



California Independent  
System Operator Corporation

September 15, 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-\_\_  
July 2011 Exceptional Dispatch Report (Chart 1 data)**

Dear Secretary Bose:

Pursuant to the Commission's September 2, 2009 and May 4, 2010 orders in the above referenced dockets, the California Independent System Operator Corporation submits the attached report. The attached report provides details concerning Exceptional Dispatches the Commission directed to be included in "Chart 1" as set forth in Appendix A of the September 2 order, as modified by the ISO's September 14 motion for clarification, which the Commission granted in its May 4 order. The attached report provides Chart 1 data for the month of July 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@caiso.com](mailto:sdavies@caiso.com)



# Exceptional Dispatch Report

## Table 1: July 2011

---

ISO Market Services

September 15, 2011

## TABLE OF CONTENTS

Introduction .....	3
The Nature of Exceptional Dispatch.....	3
Appendix A: Explanation by Example .....	21
Example 1: Exceptional Dispatch Instructions Prior to DAM .....	21
Example 2: Incremental Exceptional Dispatch Instructions in RTM.....	22
Example 3: Decremental Exceptional Dispatch Instructions in RTM .....	24

## LIST OF TABLES AND FIGURES

Table 1: Exceptional Dispatches in July 2011.....	6
Table 2: Instructions Prior to Day-Ahead Market .....	21
Table 3: FERC Summary of Instructions Prior to DAM .....	22
Table 4: Incremental Exceptional Dispatch Instructions in RTM .....	22
Table 5: FERC Summary of ED Instructions in RTM .....	23
Table 6: Decremental Exceptional Dispatch Instructions in RTM .....	24
Table 7: FERC Summary of Decremental ED Instructions in RTM .....	24

## 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 and reasons for Exceptional Dispatches issued in July 2011.

## 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<sup>1</sup>. A pre-day-ahead commitment is an exceptional dispatch instruction that commits a resource at or above its physical minimum operating level in the day-ahead market. A post-day-ahead market commitment is an exceptional dispatch instruction that commits a resource at or above its physical minimum operating level in the real-time market. A real-time exceptional dispatch instruction is a dispatch of a resource at or above its physical minimum operating point. For the purposes of this report, a real-time exceptional dispatch above the resource day-ahead award is considered an incremental exceptional dispatch instruction and an exceptional dispatch below the day-ahead award is considered a decremental dispatch instruction.

The ISO issues exceptional dispatch instructions primarily for constraints which are not enforced or not completely enforced in the market software. Whenever the ISO issues an exceptional dispatch instruction, such instructions are logged into the scheduling and logging system ("SLIC"), including the associated reason. These reasons are associated with the constraints that are not currently incorporated into the market application. In addition to model constraints, the ISO also issues exceptional dispatch instructions for software failures.

Many of the exceptional dispatches listed below in Table 1, were to satisfy either a local area or system reliability requirements, and are classified into local generation requirements, transmission management requirements, non-modeled transmission outages or other requirements, such as ramp requirements and intertie emergency assistance. All reason codes starting with "G" refer to an ISO operating procedure for generation requirements and 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 on the ISO website. All of the transmission procedures are available on the CAISO website<sup>2</sup>.

---

<sup>1</sup> The ISO can issue exceptional dispatch instruction subject to authority of the ISO Tariff Section 34.9 and in accordance with ISO Operating Procedure M-402.

<sup>2</sup> A list of all of the ISO's publicly available Operating Procedures are available at the following link: <http://www.caiso.com/thegrid/operations/opsdoc/index.html>

In July 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-103, Southern California import transmission (SCIT) nomogram; (2) T-129, transmission facilities in Fresno area; (3) T-132, transmission facilities in San Diego and Imperial Valley area; (4) T-133, transmission facilities in Bay Area; (5) T-138, transmission facilities in Humboldt area; (6) T-167, transmission facilities in Tesla/Bellota Area; and (7) other transmission outages in PG&E, SCE and SDG&E area.

The following additional reasons for exceptional dispatch instructions in July 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 July, which are self explanatory.

As mentioned earlier, the data shown in Table 1 is based on a template specified in the September 2009 order<sup>3</sup>. Each entry in Attachment A 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

---

<sup>3</sup> The data in Table 1 is principally SLIC information supplemented with data from the Market Quality System (MQS). It is the most accurate currently available and it is worth noting that this data has been through the T+38B initial statement process wherein many unresolved issues are fixed. The CAISO believes that this data will correlate well with the settlements data that will be available when the CAISO files the Table 2 report for the reporting period.

information is provided: (1) Megawatts (MW); (2) Commitment (3) Inc or Dec (4) Hours; (5) Begin Time; and (6) End Time.

The MW column shows the range of exceptional dispatch instructions 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, a decremental dispatch, or only a unit commitment. If the exceptional dispatch was only a unit commitment, the column shows NA for the classification. The Begin Time column shows the start of exceptional dispatch for the classification and the End Time column shows the end of exceptional dispatch for the classification. The column Hours is the difference between end time and begin time rounded up to the next hour. The data shown is further explained by way of example in Attachment A.

Table 1 indicates that there were a total of 404 exceptional dispatches in July 2011, increasing by 155 as compared to the August 15, 2011 report for June 2011. There were no exceptional dispatches in the day-ahead market. All exceptional dispatches in July were issued in the real-time market. Exceptional dispatches issued for the following reasons accounted for approximately 52 percent of the total exceptional dispatches during the reporting period: Software Limitation, T-167, Transmission Outage PG&E, and Ramp Rate.

**Table 1: Exceptional Dispatches in July 2011**

California Independent System Operator Corporation Exceptional Dispatch Report September 15, 2011											
Chart 1: Table of Exceptional Dispatches for Period 01/July/2011 – 31/July/2011											
Number	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commitment	INC_DEC	Hours	Begin Time	End Time
1	RT	Bad Transition	N/A	N/A	7-Jul-11	300	Yes	INC	4	7:05	10:59
2	RT	Bad Transition	SCE	LA Basin	7-Jul-11	300	No	INC	1	7:00	7:06
3	RT	COI Mitigation	N/A	N/A	24-Jul-11	0	No	INC	1	2:10	2:29
4	RT	COI Mitigation	PG&E	Fresno	24-Jul-11	83	Yes	INC	2	0:34	1:06
5	RT	Fire	N/A	N/A	15-Jul-11	354	Yes	INC	1	23:00	23:29
6	RT	Fire	SCE	Big Creek-Ventura	20-Jul-11	50	Yes	INC	5	15:35	19:59
7	RT	Fire	SCE	LA Basin	20-Jul-11	600	No	INC	1	15:24	15:31
8	RT	Fire	SDG&E	N/A	15-Jul-11	65	No	DEC	4	16:05	19:59
9	RT	G-206	SDG&E	San Diego	15-Jul-11	107- 472	Yes	INC	7	17:26	23:59
10	RT	G-206	SDG&E	San Diego	16-Jul-11	472	Yes	INC	1	0:00	0:24
11	RT	Intertie Emergency Assistance	N/A	N/A	12-Jul-11	120- 203	No	INC	2	12:00	13:59
12	RT	Intertie Emergency Assistance	N/A	N/A	19-Jul-11	125	No	INC	1	19:00	19:59
13	RT	Late Start Up	SCE	LA Basin	30-Jul-11	70- 450	Yes	DEC	9	13:35	21:09
14	RT	Load Forecast Uncertainty	SCE	LA Basin	28-Jul-11	20- 45	Yes	INC	24	0:00	23:59
15	RT	Market Disruption	N/A	N/A	4-Jul-11	910	No	INC	1	2:00	2:59
16	RT	Market Disruption	N/A	N/A	19-Jul-11	25	No	INC	1	3:00	3:59
17	RT	Market Disruption	PG&E	Bay Area	4-Jul-11	180	Yes	INC	1	0:00	0:19
18	RT	Market Disruption	PG&E	N/A	4-Jul-11	281	Yes	INC	1	0:00	0:19
19	RT	Over Generation	N/A	N/A	4-Jul-11	0	No	INC	2	8:55	9:24
20	RT	Over Generation	N/A	N/A	31-Jul-11	520	No	INC	3	10:20	12:29

