California Independent System Operator Corporation



August 30, 2011

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 2011 Exceptional Dispatch Report (Chart 2 data)

Dear Secretary Bose:

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

The attached report provides Chart 2 data for the month of May 2011. The attached Chart 2 report also includes the price impact analysis for the month of May 2011 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 2011.

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



# **Exceptional Dispatch Report**

## Table 2: May 2011

**ISO Market Services** 

August 30, 2011

CAISO 250 Outcropping Way Folsom, California 95630 (916) 351-4400

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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 15<sup>th</sup> of each month and one issued on the 30<sup>th</sup> of each month. This report provides data on the frequency, reasons and costs for Exceptional Dispatches issued in May 2011.

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 2011 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-dayahead 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, nonmodeled 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 2011, the ISO issued exceptional dispatches for the following local area generation requirement: (1) G-206, San Diego area generation requirements. Exceptional dispatch instructions were also issued for the following transmission management requirements: (1) T-129, transmission facilities in Fresno area; (2) T-132, transmission facilities in San Diego and Imperial Valley area; (3) T-135, Lugo-Victorville 500 kV Line and Sylmar Transformer Banks Operation; (4) T-138, transmission facilities in Humboldt area; 5) T-163, South of Magunden Nomograms; 6) T-167, transmission facilities in Tesla/Bellota Area; and (7) other transmission outages in PG&E, SCE and SDG&E area.

In Table 1, the reason codes starting with "G" refer to an ISO operating procedure for generation requirements and the reason codes starting with "T" refer to an ISO operating procedure for transmission facilities. Most of the generation procedures are internal to the ISO and not available publically on the ISO website; however, all of the transmission procedures are available on the ISO website.<sup>1</sup>

The following additional reasons for exceptional dispatch instructions in May 2011 were not related to specific generation or transmission operating procedures: (1) Software Limitation, when an exceptional dispatch instruction was used to bridge schedules across days for resources with a minimum down time of 24 hours, as the ISO software does not handle multi day commitment. (For instance, a resource has a day-ahead schedule from 0600 till 2300, and then is shut down in 2400. If this resource had a minimum down time of 24 hours and it is required the following day, then the ISO issues an exceptional dispatch to commit this resource in 2400 so that it can be dispatched economically in the following day. Software limitation reason was also used for exceptional dispatches to manually issue shut down instructions to a resource because of a temporary Automatic Dispatch System ("ADS") failure, or similar issues.); (2) Market Disruption, when the exceptional dispatch instructions were issued due to HASP failures; and (3) Ramp Rate, when exceptional dispatch instructions were issued to dispatch a resource above its physical minimum to a level where the resource has significantly higher ramp rate capability. For example, a resource could have a ramp rate of 2 MW/min at its physical minimum of 100 MW, but a significantly higher ramp rate of 10 MW/min at 250 MW. The operators could issue an exceptional dispatch for this resource to be dispatched to 250 MW, so that the resource could respond to the anticipated steep load ramp or to a potential contingency. There were a few other reasons used to explain exceptional dispatch instructions in May, which are self explanatory.

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

As mentioned earlier, the data shown in Table 1 is based on a template specified in the September 2009 order.<sup>2</sup> This table contains all the information published in the 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) 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:

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

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

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

- 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 portion of the real-time instructed imbalance energy charge code (6470).<sup>4</sup>
- The CC6482 column shows the real-time excess cost for the classification.<sup>5</sup>
- The CC6488 column shows the real-time exceptional dispatch uplift settlement for the classification.<sup>6</sup> The CC6620 shows the bid cost recovery payment for the classification. This cost is shown for all pre-day-ahead unit commitments only.

Charge codes 6470, 6470 INC, 6470 DEC, 6482 and 6488 are shown in Table 1 because all these charge code 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 capacity under Interim Capacity Procurement Mechanism (ICPM) in May 2011.

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

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

<sup>&</sup>lt;sup>6</sup> For further details please refer to the BPM configuration Guide: Real Time Exceptional dispatch uplift Settlement published on the ISO's website.

#### Table 1: Exceptional Dispatches in May 2011

# California Independent System Operator Corporation Exceptional Dispatch Report August 30, 2011

					Chart 2:	Table of E	Exception	onal Di	spatc	hes for	Period	d 01/Ma	y/2011 - 3	1/May/20	11						
Num ber	Mark et Type	Reason	Location	Local Reliability Area	Trade Date	MW	Comm itment	INC_ DEC	Hou rs	Begin Time	End Time	Total MWH	Min Load Cost	Start Up Cost	CC6470	ED MWH (INC/DEC)	CC6470 INC	CC6470 DEC	CC6482	CC6488	CC6620
1	RT	G-206	SDG&E	San Diego	2-May-11	40	Yes	INC	13	11:00	23:59	598.69	\$32,989	\$0	(\$27,25 6)	\$0	\$0	\$0	\$0	\$0	\$0
2	RT	Generation Outage	SCE	LA Basin	29-May- 11	160	No	INC	5	19:30	23:59	731.10	\$26,728	\$0	\$3,919	\$0	\$0	\$0	\$0	\$0	\$0
3	RT	Market Disruption	N/A	N/A	23-May- 11	200	No	DEC	1	5:00	5:59	0.00	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4	RT	Market Disruption	N/A	N/A	23-May- 11	160	Yes	INC	1	5:00	5:59	0.00	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5	RT	Market Disruption	N/A	N/A	26-May- 11	400	Yes	INC	1	19:00	19:59	0.00	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
6	RT	Over Generation	PG&E	Fresno	8-May-11	0	No	INC	1	23:35	23:59	25.83	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
7	RT	Over Generation	PG&E	Fresno	19-May- 11	310	No	DEC	1	5:55	5:59	-55.13	\$0	\$0	(\$3)	\$0	\$0	\$0	\$0	\$0	\$0
8	RT	Over Generation	PG&E	Fresno	19-May- 11	-310	No	INC	1	6:00	6:14	-101.74	\$0	\$0	(\$2,953)	(\$17)	\$0	(\$437)	\$0	\$0	\$0
9	RT	PACI Scheduling Rights	N/A	N/A	13-May- 11	178- 185	No	DEC	4	14:05	17:59	-563.13	\$0	\$0	\$4,905	(\$118)	\$0	\$1,347	\$0	\$0	\$0
10	RT	Path 26	SCE	Big Creek- Ventura	25-May- 11	50	Yes	INC	7	15:45	21:59	304.93	\$0	\$0	(\$5,847)	\$171	(\$2,986)	\$0	(\$5,294)	\$0	\$0
11	RT	Pump Management	PG&E	Fresno	7-May-11	2	Yes	INC	1	0:00	0:59	-12.92	\$0	\$0	\$392	\$0	\$0	\$0	\$0	\$0	\$0
12	RT	Pump Management	PG&E	Fresno	9-May-11	0	Yes	INC	1	0:00	0:39	0.00	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
13	RT	Pump Management	PG&E	Fresno	13-May- 11	310	No	INC	1	0:00	0:29	155.00	\$0	\$0	(\$4,700)	\$0	\$0	\$0	\$0	\$0	\$0
14	RT	Pump Management	PG&E	Fresno	24-May- 11	0	No	INC	1	23:05	23:34	3.46	\$0	\$0	(\$0)	\$0	\$0	\$0	\$0	\$0	\$0
15	RT	Ramp Rate	SCE	LA Basin	9-May-11	142	Yes	INC	4	17:25	20:59	517.55	\$16,659	\$10,324	(\$23,13 6)	\$288	(\$17,14 7)	\$0	\$0	\$0	\$0
16	RT	Ramp Rate	SCE	LA Basin	28-May- 11	88	No	DEC	3	18:25	20:59	-111.98	\$0	\$0	\$3,626	\$0	\$0	\$0	\$0	\$0	\$0
17	RT	Ramp Rate	SCE	LA Basin	28-May- 11	74- 170	No	INC	3	18:25	20:59	-19.28	\$0	\$0	(\$8,419)	\$9	(\$9,375)	\$0	\$0	\$0	\$0
18	RT	Software Limitation	N/A	N/A	10-May- 11	282- 385	Yes	DEC	6	7:00	12:59	0.00	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
19	RT	Software Limitation	N/A	N/A	10-May- 11	503- 550	No	INC	2	12:20	13:29	-288.33	\$5,153	\$0	\$4,886	\$0	\$0	\$0	\$0	\$0	\$0
20	RT	Software Limitation	PG&E	Bay Area	1-May-11	0	Yes	INC	2	22:04	23:19	6.67	\$0	\$0	(\$279)	\$0	\$0	\$0	\$0	\$0	\$0
21	RT	Software Limitation	PG&E	Bay Area	9-May-11	0	Yes	INC	7	6:35	12:29	1.00	\$0	\$0	(\$34)	\$0	\$0	\$0	\$0	\$0	\$0

#### for Deried 04/May/2014 24/May/2014 Chart O. Table of E. -11-. .

	Mark			Local																	
Num	_et	_		Reliability	Trade		Comm	INC_	Hou	Begin	End	Total	Min Load	Start Up		ED MWH	CC6470	CC6470			
ber	Туре	Reason	Location	Area	Date 11-May-	MW	itment	DEC	rs	Time	Time	MWH	Cost	Cost	CC6470	(INC/DEC)	INC	DEC	CC6482	CC6488	CC6620
22	RT	Software Limitation	PG&E	Bay Area	11-iviay-	0	Yes	INC	3	11:44	13:09	0.00	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
				<b>,</b>	12-May-																
23	RT	Software Limitation	PG&E	Bay Area	11	0	Yes	INC	7	9:15	15:59	0.00	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
24	RT	Software Limitation	PG&E	Bay Area	31-May- 11	510	No	INC	3	10:45	12:07	-373.73	\$22,851	\$0	\$71,800	\$0	\$0	\$0	\$0	\$0	\$0
25	RT	Software Limitation	PG&E	Fresno	2-May-11	0	No	INC	1	23:13	23:59	0.00	\$0	\$0 \$0	\$0	\$0 \$0	\$0	<u>\$0</u>	\$0	\$0	\$0
26	RT	Software Limitation	PG&E	Fresno	6-May-11	0	No	INC	1	23:30	23:44	6.92	\$0 \$0	\$0 \$0	(\$144)	\$0 \$0	\$0	<u>\$0</u>	\$0	\$0 \$0	\$0
27	RT	Software Limitation	PG&E	Fresno	7-May-11	310	No	INC	15	9:40	23:29	129.17	\$0	\$0	(\$3,816)	\$0 \$0	\$0	<u>\$0</u>	\$0 \$0	\$0	\$0
28	RT	Software Limitation	PG&E	Fresno	9-May-11	0	Yes	DEC	2	6:55	7:59	8.71	\$0	\$0	(\$93)	\$0 \$0	\$0	<u>\$0</u>	\$0	\$0	\$0
29	RT	Software Limitation	PG&E	Fresno	9-May-11	83	Yes	INC	18	6:55	23:59	10.14	\$0 \$0	\$0 \$0	\$114	\$0 \$0	\$0	<u>\$0</u>	\$0	\$0 \$0	\$0
20			1002	1100110	10-May-	00	100		10	0.00	20.00	10.11			ψΠ	ψu	ψũ		ψ0	<b>\$</b>	
30	RT	Software Limitation	PG&E	Fresno	11	398- 501	No	INC	2	12:20	13:29	-156.40	\$0	\$0	\$2,738	\$0	\$0	\$0	\$0	\$0	\$0
31	RT	Software Limitation	PG&E	Fresno	11-May- 11	0	No	INC	1	23:15	23:59	19.83	\$0	\$0	(\$21)	\$0	\$0	\$0	\$0	\$0	\$0
- 51			TOQL	1163110	21-May-	0				20.10	20.00	10.00	ψυ	ψυ	(ψ21)	ψυ	ψυ	ψυ	ΨΟ	ψυ	Ψ
32	RT	Software Limitation	PG&E	Fresno	11	0	No	INC	24	0:00	23:44	0.92	\$0	\$0	\$93	\$0	\$0	\$0	\$0	\$0	\$0
33	RT	Software Limitation	PG&E	Fresno	22-May- 11	310	No	DEC	1	23:30	23:59	-142.08	\$0	\$0	(\$92)	\$0	\$0	\$0	\$0	\$0	\$0
- 33	ΓI	Sollware Limitation	FGae	Flesho	22-May-	310	INU	DEC	I	23.30	23.59	-142.00	φU	<u>.</u>	(\$92)	<del>م</del> 0	φU	ΦU		<del>م</del> 0	<del>پ</del> ۵
34	RT	Software Limitation	PG&E	Fresno	11	0	No	INC	1	23:00	23:29	-3.46	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
25	рт	Software Limitation	PG&E	Fraana	23-May- 11	160	No		F	14.07	10.20	407 40	¢10.170	¢o	(¢E 700)	¢۵	\$0	¢o	¢0	¢0	¢o
35	RT	Software Limitation	PGAE	Fresno	27-May-	160	No	INC	5	14:37	18:36	437.43	\$18,173	\$0	(\$5,722)	\$0	ΦU	\$0	\$0	\$0	\$0
36	RT	Software Limitation	PG&E	Fresno	11	310	No	INC	1	0:15	0:59	129.17	\$0	\$0	(\$1,656)	\$0	\$0	\$0	\$0	\$0	\$0
07	рт			<b>F</b> actoria	29-May-	0	Nia		4	00.05	00.50	40.07	¢o	¢o	<b>ФОТ</b> Г	¢o	¢o	¢o	¢o	<b>*</b> 0	¢o
37	RT	Software Limitation	PG&E	Fresno	11 30-May-	0	No	INC	1	23:05	23:59	16.37	\$0	\$0	\$375	\$0	\$0	\$0	\$0	\$0	\$0
38	RT	Software Limitation	PG&E	Fresno	11	310	Yes	INC	24	0:00	23:59	79.57	\$0	\$0	\$439	\$0	\$0	\$0	\$0	\$0	\$0
				_	31-May-								••	<b>.</b>		<b>^</b>		<b>A</b> -			
39	RT	Software Limitation	PG&E	Fresno	11	310	Yes	INC	23	0:00	22:39	254.87	\$0	\$31	(\$2,252)	\$0 \$0	\$0	\$0	\$0	\$0	\$0
40	RT	Software Limitation	PG&E	N/A	9-May-11 28-May-	0	Yes	INC	2	6:35	7:14	0.04	\$0	\$0	(\$1) (\$17,02	\$0	\$0	\$0	\$0	\$0	\$0
41	RT	Software Limitation	PG&E	N/A	20-May- 11	3	Yes	INC	1	17:15	17:59	20.56	\$0	\$0	(\\$17,02 1)	\$0	\$0	\$0	\$0	\$0	\$0
					12-May-																
42	RT	Software Limitation	PG&E	Sierra	11	0	Yes	INC	1	12:00	12:22	-0.04	\$0	\$0	\$2	\$0	\$0	\$0	\$0	\$0	\$0
43	RT	Software Limitation	SCE	LA Basin	3-May-11	20	Yes	INC	1	23:00	23:59	22.50	\$2,837	\$0	(\$885)	\$0	\$0	\$0	\$0	\$0	\$0
44	RT	Software Limitation	SCE	LA Basin	11-May- 11	0	Yes	INC	2	14:20	15:04	0.00	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
					19-May-	•															
45	RT	Software Limitation	SCE	LA Basin	11	0	Yes	INC	2	11:25	12:24	0.00	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
46	RT	Software Limitation	SCE	LA Basin	24-May- 11	0	Yes	INC	1	8:20	8:49	0.00	\$0	\$296	(\$0)	\$0	\$0	\$0	\$0	\$0	\$0
	111			Li Daoin	25-May-	0	103		1	0.20	0.70	0.00	ψυ	ψ200	(ψυ)	ψΟ	ΨŪ	ψυ	ΨΟ	ΨΟ	ψυ
47	RT	Software Limitation	SCE	LA Basin	11	0	No	INC	3	6:45	8:44	0.00	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
48	RT	Software Limitation	SCE	LA Basin	26-May-	227	No	DEC	6	18:50	23:59	-	\$0	\$0	\$6,701	(\$631)	\$0	\$1,844	\$0	\$0	\$0

