



California Independent  
System Operator Corporation

July 15, 2009

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. ER06-615-\_\_\_\_, ER07-1257-\_\_\_\_, ER08-1178-\_\_\_\_,  
and EL08-88-\_\_\_\_  
Exceptional Dispatch and Market Disruption Reports**

Dear Secretary Bose:

The California Independent System Operator Corporation (“ISO”) hereby submits the following periodic reports in these proceedings: (1) the ISO’s report regarding Exceptional Dispatches that occurred during the time period from May 16 through June 15, 2009, and the ISO’s final report regarding Exceptional Dispatches that occurred during the time period from April 1 through April 15, 2009; and (2) the ISO’s report regarding Market Disruptions that occurred during the time period from May 16 through June 15.

Please contact the undersigned with any questions.

Respectfully submitted,

**/s/ Sidney M. Davies**

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California ISO  
Your Link to Power

**Exceptional Dispatch Report  
May 16 to June 15, 2009**

**and**

**Final Exceptional Dispatch  
Report  
April 1 to April 15, 2009**

July 15, 2009

## ISO Market Services

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### I. Background

#### A. The ISO's Exceptional Dispatch Reporting

Under Section 34.9 of the CAISO Tariff, the ISO can issue Exceptional Dispatch instructions – *i.e.*, dispatches issued outside the standard dispatches issued pursuant to the ISO's market software – for specified purposes.<sup>1</sup>

In an order issued in Docket Nos. ER08-1178-000 and EL08-88-000 on February 20, 2009,<sup>2</sup> the Commission conditionally accepted in part and rejected in part a revised Exceptional Dispatch proposal filed by the ISO, effective upon the implementation of the ISO's Market Redesign and Technology Upgrade ("MRTU").<sup>3</sup> Also, in response to comments submitted by parties regarding what obligations the ISO should be under to report Exceptional Dispatches, the Commission directed the ISO to file, on compliance, tariff provisions requiring the ISO to submit reports that detail the frequency, volume, costs, causes, and degree of mitigation of Exceptional Dispatches.<sup>4</sup>

Pursuant to the directives in the February 20 Order, the ISO submitted a compliance filing on March 23, 2009, that included a new Section 34.9.4 to the CAISO Tariff. Section 34.9.4 requires the ISO to submit reports on the "frequency, volume, costs, causes, and degree of mitigation of Exceptional Dispatches."<sup>5</sup> Also, on April 28, 2009, the ISO submitted an answer to comments and protests on the March 23 compliance filing ("April 28 Answer"). In the April 28 Answer, the ISO stated that it intends to provide the following details in its Exceptional Dispatch reports:

- The frequency of Exceptional Dispatches (*i.e.*, the ISO will identify each Exceptional Dispatch and the date or dates on which it occurred);
- The gross volume in MW of the Exceptional Dispatch;
- The cause of the Exceptional Dispatch (*e.g.*, transmission outages on a particular line) and the reason that an Exceptional Dispatch was necessary;

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<sup>1</sup> CAISO Tariff, Section 34.9; *id.*, Appendix A, definition of Exceptional Dispatch. Capitalized terms not otherwise defined herein have the meanings set forth in the Master Definitions Supplement, Appendix A to the CAISO Tariff.

<sup>2</sup> *California Independent System Operator Corp.*, 126 FERC ¶ 61,150 (2009) ("February 20 Order").

<sup>3</sup> MRTU became effective on March 31, 2009, for the Day-Ahead Market for the April 1, 2009, Trading Day.

<sup>4</sup> February 20 Order at P 263.

<sup>5</sup> Commission action on the compliance filing is pending.

- The cost of the Exceptional Dispatch, which would include Exceptional Dispatch Energy, Excess Cost Payments for Exceptional Dispatches, Exceptional Dispatch ICPM payments, and supplemental revenues;
- The degree of mitigation achieved by the Exceptional Dispatch, *i.e.*, whether any Exceptional Dispatch Bids are mitigated;
- The location of the exceptionally dispatched resources at the level of Local Reliability Area if relevant and applicable and to the extent such information is readily determinable; and
- The market in which the Exceptional Dispatch occurred.<sup>6</sup>

#### **B. Timing of the ISO's Exceptional Dispatch Reports**

In the February 20 Order, the Commission directed the ISO to file its first report on Exceptional Dispatches within 60 days of the implementation of MRTU and to file each subsequent Exceptional Dispatch report every 60 days thereafter.<sup>7</sup> The ISO filed its first Exceptional Dispatch report on May 15, 2009, as corrected on May 18, 2009 ("May 2009 Report").