## Department of Market Services – California ISO

Number	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commitment	INC_DEC	Hours	Begin Time	End Time
21	RT	Over Generation	PG&E	Bay Area	31-Jul-11	380	No	INC	2	11:09	12:20
22	RT	Over Generation	PG&E	Fresno	4-Jul-11	190	No	DEC	1	8:14	8:35
23	RT	Over Generation	PG&E	Fresno	4-Jul-11	0	No	INC	2	8:50	9:49
24	RT	Over Generation	PG&E	Fresno	9-Jul-11	308	No	DEC	1	9:00	9:20
25	RT	Over Generation	PG&E	Fresno	31-Jul-11	317	No	DEC	1	11:00	11:13
26	RT	Over Generation	PG&E	Sierra	4-Jul-11	215	No	DEC	1	8:14	8:35
27	RT	Over Generation	SDG&E	San Diego	4-Jul-11	53	Yes	DEC	1	18:15	18:35
28	RT	Over Generation	SDG&E	San Diego	4-Jul-11	0	Yes	INC	2	8:45	9:49
29	RT	Path 15	N/A	N/A	25-Jul-11	15- 460	No	INC	3	14:25	16:59
30	RT	Path 15	PG&E	N/A	25-Jul-11	0- 114	No	DEC	4	13:58	16:09
31	RT	Path 15	PG&E	N/A	25-Jul-11	0- 460	No	INC	4	13:59	16:09
32	RT	Path 15	SCE	LA Basin	25-Jul-11	130	Yes	INC	5	13:55	17:59
33	RT	Path 26	SCE	LA Basin	4-Jul-11	70	Yes	INC	24	0:00	23:59
34	RT	Path 66	N/A	N/A	2-Jul-11	200	No	DEC	1	23:50	23:59
35	RT	Path 66	N/A	N/A	3-Jul-11	200	No	DEC	1	0:00	0:59
36	RT	Pump Management	PG&E	Fresno	7-Jul-11	0	No	INC	1	8:30	8:54
37	RT	Ramp Rate	N/A	N/A	1-Jul-11	68	Yes	INC	4	16:20	19:59
38	RT	Ramp Rate	N/A	N/A	3-Jul-11	352	Yes	DEC	3	10:15	12:59
39	RT	Ramp Rate	N/A	N/A	3-Jul-11	600	Yes	INC	3	10:15	12:59
40	RT	Ramp Rate	N/A	N/A	19-Jul-11	131	Yes	INC	2	11:05	12:59
41	RT	Ramp Rate	N/A	N/A	20-Jul-11	45	Yes	DEC	3	10:00	12:59
42	RT	Ramp Rate	N/A	N/A	20-Jul-11	63	Yes	INC	11	10:00	20:59
43	RT	Ramp Rate	N/A	N/A	21-Jul-11	45	Yes	DEC	6	15:35	20:59
44	RT	Ramp Rate	N/A	N/A	21-Jul-11	63- 131	Yes	INC	14	7:30	20:59
45	RT	Ramp Rate	N/A	N/A	30-Jul-11	37- 163	Yes	DEC	7	12:10	18:59
46	RT	Ramp Rate	N/A	N/A	30-Jul-11	64	Yes	INC	7	12:10	18:59
47	RT	Ramp Rate	PG&E	N/A	4-Jul-11	22- 405	No	DEC	9	11:40	19:59
48	RT	Ramp Rate	PG&E	N/A	4-Jul-11	15	No	INC	9	11:40	19:59
49	RT	Ramp Rate	SCE	Big Creek-	19-Jul-11	50	No	INC	3	15:29	17:59

## Department of Market Services – California ISO

Number	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commitment	INC_DEC	Hours	Begin Time	End Time
				Ventura							
50	RT	Ramp Rate	SCE	Big Creek-Ventura	21-Jul-11	50	Yes	INC	4	15:50	18:59
51	RT	Ramp Rate	SCE	Big Creek-Ventura	28-Jul-11	51	Yes	INC	7	15:50	21:59
52	RT	Ramp Rate	SCE	Big Creek-Ventura	30-Jul-11	1- 51	Yes	INC	8	11:35	18:59
53	RT	Ramp Rate	SCE	LA Basin	1-Jul-11	142	Yes	INC	7	13:50	19:59
54	RT	Ramp Rate	SCE	LA Basin	2-Jul-11	142	Yes	INC	8	12:05	19:59
55	RT	Ramp Rate	SCE	LA Basin	3-Jul-11	64- 407	Yes	DEC	10	10:10	19:44
56	RT	Ramp Rate	SCE	LA Basin	3-Jul-11	26- 770	Yes	INC	11	9:52	19:44
57	RT	Ramp Rate	SCE	LA Basin	5-Jul-11	142	Yes	INC	7	13:15	19:59
58	RT	Ramp Rate	SCE	LA Basin	6-Jul-11	142	Yes	INC	5	15:00	19:59
59	RT	Ramp Rate	SCE	LA Basin	7-Jul-11	284	Yes	INC	10	11:45	20:59
60	RT	Ramp Rate	SCE	LA Basin	8-Jul-11	213	Yes	INC	6	14:35	19:59
61	RT	Ramp Rate	SCE	LA Basin	9-Jul-11	71	Yes	INC	8	14:55	21:59
62	RT	Ramp Rate	SCE	LA Basin	10-Jul-11	71	Yes	INC	8	13:15	20:59
63	RT	Ramp Rate	SCE	LA Basin	11-Jul-11	71	Yes	INC	7	4:30	10:49
64	RT	Ramp Rate	SCE	LA Basin	18-Jul-11	190	Yes	INC	5	15:15	19:59
65	RT	Ramp Rate	SCE	LA Basin	20-Jul-11	190- 261	Yes	INC	11	10:00	20:59
66	RT	Ramp Rate	SCE	LA Basin	21-Jul-11	190	Yes	INC	11	10:00	20:59
67	RT	Ramp Rate	SCE	LA Basin	27-Jul-11	71	Yes	INC	8	14:25	21:59
68	RT	Ramp Rate	SCE	LA Basin	28-Jul-11	71	Yes	INC	8	14:25	21:59
69	RT	Ramp Rate	SCE	LA Basin	30-Jul-11	261	Yes	INC	8	11:30	18:59
70	RT	Ramp Rate	SDG&E	San Diego	1-Jul-11	68	No	INC	1	16:01	16:59
71	RT	SC Request	SCE	LA Basin	5-Jul-11	0	No	INC	4	20:15	23:59
72	RT	SP26 Capacity	SCE	Big Creek-Ventura	13-Jul-11	140	Yes	INC	14	8:00	21:59
73	RT	SP26 Capacity	SCE	LA Basin	3-Jul-11	428	No	DEC	2	15:20	16:59
74	RT	SP26 Capacity	SCE	LA Basin	3-Jul-11	20	No	INC	5	19:00	23:59