	Mark			Local																	
Num ber	et Type	Reason	Location	Reliability Area	Trade Date	MW	Comm itment	INC_ DEC	Hou rs	Begin Time	End Time	Total MWH	Min Load Cost	Start Up Cost	CC6470	ED MWH (INC/DEC)	CC6470 INC	CC6470 DEC	CC6482	CC6488	CC6620
DCI	турс	Reason	Location	Alca	11	10100		DLU	15	TITIC	Time	1,163.3	0030	0031	000470			DLU	000402	000400	000020
												7									
49	RT	Software Limitation	SDG&E	San Diego	1-May-11	20	No	INC	3	21:25	23:54	52.93	\$0	\$0	(\$1,875)	\$0	\$0	\$0	\$0	\$0	\$0
50	D.T.		00005	0 5	18-May-				•	17.10	40.40	70.00	<b>\$</b> 0	<b>\$</b> 0	<b>.</b>	<b>\$</b> 0		<b>\$</b> 0	<b>\$</b> 0	<b>\$</b> 0	<b>\$</b> 0
50	RT	Software Limitation	SDG&E	San Diego	11 21-May-	93	Yes	INC	3	17:42	19:19	78.86	\$0	\$0	\$43	\$2	(\$15)	\$0	\$0	\$0	\$0
51	RT	Software Limitation	SDG&E	San Diego	21-iviay-	0	No	INC	1	23:30	23:59	0.00	\$0	\$806	(\$0)	\$0	\$0	\$0	\$0	\$0	\$0
				~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	22-May-														·		
52	RT	Software Limitation	SDG&E	San Diego	11	0	Yes	INC	6	0:00	5:29	0.00	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
53	RT	SP26 Capacity	PG&E	Bay Area	31-May- 11	94	Yes	INC	2	13:00	14:44	204.26	\$7,090	\$506	(\$8,787)	\$108	(\$6,181)	\$0	\$0	\$0	\$0
- 55		Of 20 Odpacity	1 Ode	Day Alca	31-May-	54	103		2	10.00	17.77	204.20	Ψ1,000	ψ000	(\$0,707)	<b>\$100</b>	(\$0,101)	ΨΟ	ψυ	ψυ	ΨΟ
54	RT	SP26 Capacity	PG&E	N/A	11	46	Yes	INC	2	13:00	14:59	129.59	\$3,766	\$144	(\$3,320)	\$71	(\$1,829)	\$0	(\$2,056)	\$0	\$0
	БТ		005		0.14	05	Vee		47	7.00	00.50	000 50	<b>Ф</b> 77 000	¢ 47 000	(\$39,43	<b>*</b> 455	(\$10,86	¢o	¢o	¢o	¢o
55	RT	SP26 Capacity	SCE	LA Basin	9-May-11 14-May-	25	Yes	INC	17	7:00	23:59	608.53	\$77,236	\$47,868	9) (\$16,82	\$155	5)	\$0	\$0	\$0	\$0
56	RT	SP26 Capacity	SCE	LA Basin	11	20	Yes	INC	15	9:00	23:58	510.15	\$43,911	\$34,730	(010,02	\$0	\$0	\$0	\$0	\$0	\$0
					25-May-										,						
57	RT	SP26 Capacity	SCE	LA Basin	11	190	Yes	INC	5	16:20	20:59	672.92	\$56,615	\$6,066	(\$5,993)	\$0	\$0	\$0	\$0	\$0	\$0
58	RT	SP26 Capacity	SCE	LA Basin	30-May- 11	160	No	INC	12	9:00	20:59	3,213.8 4	\$102,568	\$18,378	(\$62,98 7)	\$0	\$0	\$0	\$0	\$0	\$0
00			002	E/ Busin	31-May-	100			12	0.00	20.00		ψ102,000	ψ10,070	(\$107,9	φυ	φυ	ΨΟ	φυ	ΨΟ	ΨΟ
59	RT	SP26 Capacity	SDG&E	San Diego	11	15- 75	Yes	INC	9	13:00	21:29	383.04	\$32,170	\$490	09)	\$15	(\$565)	\$0	(\$170)	\$0	\$0
<u> </u>	рт	Sustem Consolt			31-May- 11	02	Vee		~	12.00	44.50	107.14	ሮፓ ጋላላ	<u> </u>	( 7 4 5 0 )	¢00		¢o	(\$\$ 50.4)	۴o	¢o
60	RT	System Capacity	PG&E	Bay Area		93	Yes	INC	2	13:00	14:59	197.44	\$7,311	\$471	(\$7,450)	\$90	(\$4,595)	\$0 \$0	(\$594)	\$0 \$0	\$0 ©
61	RT	System Capacity	PG&E	Fresno	1-May-11	83	No	INC	2	19:20	20:34	98.66	\$0	\$0	(\$4,346) (\$32,73	\$0	\$0	\$0	\$0	\$0	\$0
62	RT	System Capacity	PG&E	Fresno	7-May-11	83	Yes	INC	4	19:47	22:59	371.51	\$11,825	\$0	(002,70	\$0	\$0	\$0	\$0	\$0	\$0
					28-May-																
63	RT	System Capacity	PG&E	Fresno	11	22	Yes	INC	1	18:05	18:59	111.21	\$704	\$658	(\$6,476)	\$0	\$0	\$0	\$0	\$0	\$0
64	RT	System Capacity	PG&E	N/A	23-May- 11	208	No	INC	2	21:57	22:51	238.46	\$9,727	\$0	(\$6,041)	\$32	(\$659)	\$0	(\$143)	\$0	\$0
01			1002			200	110		-	21.07	22.01	200.10	ψ0,121	ψũ	(\$52,53		(\$000)	ψŬ	(\$110)	ψu	
65	RT	System Capacity	SCE	LA Basin	2-May-11	20	Yes	INC	17	7:00	23:59	974.01	\$48,232	\$33,624	9)	\$0	\$0	\$0	\$0	\$0	\$0
66	RT	System Capacity	SDG&E	Son Diago	31-May- 11	15	Yes	INC	4	13:00	12.20	7.38	\$910	¢o	(ゆつつち)	\$0	(\$95)	\$0	\$0	\$0	¢o
66				San Diego		15			1		13:29			\$0 \$0	(\$225)		· · · · ·				\$0 ©
67	RT	System Energy	N/A	N/A	1-May-11	200	Yes	INC	1	6:00	6:59	0.00	\$0 \$0	\$0	\$0	\$0	\$0 \$0	\$0	\$0	\$0	\$0 \$0
68	RT	System Energy	N/A	N/A	2-May-11	725	Yes	INC	1	0:00	0:59	0.00	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0 \$0
69	RT	System Energy	N/A	N/A	3-May-11 15-May-	200-259	Yes	INC	18	5:00	22:59	25.00	\$0	\$0	(\$699)	\$25	(\$699)	\$0	(\$211)	\$0	\$0
70	RT	System Energy	N/A	N/A	15-iviay-	400	Yes	INC	1	5:00	5:59	0.00	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
					16-May-																
71	RT	System Energy	N/A	N/A	11	436	No	DEC	1	6:00	6:59	0.00	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
72	RT	System Energy	N/A	N/A	16-May- 11	384	Yes	INC	1	6:00	6:59	0.00	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
12	ΠI	System Energy	IN/A	IN/A	17-May-	304	162		1	0.00	0.09	0.00	<b>Φ</b> Ο	φU	ΦU	<u></u> مو	φU	φU	ΦU	<u>م</u> ل	ψŪ
73	RT	System Energy	N/A	N/A	11	300	Yes	INC	1	12:00	12:59	0.00	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

	Mark			Local	Table		0			Durin	E.I	Tatal	Man	01			000470	000470			
Num ber	et Type	Reason	Location	Reliability Area	Trade Date	MW	Comm itment	INC_ DEC	Hou rs	Begin Time	End Time	Total MWH	Min Load Cost	Start Up Cost	CC6470	ED MWH (INC/DEC)	CC6470 INC	CC6470 DEC	CC6482	CC6488	CC6620
77	RT	System Energy	N/A	N/A	29-May- 11	387- 457	Yes	INC	2	7:00	8:59	0.00	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
		System Energy			31-May-		165		2				φU							φυ	
78	RT	System Energy	N/A	N/A	11 31-May-	259- 717	Yes	INC	2	13:00	14:59	0.00	\$0	\$0	\$0 (\$16,14	\$0	\$0	\$0	\$0	\$0	\$0
79	RT	System Energy	PG&E	Bay Area	11	47	Yes	INC	5	8:48	12:07	147.95	\$4,653	\$203	0)	\$46	(\$2,190)	\$0	(\$584)	\$0	\$0
80	RT	System Energy	PG&E	N/A	31-May- 11	300	No	INC	4	9:51	12:07	700.00	\$21,786	\$308	(\$96,23 7)	\$51	(\$1,007)	\$0	(\$605)	\$0	\$0
81	RT	T-129	PG&E	Fresno	7-May-11	310	No	INC	3	2:05	4:59	452.08	\$0	\$0	(\$10,35 1)	\$0	\$0	\$0	\$0	\$0	\$0
82	RT	T-129	PG&E	Fresno	8-May-11	0	No	INC	2	0:20	1:04	0.00	\$0 \$0	\$0 \$0	\$0	\$0 \$0	\$0	\$0	\$0	<u>\$0</u>	\$0
					10-May-																
83	RT	T-129	PG&E	Fresno	11 11-May-	5- 10	No	INC	14	8:00	21:59	103.91	\$0	\$0	(\$2,079)	\$0	\$0	\$0	\$0	\$0	\$0
84	RT	T-129	PG&E	Fresno	11	3-5	No	DEC	17	7:20	23:59	-88.96	\$0	\$0	\$1,400	(\$65)	\$0	\$1,652	\$0	(\$1,589)	\$0
85	RT	T-129	PG&E	Fresno	12-May- 11	5	No	INC	24	0:00	23:59	-0.21	\$0	\$0	\$4	\$0	\$0	\$0	\$0	\$0	\$0
				Farmer	13-May-	0										· · · ·					
86	RT	T-129	PG&E	Fresno	11 14-May-	0	No	INC	24	0:00	23:59	-42.40	\$0	\$0	\$526	\$0	\$0	\$0	\$0	\$0	\$0
87	RT	T-129	PG&E	Fresno	11	5	No	DEC	24	0:35	23:59	-117.08	\$0	\$0	\$2,195	(\$117)	\$0	\$2,195	\$0	(\$2,334)	\$0
88	RT	T-129	PG&E	Fresno	14-May- 11	0	No	INC	1	0:00	0:34	-0.52	\$0	\$0	\$5	\$0	\$0	\$0	\$0	\$0	\$0
89	RT	T-129	PG&E	Fresno	15-May- 11	5	No	DEC	21	0:00	20:49	-215.33	\$0	\$0	(\$375)	(\$92)	\$0	\$1,365	\$0	(\$1,566)	\$0
90	RT	T-129	PG&E	Fresno	15-May- 11	0	No	INC	4	20:50	23:59	-0.05	\$0	\$0	\$2	\$0	\$0	\$0	\$0	\$0	\$0
91	RT	T-129	PG&E	Fresno	16-May- 11	5	No	DEC	20	4:55	23:59	-134.43	\$0		\$716	(\$89)	\$0	\$1,789	\$0	(\$1,927)	\$0
					16-May-															<b>, , , , ,</b>	
92	RT	T-129	PG&E	Fresno	11 17-May-	50	No	INC	24	0:00	23:59	36.27	\$0	\$0	\$40	\$0	\$0	\$0	\$0	\$0	\$0
93	RT	T-129	PG&E	Fresno	11	5	No	DEC	7	0:00	6:44	-24.58	\$0	\$0	\$182	(\$27)	\$0	\$181	\$0	(\$228)	\$0
94	RT	T-129	PG&E	Fresno	17-May- 11	45	No	INC	24	0:00	23:59	5.26	\$0	\$0	\$1,343	\$0	\$0	\$0	\$0	\$0	\$0
95	RT	T-129	PG&E	Fresno	22-May- 11	5	No	DEC	3	11:20	13:59	-13.23	\$0	\$0	\$54	(\$13)	\$0	\$54	\$0	(\$67)	\$0
					23-May-				0												
96	RT	T-129	PG&E	Fresno	11 24-May-	10	No	DEC	1	16:35	16:49	-2.65	\$0	\$0	\$6	(\$2)	\$0	\$6	\$0	(\$6)	\$0
97	RT	T-129	PG&E	Fresno	11	2-5	No	DEC	24	0:00	23:59	-62.04	\$0	\$0	\$1,439	(\$62)	\$0	\$1,424	\$0	(\$1,406)	\$0
98	RT	T-129	PG&E	Fresno	24-May- 11	15- 65	No	INC	24	0:00	23:59	3.09	\$0	\$0	(\$569)	\$0	\$0	\$0	\$0	\$0	\$0
99	RT	T-129	PG&E	Fresno	30-May- 11	1- 6	No	INC	9	12:35	20:59	18.11	\$0	\$0	\$626	\$0	\$0	\$0	\$0	\$0	\$0
100	RT	T-129	PG&E	Stockton	11-May- 11	2-8	No	DEC	14	9:20	22:59	-44.74	\$0		\$748	(\$22)	\$0	\$540	\$0	(\$788)	\$0
100	RT	T-129	PG&E PG&E	Stockton	11-May-	10	No	INC	14	9:20	22:59	-23.23	\$0 \$0		(\$16)	( <u>\$22)</u> \$0			<u>\$0</u> \$0	(\$788) \$0	
	1.1	=•		Clookton	May	10			••	0.20	00	20.20	ψŪ	ψŪ	(ΨΙΟ)	ψŪ	φ0	μ ψυ	ΨŪ	ΨŪ	Ψ0