The May 2009 Report concerned Exceptional Dispatches that occurred during the first 15 days after the new market implementation (*i.e.*, the time period from April 1 through April 15, 2009).<sup>8</sup> As the ISO explained both in the April 28 Answer and in the May 2009 Report, the ISO proposes to file each subsequent report on a monthly basis rather than every 60 days. Filing on a monthly basis means that each subsequent report will be submitted well within the 60-day time period stated in the February 20 Order. Also, in the April 28 Answer and the May 2009 Report, the ISO explained that it proposes to file its monthly reports on the fifteenth day of each month to cover the time period ending on the fifteenth day of the prior month, thus giving the ISO 30 days to analyze and validate the data and draft the report. As discussed below, however, the ISO is unable at this time to analyze and validate all of the data in time to include in the monthly reports and will republish all data for each reporting period in the Exceptional Dispatch report that includes the cost data. Consistent with these proposals, the instant report is being filed on July 15, 2009, and concerns Exceptional Dispatches that occurred from May 16 through June 15, 2009.<sup>9</sup> This report also includes Exceptional Dispatch cost data for the April 1 through April 15 time period.

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<sup>6</sup> April 28 Answer at 9-10.

<sup>7</sup> February 20 Order at P 263.

<sup>8</sup> The May 2009 Report also included a report on Market Disruptions that occurred during that same time period. See the discussion in the Market Disruption report submitted concurrently with this report.

<sup>9</sup> April 28 Answer at 7-8; May 2009 Report at 1-2. If the Commission denies any of the proposals, the ISO will modify its future reporting of Exceptional Dispatches in accordance with the Commission's directives.

## II. Report on Exceptional Dispatches Occurring from May 16 Through June 15, 2009

The ISO's report on Exceptional Dispatches that occurred during the time period from May 16 through June 15, 2009, is provided in Figure 1 through Figure 4 and Attachment A, below. Except as noted below, this report provides all available Exceptional Dispatch information specified in Section 34.9.4 and the April 28 Answer.<sup>10</sup> The two chief exceptions concern the degree of mitigation and cost data. First, this report does not list the "degree of mitigation," because that information is really only relevant as of Trading Days occurring on and after August 1, 2009 when only Bids for non-competitive constraints and Delta Dispatch will be mitigated. For the first four months of operations under the new market (*i.e.*, through the end of July), all Bids that are settled at the higher of Bid price, Resource-Specific Interval Locational Marginal Price ("LMP"), or Default Energy Bid price are subject to Bid mitigation other than for decremental Exceptional Dispatches.<sup>11</sup>

The second exception is that, as was the case with the ISO's previous reports, the instant report does not include any cost data for the period that this report covers, from May 16 through June 15, 2009. As was explained in the April 28 Answer, until the ISO implements payment acceleration, settlement quality data for the Exceptional Dispatches discussed in a particular report will not be available in time to be included in that same report.<sup>12</sup> However, as explained in Section III, below, this July 2009 Report also includes cost data, as well as updated metrics and other information, for the April 1-April 15 time period. Subsequent reports will similarly include cost data for the time period ending 90 days prior to the date on which the report is submitted.

Attachment A includes an entry for each Exceptional Dispatch that occurred for Operating Days May 16 through June 15. Each entry indicates: (1) the date of the Exceptional Dispatch; (2) the location of the resource by Participating Transmission Owner Service Area; (3) the market in which the Exceptional Dispatch occurred (Day-Ahead vs. Real-Time); and (4) the reason for the Exceptional Dispatch. Note that Exceptional Dispatches that are required due to a failure of the Hour-Ahead Scheduling Process ("HASP") are considered to be Real-Time dispatches. Many of the reasons listed are self-explanatory and may include such things as transmission or generator outages, over-generation and resource ramping constraints, and references to specific Operating

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<sup>10</sup> See Section I.A, above.

<sup>11</sup> Section 34.9.1 of the CAISO Tariff allows the ISO to accept a Bid from a Non-Dynamic System Resource, in which case the ISO will pay the resource as Bid without mitigation and without triggering any supplemental compensation in the form of an Interim Capacity Procurement Mechanism ("ICPM") payment or supplemental revenues.