## Department of Market Services – California ISO

Number	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commitment	INC_DEC	Hours	Begin Time	End Time
75	RT	SP26 Capacity	SCE	LA Basin	4-Jul-11	20	Yes	INC	24	0:00	23:59
76	RT	SP26 Capacity	SCE	LA Basin	5-Jul-11	25	Yes	INC	15	9:00	23:59
77	RT	SP26 Capacity	SCE	LA Basin	7-Jul-11	25	Yes	INC	24	0:00	23:59
78	RT	SP26 Capacity	SCE	LA Basin	8-Jul-11	25	Yes	INC	24	0:00	23:59
79	RT	SP26 Capacity	SCE	LA Basin	9-Jul-11	25	Yes	INC	24	0:00	23:59
80	RT	SP26 Capacity	SCE	LA Basin	10-Jul-11	45	Yes	INC	24	0:00	23:59
81	RT	SP26 Capacity	SCE	LA Basin	11-Jul-11	45	Yes	INC	24	0:00	23:59
82	RT	SP26 Capacity	SCE	LA Basin	20-Jul-11	40	Yes	INC	24	0:00	23:59
83	RT	SP26 Capacity	SCE	LA Basin	26-Jul-11	20	Yes	INC	15	9:00	23:59
84	RT	SP26 Capacity	SCE	LA Basin	30-Jul-11	20- 45	Yes	INC	24	0:00	23:59
85	RT	SP26 Capacity	SCE	LA Basin	31-Jul-11	40	Yes	INC	24	0:00	23:59
86	RT	SP26 Capacity	SDG&E	San Diego	15-Jul-11	23	Yes	DEC	2	16:30	17:29
87	RT	Software Issue	N/A	N/A	30-Jul-11	48	No	DEC	2	7:55	8:59
88	RT	Software Issue	N/A	N/A	30-Jul-11	0	No	INC	2	7:55	8:59
89	RT	Software Limitation	N/A	N/A	3-Jul-11	68	Yes	INC	2	21:50	22:59
90	RT	Software Limitation	N/A	N/A	4-Jul-11	8- 51	Yes	DEC	10	0:10	9:59
91	RT	Software Limitation	N/A	N/A	4-Jul-11	0	Yes	INC	10	0:10	9:59
92	RT	Software Limitation	N/A	N/A	10-Jul-11	145	Yes	DEC	1	16:40	16:59
93	RT	Software Limitation	N/A	N/A	10-Jul-11	160	Yes	INC	1	15:00	15:59
94	RT	Software Limitation	N/A	N/A	16-Jul-11	0	No	INC	4	3:55	6:24
95	RT	Software Limitation	N/A	N/A	23-Jul-11	24- 300	No	INC	3	18:55	20:39
96	RT	Software Limitation	N/A	N/A	30-Jul-11	85- 170	No	DEC	5	19:40	23:59
97	RT	Software Limitation	N/A	N/A	30-Jul-11	310- 315	No	INC	7	16:50	22:59
98	RT	Software Limitation	N/A	N/A	31-Jul-11	85- 170	No	DEC	15	8:50	22:59
99	RT	Software Limitation	N/A	N/A	31-Jul-11	310	Yes	INC	24	0:25	23:59
100	RT	Software Limitation	PG&E	Bay Area	3-Jul-11	0	Yes	INC	2	22:20	23:19
101	RT	Software Limitation	PG&E	Bay Area	5-Jul-11	0	No	INC	2	22:10	23:39
102	RT	Software Limitation	PG&E	Bay Area	6-Jul-11	0	Yes	INC	24	0:30	23:59
103	RT	Software Limitation	PG&E	Bay Area	7-Jul-11	0	Yes	INC	2	0:00	1:59

## Department of Market Services – California ISO

Number	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commitment	INC_DEC	Hours	Begin Time	End Time
104	RT	Software Limitation	PG&E	Bay Area	23-Jul-11	47	Yes	INC	2	22:20	23:09
105	RT	Software Limitation	PG&E	Bay Area	24-Jul-11	0	Yes	INC	1	0:37	0:59
106	RT	Software Limitation	PG&E	Bay Area	28-Jul-11	60	Yes	INC	2	16:00	17:59
107	RT	Software Limitation	PG&E	Fresno	3-Jul-11	310	No	INC	1	7:22	7:59
108	RT	Software Limitation	PG&E	Fresno	5-Jul-11	0- 43	Yes	DEC	5	12:00	16:24
109	RT	Software Limitation	PG&E	Fresno	6-Jul-11	0	No	INC	1	6:00	6:59
110	RT	Software Limitation	PG&E	Fresno	9-Jul-11	0	Yes	INC	1	23:25	23:59
111	RT	Software Limitation	PG&E	Fresno	10-Jul-11	0	No	INC	2	0:00	1:24
112	RT	Software Limitation	PG&E	Fresno	11-Jul-11	0	No	INC	1	9:05	9:09
113	RT	Software Limitation	PG&E	Fresno	15-Jul-11	0	No	INC	2	3:02	4:29
114	RT	Software Limitation	PG&E	Fresno	20-Jul-11	0	No	INC	3	2:55	4:54
115	RT	Software Limitation	PG&E	Fresno	23-Jul-11	49- 94	Yes	INC	2	22:20	23:14
116	RT	Software Limitation	PG&E	Fresno	29-Jul-11	3	Yes	DEC	2	18:30	19:44
117	RT	Software Limitation	PG&E	Fresno	29-Jul-11	0	Yes	INC	6	18:30	23:59
118	RT	Software Limitation	PG&E	Fresno	30-Jul-11	0	Yes	INC	2	0:00	1:49
119	RT	Software Limitation	PG&E	Humboldt	8-Jul-11	0	No	INC	1	4:45	4:59
120	RT	Software Limitation	PG&E	N/A	1-Jul-11	0	No	INC	4	0:00	3:04
121	RT	Software Limitation	PG&E	N/A	5-Jul-11	43	Yes	DEC	2	15:25	16:24
122	RT	Software Limitation	PG&E	N/A	6-Jul-11	0	Yes	INC	6	1:25	6:59
123	RT	Software Limitation	PG&E	N/A	7-Jul-11	0	No	INC	2	22:25	23:59
124	RT	Software Limitation	PG&E	N/A	8-Jul-11	0	No	INC	1	0:00	0:24
125	RT	Software Limitation	PG&E	Sierra	28-Jul-11	40	Yes	INC	1	15:05	15:59
126	RT	Software Limitation	PG&E	Stockton	23-Jul-11	22	Yes	INC	2	22:20	23:09
127	RT	Software Limitation	PG&E	Stockton	24-Jul-11	0	Yes	INC	1	1:40	1:59
128	RT	Software Limitation	SCE	Big Creek-Ventura	8-Jul-11	7	No	DEC	3	21:30	23:29
129	RT	Software Limitation	SCE	Big Creek-Ventura	23-Jul-11	64- 174	Yes	INC	2	22:20	23:09
130	RT	Software Limitation	SCE	Big Creek-	24-Jul-11	0	No	INC	2	0:40	1:14