Num	Mark et			Local Reliability	Trade		Comm	INC_	Hou	Begin	End	Total	Min Load	Start Up		ED MWH	CC6470	CC6470			
ber	Туре	Reason	Location	Area	Date	MW	itment	DEC	rs	Time	Time	MWH	Cost	Cost	CC6470	(INC/DEC)	INC	DEC	CC6482	CC6488	CC6620
					11										<b>•</b> · • •		<b>^</b>	<b>.</b>		<b>^</b>	
102	RT	T-132	SDG&E	N/A	6-May-11 18-May-	150	Yes	DEC	1	12:10	12:14	-6.37	\$0	\$0	\$123	(\$5)	\$0	\$95	\$0	\$0 (\$13,46	\$0
103	RT	T-132	SDG&E	San Diego	11	83- 372	Yes	INC	4	17:38	20:59	586.81	\$31,081	\$1,924	\$1,661	\$238	\$462	\$0	\$0	(010,10	\$0
104	RT	T-135	PG&E	Bay Area	31-May- 11	187	Yes	INC	1	14:00	14:59	111.67	\$3,323	\$220	(\$4,424)	\$58	(\$2,739)	\$0	(\$578)	\$0	\$0
105	RT	T-135	PG&E	N/A	31-May- 11	46	Yes	INC	1	14:00	14:59	46.00	\$1,329	\$51	(\$1,463)	\$26	(\$827)	\$0	(\$608)	\$0	\$0
	рт	T-135	PG&E	Sierra	31-May- 11	46	Vaa	INC	4			0.00		\$0	\$0	¢0	\$0	\$0		0.1	\$0
106	RT	1-130		Sierra	31-May-	40	Yes		I	13:15	13:59	0.00	\$0	<u>۵</u> 0	<b>Φ</b> 0	\$0		<u>۵</u> 0	\$0	\$0	<u></u> фО
107	RT	T-135	SCE	LA Basin	11 31-May-	42-47	Yes	INC	2	13:00	14:29	121.34	\$9,208	\$680	(\$3,481) (\$18,12	\$20	(\$577)	\$0	(\$3,427)	\$0	\$0
108	RT	T-135	SDG&E	San Diego	11	194	Yes	INC	4	12:45	15:29	506.11	\$28,885	\$929	(\$10,12	\$191	(\$9,107)	\$0	\$0	\$0	\$0
109	RT	T-138	N/A	N/A	31-May- 11	29	No	INC	3	12:05	14:59	0.00	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
110	RT	T-138	PG&E	Humboldt	3-May-11	30	No	INC	3	20:35	22:59	-3.13	\$0	\$0	\$128	(\$2)	\$0	\$97	\$0	(\$93)	\$0
111	RT	T-138	PG&E	Humboldt	31-May- 11	29	No	INC	4	11:48	14:59	38.50	\$4,521	\$0	(\$1,173)	\$8	(\$230)	\$0	\$0	(\$78)	\$0
				Big Creek-								- 1,367.9			\$1,228,			\$973,85		(\$934,1	
112	RT	T-163	SCE	Ventura	5-May-11	62-201	No	DEC	9	11:52	19:29	7	\$0	\$0	902	(\$1,238)	\$0	9	\$0	05)	\$0
113	RT	T-163	SCE	Big Creek- Ventura	5-May-11	1	No	INC	9	11:52	19:29	12.92	\$0	\$0	(\$397)	\$0	\$0	\$0	\$0	\$0	\$0
114	RT	T-167	PG&E	Stockton	4-May-11	10- 15	No	DEC	15	9:40	23:59	-180.60	\$0	\$0	\$8,458	(\$169)	\$0	\$8,432	\$0	(\$12,45 0)	\$0
115	RT	T-167	PG&E	Stockton	12-May- 11	4- 11	No	DEC	22	2:05	23:59	-53.55	\$0	\$0	\$1,610	(\$54)	\$0	\$1,617	\$0	(\$2,721)	\$0
					12-May-												·				
116	RT	T-167	PG&E	Stockton	11 13-May-	55	No	INC	22	2:05	23:59	81.13	\$0	\$0	(\$1,745)	\$0	\$0	\$0	\$0	\$0	\$0
117	RT	T-167	PG&E	Stockton	11 13-May-	3-11	No	DEC	24	0:00	23:59	-43.38	\$0	\$0	\$930	(\$44)	\$0	\$941	\$0	(\$2,017)	\$0
118	RT	T-167	PG&E	Stockton	11	25	No	INC	24	0:00	23:59	37.07	\$0	\$0	(\$987)	\$0	\$0	\$0	\$0	\$0	\$0
119	RT	T-167	PG&E	Stockton	14-May- 11	2-9	No	DEC	24	0:00	23:59	-22.81	\$0	\$0	\$287	(\$25)	\$0	\$345	\$0	(\$855)	\$0
120	RT	T-167	PG&E	Stockton	14-May- 11	55	No	INC	24	0:00	23:59	150.16	\$0	\$0	(\$4,864)	\$0	\$0	\$0	\$0	\$0	\$0
121	RT	T-167	PG&E	Stockton	15-May- 11	7	No	DEC	22	0:00	21:04	-4.88	\$0	\$0	\$152	(\$5)	\$0	\$153	\$0	(\$264)	\$0
122	RT	T-167	PG&E	Stockton	15-May- 11	10- 55	No	INC	22	0:00	21:04	144.00	\$0	\$0	(\$4,576)	\$0	\$0	\$0	\$0	\$0	\$0
123	RT	T-167	PG&E	Stockton	28-May- 11	11	No	DEC	2	22:35	23:59	-15.80	\$0	\$0	(\$475)	(\$15)	\$0	(\$438)	\$0	\$0	\$0
		T-167	PG&E		29-May-								\$0	\$0		,	\$0			\$0	
124	RT			Stockton	11 29-May-	8- 10	No	DEC	24	0:00	23:59	-26.25			(\$754)	(\$23)		(\$673)	\$0		\$0
125	RT	T-167	PG&E	Stockton	11	10- 55	No	INC	24	0:00	23:59	86.25	\$0	\$0	\$1,638	\$0	\$0	\$0	\$0	\$0	\$0

	Mark			Local																	
Num ber	et Type	Reason	Location	Reliability Area	Trade Date	MW	Comm itment	INC_ DEC	Hou rs	Begin Time	End Time	Total MWH	Min Load Cost	Start Up Cost	CC6470	ED MWH (INC/DEC)	CC6470 INC	CC6470 DEC	CC6482	CC6488	CC6620
Dei	туре	Reason	LUCATION	Alea	30-May-		IIIIeiii	DEC	15	TITLE	TITLE		COSI	COSI	000470	(INC/DEC)	INC	DEC	000402	CC0400	00020
126	RT	T-167	PG&E	Stockton	11	25- 60	No	INC	6	5:10	10:39	32.76	\$0	\$0	(\$253)	\$0	\$0	\$0	\$0	\$0	\$0
127	RT	Transmission Mitigation	N/A	N/A	24-May- 11	50- 64	No	DEC	5	11:00	15:59	-299.63	\$0	\$0	\$11,880	(\$243)	\$0	\$10,818	\$0	(\$3,940)	\$0
127	RT	Transmission Outage Other	PG&E	Sierra	6-May-11	20	Yes	INC	4	7:58	10:59	73.34	φ0 \$4,698	\$259	(\$1,153)	(\\$243) \$0	\$0 \$0	\$0	\$0 \$0	( <del>\$3,340)</del> \$0	\$0 \$0
120	RT	Transmission Outage PG&E	PG&E	Fresno	6-May-11	3- 10	No	DEC	8	7:25	14:29	-54.89	φ-,000 \$0	<u>\$0</u>	\$1,185	(\$50)	\$0 \$0	\$1,090	\$0	(\$1,064)	\$0
130	RT	Transmission Outage PG&E	PG&E	Fresno	6-May-11	2- 10	No	INC	1	14:30	14:59	-0.01	\$0	\$0	\$0	(¢33) \$0	\$0	\$0	\$0	\$0	\$0
					13-May-				-					·	·					·	
131	RT	Transmission Outage PG&E	PG&E	N/A	11 11-May-	10- 15	No	DEC	2	11:30	12:09	-9.25	\$0	\$0	(\$279)	(\$9)	\$0	(\$260)	\$0	\$0	\$0
132	RT	Transmission Outage PG&E	PG&E	NCNB	11-May-	12- 32	No	DEC	1	10:01	10:54	-42.30	\$0	\$0	\$1,297	(\$35)	\$0	\$1,048	\$0	(\$559)	\$0
100	рт	Transmission Outage PG&E	PG&E	Stockton	1-May-11	15- 54	No	DEC	24	0:00	23:59	-770.63	ድሳ	\$0	\$20,429	(\$745)	\$0	\$19,894	\$0	(\$39,90 4)	¢0
133 134	RT RT	Transmission Outage PG&E	PG&E PG&E	Stockton	1-May-11	20	No	INC	24	0:40	23:59	120.25	\$0 \$0	<u>\$0</u> \$0	(\$4,211)	(\$745) \$0	\$0 \$0	\$19,694 \$0	\$0 \$0	<u>4)</u> \$0	\$0 \$0
134			FOAL	Stockton	1-1viay-11	20	NO	INC	24	0.40	23.39	120.25	ψU	ψŪ	(\$4,211)	ψ	ψυ	ψŪ	ψυ	(\$56,06	ψŪ
135	RT	Transmission Outage PG&E	PG&E	Stockton	2-May-11	25-46	No	DEC	24	0:00	23:59	-912.89	\$0	\$0	\$30,483	(\$909)	\$0	\$30,379	\$0	1)	\$0
136	RT	Transmission Outage PG&E	PG&E	Stockton	2-May-11	35	No	INC	24	0:00	23:59	66.13	\$0	\$0	(\$2,925)	\$0	\$0	\$0	\$0	\$0	\$0
137	RT	Transmission Outage PG&E	PG&E	Stockton	3-May-11	6-62	Yes	DEC	24	0:00	23:59	-823.08	\$0	\$0	\$14,404	(\$770)	\$0	\$14,406	\$0	(\$32,24 0)	\$0
138	RT	Transmission Outage PG&E	PG&E	Stockton	3-May-11	67	Yes	INC	14	4:25	17:24	40.62	\$0	\$0	(\$2,055)	\$0	\$0	\$0	\$0	\$0	\$0
139	RT	Transmission Outage PG&E	PG&E	Stockton	4-May-11	2-20	No	DEC	10	0:00	9:04	-168.57	\$0	\$0	(\$2,746)	(\$53)	\$0	\$652	\$0	(\$2,076)	\$0
140	RT	Transmission Outage PG&E	PG&E	Stockton	4-May-11	5- 85	Yes	INC	14	0:00	13:29	242.85	\$0	\$0	\$1,967	\$0	\$0	\$0	\$0	\$0	\$0
141	RT	Transmission Outage PG&E	PG&E	Stockton	5-May-11	2- 12	No	DEC	24	0:25	23:59	-315.81	\$0	\$0	\$3,583	(\$121)	\$0	\$3,624	\$0	(\$909)	\$0
142	RT	Transmission Outage PG&E	PG&E	Stockton	5-May-11	17	No	INC	24	0:25	23:59	-157.18	\$0	\$0	(\$773)	\$0	\$0	\$0	\$0	\$0	\$0
143	RT	Transmission Outage PG&E	PG&E	Stockton	6-May-11	5- 17	No	DEC	24	0:00	23:59	-232.79	\$0	\$0	\$4,786	(\$226)	\$0	\$4,743	\$0	(\$10,51 9)	\$0
144	RT	Transmission Outage PG&E	PG&E	Stockton	6-May-11	25	No	INC	7	0:00	6:14	12.50	\$0	\$0	(\$218)	( <u>+==</u> ) \$0	\$0	\$0	\$0	<u> </u>	\$0
145	RT	Transmission Outage PG&E	PG&E	Stockton	7-May-11	0-5	No	DEC	24	0:00	23:59	-11.53	\$0	\$0	\$274	(\$14)	\$0	\$361	\$0	(\$583)	\$0
146	RT	Transmission Outage PG&E	PG&E	Stockton	7-May-11	27	No	INC	24	0:00	23:59	247.42	\$0	\$0	(\$8,808)	\$0	\$0	\$0	\$0	\$0	\$0
147	RT	Transmission Outage PG&E	PG&E	Stockton	8-May-11	0- 11	No	DEC	24	0:00	23:59	-13.18	\$0	\$0	\$157	(\$15)	\$0	\$239	\$0	(\$602)	\$0
148	RT	Transmission Outage PG&E	PG&E	Stockton	8-May-11	1- 25	No	INC	24	0:00	23:59	247.97	\$0	\$0	(\$7,828)	\$0	\$0	\$0	\$0	\$0	\$0
149	RT	Transmission Outage PG&E	PG&E	Stockton	9-May-11	5- 12	No	DEC	24	0:00	23:59	-108.17	\$0	\$0	\$3,295	(\$108)	\$0	\$3,232	\$0	(\$5,823)	\$0
150	RT	Transmission Outage PG&E	PG&E	Stockton	9-May-11	25	No	INC	24	0:00	23:59	25.67	\$0	\$0	\$1,388	\$0	\$0	\$0	\$0	\$0	\$0
151	RT	Transmission Outage PG&E	PG&E	Stockton	10-May- 11	1- 8	No	DEC	17	7:10	23:59	-43.39	\$0	\$0	\$607	(\$39)	\$0	\$554	\$0	(\$1,426)	\$0
101		<u> </u>		Otookton	10-May-											, ,			ψυ		<u> </u>
74	RT	Transmission Outage PG&E	PG&E	Stockton	11	27	No	INC	17	7:05	23:59	7.78	\$0	\$0	(\$243)	\$0	\$0	\$0	\$0	\$0	\$0
75	RT	Transmission Outage PG&E	PG&E	Stockton	17-May- 11	9-10	No	DEC	3	19:10	21:39	-15.00	\$0	\$0	\$694	(\$14)	\$0	\$782	\$0	(\$1,090)	\$0
		<u> </u>			17-May-											, ,					
76	RT	Transmission Outage PG&E	PG&E	Stockton	11 18-May-	25	No	INC	5	19:10	23:59	-10.47	\$0	\$0	(\$120)	\$0	\$0	\$0	\$0	\$0	\$0
152	RT	Transmission Outage PG&E	PG&E	Stockton	11	1- 19	No	DEC	23	1:30	23:59	-63.34	\$0	\$0	\$859	(\$64)	\$0	\$857	\$0	(\$1,937)	\$0