<sup>12</sup> April 28 Answer at 10 n.22. Once payment acceleration is in place, the cost data for Exceptional Dispatches – based on estimated meter data – should be available in time to be included in the same report. *Id.*

Procedures (e.g., Operating Procedures T-138 and G-219).<sup>13</sup> The reason labeled “Software Limitation” captures a number of different instances where ISO Operators issued Exceptional Dispatches to augment or modify market instructions for reasons such as: (1) the need to keep a resource on that had previously been issued a market dispatch to shut down or was already subject to an Exceptional Dispatch but the software was instructing the resource to ramp down to zero generation; (2) to reverse a market instruction to a unit that was either off or on to stay off or on when the software was trying to give an opposite instruction; and (3) to keep a unit off or on to manage the unit’s start-up and shut down requirements. The need for some of these Exceptional Dispatches has led to the recognition of variances in the software that are being addressed. Other Exceptional Dispatches in this category relate to the fact that the software does not consider a long enough time horizon to manage a resource’s operating constraints. With respect to this constraint, the ISO has already initiated a project to enhance the market software.

For the reporting period May 16 through June 15, Attachment A identifies 631 instances of Exceptional Dispatch, a 24 percent decrease in frequency from the 828 instances occurring during the immediately previous reporting period of April 16 through May 15, 2009.<sup>14</sup> Of the 631 Exceptional Dispatches, 448 were dispatches for generating units (71 percent) and 183 were dispatches for inertie resources (29 percent). To provide some additional context, Figure 1 through Figure 4 provide data for both the current reporting period and the previous reporting period (*i.e.*, the period from April 16 through June 15). Figure 1 shows the frequency of Exceptional Dispatch broken out by Market Type (Day-Ahead vs. Real-Time). Exceptional Dispatch commitments made prior the Integrated Forward Market (“IFM”) run are considered to be Day-Ahead Exceptional Dispatches. All other Exceptional Dispatches occur in the Real-Time, including those that occur in the HASP time frame.

Figure 2 shows the frequency of Exceptional Dispatch broken out by commitment type. Note that for the current reporting period, 77 percent of all Unit Commitments were issued prior to the IFM, so Figure 1 and Figure 2 look similar but provide different information. Also note that the practice of logging Exceptional Dispatches as occurring in the Day-Ahead time frame began on April 22. Prior to that date, all Exceptional Dispatches were logged on the same reports as Real-Time Exceptional Dispatches and, therefore, it was difficult to distinguish between Day-Ahead and Real-Time Exceptional Dispatches. Since April 22, operators have logged Day-Ahead dispatches separately so they can be reported on separately.

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<sup>13</sup> A list of all of the ISO’s Operating Procedures and all the publicly available Operating Procedures are available at the following link:  
<http://www.caiso.com/thegrid/operations/opsdoc/index.html>.

<sup>14</sup> See Exceptional Dispatch report submitted on June 15, 2009, in these proceedings (“June 2009 Report”).

Figure 3 summarizes by general reason the data presented in Attachment A. Most of the reasons for Exceptional Dispatches listed in Figure 3 correspond to reasons listed in Attachment A, except that in Figure 3 “System” includes System Energy on interties and other System Capacity requirements in the ISO Balancing Authority Area, “Market Disruption” includes “HASP Failure,” and all reasons listed in Attachment A but not listed in Figure 3 are grouped as “Other.” For both the reporting periods covered by the June 2009 Report and the July 2009 Report, transmission outages were the most frequent reason for Exceptional Dispatches and constituted 29 percent of the total. This is consistent with the time of year (April-June), because during that time loads are often light and typically a large volume of scheduled maintenance on transmission lines takes place. Figure 3 shows a declining trend in the frequency of transmission outages coming into the June time-frame as most of this scheduled transmission maintenance neared completion. System requirements were the second-most frequent reason for Exceptional Dispatch (18 percent of the total) and are approximately evenly divided between internal generation and intertie dispatches for system energy requirements.

Figure 4 provides the total megawatt-hour (MWh) volume of incremental and decremental Exceptional Dispatches by day, broken out by: Unit Commitment to Minimum Load (Pmin), Real-Time incremental dispatch, and Real-Time decremental dispatch. Figure 4 makes clear that while Unit Commitments to Minimum Load account for only 40 percent of the frequency of Exceptional Dispatches on average, they account for nearly 90 percent of the total MWh of Exceptional Dispatch. MWh volumes peaked around mid-May during a mild heat wave when loads peaked above 36,000 MW, which is unusual for May. During this timeframe there were also major derates on Path 26 and the Palo Verde Branch Group in addition to a number of other scheduled line outages.

Figure 5 shows the total MWh quantity of Exceptional Dispatch as a percentage of total load, where total load is equal to internal generation plus imports minus exports. For the month of May 2009, the total MWh quantity of Exceptional Dispatches averaged only about 2.6 percent of total load. For the entire report horizon (April 1 to June 15) the total quantity of Exceptional Dispatch is slightly less than two percent of total load.