## Department of Market Services – California ISO

Number	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commitment	INC_DEC	Hours	Begin Time	End Time
				Ventura							
131	RT	Software Limitation	SCE	LA Basin	1-Jul-11	400	Yes	INC	20	0:00	19:49
132	RT	Software Limitation	SCE	LA Basin	3-Jul-11	134	Yes	DEC	2	16:30	17:14
133	RT	Software Limitation	SCE	LA Basin	3-Jul-11	0	Yes	INC	5	19:00	23:59
134	RT	Software Limitation	SCE	LA Basin	4-Jul-11	0	Yes	INC	9	0:00	8:59
135	RT	Software Limitation	SCE	LA Basin	5-Jul-11	20	No	DEC	2	22:40	23:59
136	RT	Software Limitation	SCE	LA Basin	5-Jul-11	200	No	INC	14	10:50	23:59
137	RT	Software Limitation	SCE	LA Basin	6-Jul-11	0	No	INC	24	0:00	23:59
138	RT	Software Limitation	SCE	LA Basin	7-Jul-11	28	No	DEC	5	19:45	23:44
139	RT	Software Limitation	SCE	LA Basin	7-Jul-11	70	Yes	INC	24	0:00	23:59
140	RT	Software Limitation	SCE	LA Basin	8-Jul-11	0	No	INC	2	20:05	21:04
141	RT	Software Limitation	SCE	LA Basin	11-Jul-11	17	Yes	DEC	5	12:35	16:59
142	RT	Software Limitation	SCE	LA Basin	11-Jul-11	30	Yes	INC	8	9:20	16:59
143	RT	Software Limitation	SCE	LA Basin	19-Jul-11	20- 190	Yes	INC	24	0:00	23:59
144	RT	Software Limitation	SCE	LA Basin	20-Jul-11	0	No	INC	1	23:45	23:59
145	RT	Software Limitation	SCE	LA Basin	21-Jul-11	0	No	INC	4	0:00	3:44
146	RT	Software Limitation	SCE	LA Basin	23-Jul-11	172- 198	Yes	INC	2	22:20	23:14
147	RT	Software Limitation	SCE	LA Basin	24-Jul-11	0	Yes	INC	4	0:05	3:49
148	RT	Software Limitation	SCE	LA Basin	29-Jul-11	28	No	DEC	5	18:45	22:44
149	RT	Software Limitation	SCE	LA Basin	29-Jul-11	20	Yes	INC	6	18:45	23:59
150	RT	Software Limitation	SCE	LA Basin	30-Jul-11	80	Yes	DEC	2	21:35	22:29
151	RT	Software Limitation	SCE	LA Basin	30-Jul-11	20	Yes	INC	24	0:00	23:59
152	RT	Software Limitation	SCE	N/A	16-Jul-11	1	Yes	DEC	1	20:22	20:51
153	RT	Software Limitation	SCE	N/A	16-Jul-11	0	Yes	INC	6	0:20	5:59
154	RT	Software Limitation	SCE	N/A	21-Jul-11	668- 670	Yes	DEC	9	3:10	11:09
155	RT	Software Limitation	SCE	N/A	21-Jul-11	0	Yes	INC	9	3:10	11:09
156	RT	Software Limitation	SCE	N/A	24-Jul-11	320	Yes	INC	2	22:42	23:21
157	RT	Software Limitation	SDG&E	N/A	10-Jul-11	335	No	INC	2	22:00	23:58
158	RT	Software Limitation	SDG&E	N/A	11-Jul-11	310	No	INC	1	0:00	0:59

## Department of Market Services – California ISO

Number	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commitment	INC_DEC	Hours	Begin Time	End Time
159	RT	Software Limitation	SDG&E	N/A	30-Jul-11	315	No	INC	2	17:05	18:59
160	RT	Software Limitation	SDG&E	San Diego	5-Jul-11	0	Yes	INC	2	20:50	21:29
161	RT	Software Limitation	SDG&E	San Diego	6-Jul-11	28	Yes	DEC	8	12:40	19:59
162	RT	Software Limitation	SDG&E	San Diego	6-Jul-11	43	Yes	INC	10	12:40	21:04
163	RT	Software Limitation	SDG&E	San Diego	7-Jul-11	0	Yes	INC	1	19:15	19:54
164	RT	Software Limitation	SDG&E	San Diego	8-Jul-11	0	Yes	INC	22	0:20	21:24
165	RT	Software Limitation	SDG&E	San Diego	9-Jul-11	0	Yes	INC	1	18:15	18:54
166	RT	Software Limitation	SDG&E	San Diego	10-Jul-11	20	Yes	INC	3	14:00	16:59
167	RT	Software Limitation	SDG&E	San Diego	13-Jul-11	290	Yes	INC	1	19:09	19:59
168	RT	Software Limitation	SDG&E	San Diego	19-Jul-11	40	Yes	INC	5	19:00	23:59
169	RT	Software Limitation	SDG&E	San Diego	23-Jul-11	65- 72	Yes	INC	2	22:20	23:14
170	RT	Software Limitation	SDG&E	San Diego	24-Jul-11	0	Yes	INC	18	1:30	18:24
171	RT	Software Limitation	SDG&E	San Diego	25-Jul-11	0	Yes	INC	1	17:20	17:59
172	RT	Software Limitation	SDG&E	San Diego	27-Jul-11	0	Yes	INC	1	13:25	13:54
173	RT	Software Limitation	SDG&E	San Diego	31-Jul-11	63- 131	No	INC	7	17:06	23:58
174	RT	System Capacity	N/A	N/A	1-Jul-11	20	Yes	INC	17	7:00	23:59
175	RT	System Capacity	N/A	N/A	20-Jul-11	20	Yes	INC	21	3:00	23:59
176	RT	System Capacity	N/A	N/A	21-Jul-11	20	Yes	INC	24	0:00	23:59
177	RT	System Capacity	SCE	LA Basin	1-Jul-11	40- 85	Yes	INC	24	0:00	23:59
178	RT	System Capacity	SCE	LA Basin	2-Jul-11	65- 75	Yes	INC	24	0:00	23:59
179	RT	System Capacity	SCE	LA Basin	4-Jul-11	36- 225	Yes	DEC	6	18:15	23:59
180	RT	System Capacity	SCE	LA Basin	4-Jul-11	20- 30	Yes	INC	6	18:15	23:59
181	RT	System Capacity	SCE	LA Basin	5-Jul-11	315	No	DEC	2	15:40	16:59
182	RT	System Capacity	SCE	LA Basin	5-Jul-11	30- 55	Yes	INC	24	0:00	23:59
183	RT	System Capacity	SCE	LA Basin	6-Jul-11	110	Yes	INC	24	0:00	23:59
184	RT	System Capacity	SCE	LA Basin	8-Jul-11	20- 40	Yes	INC	24	0:00	23:59
185	RT	System Capacity	SCE	LA Basin	9-Jul-11	20	Yes	INC	24	0:00	23:59
186	RT	System Capacity	SCE	LA Basin	20-Jul-11	25	Yes	INC	15	9:00	23:59
187	RT	System Capacity	SCE	LA Basin	21-Jul-11	20	Yes	INC	24	0:00	23:59