	Mark			Local																	
Num	et			Reliability	Trade		Comm	INC_	Hou	Begin	End	Total	Min Load	Start Up		ED MWH	CC6470	CC6470			
ber	Туре	Reason	Location	Area	Date	MW	itment	DEC	rs	Time	Time	MWH	Cost	Cost	CC6470	(INC/DEC)	INC	DEC	CC6482	CC6488	CC6620
153	RT	Transmission Outage PG&E	PG&E	Stockton	18-May- 11	15	No	INC	23	1:30	23:59	-11.04	\$0	\$0	(\$723)	\$0	\$0	\$0	\$0	\$0	\$0
155			TOQL	Stockton	19-May-	15	INO	INC	25	1.50	20.00	-11.04	ψΟ	ψυ	(\$723)	ψŪ	ψΟ	ψυ	ψυ	ψυ	<b>\$</b> 0
154	RT	Transmission Outage PG&E	PG&E	Stockton	11	2-21	No	DEC	24	0:00	23:59	-72.12	\$0	\$0	\$1,218	(\$71)	\$0	\$1,196	\$0	(\$2,989)	\$0
					19-May-																
155	RT	Transmission Outage PG&E	PG&E	Stockton	11	15	No	INC	24	0:00	23:59	-1.71	\$0	\$0	(\$290)	\$0	\$0	\$0	\$0	\$0	\$0
156	RT	Transmission Outage PG&E	PG&E	Stockton	24-May- 11	1- 16	No	DEC	24	0:35	23:59	-30.56	\$0	\$0	\$555	(\$31)	\$0	\$560	\$0	(\$1,342)	\$0
150			FORL	SIUCKION	24-May-	1- 10	INU	DLC	24	0.55	23.53	-30.30	ψŪ	ψυ	ψ <b>0</b> 00	(431)	ψυ	φ300	ψυ	(\$1,342)	
157	RT	Transmission Outage PG&E	PG&E	Stockton	11	5- 50	No	INC	24	0:35	23:59	110.71	\$0	\$0	(\$3,996)	\$0	\$0	\$0	\$0	\$0	\$0
158	RT	Transmission Outage SCE	N/A	N/A	9-May-11	20	Yes	INC	17	7:00	23:59	0.00	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
159	RT	Transmission Outage SCE	SCE	LA Basin	3-May-11	3	Yes	DEC	3	17:45	19:59	1.93	\$0	\$0	(\$60)	\$0	\$0	\$0	\$0	\$0	\$0
															(\$65,86		(\$17,65			(\$169,9	
160	RT	Transmission Outage SCE	SCE	LA Basin	3-May-11	45- 445	Yes	INC	13	7:40	19:59	584.80	\$15,294	\$43	1)	\$265	9)	\$0	\$0	35)	\$0
161	RT	Transmission Outage SCE	SCE	LA Basin	4-May-11	20	Yes	INC	24	0:00	23:59	837.14	\$68,092	\$0	(\$54,08 6)	\$0	\$0	\$0	\$0	\$0	\$0
101			JUE	LA Dasin	13-May-	20	165	INC	24	0.00	23.59	037.14	φ00,09Z	φU	0)	φU	φU	φU	φU	φU	
162	RT	Transmission Outage SCE	SCE	LA Basin	11	35-71	Yes	INC	3	13:15	15:44	123.96	\$9,642	\$1,029	(\$2,162)	\$0	(\$3)	\$0	\$0	(\$81)	\$0
163	RT	Transmission Outage SCE	SDG&E	N/A	3-May-11	126- 128	No	DEC	2	7:05	8:14	-164.92	\$0	\$0	\$656	(\$70)	\$0	\$1,734	\$0	(\$123)	\$0
164	RT	Transmission Outage SCE	SDG&E	N/A	3-May-11	360	No	INC	2	7:15	8:14	361.70	\$0	\$0	(\$1,536)	\$0	\$0	\$0	\$0	\$0	\$0
165	RT	Transmission Outage SCE	SDG&E	San Diego	3-May-11	172	No	DEC	2	7:15	8:14	-190.79	\$0	\$0	\$3,841	\$0	\$0	\$0	\$0	\$0	\$0
166	RT	Transmission Outage SCE	SDG&E	San Diego	3-May-11	69	No	INC	2	7:15	8:14	-10.04	\$0	\$0	\$228	\$0	\$0	\$0	\$0	\$0	\$0
				~	18-May-													·			
167	RT	Transmission Outage SDG&E	SDG&E	San Diego	11	80	No	INC	1	18:25	18:44	39.91	\$0	\$0	\$14	\$27	\$11	\$0	\$0	(\$1,353)	\$0
168	RT	Unit Testing	N/A	N/A	12-May- 11	43	Yes	INC	2	16:35	17:59	0.00	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
100			IN/A	IN/A	18-May-	43	165	INC	2	10.35	17.59	0.00	φU	φU	φU	φU	φU	φU	φU	φU	
169	RT	Unit Testing	N/A	N/A	11	98	No	INC	2	9:07	10:24	37.52	\$0	\$0	(\$665)	\$14	(\$251)	\$0	\$0	\$0	\$0
					12-May-											_					
170	RT	Unit Testing	PG&E	Fresno	11	46	Yes	INC	3	15:50	17:59	73.62	\$3,348	\$225	(\$2,479)	\$0	\$0	\$0	\$0	\$0	\$0
171	RT	Unit Testing	SCE	LA Basin	8-May-11	130- 201	Yes	INC	4	5:45	8:39	494.81	\$18,326	\$41,885	(\$11,97 3)	\$54	(\$1,085)	\$0	\$0	\$0	\$0
1/1	111		50L	LA Dasili	0-1vidy-11	100-201	103		+	5.45	0.53	-34.01	ψ10,520	ψ-ι,003	(\$10,75	ψ04	(\$1,000)	ΨU	ψυ	ψ	ψυ
172	RT	Unit Testing	SCE	LA Basin	9-May-11	130- 220	Yes	INC	18	6:55	23:59	439.69	\$3,436	\$64,060	8)	\$70	(\$1,861)	\$0	\$0	\$0	\$0
			0.07		10-May-							3,027.7		<b>A00 - ·</b> · · ·	(\$54,34	<b>A</b>	(\$18,21	• -	<b>.</b> -		
173	RT	Unit Testing	SCE	LA Basin	11 21 Mov	130- 495	Yes	INC	12	0:00	11:29	6 2.050.1	\$79,030	\$62,918	7)	\$866	3)	\$0	\$0	\$0	\$0
174	RT	Unit Testing	SDG&E	San Diego	21-May- 11	200- 340	No	INC	9	13:20	21:59	2,059.1 8	\$48.429	\$20,155	(\$8,854)	\$209	(\$0)	\$0	\$0	\$0	\$0
				202.090	22-May-							1,002.2									
175	RT	Unit Testing	SDG&E	San Diego	11	220- 256	Yes	INC	4	17:00	20:59	5	\$8,977	\$14,749	(\$8,612)	\$150	(\$140)	\$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 G-219. Similarly, the ISO issued additional instructions to resources B and C for the same reason as shown in Table 2. Generally exceptional dispatches prior to the day-ahead market are commitments to minimum load. In this case the dispatch levels are all at minimum load. Table 2 below also shows the commitment costs and the total volume (MWh) of exceptional dispatch instruction for each resource. The minimum load costs and start up costs, shown in Table 2 are the eligible minimum load and start up costs which are different from the bid-in minimum load and start up costs<sup>7</sup>. Only those quantities which are relevant to pre-day-ahead unit commitments are shown in this table.

Date	Market	Resource	Location	Local Reliability	Begin	End Time	Dispatch level	Reason	Total Volume	Min-Load	Start- Up	CC6620
				Area (LRA)	Time		(MW)		(MWh)	Cost	Cost	(BCR)
01-Jul-09	DA	A	SCE	LA BASIN	05:00	10:00	50	G-219	300	\$5000	\$0	0
01-Jul-09	DA	В	SCE	LA BASIN	08:00	20:00	30	G-219	390	\$6000	\$500	\$4000
01-Jul-09	DA	С	SCE	LA BASIN	09:00	23:00	20	G-219.	300	\$400	\$1000	\$1000

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

This data is summarized as shown in Table 3, which is the prescribed format specified in the FERC order on September 02, 2009. This summary classifies the data by reason, resource location, local reliability area, and trade date. The MW column in Table 3 is the range of MW; in this case the minimum instruction MW is 20 MW for resource C which occurs from hours ending 21 through 23. The maximum instruction occurs in hour ending 10. In this hour resource A is committed at 50 MW, resource B is committed at 30 MW and resource C is committed at 20 MW. This adds up to 100 MW. Thus the MW column shows the minimum and maximum of the overlaps of all the exceptional dispatch instructions. The Commitment column shows whether a resource was committed between the begin time and end time. Commitments are broken out separately from energy dispatches. In the day-ahead, however the exceptional dispatches are nearly always just commitments, as in this example. The Begin Time column shows hour ending 5 as this was the hour ending for first dispatch of the day, and the End Time column shows hour ending 23, as this was the hour with last dispatch. It is also possible that there might be some hours between the begin time and the end time where there might not be exceptional dispatch instructions for the given reason, meaning that the range between the begin time and end time can include null hours with no dispatch. The Total Volume (MWh) is the sum of MWh quantity for each resource, which adds up to 990 MWh. Similarly, all cost information is sum of individual resource costs. It is possible that some resource 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	G-219	SCE	LA Basin	1-Jul-09	20-100	Yes	N/A	19	05:00	23:00	990	\$11,400	\$1,500	\$5000

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

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

In this fictitious example the ISO issued an exceptional dispatch instruction to resource A to be committed at its Pmin of 30 MW from hours ending 7 through 11 after completion of the day-ahead market for the transmission procedure T-138. This resource did not have a day-ahead award in those hours. The ISO issued another exceptional dispatch instruction to resource B, to be dispatched at 40 MW from hours ending 8 through 9 in real-time for the transmission procedure T-138. 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
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Date	Mar ket	Resour ce	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	А	PG&E	Humboldt	6:00	11:00	30	0	Yes	INC	30	T-138	180	1000	50	800	60	600	0	0	5400
1-Jul-09	RT	В	PG&E	Humboldt	7:00	9:00	40	20	No	INC	20	T-138	60	0	0	600	60	600	0	0	5400
1-Jul-09	RT	С	PG&E	Humboldt	12:00	15:00	50	50	No	INC	0	T-138	0	0	0	0	0	0	0	0	0
1-Jul-09	RT	С	PG&E	Humboldt	16:00	20:00	50	40	No	INC	10	T-138	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	T-138	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 T-129. 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		CC6470	ED MWH (INC/DEC)	CC6470 INC	CC6470 DEC	CC6482	CC6488
1- Jul- 09	RT	А	PG&E	Fresno	15:00	20:00	20	0	Yes	INC	20	T-129	120	\$ 120	\$ 100	\$-	0	\$-	\$-	\$ -	\$-
1- Jul- 09	RT	В	PG&E	Fresno	7:00	9:00	40	60	No	DEC	20	T-129	(60)	\$ -	\$ -	\$ 600	-60	\$-	\$ 600	\$-	\$2,400
1- Jul- 09	RT	С	PG&E	Fresno	10:00	14:00	40	50	No	DEC	10	T-129	(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

Nu	ımber	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	T-129	PG&E	Fresno	1-Jul-09	20	Yes	INC	6	15:00	20:00	120	\$ 120	\$ 100	\$-	0	\$-	\$-	\$-	\$-
	2	RT	T-129	PG&E	Fresno	1-Jul-09	10-20	Yes	DEC	8	7:00	14:00	(110)	\$-	\$-	\$ (1,100)	\$ (110)	\$-	\$ (1,100)	\$-	\$ (4,400)

#### Appendix B: Price Impact Analysis

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

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

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

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

An exceptional dispatch instruction can be generally classified as a start up instruction, an instruction to be dispatched at or above the constrained level, an instruction to be dispatched at 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 SDGE area. This table shows all the five minute intervals in which the resource at PNode A was issued an exceptional dispatch instruction. Out of the 8,928 five-minute intervals in May, this resource was issued exceptional dispatch instructions in 236 five-minute intervals. It was eligible to set the LMP in 164 of the 236 intervals. Resource calculated LMP was larger than the market LMP in 144 of the 164 intervals. In the 144 intervals, the average increase in five minute LMP was \$29.35/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 \$29.35/MWh. Note that 144 five minute intervals are approximately 1.61 percent of the total 8,928 five minute intervals.