Data gathering for this report continues to involve manual review of individual logs as logging practices are not automated. In addition, the market quality review of the data is on a timeline consistent with the publication of initial settlement statement at T + 38 Business Days. Consequently, the manual log review for this period is not complete, and it is possible that additional Exceptional Dispatches occurred during this period. Although the ISO is confident that it has captured substantially all of the occurrences of Exceptional Dispatch for the May 16 through June 15 time frame, it was unable to capture a significant portion of the MWh quantity of Exceptional Dispatches of intertie

resources in time for this report. For all Exceptional Dispatches, the ISO has substantially captured the MWh volume through May 30. MWh data for the period after May 30 is less accurate due to the amount of time required to manually transfer intertie Exceptional Dispatch records from dispatcher's logs to downstream databases that are used for this report. The ISO is developing procedures and revising its processes for this information to be captured in a more timely manner in the future to ensure that it is incorporated in this report. The ISO has endeavored to develop a comprehensive report itemizing all Exceptional Dispatches occurring in the period from May 16 to June 15 and believes that it is substantially complete and accurate, except as discussed above.

### **III. Final Report on Exceptional Dispatches Occurring from April 1 Through April 15, 2009**

In the June 2009 Report, the ISO explained that it planned to republish all data for the time period from April 1 through April 15, and to provide cost data for that period, in the July 2009 Report.<sup>15</sup> Further, in the answer the ISO submitted on June 23, 2009, in response to comments on the May 2009 Report (“June 23 Answer”), it explained that the July 2009 Report would include information on all Exceptional Dispatches that occurred during the April 1-15 time period, including Exceptional Dispatches that were inadvertently omitted from the May 2009 Report.<sup>16</sup> Accordingly, Attachment B to the instant report includes updated metrics, including cost data, for the April 1-15 time period. As identified in the June 23 Answer, the May 2009 Report underreported the frequency of intertie Exceptional Dispatches. This is corrected in Attachment B. In addition, some over-counting of generator Exceptional Dispatches occurred from April 1-15 due to several Reliability Must-Run dispatches that were incorrectly classified as Exceptional Dispatches. Attachment B shows a corrected total of 282 Exceptional Dispatches, including 107 intertie dispatches and 175 generator dispatches. In addition, Table 1 conforms to updated and enhanced definitions of Market Type and Reason identification which have evolved considerably since the June 2009 Report was published. As a result, the data in Table 1 is not directly comparable to Attachment A published in the June 2009 Report.

Similar to Figure 4 and Figure 5, discussed above, Figure 6, Figure 7 and Figure 8 in Attachment B show the frequency of Exceptional Dispatch by commitment type, the total MWh volume of Exceptional Dispatch by day and the total MWh volume of Exceptional Dispatch as a percent of total load. A breakout of Exceptional Dispatch Frequency by market type is not provided in Attachment B, because all Exceptional Dispatches were made in Real-Time during the April 1-15 time frame.

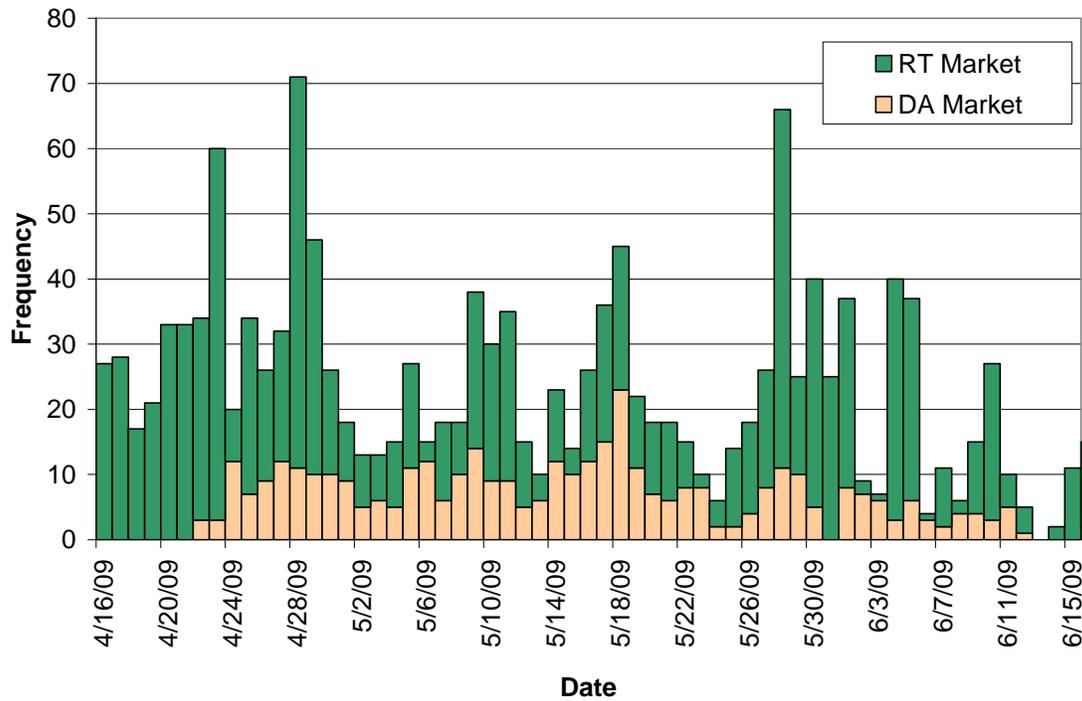
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<sup>15</sup> June 2009 Report at 4.