## Department of Market Services – California ISO

Number	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commitment	INC_DEC	Hours	Begin Time	End Time
188	RT	System Capacity	SCE	LA Basin	26-Jul-11	25	Yes	INC	12	12:00	23:59
189	RT	System Capacity	SCE	LA Basin	27-Jul-11	25- 45	Yes	INC	24	0:00	23:59
190	RT	System Capacity	SCE	LA Basin	28-Jul-11	25	Yes	INC	8	16:25	23:59
191	RT	System Capacity	SCE	LA Basin	29-Jul-11	25- 45	Yes	INC	24	0:00	23:59
192	RT	System Capacity	SDG&E	San Diego	1-Jul-11	20- 40	Yes	INC	17	7:00	23:59
193	RT	System Capacity	SDG&E	San Diego	2-Jul-11	20	Yes	INC	24	0:00	23:59
194	RT	System Capacity	SDG&E	San Diego	20-Jul-11	40	Yes	INC	24	0:00	23:59
195	RT	System Capacity	SDG&E	San Diego	24-Jul-11	48	Yes	INC	2	16:00	17:59
196	RT	System Energy	N/A	N/A	3-Jul-11	200	No	DEC	1	8:00	8:59
197	RT	System Energy	N/A	N/A	3-Jul-11	445	No	INC	1	8:00	8:59
198	RT	System Energy	N/A	N/A	4-Jul-11	451- 601	No	INC	2	13:00	14:59
199	RT	System Energy	N/A	N/A	5-Jul-11	250-1023	No	INC	12	3:00	14:59
200	RT	System Energy	N/A	N/A	7-Jul-11	350	No	DEC	1	13:00	13:59
201	RT	System Energy	N/A	N/A	7-Jul-11	100- 357	Yes	INC	8	6:00	13:59
202	RT	System Energy	N/A	N/A	8-Jul-11	200	No	DEC	1	7:00	7:59
203	RT	System Energy	N/A	N/A	8-Jul-11	600	No	INC	4	4:00	7:59
204	RT	System Energy	N/A	N/A	17-Jul-11	572	No	INC	1	16:00	16:59
205	RT	System Energy	N/A	N/A	18-Jul-11	100- 407	No	INC	23	0:00	22:59
206	RT	System Energy	N/A	N/A	19-Jul-11	327-1156	Yes	INC	3	9:00	11:59
207	RT	System Energy	N/A	N/A	21-Jul-11	315	No	INC	1	10:00	10:59
208	RT	System Energy	N/A	N/A	24-Jul-11	90	No	DEC	1	0:00	0:59
209	RT	System Energy	N/A	N/A	24-Jul-11	150	No	INC	1	0:00	0:59
210	RT	System Energy	N/A	N/A	27-Jul-11	460	No	INC	1	22:00	22:59
211	RT	System Reliability	N/A	N/A	10-Jul-11	45	No	INC	2	16:30	17:59
212	RT	System Reliability	N/A	N/A	24-Jul-11	147- 560	Yes	INC	7	15:45	21:59
213	RT	System Reliability	PG&E	Bay Area	17-Jul-11	84	Yes	INC	1	22:10	22:59
214	RT	System Reliability	PG&E	Fresno	17-Jul-11	166-1162	Yes	INC	2	22:03	23:59
215	RT	System Reliability	PG&E	Fresno	24-Jul-11	83- 346	Yes	INC	5	15:20	19:59
216	RT	System Reliability	PG&E	N/A	17-Jul-11	300	No	INC	1	22:11	22:29

## Department of Market Services – California ISO

Number	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commitment	INC_DEC	Hours	Begin Time	End Time
217	RT	System Reliability	PG&E	N/A	24-Jul-11	280- 288	No	INC	5	15:29	19:38
218	RT	System Reliability	SCE	Big Creek-Ventura	17-Jul-11	120	Yes	INC	2	22:08	23:19
219	RT	System Reliability	SCE	Big Creek-Ventura	24-Jul-11	50- 215	No	INC	6	15:46	20:59
220	RT	System Reliability	SCE	LA Basin	17-Jul-11	817	Yes	INC	2	22:07	23:59
221	RT	System Reliability	SCE	LA Basin	18-Jul-11	0	No	INC	1	0:00	0:29
222	RT	System Reliability	SCE	N/A	15-Jul-11	138- 415	Yes	INC	2	22:55	23:29
223	RT	System Reliability	SDG&E	San Diego	10-Jul-11	45	No	INC	2	16:05	17:59
224	RT	System Reliability	SDG&E	San Diego	15-Jul-11	43- 93	No	INC	2	17:26	18:59
225	RT	System Reliability	SDG&E	San Diego	17-Jul-11	99- 475	Yes	INC	2	22:09	23:19
226	RT	T-103	SCE	LA Basin	7-Jul-11	65	Yes	INC	24	0:00	23:59
227	RT	T-129	PG&E	Fresno	3-Jul-11	0	No	INC	1	7:00	7:14
228	RT	T-129	PG&E	Fresno	6-Jul-11	78	No	INC	1	23:41	23:59
229	RT	T-129	PG&E	Fresno	7-Jul-11	58- 78	No	INC	24	0:00	23:59
230	RT	T-129	PG&E	Fresno	8-Jul-11	84	No	DEC	2	0:00	1:59
231	RT	T-129	PG&E	Fresno	9-Jul-11	0	Yes	DEC	1	13:20	13:24
232	RT	T-129	PG&E	Fresno	9-Jul-11	5- 47	Yes	INC	24	0:18	23:59
233	RT	T-129	PG&E	Fresno	10-Jul-11	44- 47	Yes	INC	2	0:00	1:59
234	RT	T-129	PG&E	Fresno	11-Jul-11	67- 150	Yes	INC	5	19:05	23:59
235	RT	T-129	PG&E	Fresno	12-Jul-11	32	Yes	INC	1	0:00	0:19
236	RT	T-129	PG&E	Fresno	15-Jul-11	5	No	DEC	13	9:25	21:59
237	RT	T-129	PG&E	Fresno	16-Jul-11	0- 5	No	DEC	15	7:45	21:59
238	RT	T-129	PG&E	Fresno	16-Jul-11	0- 2	No	INC	15	7:45	21:59
239	RT	T-129	PG&E	Fresno	17-Jul-11	1- 5	No	DEC	15	7:15	21:59
240	RT	T-129	PG&E	Fresno	18-Jul-11	0- 5	No	DEC	24	0:10	23:59
241	RT	T-129	PG&E	Fresno	18-Jul-11	0- 10	No	INC	24	0:10	23:59
242	RT	T-129	PG&E	Fresno	24-Jul-11	138- 239	Yes	INC	9	13:24	21:44
243	RT	T-129	PG&E	Fresno	28-Jul-11	37- 40	Yes	INC	2	19:30	20:29