Table 9 shows the price impact analysis information for node B, which is located in the SCE area. This table shows all the five minute intervals in which the resource at PNode B was issued an exceptional dispatch instruction. Out of the 8,928 five minute intervals, this resource was issued an exceptional dispatch instruction in 378 five minute intervals. This resource was eligible to set the LMP in all 378 intervals. Out of the 378 intervals, resource calculated LMP was larger than the market LMP in 342 intervals. In the 342 intervals, the average increase in five minute LMP was \$26.77/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 \$26.77/MWh. The 342 five minute intervals account for approximately 3.83 percent of the total 8,928 five minute intervals.

### Table 8: Price Impact Analysis Information for Pricing Node A in SDGE LAP

Number	Trade Date	Trade Hour	Interval	Market LMP	Eligible Flag	Calculated LMP	Change in LMP
1	3-May-11	8	4	\$0.87	Yes	\$33.30	\$32.43
2	3-May-11	8	5	\$22.73	Yes	\$33.30	\$10.57
3	3-May-11	8	6	\$22.73	Yes	\$33.30	\$10.57
4	3-May-11	8	7	\$25.74	Yes	\$33.30	\$7.56
5	3-May-11	8	8	\$26.02	Yes	\$33.30	\$7.28
6	3-May-11	8	9	\$27.01	Yes	\$33.30	\$6.29
7	3-May-11	8	10	\$26.25	Yes	\$33.30	\$7.05
8	3-May-11	8	11	\$26.25	Yes	\$33.30	\$7.05
9	3-May-11	8	12	\$25.72	Yes	\$33.30	\$7.58
10	3-May-11	9	1	\$22.73	Yes	\$33.78	\$11.05
11	3-May-11	9	2	\$22.73	Yes	\$33.78	\$11.05
12	3-May-11	9	3	\$20.06	Yes	\$33.78	\$13.72
13	21-May-11	14	5	-\$0.19	Yes	\$26.90	\$27.09
14	21-May-11	14	6	-\$0.12	Yes	\$26.90	\$27.02
15	21-May-11	14	7	-\$0.12	Yes	\$26.90	\$27.02
16	21-May-11	14	8	-\$0.06	Yes	\$26.90	\$26.96
17	21-May-11	14	9	-\$0.12	Yes	\$26.90	\$27.02
18	21-May-11	14	10	-\$0.01	Yes	\$26.90	\$26.91
19	21-May-11	14	11	-\$0.01	Yes	\$26.90	\$26.91
20	21-May-11	14	12	-\$0.06	Yes	\$26.90	\$26.96
21	21-May-11	15	1	-\$0.06	Yes	\$26.90	\$26.96
22	21-May-11	15	2	-\$0.03	Yes	\$26.90	\$26.93
23	21-May-11	15	3	-\$0.01	Yes	\$26.90	\$26.91
24	21-May-11	15	4	-\$0.01	Yes	\$26.90	\$26.91
25	21-May-11	15	5	-\$0.01	Yes	\$26.90	\$26.91
26	21-May-11	15	6	-\$0.01	Yes	\$26.90	\$26.91
27	21-May-11	15	7	-\$0.01	Yes	\$26.90	\$26.91
28	21-May-11	15	8	-\$0.06	Yes	\$26.90	\$26.96
29	21-May-11	15	9	-\$0.06	Yes	\$26.90	\$26.96
30	21-May-11	15	10	-\$0.01	Yes	\$26.90	\$26.91
31	21-May-11	15	11	-\$0.12	Yes	\$26.90	\$27.02
32	21-May-11	15	12	-\$0.12	Yes	\$26.90	\$27.02
33	21-May-11	16	1	-\$0.01	Yes	\$26.94	\$26.95
34	21-May-11	16	2	-\$0.01	Yes	\$26.94	\$26.95
35	21-May-11	16	3	-\$0.01	Yes	\$26.94	\$26.95
36	21-May-11	16	4	-\$0.10	Yes	\$26.94	\$27.04
37	21-May-11	16	5	-\$0.12	Yes	\$26.94	\$27.06
38	21-May-11	16	6	-\$0.19	Yes	\$26.94	\$27.13
39	21-May-11	16	7	-\$0.19	Yes	\$26.94	\$27.13
40	21-May-11	16	8	-\$0.19	Yes	\$26.94	\$27.13
41	21-May-11	16	9	-\$0.19	Yes	\$26.94	\$27.13
42	21-May-11	16	10	-\$1.10	Yes	\$26.94	\$28.04
43	21-May-11	16	11	-\$1.11	Yes	\$26.94	\$28.05

Number	Trade Date	Trade Hour	Interval	Market LMP	Eligible Flag	Calculated LMP	Change in LMP
44	21-May-11	16	12	-\$1.10	Yes	\$26.94	\$28.04
45	21-May-11	17	1	-\$0.19	Yes	\$26.94	\$27.13
46	21-May-11	17	2	-\$0.19	Yes	\$26.94	\$27.13
47	21-May-11	17	3	-\$0.12	Yes	\$26.94	\$27.06
48	21-May-11	17	4	-\$0.19	Yes	\$26.94	\$27.13
49	21-May-11	17	5	-\$0.10	Yes	\$26.94	\$27.04
50	21-May-11	17	6	-\$0.19	Yes	\$26.94	\$27.13
51	21-May-11	17	7	-\$1.15	Yes	\$26.94	\$28.09
52	21-May-11	17	8	-\$1.12	Yes	\$26.94	\$28.06
53	21-May-11	17	9	-\$1.15	Yes	\$26.94	\$28.09
54	21-May-11	17	10	-\$0.19	Yes	\$26.94	\$27.13
55	21-May-11	17	11	-\$1.12	Yes	\$26.94	\$28.06
56	21-May-11	17	12	-\$0.19	Yes	\$26.94	\$27.13
57	21-May-11	18	1	-\$0.12	Yes	\$26.94	\$27.06
58	21-May-11	18	2	-\$0.12	Yes	\$26.94	\$27.06
59	21-May-11	18	3	-\$0.10	Yes	\$26.94	\$27.04
60	21-May-11	18	4	-\$0.10	Yes	\$26.94	\$27.04
61	21-May-11	18	5	-\$0.01	Yes	\$26.94	\$26.95
62	21-May-11	18	6	-\$0.01	Yes	\$26.94	\$26.95
63	21-May-11	18	7	-\$0.12	Yes	\$26.94	\$27.06
64	21-May-11	18	8	-\$0.12	Yes	\$26.94	\$27.06
65	21-May-11	18	9	-\$0.12	Yes	\$26.94	\$27.06
66	21-May-11	18	10	-\$0.12	Yes	\$26.94	\$27.06
67	21-May-11	18	11	-\$0.12	Yes	\$26.94	\$27.06
68	21-May-11	18	12	-\$0.12	Yes	\$26.94	\$27.06
69	21-May-11	19	1	-\$0.01	Yes	\$26.94	\$26.95
70	21-May-11	19	2	\$0.01	Yes	\$26.94	\$26.93
71	21-May-11	19	3	\$0.01	Yes	\$26.94	\$26.93
72	21-May-11	19	4	-\$0.01	Yes	\$26.94	\$26.95
73	21-May-11	19	5	-\$0.01	Yes	\$26.94	\$26.95
74	21-May-11	19	6	-\$0.01	Yes	\$26.94	\$26.95
75	21-May-11	19	7	\$0.00	Yes	\$26.94	\$26.94
76	21-May-11	19	8	-\$0.01	Yes	\$26.94	\$26.95
77	21-May-11	19	9	\$0.01	Yes	\$26.94	\$26.93
78	21-May-11	19	10	\$0.01	Yes	\$26.94	\$26.93
79	21-May-11	19	11	\$0.01	Yes	\$26.94	\$26.93
80	21-May-11	19	12	-\$0.12	Yes	\$26.94	\$27.06
81	21-May-11	20	1	-\$0.12	Yes	\$26.94	\$27.06
82	21-May-11	20	2	-\$1.12	Yes	\$26.94	\$28.06
83	21-May-11	20	3	-\$2.30	Yes	\$26.94	\$29.24
84	21-May-11	20	4	-\$2.30	Yes	\$26.94	\$28.08
85	21-May-11	20	5	-\$31.08	Yes	\$26.94	\$58.02
86	21-May-11	20	6	-\$2.31	Yes	\$26.94	\$33.02
87	21-May-11 21-May-11	20	7	-\$2.51	Yes	\$26.94	\$28.05
88	21-May-11 21-May-11	20	8	-\$1.11	Yes	\$26.94	\$28.05

Number	Trade Date	Trade Hour	Interval	Market LMP	Eligible Flag	Calculated LMP	Change in LMP
89	21-May-11	20	9	-\$0.19	Yes	\$26.94	\$27.13
90	21-May-11	20	10	-\$0.02	Yes	\$26.94	\$26.96
91	21-May-11	20	11	\$0.01	Yes	\$26.94	\$26.93
92	21-May-11	20	12	-\$0.01	Yes	\$26.94	\$26.95
93	21-May-11	21	1	\$0.01	Yes	\$26.90	\$26.89
94	21-May-11	21	2	\$0.01	Yes	\$26.90	\$26.89
95	21-May-11	21	3	\$42.27	Yes	\$26.90	-\$15.37
96	21-May-11	21	4	\$47.71	Yes	\$26.90	-\$20.81
97	21-May-11	21	5	\$56.02	Yes	\$26.90	-\$29.12
98	21-May-11	21	6	\$79.34	Yes	\$26.90	-\$52.44
99	21-May-11	21	7	\$53.51	Yes	\$26.90	-\$26.61
100	21-May-11	21	8	\$42.12	Yes	\$26.90	-\$15.22
101	21-May-11	21	9	\$43.49	Yes	\$26.90	-\$16.59
102	21-May-11	21	10	\$42.06	Yes	\$26.90	-\$15.16
103	21-May-11	21	11	\$42.06	Yes	\$26.90	-\$15.16
104	21-May-11	21	12	\$27.69	Yes	\$26.90	-\$0.79
105	21-May-11	22	1	\$42.08	Yes	\$26.90	-\$15.18
106	21-May-11	22	2	\$35.68	Yes	\$26.90	-\$8.78
107	21-May-11	22	3	\$0.01	Yes	\$26.90	\$26.89
108	21-May-11	22	4	\$0.01	Yes	\$26.90	\$26.89
109	21-May-11	22	5	-\$0.01	Yes	\$26.90	\$26.91
110	21-May-11	22	6	-\$0.01	Yes	\$26.90	\$26.91
111	21-May-11	22	7	-\$0.10	Yes	\$26.90	\$27.00
112	21-May-11	22	8	-\$0.10	Yes	\$26.90	\$27.00
113	21-May-11	22	9	-\$0.18	Yes	\$26.90	\$27.08
114	21-May-11	22	10	-\$0.17	Yes	\$26.90	\$27.07
115	21-May-11	22	11	-\$0.17	Yes	\$26.90	\$27.07
116	21-May-11	22	12	-\$0.01	Yes	\$26.90	\$26.91
117	21-May-11	24	7	\$1.10	No	\$26.90	\$25.80
118	21-May-11	24	8	\$1.09	No	\$26.90	\$25.81
119	21-May-11	24	9	\$0.01	No	\$26.90	\$26.89
120	21-May-11	24	10	-\$2.28	No	\$26.90	\$29.18
121	21-May-11	24	11	-\$1.11	No	\$26.90	\$28.01
122	21-May-11	24	12	-\$0.11	No	\$26.90	\$27.01
123	22-May-11	1	1	-\$0.06	No	\$26.90	\$26.96
124	22-May-11	1	2	-\$0.06	No	\$26.90	\$26.96
125	22-May-11	1	3	\$9.99	No	\$26.90	\$16.91
126	22-May-11	1	4	\$24.23	No	\$26.90	\$2.67
127	22-May-11	1	5	\$1,002.46	No	\$26.90	-\$975.56
128	22-May-11	1	6	\$1,002.46	No	\$26.90	-\$975.56
129	22-May-11	1	7	\$47.99	No	\$26.90	-\$21.09
130	22-May-11	1	8	\$36.00	No	\$26.90	-\$9.10
131	22-May-11	1	9	\$24.25	No	\$26.90	\$2.65
132	22-May-11	1	10	\$1.10	No	\$26.90	\$25.80
133	22-May-11 22-May-11	1	11	\$1.09	No	\$26.90	\$25.80