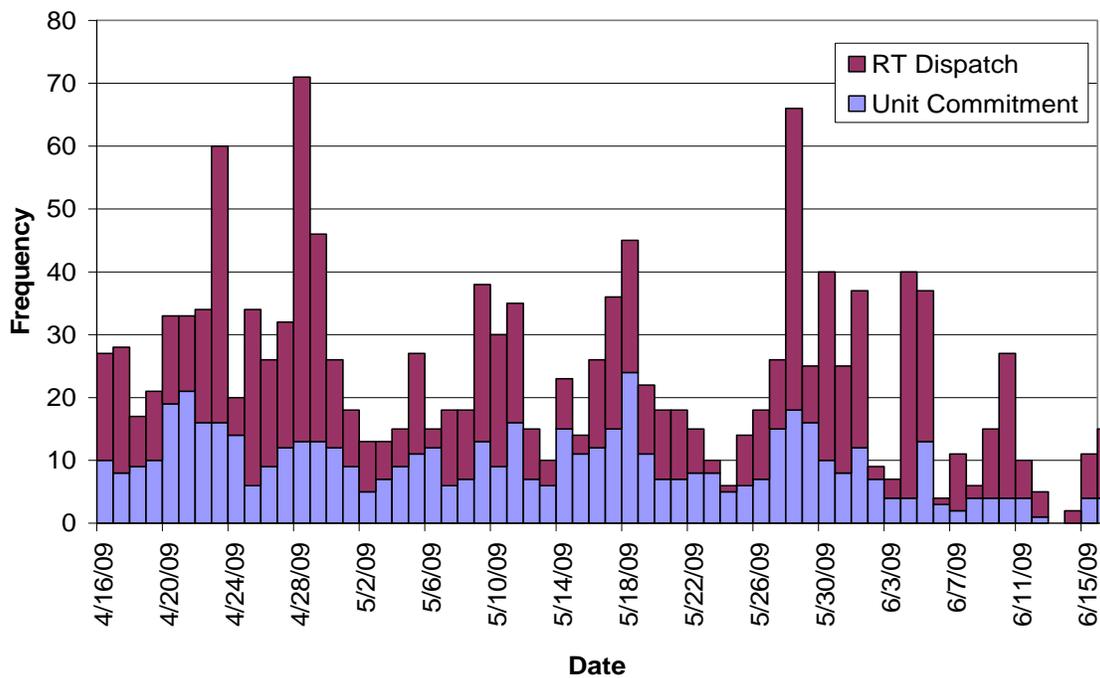
<sup>16</sup> June 23 Answer at 25-26.

Table 2 in Attachment B provides a list of Exceptional Dispatch costs by day, resource, and Charge Code. The relevant Charge Codes for the April 1-15 time frame are 6470 (Real-Time Instructed Imbalance Energy Settlement) broken out by incremental or decremental dispatch, and 6482 (Real-Time Excess Cost for Instructed Energy Settlement). In Table 2, positive values reflect payments and negative values reflect charges. For the April 1-15 time frame, the total payment for Charge Code 6470 (incremental dispatch) was \$762,598 and net total payment for Charge Code 6470 (decremental dispatch) was \$42,860. The net total charge for Charge Code 6482 was \$730.