## Department of Market Services – California ISO

Number	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commitment	INC_DEC	Hours	Begin Time	End Time
244	RT	T-129	PG&E	Fresno	30-Jul-11	42- 267	Yes	INC	11	13:20	23:29
245	RT	T-129	PG&E	Fresno	31-Jul-11	45	Yes	INC	6	17:00	22:04
246	RT	T-132	N/A	N/A	2-Jul-11	245- 565	No	INC	5	15:00	19:59
247	RT	T-132	N/A	N/A	21-Jul-11	45	No	DEC	4	16:45	19:59
248	RT	T-132	N/A	N/A	23-Jul-11	25- 165	No	DEC	2	18:30	19:59
249	RT	T-132	N/A	N/A	30-Jul-11	310- 450	No	INC	4	15:05	18:59
250	RT	T-132	SCE	LA Basin	2-Jul-11	126	Yes	INC	6	14:01	19:59
251	RT	T-132	SCE	LA Basin	30-Jul-11	25- 320	Yes	INC	9	15:35	23:59
252	RT	T-132	SCE	N/A	2-Jul-11	15- 80	Yes	INC	7	13:17	19:59
253	RT	T-132	SCE	N/A	3-Jul-11	65	Yes	DEC	6	16:11	21:59
254	RT	T-132	SCE	N/A	3-Jul-11	1	Yes	INC	6	16:40	21:59
255	RT	T-132	SCE	N/A	30-Jul-11	26- 51	No	DEC	4	13:35	16:44
256	RT	T-132	SCE	N/A	30-Jul-11	15	No	INC	3	14:15	16:29
257	RT	T-132	SDG&E	N/A	2-Jul-11	86- 120	Yes	DEC	6	14:05	19:59
258	RT	T-132	SDG&E	N/A	2-Jul-11	245- 400	No	INC	6	14:09	19:59
259	RT	T-132	SDG&E	N/A	3-Jul-11	108- 164	No	DEC	5	16:08	20:59
260	RT	T-132	SDG&E	N/A	19-Jul-11	20- 49	Yes	DEC	2	16:25	17:49
261	RT	T-132	SDG&E	N/A	23-Jul-11	18- 50	Yes	DEC	4	16:35	19:59
262	RT	T-132	SDG&E	N/A	23-Jul-11	310	No	INC	2	17:50	18:29
263	RT	T-132	SDG&E	N/A	30-Jul-11	66- 109	No	DEC	6	13:40	18:59
264	RT	T-132	SDG&E	N/A	30-Jul-11	0	No	INC	2	17:30	18:59
265	RT	T-132	SDG&E	San Diego	18-Jul-11	66	No	DEC	2	15:45	16:09
266	RT	T-133	N/A	N/A	20-Jul-11	19- 40	Yes	INC	4	19:05	22:59
267	RT	T-133	PG&E	Bay Area	3-Jul-11	20	Yes	INC	2	19:05	20:59
268	RT	T-133	PG&E	Bay Area	20-Jul-11	40	No	INC	4	19:00	22:59
269	RT	T-138	N/A	N/A	8-Jul-11	0- 4	Yes	DEC	18	5:00	22:59
270	RT	T-138	N/A	N/A	8-Jul-11	15- 58	Yes	INC	19	4:50	22:59
271	RT	T-138	N/A	N/A	21-Jul-11	3	No	INC	1	23:55	23:59
272	RT	T-138	N/A	N/A	22-Jul-11	80	Yes	INC	2	0:00	1:59

## Department of Market Services – California ISO

Number	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commitment	INC_DEC	Hours	Begin Time	End Time
273	RT	T-138	N/A	N/A	29-Jul-11	29	No	INC	3	17:05	19:59
274	RT	T-138	PG&E	Humboldt	8-Jul-11	44- 74	No	INC	20	4:34	23:51
275	RT	T-138	PG&E	Humboldt	20-Jul-11	13	No	INC	1	21:36	21:54
276	RT	T-138	PG&E	Humboldt	25-Jul-11	15	No	INC	4	20:52	23:58
277	RT	T-138	PG&E	Humboldt	26-Jul-11	15	No	INC	1	0:00	0:16
278	RT	T-167	PG&E	N/A	8-Jul-11	6- 32	No	DEC	4	8:26	11:29
279	RT	T-167	PG&E	N/A	8-Jul-11	5	No	INC	2	10:45	11:29
280	RT	T-167	PG&E	Stockton	1-Jul-11	25	No	INC	1	23:36	23:58
281	RT	T-167	PG&E	Stockton	4-Jul-11	6- 25	No	INC	17	7:05	23:59
282	RT	T-167	PG&E	Stockton	5-Jul-11	3- 19	No	INC	24	0:20	23:59
283	RT	T-167	PG&E	Stockton	6-Jul-11	15- 25	No	INC	24	0:00	23:59
284	RT	T-167	PG&E	Stockton	7-Jul-11	3- 25	No	INC	24	0:00	23:59
285	RT	T-167	PG&E	Stockton	8-Jul-11	15- 20	No	INC	24	0:00	23:59
286	RT	T-167	PG&E	Stockton	10-Jul-11	0	No	DEC	13	5:50	17:09
287	RT	T-167	PG&E	Stockton	10-Jul-11	6- 55	No	INC	19	5:50	23:59
288	RT	T-167	PG&E	Stockton	11-Jul-11	0	No	DEC	23	1:25	23:59
289	RT	T-167	PG&E	Stockton	11-Jul-11	3- 50	No	INC	23	1:15	23:59
290	RT	T-167	PG&E	Stockton	12-Jul-11	3	No	DEC	2	0:05	1:34
291	RT	T-167	PG&E	Stockton	12-Jul-11	4	No	INC	2	0:05	1:34
292	RT	T-167	PG&E	Stockton	14-Jul-11	7- 9	No	DEC	6	3:30	8:59
293	RT	T-167	PG&E	Stockton	14-Jul-11	3- 19	No	INC	18	3:30	20:59
294	RT	T-167	PG&E	Stockton	15-Jul-11	3- 11	No	DEC	24	0:05	23:59
295	RT	T-167	PG&E	Stockton	15-Jul-11	4- 13	No	INC	21	1:50	21:59
296	RT	T-167	PG&E	Stockton	16-Jul-11	0- 11	No	DEC	23	0:15	22:59
297	RT	T-167	PG&E	Stockton	16-Jul-11	5- 25	No	INC	23	0:15	22:59
298	RT	T-167	PG&E	Stockton	17-Jul-11	1- 7	No	DEC	24	0:00	23:59
299	RT	T-167	PG&E	Stockton	17-Jul-11	1- 25	No	INC	24	0:00	23:59
300	RT	T-167	PG&E	Stockton	18-Jul-11	10	No	DEC	24	0:00	23:59
301	RT	T-167	PG&E	Stockton	18-Jul-11	1- 17	No	INC	24	0:00	23:59