Number	Trade Date	Trade Hour	Interval	Market LMP	Eligible Flag	Calculated LMP	Change in LMP
134	22-May-11	1	12	\$0.01	No	\$26.90	\$26.89
135	22-May-11	2	1	\$0.01	No	\$26.90	\$26.89
136	22-May-11	2	2	-\$0.09	No	\$26.90	\$26.99
137	22-May-11	2	3	-\$0.09	No	\$26.90	\$26.99
138	22-May-11	2	4	-\$0.11	No	\$26.90	\$27.01
139	22-May-11	2	5	-\$0.11	No	\$26.90	\$27.01
140	22-May-11	2	6	-\$0.17	No	\$26.90	\$27.07
141	22-May-11	2	7	-\$0.17	No	\$26.90	\$27.07
142	22-May-11	2	8	-\$0.17	No	\$26.90	\$27.07
143	22-May-11	2	9	-\$1.09	No	\$26.90	\$27.99
144	22-May-11	2	10	-\$1.08	No	\$26.90	\$27.98
145	22-May-11	2	11	-\$1.08	No	\$26.90	\$27.98
146	22-May-11	2	12	-\$0.17	No	\$26.90	\$27.07
147	22-May-11	3	1	-\$0.01	No	\$26.90	\$26.91
148	22-May-11	3	2	\$0.01	No	\$26.90	\$26.89
149	22-May-11	3	3	-\$0.01	No	\$26.90	\$26.91
150	22-May-11	3	4	-\$0.01	No	\$26.90	\$26.91
151	22-May-11	3	5	-\$0.01	No	\$26.90	\$26.91
152	22-May-11	3	6	-\$0.01	No	\$26.90	\$26.91
153		3	7	-\$0.01	No	\$26.90	\$26.92
153	22-May-11	3	-	-\$0.02		\$26.90	
	22-May-11		8		No		\$26.96
155	22-May-11	3	9	-\$1.09	No	\$26.90	\$27.99
156	22-May-11	3	10	-\$1.08	No	\$26.90	\$27.98
157	22-May-11	3	11	-\$1.08	No	\$26.90	\$27.98
158	22-May-11	3	12	-\$1.08	No	\$26.90	\$27.98
159	22-May-11	4	1	-\$0.01	No	\$26.90	\$26.91
160	22-May-11	4	2	-\$0.01	No	\$26.90	\$26.91
161	22-May-11	4	3	-\$0.01	No	\$26.90	\$26.91
162	22-May-11	4	4	-\$0.06	No	\$26.90	\$26.96
163	22-May-11	4	5	-\$0.06	No	\$26.90	\$26.96
164	22-May-11	4	6	-\$0.06	No	\$26.90	\$26.96
165	22-May-11	4	7	-\$1.97	No	\$26.90	\$28.87
166	22-May-11	4	8	-\$2.21	No	\$26.90	\$29.11
167	22-May-11	4	9	-\$2.21	No	\$26.90	\$29.11
168	22-May-11	4	10	-\$10.78	No	\$26.90	\$37.68
169	22-May-11	4	11	-\$10.78	No	\$26.90	\$37.68
170	22-May-11	4	12	-\$10.78	No	\$26.90	\$37.68
171	22-May-11	5	1	-\$10.79	No	\$26.90	\$37.69
172	22-May-11	5	2	-\$10.79	No	\$26.90	\$37.69
173	22-May-11	5	3	-\$10.79	No	\$26.90	\$37.69
174	22-May-11	5	4	-\$10.85	No	\$26.90	\$37.75
175	22-May-11	5	5	-\$10.85	No	\$26.90	\$37.75
176	22-May-11	5	6	-\$10.85	No	\$26.90	\$37.75
177	22-May-11	5	7	-\$10.86	No	\$26.90	\$37.76
178	22-May-11	5	8	-\$10.86	No	\$26.90	\$37.76

Number	Trade Date	Trade Hour	Interval	Market LMP	Eligible Flag	Calculated LMP	Change in LMP
179	22-May-11	5	9	-\$10.86	No	\$26.90	\$37.76
180	22-May-11	5	10	-\$10.86	No	\$26.90	\$37.76
181	22-May-11	5	11	-\$30.88	No	\$26.90	\$57.78
182	22-May-11	5	12	-\$30.88	No	\$26.90	\$57.78
183	22-May-11	6	1	-\$30.70	No	\$26.90	\$57.60
184	22-May-11	6	2	-\$2.24	No	\$26.90	\$29.14
185	22-May-11	6	3	-\$2.24	No	\$26.90	\$29.14
186	22-May-11	6	4	-\$27.77	No	\$26.90	\$54.67
187	22-May-11	6	5	-\$2.02	No	\$26.90	\$28.92
188	22-May-11	6	6	-\$2.25	No	\$26.90	\$29.15
189	22-May-11	18	1	-\$0.11	Yes	\$41.19	\$41.30
190	22-May-11	18	2	-\$0.11	Yes	\$41.19	\$41.30
191	22-May-11	18	3	-\$0.11	Yes	\$41.19	\$41.30
192	22-May-11	18	4	-\$0.10	Yes	\$41.19	\$41.29
193	22-May-11	18	5	-\$0.10	Yes	\$41.19	\$41.29
194	22-May-11	18	6	-\$0.02	Yes	\$41.19	\$41.21
195	22-May-11	18	7	-\$0.02	Yes	\$41.19	\$41.21
196	22-May-11	18	8	-\$0.06	Yes	\$41.19	\$41.25
197	22-May-11	18	9	-\$0.06	Yes	\$41.19	\$41.25
198	22-May-11	18	10	-\$0.10	Yes	\$41.19	\$41.29
199	22-May-11	18	11	-\$0.10	Yes	\$41.19	\$41.29
200	22-May-11	18	12	-\$0.06	Yes	\$41.19	\$41.25
200	22-May-11	19	12	-\$0.00	Yes	\$36.55	\$36.66
201	22-May-11	19	2	-\$0.09	Yes	\$36.55	\$36.64
202	22-May-11	19	3	-\$0.09	Yes	\$36.55	\$36.61
203		19	4	-\$0.00	Yes	\$36.55	\$36.56
	22-May-11						
205	22-May-11	19	5	-\$0.01	Yes	\$36.55	\$36.56
206	22-May-11	19	6	\$0.01	Yes	\$36.55	\$36.54
207	22-May-11	19	,	-\$0.01	Yes	\$36.55	\$36.56
208	22-May-11	19	8	\$0.01	Yes	\$36.55	\$36.54
209	22-May-11	19	9	\$0.01	Yes	\$36.55	\$36.54
210	22-May-11	19	10	\$0.01	Yes	\$36.55	\$36.54
211	22-May-11	19	11	\$5.84	Yes	\$36.55	\$30.71
212	22-May-11	19	12	-\$0.01	Yes	\$36.55	\$36.56
213	22-May-11	20	1	-\$0.11	Yes	\$41.19	\$41.30
214	22-May-11	20	2	-\$0.18	Yes	\$41.19	\$41.37
215	22-May-11	20	3	-\$0.18	Yes	\$41.19	\$41.37
216	22-May-11	20	4	-\$0.12	Yes	\$41.19	\$41.31
217	22-May-11	20	5	-\$0.10	Yes	\$41.19	\$41.29
218	22-May-11	20	6	-\$0.01	Yes	\$41.19	\$41.20
219	22-May-11	20	7	-\$0.01	Yes	\$41.19	\$41.20
220	22-May-11	20	8	-\$0.01	Yes	\$41.19	\$41.20
221	22-May-11	20	9	\$0.01	Yes	\$41.19	\$41.18
222	22-May-11	20	10	\$0.01	Yes	\$41.19	\$41.18
223	22-May-11	20	11	\$0.01	Yes	\$41.19	\$41.18

Number	Trade Date	Trade Hour	Interval	Market LMP	Eligible Flag	Calculated LMP	Change in LMP
224	22-May-11	20	12	\$0.01	Yes	\$41.19	\$41.18
225	22-May-11	21	1	-\$0.01	Yes	\$41.19	\$41.20
226	22-May-11	21	2	-\$0.01	Yes	\$41.19	\$41.20
227	22-May-11	21	3	\$0.00	Yes	\$41.19	\$41.19
228	22-May-11	21	4	\$24.44	Yes	\$41.19	\$16.75
229	22-May-11	21	5	\$42.37	Yes	\$41.19	-\$1.18
230	22-May-11	21	6	\$42.91	Yes	\$41.19	-\$1.72
231	22-May-11	21	7	\$42.62	Yes	\$41.19	-\$1.43
232	22-May-11	21	8	\$47.47	Yes	\$41.19	-\$6.28
233	22-May-11	21	9	\$44.09	Yes	\$41.19	-\$2.90
234	22-May-11	21	10	\$41.53	Yes	\$41.19	-\$0.34
235	22-May-11	21	11	\$44.05	Yes	\$41.19	-\$2.86
236	22-May-11	21	12	\$43.44	Yes	\$41.19	-\$2.25

Number	Trade Date	Trade Hour	Interval	Market LMP	Eligible Flag	Calculated LMP	Change in LMP
1	8-May-11	6	10	\$21.26	Yes	\$41.92	\$20.66
2	8-May-11	6	11	\$21.26	Yes	\$41.92	\$20.66
3	8-May-11	6	12	\$21.26	Yes	\$41.92	\$20.66
4	8-May-11	7	1	\$14.89	Yes	\$41.92	\$27.03
5	8-May-11	7	2	\$14.89	Yes	\$41.92	\$27.03
6	8-May-11	7	3	\$21.27	Yes	\$41.92	\$20.65
7	8-May-11	7	4	\$19.47	Yes	\$41.92	\$22.45
8	8-May-11	7	5	\$19.47	Yes	\$41.92	\$22.45
9	8-May-11	7	6	\$21.50	Yes	\$41.92	\$20.42
10	8-May-11	7	7	\$21.39	Yes	\$41.92	\$20.53
11	8-May-11	7	8	\$21.39	Yes	\$41.92	\$20.53
12	8-May-11	7	9	\$21.39	Yes	\$41.92	\$20.53
13	8-May-11	7	10	\$39.96	Yes	\$41.92	\$1.96
14	8-May-11	7	11	\$21.72	Yes	\$42.10	\$20.38
15	8-May-11	7	12	\$21.72	Yes	\$42.10	\$20.38
16	8-May-11	8	1	\$21.15	Yes	\$42.10	\$20.95
17	8-May-11	8	2	\$21.15	Yes	\$42.10	\$20.95
18	8-May-11	8	3	\$21.15	Yes	\$42.10	\$20.95
19	8-May-11	8	4	\$37.24	Yes	\$42.10	\$4.86
20	8-May-11	8	5	\$37.24	Yes	\$41.92	\$4.68
21	8-May-11	8	6	\$37.24	Yes	\$41.92	\$4.68
22	8-May-11	8	7	\$25.65	Yes	\$41.92	\$16.27
23	8-May-11	8	8	\$34.27	Yes	\$41.92	\$7.65
24	8-May-11	8	9	\$36.38	Yes	\$42.10	\$5.72
25	8-May-11	8	10	\$66.71	Yes	\$42.10	-\$24.61
26	8-May-11	8	11	\$49.85	Yes	\$42.10	-\$7.75
27	8-May-11	8	12	\$37.44	Yes	\$42.10	\$4.66
28	8-May-11	9	1	\$4.17	Yes	\$42.10	\$37.93
29	8-May-11	9	2	\$1.07	Yes	\$42.10	\$41.03
30	8-May-11	9	3	\$4.17	Yes	\$42.10	\$37.93
31	8-May-11	9	4	\$15.33	Yes	\$42.10	\$26.77
32	8-May-11	9	5	\$21.74	Yes	\$42.10	\$20.36
33	8-May-11	9	6	\$21.74	Yes	\$42.24	\$20.50
34	8-May-11	9	7	\$15.33	Yes	\$42.24	\$26.91
35	8-May-11	9	8	\$15.33	Yes	\$42.24	\$26.91
36	9-May-11	7	12	\$21.70	Yes	\$42.24	\$20.54
37	9-May-11	8	1	\$1.08	Yes	\$42.24	\$41.16
38	9-May-11	8	2	\$15.56	Yes	\$42.24	\$26.68
39	9-May-11	8	3	\$21.14	Yes	\$42.24	\$21.10
40	9-May-11	8	4	\$21.15	Yes	\$42.24	\$21.09
41	9-May-11	8	5	\$46.08	Yes	\$42.24	-\$3.84

### 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
42	9-May-11	8	6	\$46.08	Yes	\$42.24	-\$3.84
43	9-May-11	8	7	\$34.22	Yes	\$42.24	\$8.02
44	9-May-11	8	8	\$34.22	Yes	\$42.24	\$8.02
45	9-May-11	8	9	\$34.22	Yes	\$42.24	\$8.02
46	9-May-11	8	10	\$35.83	Yes	\$42.24	\$6.41
47	9-May-11	8	11	\$34.58	Yes	\$42.24	\$7.66
48	9-May-11	8	12	\$35.83	Yes	\$42.24	\$6.41
49	9-May-11	9	1	\$22.28	Yes	\$42.24	\$19.96
50	9-May-11	9	2	\$22.28	Yes	\$42.24	\$19.96
51	9-May-11	9	3	\$26.69	Yes	\$42.24	\$15.55
52	9-May-11	9	4	\$26.79	Yes	\$42.24	\$15.45
53	9-May-11	9	5	\$27.30	Yes	\$42.24	\$14.94
54	9-May-11	9	6	\$27.30	Yes	\$42.24	\$14.94
55	9-May-11	9	7	\$27.44	Yes	\$42.24	\$14.80
56	9-May-11	9	8	\$29.14	Yes	\$42.24	\$13.10
57	9-May-11	9	9	\$29.84	Yes	\$42.24	\$13.10
58	9-May-11	9	10	\$35.91	Yes	\$42.24	\$6.33
59	9-May-11	9	11	\$26.48	Yes	\$42.24	\$15.76
60	9-May-11	9	12	\$22.43	Yes	\$42.24	\$19.81
			12				
61	9-May-11	10	1	\$29.44	Yes	\$42.24	\$12.80
62	9-May-11	10	2	\$27.28	Yes	\$42.24	\$14.96
63	9-May-11	10	3	\$28.42	Yes	\$42.24	\$13.82
64	9-May-11	10	4	\$28.50	Yes	\$42.24	\$13.74
65	9-May-11	10	5	\$29.84	Yes	\$42.24	\$12.40
66	9-May-11	10	6	\$29.84	Yes	\$42.24	\$12.40
67	9-May-11	10	7	\$29.86	Yes	\$42.24	\$12.38
68	9-May-11	10	8	\$29.86	Yes	\$42.24	\$12.38
69	9-May-11	10	9	\$34.14	Yes	\$42.24	\$8.10
70	9-May-11	10	10	\$46.29	Yes	\$42.24	-\$4.05
71	9-May-11	10	11	\$46.29	Yes	\$42.24	-\$4.05
72	9-May-11	10	12	\$34.31	Yes	\$42.24	\$7.93
73	9-May-11	11	1	\$25.89	Yes	\$42.24	\$16.35
74	9-May-11	11	2	\$25.89	Yes	\$42.24	\$16.35
75	9-May-11	11	3	\$21.79	Yes	\$42.24	\$20.45
76	9-May-11	11	4	\$21.81	Yes	\$42.24	\$20.43
77	9-May-11	11	5	\$25.88	Yes	\$42.24	\$16.36
78	9-May-11	11	6	\$25.88	Yes	\$42.24	\$16.36
79	9-May-11	11	7	\$27.62	Yes	\$42.24	\$14.62
80	9-May-11	11	8	\$25.93	Yes	\$42.24	\$16.31
81	9-May-11	11	9	\$27.62	Yes	\$42.24	\$14.62
82	9-May-11	11	10	\$23.73	Yes	\$42.24	\$18.51
83	9-May-11	11	11	\$25.91	Yes	\$42.24	\$16.33
84	9-May-11	11	12	\$34.43	Yes	\$42.24	\$7.81
85	9-May-11	12	1	\$25.84	Yes	\$42.24	\$16.40
86	9-May-11	12	2	\$29.77	Yes	\$42.24	\$12.47