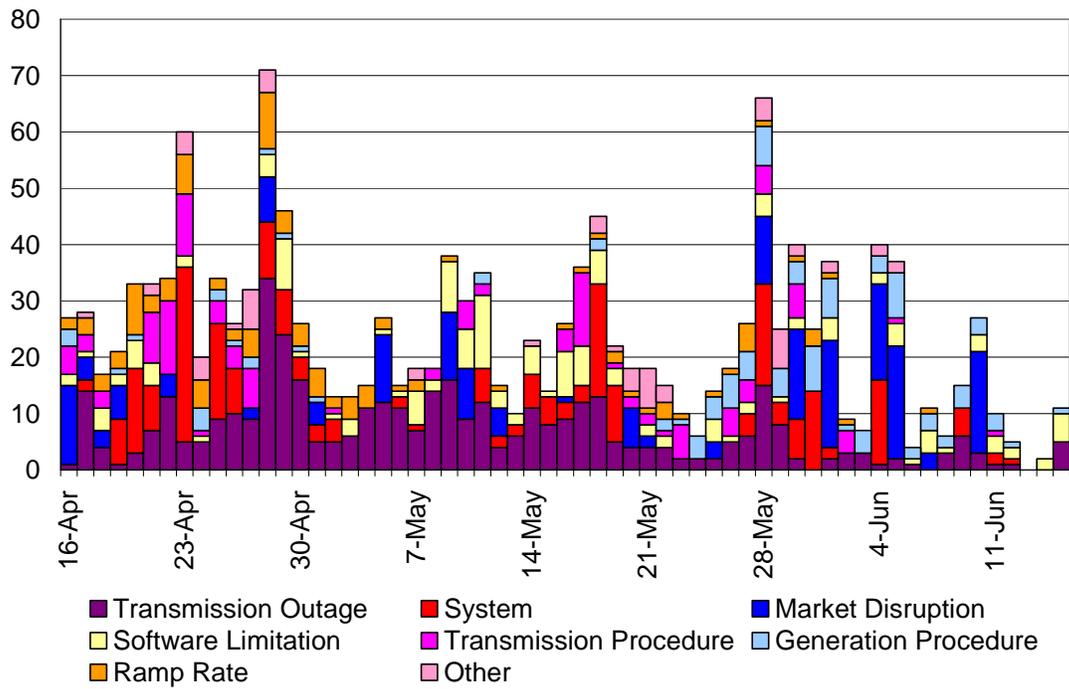
**Figure 1: Summary of Exceptional Dispatch Frequency (Day-Ahead Market vs. Real-Time Market)**



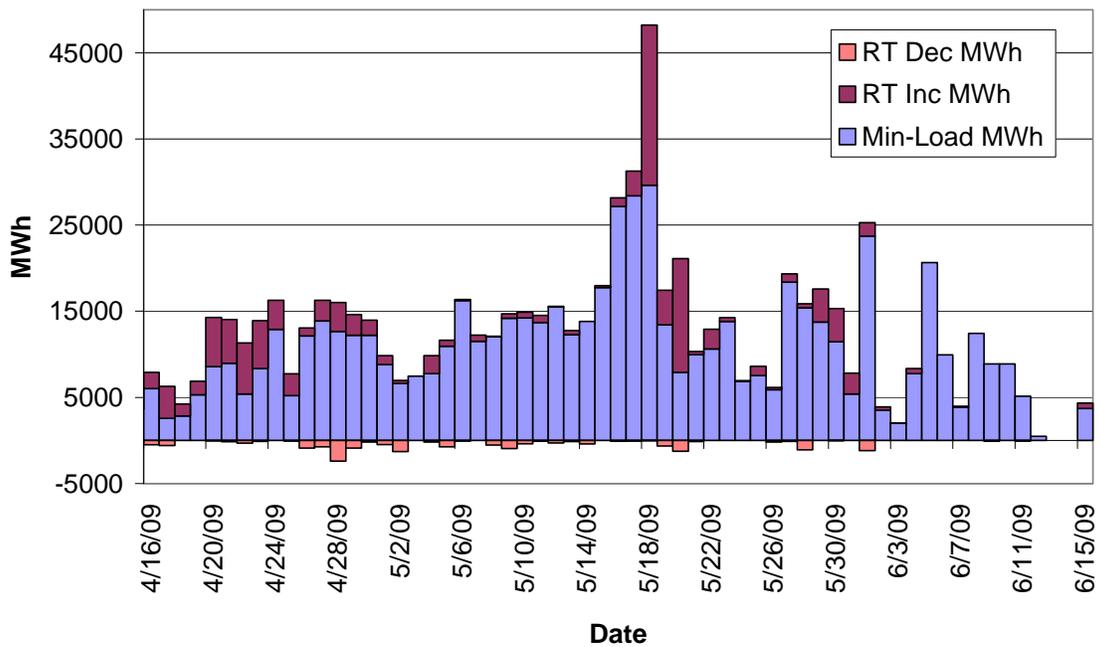
**Figure 2: Summary of Exceptional Dispatch Frequency (Unit Commitment vs. Real-Time Dispatch)**