## Department of Market Services – California ISO

Number	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commitment	INC_DEC	Hours	Begin Time	End Time
302	RT	T-167	PG&E	Stockton	19-Jul-11	10	No	INC	1	0:00	0:59
303	RT	T-167	PG&E	Stockton	20-Jul-11	0	No	DEC	2	13:25	14:19
304	RT	T-167	PG&E	Stockton	20-Jul-11	0- 25	No	INC	24	0:00	23:59
305	RT	T-167	PG&E	Stockton	21-Jul-11	0- 1	No	DEC	24	0:00	23:59
306	RT	T-167	PG&E	Stockton	21-Jul-11	3- 25	No	INC	24	0:00	23:59
307	RT	T-167	PG&E	Stockton	22-Jul-11	0- 6	No	DEC	24	0:00	23:59
308	RT	T-167	PG&E	Stockton	22-Jul-11	1- 25	No	INC	24	0:00	23:59
309	RT	T-167	PG&E	Stockton	23-Jul-11	2- 11	No	DEC	24	0:00	23:59
310	RT	T-167	PG&E	Stockton	23-Jul-11	1- 12	No	INC	24	0:00	23:59
311	RT	T-167	PG&E	Stockton	24-Jul-11	0- 11	No	DEC	24	0:00	23:59
312	RT	T-167	PG&E	Stockton	24-Jul-11	0- 13	No	INC	24	0:00	23:59
313	RT	T-167	PG&E	Stockton	25-Jul-11	2- 11	No	DEC	24	0:00	23:59
314	RT	T-167	PG&E	Stockton	25-Jul-11	0- 8	No	INC	24	0:00	23:59
315	RT	T-167	PG&E	Stockton	26-Jul-11	11	No	DEC	10	14:10	23:59
316	RT	T-167	PG&E	Stockton	27-Jul-11	0- 12	No	DEC	24	0:00	23:59
317	RT	T-167	PG&E	Stockton	27-Jul-11	24	No	INC	24	0:00	23:59
318	RT	T-167	PG&E	Stockton	28-Jul-11	0- 12	No	DEC	24	0:20	23:59
319	RT	T-167	PG&E	Stockton	28-Jul-11	10	No	INC	24	0:20	23:59
320	RT	T-167	PG&E	Stockton	29-Jul-11	0- 12	No	DEC	23	1:30	23:59
321	RT	T-167	PG&E	Stockton	29-Jul-11	1	No	INC	23	1:30	23:59
322	RT	T-167	PG&E	Stockton	30-Jul-11	1- 12	No	DEC	24	0:00	23:59
323	RT	T-167	PG&E	Stockton	31-Jul-11	4- 12	No	DEC	24	0:00	23:59
324	RT	Thermal Margin	SCE	LA Basin	16-Jul-11	20	No	INC	2	22:25	23:59
325	RT	Thermal Margin	SCE	LA Basin	17-Jul-11	20- 40	Yes	INC	16	8:00	23:59
326	RT	Thermal Margin	SCE	LA Basin	18-Jul-11	20- 110	Yes	INC	22	2:00	23:59
327	RT	Thermal Margin	SDG&E	San Diego	17-Jul-11	155	Yes	INC	14	8:00	21:59
328	RT	Transmission Mitigation	N/A	N/A	25-Jul-11	200	No	DEC	2	22:40	23:58
329	RT	Transmission Mitigation	PG&E	Stockton	1-Jul-11	18- 24	No	INC	4	4:25	7:59
330	RT	Transmission Outage Other	N/A	N/A	23-Jul-11	278	Yes	INC	1	22:29	22:37

## Department of Market Services – California ISO

Number	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commitment	INC_DEC	Hours	Begin Time	End Time
331	RT	Transmission Outage Other	N/A	N/A	24-Jul-11	200	No	DEC	2	0:45	1:59
332	RT	Transmission Outage Other	PG&E	Fresno	23-Jul-11	0	Yes	DEC	2	22:42	23:44
333	RT	Transmission Outage Other	PG&E	Fresno	23-Jul-11	249-1764	Yes	INC	2	22:24	23:59
334	RT	Transmission Outage PG&E	N/A	N/A	5-Jul-11	0- 4	Yes	DEC	9	6:55	14:59
335	RT	Transmission Outage PG&E	N/A	N/A	5-Jul-11	45- 100	Yes	INC	9	6:30	14:59
336	RT	Transmission Outage PG&E	N/A	N/A	6-Jul-11	1- 7	Yes	DEC	16	8:15	23:59
337	RT	Transmission Outage PG&E	N/A	N/A	6-Jul-11	15- 79	Yes	INC	18	6:05	23:59
338	RT	Transmission Outage PG&E	N/A	N/A	7-Jul-11	58	Yes	INC	24	0:00	23:59
339	RT	Transmission Outage PG&E	N/A	N/A	10-Jul-11	1	Yes	DEC	15	3:45	17:59
340	RT	Transmission Outage PG&E	N/A	N/A	10-Jul-11	19	Yes	INC	15	3:45	17:59
341	RT	Transmission Outage PG&E	N/A	N/A	18-Jul-11	32- 64	Yes	INC	19	5:55	23:59
342	RT	Transmission Outage PG&E	N/A	N/A	19-Jul-11	0	Yes	DEC	13	10:50	22:59
343	RT	Transmission Outage PG&E	N/A	N/A	19-Jul-11	3- 66	Yes	INC	24	0:00	23:59
344	RT	Transmission Outage PG&E	N/A	N/A	20-Jul-11	29- 61	Yes	INC	24	0:00	23:59
345	RT	Transmission Outage PG&E	N/A	N/A	21-Jul-11	32- 48	Yes	INC	20	0:00	19:59
346	RT	Transmission Outage PG&E	N/A	N/A	22-Jul-11	16	No	INC	12	2:55	13:04
347	RT	Transmission Outage PG&E	N/A	N/A	25-Jul-11	32	No	INC	15	5:25	19:59
348	RT	Transmission Outage PG&E	N/A	N/A	26-Jul-11	15- 32	Yes	INC	23	1:05	23:59
349	RT	Transmission Outage PG&E	N/A	N/A	27-Jul-11	3- 47	Yes	INC	24	0:00	23:59
350	RT	Transmission Outage PG&E	N/A	N/A	28-Jul-11	32- 80	Yes	INC	23	0:00	22:59
351	RT	Transmission Outage PG&E	N/A	N/A	29-Jul-11	32	No	INC	13	0:15	12:54
352	RT	Transmission Outage PG&E	PG&E	Bay Area	11-Jul-11	20	Yes	INC	7	9:35	15:59
353	RT	Transmission Outage PG&E	PG&E	Fresno	16-Jul-11	5	No	DEC	5	1:15	5:09
354	RT	Transmission Outage PG&E	PG&E	Fresno	18-Jul-11	0	Yes	DEC	2	21:35	22:34
355	RT	Transmission Outage PG&E	PG&E	Fresno	18-Jul-11	83	Yes	INC	3	21:35	23:29
356	RT	Transmission Outage PG&E	PG&E	Fresno	20-Jul-11	0	No	INC	3	2:05	4:14
357	RT	Transmission Outage PG&E	PG&E	Fresno	21-Jul-11	20	No	DEC	6	12:50	17:09
358	RT	Transmission Outage PG&E	PG&E	Fresno	21-Jul-11	17	No	INC	6	12:50	17:09
359	RT	Transmission Outage PG&E	PG&E	Fresno	25-Jul-11	95- 216	Yes	INC	9	12:40	20:59

