	22	3	$36.95	Yes	$57.75	$20.80
1115	24-May-13	22	4	$37.16	Yes	$57.75	$20.59
1116	24-May-13	22	5	$35.35	Yes	$57.75	$22.40
1117	24-May-13	22	6	$36.30	Yes	$57.75	$21.45
1118	24-May-13	22	7	$35.98	Yes	$57.75	$21.77
1119	24-May-13	22	8	$35.86	Yes	$57.75	$21.89
1120	24-May-13	22	9	$35.08	Yes	$57.75	$22.67
1121	24-May-13	22	10	$34.25	Yes	$57.75	$23.50

Number	Trade Date	Trade Hour	Interval	Market LMP	Eligible Flag	Calculated LMP	Change in LMP
1122	24-May-13	22	11	$34.13	Yes	$57.75	$23.62
1123	24-May-13	22	12	$34.00	Yes	$57.75	$23.75

Appendix C: Exceptional Dispatch Bid Mitigation Analysis

In May 2013, 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 May. With exceptional dispatch bid mitigation, the costs for these types of exceptional dispatches were $ 0. Without the exceptional dispatch bid mitigation, the costs for these types of exceptional dispatches would be $ 186,501.61. The cost saving from the exceptional dispatch bid mitigation was $ 186,501.61.

Table 10: Bid Mitigation Analysis for May

Type	Number of Resources	Costs without Bid Mitigation	Costs with Bid Mitigation	Cost Saving
NONTMOD	7	$137,520.50	$0.00	$137,520.50
TMODEL5	7	$18,170.04	$0.00	$18,170.04
TMODEL6	2	$30,811.07	$0.00	$30,811.07
Total	16	$186,501.61	$0.00	$186,501.61

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 30th day of August, 2013.

/s/ Jennifer Rotz

Jennifer Rotz