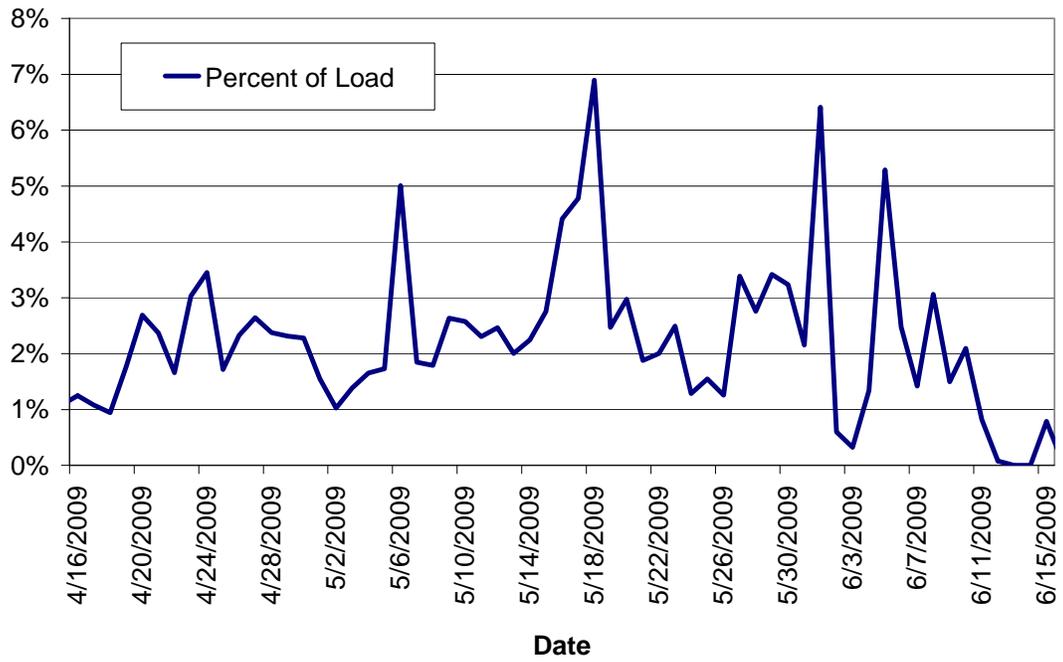
**Figure 3: Summary of Exceptional Dispatch Frequency by Reason**



**Figure 4: Total Exceptional Dispatch MWh Volume**



**Figure 5: Exceptional Dispatch Percent of Total Load**



## **ATTACHMENT A**

**California Independent System Operator Corporation  
Exception Dispatch Report  
July 15, 2009**

**Table of Exceptional Dispatches--May 16 through June 15**

<b>Number</b>	<b>Date</b>	<b>Resource Location</b>	<b>Market</b>	<b>Reason</b>
1	5/16/09	SDGE	DA	Transmission Outage SDGE
2	5/16/09	SDGE	RT	Ramp Rate
3	5/16/09	SDGE	DA	Transmission Outage SDGE
4	5/16/09	SCE	DA	Transmission Outage SDGE
5	5/16/09	SCE	DA	Transmission Outage SDGE
6	5/16/09	SCE	DA	Transmission Outage SDGE
7	5/16/09	SCE	DA	Transmission Outage SDGE
8	5/16/09	SDGE	DA	Transmission Outage SDGE
9	5/16/09	SCE	DA	Transmission Outage SDGE
10	5/16/09	SCE	DA	Transmission Outage SDGE
11	5/16/09	SCE	DA	SP26 Capacity
12	5/16/09	SCE	DA	SP26 Capacity
13	5/16/09	SCE	DA	SP26 Capacity
14	5/16/09	PGAE	RT	Software Limitation
15	5/16/09	SCE	RT	Software Limitation
16	5/16/09	SCE	RT	Software Limitation
17	5/16/09	PGAE	RT	Software Limitation
18	5/16/09	PGAE	RT	Software Limitation
19	5/16/09	PGAE	RT	Software Limitation
20	5/16/09	PGAE	RT	Market Disruption
21	5/16/09	PGAE	RT	T-165
22	5/16/09	PGAE	RT	T-165
23	5/16/09	PGAE	RT	Software Limitation
24	5/16/09	SCE	RT	T-135
25	5/16/09	SCE	RT	T-135
26	5/16/09	PGAE	RT	Software Limitation
27	5/17/09	PGAE	DA	Transmission Outage PGAE
28	5/17/09	PGAE	DA	Transmission Outage PGAE
29	5/17/09	SCE	DA	SP26 Capacity
30	5/17/09	SCE	DA	SP26 Capacity
31	5/17/09	SDGE	DA	Transmission Outage SDGE
32	5/17/09	SDGE	DA	Transmission Outage SDGE
33	5/17/09	SDGE	DA	Transmission Outage SDGE
34	5/17/09	SDGE	RT	Ramp Rate
35	5/17/09	SCE	DA	Transmission Outage SDGE
36	5/17/09	SCE	DA	Transmission Outage SDGE
37	5/17/09	SCE	DA	Transmission Outage SDGE
38	5/17/09	SCE	DA	Transmission Outage SDGE
39	5/17/09	SCE	DA	Transmission Outage SDGE
40	5/17/09	SDGE	DA	Transmission Outage SDGE
41	5/17/09	SCE	DA	Transmission Outage SDGE