Number	Trade Date	Trade Hour	Interval	Market LMP	Eligible Flag	Calculated LMP	Change in LMP
87	9-May-11	12	3	\$35.30	Yes	\$42.24	\$6.94
88	9-May-11	12	4	\$29.93	Yes	\$42.24	\$12.31
89	9-May-11	12	5	\$29.93	Yes	\$42.24	\$12.31
90	9-May-11	12	6	\$29.69	Yes	\$42.24	\$12.55
91	9-May-11	12	7	\$26.01	Yes	\$42.24	\$16.23
92	9-May-11	12	8	\$27.69	Yes	\$42.24	\$14.55
93	9-May-11	12	9	\$27.14	Yes	\$42.24	\$15.10
94	9-May-11	12	10	\$36.76	Yes	\$42.24	\$5.48
95	9-May-11	12	11	\$27.76	Yes	\$42.24	\$14.48
96	9-May-11	12	12	\$47.24	Yes	\$42.24	-\$5.00
97	9-May-11	13	1	\$29.94	Yes	\$42.24	\$12.30
98	9-May-11	13	2	\$29.94	Yes	\$42.24	\$12.30
99	9-May-11	13	3	\$26.00	Yes	\$42.24	\$16.24
100	9-May-11	13	4	\$27.63	Yes	\$42.24	\$14.61
101	9-May-11	13	5	\$27.63	Yes	\$42.24	\$14.61
102	9-May-11	13	6	\$29.72	Yes	\$42.24	\$12.52
103	9-May-11	13	7	\$27.74	Yes	\$42.24	\$14.50
104	9-May-11	13	8	\$27.74	Yes	\$42.24	\$14.50
105	9-May-11	13	9	\$27.74	Yes	\$42.24	\$14.50
106	9-May-11	13	10	\$29.79	Yes	\$42.24	\$12.45
107	9-May-11	13	11	\$27.70	Yes	\$42.24	\$14.54
108	9-May-11	13	12	\$34.68	Yes	\$42.24	\$7.56
109	9-May-11	14	1	\$28.72	Yes	\$42.24	\$13.52
110	9-May-11	14	2	\$29.97	Yes	\$42.24	\$12.27
111	9-May-11	14	3	\$29.97	Yes	\$42.24	\$12.27
112	9-May-11	14	4	\$29.97	Yes	\$42.24	\$12.27
113	9-May-11	14	5	\$29.97	Yes	\$42.24	\$12.27
114	9-May-11	14	6	\$29.97	Yes	\$42.24	\$12.27
115	9-May-11	14	7	\$29.95	Yes	\$42.24	\$12.29
116	9-May-11	14	8	\$29.95	Yes	\$42.24	\$12.29
117	9-May-11	14	9	\$29.95	Yes	\$42.24	\$12.29
118	9-May-11	14	10	\$29.94	Yes	\$42.24	\$12.30
119	9-May-11	14	11	\$29.94	Yes	\$42.24	\$12.30
120	9-May-11	14	12	\$29.94	Yes	\$42.24	\$12.30
121	9-May-11	15	1	\$29.95	Yes	\$42.24	\$12.29
122	9-May-11	15	2	\$29.95	Yes	\$42.24	\$12.29
123	9-May-11	15	3	\$29.95	Yes	\$42.24	\$12.29
124	9-May-11	15	4	\$29.93	Yes	\$42.24	\$12.31
125	9-May-11	15	5	\$29.93	Yes	\$42.24	\$12.31
126	9-May-11	15	6	\$27.87	Yes	\$42.24	\$14.37
127	9-May-11	15	7	\$29.97	Yes	\$42.24	\$12.27
128	9-May-11	15	8	\$27.68	Yes	\$42.24	\$14.56
129	9-May-11	15	9	\$29.64	Yes	\$42.24	\$12.60
130	9-May-11	15	10	\$29.94	Yes	\$42.24	\$12.30
131	9-May-11	15	11	\$29.26	Yes	\$42.24	\$12.30

Number	Trade Date	Trade Hour	Interval	Market LMP	Eligible Flag	Calculated LMP	Change in LMP
132	9-May-11	15	12	\$21.90	Yes	\$42.24	\$20.34
133	9-May-11	16	1	\$21.90	Yes	\$42.24	\$20.34
134	9-May-11	16	2	\$21.90	Yes	\$42.24	\$20.34
135	9-May-11	16	3	\$21.90	Yes	\$42.24	\$20.34
136	9-May-11	16	4	\$15.60	Yes	\$42.24	\$26.64
137	9-May-11	16	5	\$15.60	Yes	\$42.24	\$26.64
138	9-May-11	16	6	\$15.57	Yes	\$42.24	\$26.67
139	9-May-11	16	7	\$15.59	Yes	\$42.24	\$26.65
140	9-May-11	16	8	\$15.59	Yes	\$42.24	\$26.65
141	9-May-11	16	9	\$15.58	Yes	\$42.24	\$26.66
142	9-May-11	16	10	\$15.59	Yes	\$42.24	\$26.65
143	9-May-11	16	11	\$15.59	Yes	\$42.24	\$26.65
144	9-May-11	16	12	\$15.59	Yes	\$42.24	\$26.65
145	9-May-11	17	1	\$15.58	Yes	\$42.24	\$26.66
146	9-May-11	17	2	\$13.30	Yes	\$42.24	\$20.00
140	9-May-11	17	3	\$15.58	Yes	\$42.24	\$26.66
148		17	4	\$15.56	Yes	\$42.24	\$25.40
	9-May-11	17		\$16.84	Yes	\$42.24 \$42.24	\$25.40
149	9-May-11		5				
150	9-May-11	17	6	\$21.13	Yes	\$42.24	\$21.11
151	9-May-11	17	7	\$21.86	Yes	\$42.24	\$20.38
152	9-May-11	17	8	\$21.86	Yes	\$42.24	\$20.38
153	9-May-11	17	9	\$21.86	Yes	\$42.24	\$20.38
154	9-May-11	17	10	\$21.89	Yes	\$42.24	\$20.35
155	9-May-11	17	11	\$21.89	Yes	\$42.24	\$20.35
156	9-May-11	17	12	\$21.89	Yes	\$42.24	\$20.35
157	9-May-11	18	1	\$27.57	Yes	\$42.24	\$14.67
158	9-May-11	18	2	\$29.92	Yes	\$42.24	\$12.32
159	9-May-11	18	3	\$29.92	Yes	\$42.24	\$12.32
160	9-May-11	18	4	\$29.96	Yes	\$42.24	\$12.28
161	9-May-11	18	5	\$21.89	Yes	\$42.24	\$20.35
162	9-May-11	18	6	\$21.89	Yes	\$42.24	\$20.35
163	9-May-11	18	7	\$21.82	Yes	\$42.24	\$20.42
164	9-May-11	18	8	\$27.59	Yes	\$42.24	\$14.65
165	9-May-11	18	9	\$21.82	Yes	\$42.24	\$20.42
166	9-May-11	18	10	\$27.56	Yes	\$42.24	\$14.68
167	9-May-11	18	11	\$21.79	Yes	\$42.24	\$20.45
168	9-May-11	18	12	\$21.79	Yes	\$42.24	\$20.45
169	9-May-11	19	1	\$21.98	Yes	\$42.24	\$20.26
170	9-May-11	19	2	\$21.98	Yes	\$42.24	\$20.26
171	9-May-11	19	3	\$21.98	Yes	\$42.24	\$20.26
172	9-May-11	19	4	\$7.07	Yes	\$42.24	\$35.17
173	9-May-11	19	5	\$11.30	Yes	\$42.24	\$30.94
174	9-May-11	19	6	\$11.30	Yes	\$42.24	\$30.94
175	9-May-11	19	7	\$15.50	Yes	\$42.24	\$26.74
176	9-May-11	19	8	\$15.50	Yes	\$42.24	\$26.74

Number	Trade Date	Trade Hour	Interval	Market LMP	Eligible Flag	Calculated LMP	Change in LMP
177	9-May-11	19	9	\$21.06	Yes	\$42.24	\$21.18
178	9-May-11	19	10	\$21.08	Yes	\$42.24	\$21.16
179	9-May-11	19	11	\$11.29	Yes	\$42.24	\$30.95
180	9-May-11	19	12	\$9.83	Yes	\$42.24	\$32.41
181	9-May-11	20	1	-\$0.01	Yes	\$42.24	\$42.25
182	9-May-11	20	2	-\$0.01	Yes	\$42.24	\$42.25
183	9-May-11	20	3	-\$0.01	Yes	\$42.24	\$42.25
184	9-May-11	20	4	-\$0.01	Yes	\$42.24	\$42.25
185	9-May-11	20	5	-\$0.01	Yes	\$42.24	\$42.25
186	9-May-11	20	6	-\$0.01	Yes	\$42.24	\$42.25
187	9-May-11	20	7	\$1.12	Yes	\$42.24	\$41.12
188	9-May-11	20	8	\$7.08	Yes	\$42.24	\$35.16
189	9-May-11	20	9	\$11.32	Yes	\$42.24	\$30.92
190	9-May-11	20	10	\$15.64	Yes	\$42.24	\$26.60
191	9-May-11	20	11	\$22.27	Yes	\$42.24	\$19.97
192	9-May-11	20	12	\$22.27	Yes	\$42.24	\$19.97
193	9-May-11	21	1	\$27.15	Yes	\$42.24	\$15.09
194	9-May-11	21	2	\$26.25	Yes	\$42.24	\$15.99
195	9-May-11	21	3	\$30.01	Yes	\$42.24	\$12.23
196	9-May-11	21	4	\$52.08	Yes	\$42.24	-\$9.84
197	9-May-11	21	5	\$52.08	Yes	\$42.24	-\$9.84
198	9-May-11	21	6	\$52.66	Yes	\$42.24	-\$10.42
199	9-May-11	21	7	\$51.98	Yes	\$42.24	-\$9.74
200	9-May-11	21	8	\$51.92	Yes	\$42.24	-\$9.68
201	9-May-11	21	9	\$47.39	Yes	\$42.24	-\$5.15
202	9-May-11	21	10	\$51.92	Yes	\$42.24	-\$9.68
202	9-May-11	21	10	\$23.33	Yes	\$42.24	\$18.91
203	9-May-11	21	12	\$22.23	Yes	\$42.24	\$20.01
205	9-May-11	22	1	\$1,027.60	Yes	\$42.24	-\$985.36
205	9-May-11	22	2	\$1,027.60	Yes	\$42.24	-\$985.36
207	9-May-11	22	3	\$51.94	Yes	\$42.24	-\$9.70
208	9-May-11	22	4	\$55.15	Yes	\$42.24	-\$9.70
209	9-May-11	22	5	\$94.17	Yes	\$42.24	-\$51.93
209 210	9-May-11	22	6	\$81.76	Yes	\$42.24	-\$39.52
210	9-May-11	22	7	\$27.82	Yes	\$42.24 \$42.24	\$14.42
212	9-May-11	22	8	\$22.21	Yes	\$42.24	\$20.03
212	9-May-11 9-May-11	22	9	\$22.21	Yes	\$42.24 \$42.24	\$20.03
213		22	10	\$22.21	Yes	\$42.24 \$42.24	\$20.03
	9-May-11	22	11			\$42.24 \$42.24	
215	9-May-11			\$9.26	Yes		\$32.98
216	9-May-11	22	12	\$9.25	Yes	\$42.24	\$32.99
217	9-May-11	23	1	\$29.77	Yes	\$42.24	\$12.47
218	9-May-11	23	2	\$66.91	Yes	\$42.24	-\$24.67
219	9-May-11	23	3	\$51.68	Yes	\$42.24	-\$9.44
220	9-May-11	23	4	\$45.34	Yes	\$42.24	-\$3.10
221	9-May-11	23	5	\$39.88	Yes	\$42.24	\$2.36