## Department of Market Services – California ISO

Number	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commitment	INC_DEC	Hours	Begin Time	End Time
360	RT	Transmission Outage PG&E	PG&E	Fresno	26-Jul-11	45- 48	Yes	INC	11	12:50	22:59
361	RT	Transmission Outage PG&E	PG&E	Fresno	28-Jul-11	47	Yes	INC	3	20:30	22:59
362	RT	Transmission Outage PG&E	PG&E	Fresno	29-Jul-11	46- 141	Yes	INC	5	19:10	23:59
363	RT	Transmission Outage PG&E	PG&E	Fresno	30-Jul-11	141	Yes	INC	6	18:40	23:59
364	RT	Transmission Outage PG&E	PG&E	Fresno	31-Jul-11	117- 200	Yes	INC	3	20:45	22:29
365	RT	Transmission Outage PG&E	PG&E	Humboldt	18-Jul-11	16	No	INC	2	22:36	23:59
366	RT	Transmission Outage PG&E	PG&E	Humboldt	19-Jul-11	64	No	INC	1	21:00	21:59
367	RT	Transmission Outage PG&E	PG&E	Humboldt	21-Jul-11	47	No	INC	1	16:00	16:34
368	RT	Transmission Outage PG&E	PG&E	Humboldt	22-Jul-11	16	No	INC	4	2:37	5:04
369	RT	Transmission Outage PG&E	PG&E	Humboldt	25-Jul-11	32	No	INC	13	5:06	17:59
370	RT	Transmission Outage PG&E	PG&E	Humboldt	26-Jul-11	15	No	INC	1	20:13	20:59
371	RT	Transmission Outage PG&E	PG&E	Humboldt	27-Jul-11	16- 47	No	INC	24	0:00	23:59
372	RT	Transmission Outage PG&E	PG&E	Humboldt	28-Jul-11	16- 48	No	INC	22	0:00	21:59
373	RT	Transmission Outage PG&E	PG&E	NCNB	19-Jul-11	18- 55	No	DEC	12	6:35	17:59
374	RT	Transmission Outage PG&E	PG&E	NCNB	19-Jul-11	9- 20	No	INC	4	6:35	9:19
375	RT	Transmission Outage PG&E	PG&E	Sierra	21-Jul-11	20- 66	Yes	INC	6	18:55	23:59
376	RT	Transmission Outage PG&E	PG&E	Sierra	22-Jul-11	20- 45	Yes	INC	20	0:00	19:28
377	RT	Transmission Outage PG&E	PG&E	Stockton	1-Jul-11	13- 20	No	INC	2	3:15	4:24
378	RT	Transmission Outage SCE	SCE	Big Creek-Ventura	1-Jul-11	26	No	DEC	1	13:26	13:50
379	RT	Transmission Outage SDG&E	N/A	N/A	22-Jul-11	20- 40	Yes	INC	24	0:00	23:59
380	RT	Transmission Outage SDG&E	SDG&E	San Diego	2-Jul-11	46	Yes	INC	1	19:00	19:20
381	RT	Transmission Outage SDG&E	SDG&E	San Diego	5-Jul-11	3	Yes	DEC	9	6:50	14:59
382	RT	Transmission Outage SDG&E	SDG&E	San Diego	5-Jul-11	45	Yes	INC	9	6:50	14:59
383	RT	Transmission Outage SDG&E	SDG&E	San Diego	6-Jul-11	3	Yes	DEC	8	10:35	17:44
384	RT	Transmission Outage SDG&E	SDG&E	San Diego	6-Jul-11	15- 47	Yes	INC	13	7:06	19:59
385	RT	Transmission Outage SDG&E	SDG&E	San Diego	7-Jul-11	1	Yes	DEC	6	7:25	12:59
386	RT	Transmission Outage SDG&E	SDG&E	San Diego	7-Jul-11	45	Yes	INC	6	7:25	12:59
387	RT	Transmission Outage SDG&E	SDG&E	San Diego	8-Jul-11	6	Yes	DEC	6	11:45	16:09

## Department of Market Services – California ISO

<b>Number</b>	<b>Market Type</b>	<b>Reason</b>	<b>Location</b>	<b>Local Reliability Area</b>	<b>Trade Date</b>	<b>MW</b>	<b>Commitment</b>	<b>INC_DEC</b>	<b>Hours</b>	<b>Begin Time</b>	<b>End Time</b>
388	RT	Transmission Outage SDG&E	SDG&E	San Diego	8-Jul-11	90	Yes	INC	6	11:45	16:09
389	RT	Transmission Outage SDG&E	SDG&E	San Diego	16-Jul-11	45	Yes	INC	11	8:35	18:59
390	RT	Transmission Outage SDG&E	SDG&E	San Diego	17-Jul-11	45	Yes	INC	6	12:30	17:44
391	RT	Transmission Outage SDG&E	SDG&E	San Diego	21-Jul-11	14- 113	Yes	DEC	5	15:55	19:59
392	RT	Transmission Outage SDG&E	SDG&E	San Diego	21-Jul-11	8- 289	Yes	INC	12	8:00	19:59
393	RT	Transmission Outage SDG&E	SDG&E	San Diego	22-Jul-11	3- 8	Yes	DEC	2	17:40	18:42
394	RT	Transmission Outage SDG&E	SDG&E	San Diego	22-Jul-11	45	Yes	INC	7	17:54	23:59
395	RT	Transmission Outage SDG&E	SDG&E	San Diego	23-Jul-11	45	Yes	INC	24	0:00	23:29
396	RT	Transmission Outage SDG&E	SDG&E	San Diego	27-Jul-11	2	Yes	DEC	8	12:50	19:59
397	RT	Transmission Outage SDG&E	SDG&E	San Diego	27-Jul-11	46	Yes	INC	8	12:50	19:59
398	RT	Transmission Outage SDG&E	SDG&E	San Diego	28-Jul-11	3	Yes	DEC	11	12:00	22:59
399	RT	Transmission Outage SDG&E	SDG&E	San Diego	28-Jul-11	45	Yes	INC	16	7:25	22:59
400	RT	Unit Testing	N/A	N/A	13-Jul-11	20- 97	No	INC	2	9:35	10:49
401	RT	Unit Testing	PG&E	Fresno	20-Jul-11	64- 98	No	INC	1	9:07	9:23
402	RT	Unit Testing	SCE	LA Basin	12-Jul-11	0	Yes	DEC	1	16:40	16:59
403	RT	Unit Testing	SCE	LA Basin	12-Jul-11	0	Yes	INC	4	13:00	16:39
404	RT	Unit Testing	SCE	LA Basin	13-Jul-11	3	No	INC	1	9:35	9:49

## Appendix A: Explanation by Example

All examples listed below are based on fictitious data.

### 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 physical minimum ( $P_{min}$ ) 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: Instructions Prior to Day-Ahead Market**

Date	Market	Resource	Location	Local Reliability Area (LRA)	Begin Time	End Time	Dispatch Level (MW)	Reason
01-Jul-09	DA	A	SCE	LA BASIN	05:00	10:00	50	G-219
01-Jul-09	DA	B	SCE	LA BASIN	08:00	20:00	30	G-219
01-Jul-09	DA	C	SCE	LA BASIN	09:00	23:00	20	G-219.

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.

**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
1	DA	G-219	SCE	LA Basin	1-Jul-09	20-100	Yes	N/A	19	05:00	23:00

**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.

**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
01-Jul-09	RT	A	PG&E	Humboldt	06:00	11:00	30	0	Yes	INC	30	t-138
01-Jul-09	RT	B	PG&E	Humboldt	07:00	09:00	40	20	No	INC	20	t-138
01-Jul-09	RT	C	PG&E	Humboldt	12:00	15:00	50	50	No	INC	0	t-138
01-Jul-09	RT	C	PG&E	Humboldt	16:00	20:00	50	40	No	INC	10	t-138

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.

**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
1	RT	T-138	PG&E	Humboldt	1-Jul-09	0-50	Yes	INC	15	06:00	20:00

**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.

**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
01-Jul-09	RT	A	PG&E	Fresno	15:00	20:00	20	0	Yes	INC	20	t-129
01-Jul-09	RT	B	PG&E	Fresno	07:00	09:00	40	60	No	DEC	20	t-129
01-Jul-09	RT	C	PG&E	Fresno	10:00	14:00	40	50	No	DEC	10	t-129

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 inc and dec 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.

**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
1	RT	T-129	PG&E	Fresno	1-Jul-09	20	Yes	INC	6	15:00	20:00
1	RT	T-129	PG&E	Fresno	1-Jul-09	10-20	Yes	DEC	8	07:00	14:00

## **CERTIFICATE OF SERVICE**

I hereby certify that I have served the foregoing document upon the parties listed on the official service list in the captioned proceedings, in accordance with the requirements of Rule 2010 of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385. 2010).

Dated at Folsom, California this 15<sup>th</sup> day of September, 2011.

*/s/ Susan L. Montana*  
Susan L. Montana