Number	Trade Date	Trade Hour	Interval	Market LMP	Eligible Flag	Calculated LMP	Change in LMP
222	9-May-11	23	6	\$41.52	Yes	\$42.24	\$0.72
223	9-May-11	23	7	\$38.08	Yes	\$42.24	\$4.16
224	9-May-11	23	8	\$38.08	Yes	\$42.24	\$4.16
225	9-May-11	23	9	\$35.67	Yes	\$42.24	\$6.57
226	9-May-11	23	10	\$21.95	Yes	\$42.24	\$20.29
227	9-May-11	23	11	\$21.95	Yes	\$42.24	\$20.29
228	9-May-11	23	12	\$1.09	Yes	\$42.24	\$41.15
229	9-May-11	24	1	\$33.21	Yes	\$43.21	\$10.00
230	9-May-11	24	2	\$34.35	Yes	\$43.21	\$8.86
231	9-May-11	24	3	\$45.07	Yes	\$43.21	-\$1.86
232	9-May-11	24	4	\$37.84	Yes	\$42.88	\$5.04
233	9-May-11	24	5	\$21.76	Yes	\$42.88	\$21.12
234	9-May-11	24	6	\$15.62	Yes	\$42.88	\$27.26
235	9-May-11	24	7	\$1.07	Yes	\$42.88	\$41.81
236	9-May-11	24	8	-\$0.04	Yes	\$42.88	\$42.92
237	9-May-11	24	9	-\$1.11	Yes	\$42.88	\$43.99
238	9-May-11	24	10	-\$1.07	Yes	\$42.88	\$43.95
239	9-May-11	24	11	-\$1.06	Yes	\$42.88	\$43.94
240	9-May-11	24	12	-\$1.06	Yes	\$42.88	\$43.94
241	10-May-11	1	1	-\$0.01	Yes	\$42.88	\$42.89
242	10-May-11	1	2	\$21.82	Yes	\$42.88	\$21.06
243	10-May-11	1	3	\$37.75	Yes	\$42.88	\$5.13
243	10-May-11	1	4	\$21.93	Yes	\$42.88	\$20.95
245	10-May-11	1	5	\$29.87	Yes	\$42.88	\$13.01
245	10-May-11	1	6	\$29.87	Yes	\$42.88	\$13.01
240	10-May-11	1	7	\$21.83	Yes	\$42.88	\$21.05
248	10-May-11	1	8	\$26.23	Yes	\$42.88	\$21.00
248	10-May-11	1	9	\$20.23	Yes	\$42.88	\$10.05
		1	10	\$21.82	Yes	\$42.88	\$21.06
250 251	10-May-11	1	11		Yes	\$42.88	\$42.89
	10-May-11	1		-\$0.01			
<u>252</u> 253	10-May-11	1	12	-\$0.12	Yes	\$42.88	\$43.00
	10-May-11	2	1	-\$0.11	Yes	\$42.88	\$42.99
254	10-May-11	2	2	-\$1.11	Yes	\$42.88	\$43.99
255	10-May-11	2	3	-\$30.47	Yes	\$42.88	\$73.35
256	10-May-11	2	4	-\$31.62	Yes	\$42.88	\$74.50
257	10-May-11	2	5	-\$31.54	Yes	\$42.88	\$74.42
258	10-May-11	2	6	-\$31.65	Yes	\$42.88	\$74.53
259	10-May-11	2	7	-\$31.30	Yes	\$42.88	\$74.18
260	10-May-11	2	8	-\$31.52	Yes	\$42.88	\$74.40
261	10-May-11	2	9	-\$30.85	Yes	\$42.88	\$73.73
262	10-May-11	2	10	-\$31.60	Yes	\$42.88	\$74.48
263	10-May-11	2	11	-\$31.09	Yes	\$42.88	\$73.97
264	10-May-11	2	12	-\$1.09	Yes	\$42.88	\$43.97
265	10-May-11	3	1	-\$1.10	Yes	\$42.88	\$43.98
266	10-May-11	3	2	-\$0.11	Yes	\$42.88	\$42.99

Number	Trade Date	Trade Hour	Interval	Market LMP	Eligible Flag	Calculated LMP	Change in LMP
267	10-May-11	3	3	-\$0.11	Yes	\$42.88	\$42.99
268	10-May-11	3	4	-\$0.11	Yes	\$42.88	\$42.99
269	10-May-11	3	5	-\$0.11	Yes	\$42.88	\$42.99
270	10-May-11	3	6	-\$0.11	Yes	\$42.88	\$42.99
271	10-May-11	3	7	-\$0.11	Yes	\$42.88	\$42.99
272	10-May-11	3	8	-\$1.11	Yes	\$42.88	\$43.99
273	10-May-11	3	9	-\$1.11	Yes	\$42.88	\$43.99
274	10-May-11	3	10	-\$0.11	Yes	\$42.88	\$42.99
275	10-May-11	3	11	-\$0.11	Yes	\$42.88	\$42.99
276	10-May-11	3	12	-\$0.11	Yes	\$42.88	\$42.99
277	10-May-11	4	1	-\$0.11	Yes	\$42.88	\$42.99
278	10-May-11	4	2	-\$0.11	Yes	\$42.88	\$42.99
279	10-May-11	4	3	-\$1.09	Yes	\$42.88	\$43.97
280	10-May-11	4	4	-\$1.11	Yes	\$42.88	\$43.99
281	10-May-11	4	5	-\$1.11	Yes	\$42.88	\$43.99
282	10-May-11	4	6	-\$1.11	Yes	\$42.88	\$43.99
283	10-May-11	4	7	-\$1.09	Yes	\$42.88	\$43.97
284	10-May-11	4	8	-\$1.09	Yes	\$42.88	\$43.97
285	10-May-11	4	9	-\$1.09	Yes	\$42.88	\$43.97
286	10-May-11	4	10	-\$0.11	Yes	\$42.88	\$42.99
287	10-May-11	4	11	-\$0.11	Yes	\$42.88	\$42.99
288	10-May-11	4	12	-\$5.23	Yes	\$42.88	\$48.11
289	10-May-11	5	1	-\$1.10	Yes	\$42.88	\$43.98
290	10-May-11	5	2	-\$31.21	Yes	\$42.88	\$74.09
291	10-May-11	5	3	-\$30.88	Yes	\$42.88	\$73.76
292	10-May-11	5	4	-\$1.11	Yes	\$42.88	\$43.99
293	10-May-11	5	5	-\$1.11	Yes	\$42.88	\$43.99
294	10-May-11	5	6	-\$1.11	Yes	\$42.88	\$43.99
295	10-May-11	5	7	-\$1.12	Yes	\$42.88	\$44.00
296	10-May-11	5	8	-\$1.12	Yes	\$42.88	\$44.00
297	10-May-11	5	9	-\$1.12	Yes	\$42.88	\$44.00
298	10-May-11	5	10	-\$1.12	Yes	\$42.88	\$43.00
299	10-May-11	5	11	-\$0.12	Yes	\$42.88	\$43.00
300	10-May-11	5	12	-\$0.12	Yes	\$42.88	\$43.00
301	10-May-11	6	12	-\$0.12	Yes	\$42.88	\$74.05
302	10-May-11	6	2	-\$31.17	Yes	\$43.21	\$74.05
303	10-May-11	6	3	-\$31.17	Yes	\$43.21	\$74.38
303	10-May-11	6	4	-\$31.17	Yes	\$43.21	\$74.48
305	10-May-11	6	5	-\$31.27	Yes	\$43.21 \$43.21	\$74.48
305					Yes	\$43.21 \$43.21	
<u> </u>	10-May-11	6	6	-\$31.27			\$74.48
	10-May-11	6	1	-\$31.14	Yes	\$43.21	\$74.35
308	10-May-11	6	8	-\$31.14	Yes	\$43.21	\$74.35
309	10-May-11	6	9	-\$31.14	Yes	\$43.21	\$74.35
310	10-May-11	6	10	-\$31.40	Yes	\$43.21	\$74.61
311	10-May-11	6	11	-\$1.12	Yes	\$43.21	\$44.33

Number	Trade Date	Trade Hour	Interval	Market LMP	Eligible Flag	Calculated LMP	Change in LMP
312	10-May-11	6	12	-\$1.12	Yes	\$43.21	\$44.33
313	10-May-11	7	1	-\$30.99	Yes	\$43.21	\$74.20
314	10-May-11	7	2	-\$31.94	Yes	\$43.21	\$75.15
315	10-May-11	7	3	-\$34.80	Yes	\$43.21	\$78.01
316	10-May-11	7	4	-\$2.06	Yes	\$43.21	\$45.27
317	10-May-11	7	5	-\$1.04	Yes	\$43.21	\$44.25
318	10-May-11	7	6	-\$0.12	Yes	\$43.21	\$43.33
319	10-May-11	7	7	-\$0.12	Yes	\$43.21	\$43.33
320	10-May-11	7	8	-\$0.01	Yes	\$43.21	\$43.22
321	10-May-11	7	9	\$21.49	Yes	\$43.21	\$21.72
322	10-May-11	7	10	\$36.52	Yes	\$43.21	\$6.69
323	10-May-11	7	11	\$36.52	Yes	\$43.21	\$6.69
324	10-May-11	7	12	\$35.47	Yes	\$43.21	\$7.74
325	10-May-11	8	1	-\$0.01	Yes	\$43.21	\$43.22
326	10-May-11	8	2	-\$0.12	Yes	\$43.21	\$43.33
327	10-May-11	8	3	-\$0.01	Yes	\$43.82	\$43.83
328	10-May-11	8	4	-\$0.02	Yes	\$43.82	\$43.84
329	10-May-11	8	5	\$1.05	Yes	\$43.82	\$43.84
330	10-May-11	8	6	\$21.03	Yes	\$43.82	\$42.77
	-	8	7				
331	10-May-11			\$21.13	Yes	\$43.82	\$22.69
332	10-May-11	8	8	\$33.83	Yes	\$43.82	\$9.99
333	10-May-11	8	9	\$33.83	Yes	\$43.82	\$9.99
334	10-May-11	8	10	\$21.87	Yes	\$43.82	\$21.95
335	10-May-11	8	11	\$21.87	Yes	\$43.82	\$21.95
336	10-May-11	8	12	\$1.07	Yes	\$43.82	\$42.75
337	10-May-11	9	1	\$21.26	Yes	\$43.82	\$22.56
338	10-May-11	9	2	\$3.35	Yes	\$43.82	\$40.47
339	10-May-11	9	3	\$3.35	Yes	\$43.82	\$40.47
340	10-May-11	9	4	-\$0.02	Yes	\$44.23	\$44.25
341	10-May-11	9	5	\$1.07	Yes	\$44.23	\$43.16
342	10-May-11	9	6	\$10.61	Yes	\$44.23	\$33.62
343	10-May-11	9	7	\$21.06	Yes	\$44.23	\$23.18
344	10-May-11	9	8	\$21.06	Yes	\$44.23	\$23.18
345	10-May-11	9	9	\$21.06	Yes	\$44.23	\$23.18
346	10-May-11	9	10	\$21.57	Yes	\$44.23	\$22.66
347	10-May-11	9	11	\$21.57	Yes	\$44.23	\$22.66
348	10-May-11	9	12	\$21.57	Yes	\$44.23	\$22.66
349	10-May-11	10	1	\$21.47	Yes	\$44.23	\$22.76
350	10-May-11	10	2	\$21.47	Yes	\$44.23	\$22.76
351	10-May-11	10	3	\$34.95	Yes	\$44.23	\$9.28
352	10-May-11	10	4	\$33.00	Yes	\$44.23	\$11.23
353	10-May-11	10	5	\$36.14	Yes	\$44.23	\$8.09
354	10-May-11	10	6	\$46.76	Yes	\$44.23	-\$2.53
355	10-May-11	10	7	\$36.12	Yes	\$44.23	\$8.11
356	10-May-11	10	8	\$42.30	Yes	\$44.23	\$1.93

Number	Trade Date	Trade Hour	Interval	Market LMP	Eligible Flag	Calculated LMP	Change in LMP
357	10-May-11	10	9	\$45.44	Yes	\$44.23	-\$1.21
358	10-May-11	10	10	\$65.28	Yes	\$44.23	-\$21.05
359	10-May-11	10	11	\$50.62	Yes	\$44.23	-\$6.39
360	10-May-11	10	12	\$49.15	Yes	\$44.23	-\$4.92
361	10-May-11	11	1	\$56.74	Yes	\$44.23	-\$12.51
362	10-May-11	11	2	\$49.64	Yes	\$44.23	-\$5.41
363	10-May-11	11	3	\$50.41	Yes	\$44.23	-\$6.18
364	10-May-11	11	4	\$50.58	Yes	\$44.23	-\$6.35
365	10-May-11	11	5	\$50.58	Yes	\$44.23	-\$6.35
366	10-May-11	11	6	\$49.76	Yes	\$44.23	-\$5.53
367	10-May-11	11	7	\$30.36	Yes	\$44.23	\$13.87
368	10-May-11	11	8	\$25.18	Yes	\$44.23	\$19.05
369	10-May-11	11	9	\$21.59	Yes	\$44.23	\$22.64
370	10-May-11	11	10	\$34.67	Yes	\$44.23	\$9.56
371	10-May-11	11	11	\$30.36	Yes	\$44.23	\$13.87
372	10-May-11	11	12	\$34.67	Yes	\$44.23	\$9.56
373	10-May-11	12	1	\$21.97	Yes	\$42.88	\$20.91
374	10-May-11	12	2	\$30.81	Yes	\$42.88	\$12.07
375	10-May-11	12	3	\$30.81	Yes	\$42.88	\$12.07
376	10-May-11	12	4	\$22.01	Yes	\$42.88	\$20.87
377	10-May-11	12	5	\$22.01	Yes	\$42.88	\$20.87
378	10-May-11	12	6	\$43.04	Yes	\$42.88	-\$0.16

#### Appendix C: Exceptional Dispatch Bid Mitigation Analysis

In May 2011, the ISO applied the exceptional dispatch bid mitigation to the exceptional dispatches that are noncompetitive TMODELs<sup>8</sup> and Delta Dispatch. There was no such exceptional dispatch subject to the bid mitigation.

<sup>&</sup>lt;sup>8</sup> The non-competitive "TMODEL" exceptional dispatches include: TMODEL4 (if more than one participating transmission owner is affected), TMODEL5 (if only PG&E is affected), TMODEL6 (if only SCE is affected) and TMODEL 7 (if only SDG&E is affected).

#### **CERTIFICATE OF SERVICE**

I hereby certify that I have served the foregoing document upon the parties listed on the official service lists in the above-referenced proceedings, in accordance with the requirements of Rule 2010 of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2010).

Dated at Folsom, California this 30<sup>th</sup> day of August, 2011.

<u>Isl Anna Pascuyyo</u> Anna Pascuzzo