Number	Date	Resource Location	Market	Reason
42	5/17/09	SCE	DA	SP26 Capacity
43	5/17/09	PGAE	RT	Software Limitation
44	5/17/09	PGAE	RT	Software Limitation
45	5/17/09	PGAE	RT	Software Limitation
46	5/17/09	PGAE	RT	T-165
47	5/17/09	PGAE	RT	T-165
48	5/17/09	PGAE	RT	T-165
49	5/17/09	SCE	RT	T-135
50	5/17/09	SCE	RT	T-135
51	5/17/09	SCE	RT	T-135
52	5/17/09	SCE	RT	T-135
53	5/17/09	SCE	RT	T-135
54	5/17/09	SCE	RT	T-135
55	5/17/09	SDGE	RT	T-132
56	5/17/09	SDGE	RT	T-132
57	5/17/09	SDGE	RT	T-132
58	5/17/09	SCE	RT	T-135
59	5/17/09	PASA	RT	Software Limitation
60	5/17/09	PASA	RT	Software Limitation
61	5/17/09	PGAE	RT	Software Limitation
62	5/17/09	PGAE	RT	Software Limitation
63	5/18/09	SCE	DA	Transmission Outage SDGE
64	5/18/09	SCE	DA	SP26 Capacity
65	5/18/09	SCE	DA	Transmission Outage SDGE
66	5/18/09	SCE	DA	SP26 Capacity
67	5/18/09	SCE	DA	Transmission Outage SDGE
68	5/18/09	SCE	DA	SP26 Capacity
69	5/18/09	SCE	DA	Transmission Outage SDGE
70	5/18/09	SCE	DA	SP26 Capacity
71	5/18/09	SDGE	DA	Transmission Outage SDGE
72	5/18/09	SDGE	DA	Transmission Outage SDGE
73	5/18/09	SDGE	DA	G-206
74	5/18/09	SDGE	DA	G-206
75	5/18/09	SCE	DA	Transmission Outage SDGE
76	5/18/09	SCE	DA	SP26 Capacity
77	5/18/09	SCE	DA	Transmission Outage SDGE
78	5/18/09	SCE	DA	SP26 Capacity
79	5/18/09	SCE	DA	SP26 Capacity
80	5/18/09	SCE	DA	SP26 Capacity
81	5/18/09	PGAE	DA	Transmission Outage PGAE
82	5/18/09	PGAE	DA	Transmission Outage PGAE
83	5/18/09	PGAE	DA	Transmission Outage SDGE
84	5/18/09	PGAE	DA	Transmission Outage PGAE
85	5/18/09	SCE	DA	SP26 Capacity
86	5/18/09	SCE	RT	System Capacity
87	5/18/09	PGAE	RT	Software Limitation
88	5/18/09	PGAE	RT	Software Limitation

Number	Date	Resource Location	Market	Reason
89	5/18/09	PGAE	RT	Software Limitation
90	5/18/09	SDGE	RT	Software Limitation
91	5/18/09	SDGE	RT	Software Limitation
92	5/18/09	PGAE	RT	Software Limitation
93	5/18/09	SDGE	RT	Ramp Rate
94	5/18/09	SCE	RT	Path 26
95	5/18/09	SCE	RT	Path 26
96	5/18/09	PGAE	RT	Transmission Outage PGAE
97	5/18/09	SCE	RT	Path 26
98	5/18/09	Intertie	RT	System Energy
99	5/18/09	Intertie	RT	System Energy
100	5/18/09	Intertie	RT	System Energy
101	5/18/09	Intertie	RT	System Energy
102	5/18/09	Intertie	RT	System Energy
103	5/18/09	Intertie	RT	System Energy
104	5/18/09	Intertie	RT	System Energy
105	5/18/09	Intertie	RT	System Energy
106	5/18/09	Intertie	RT	System Energy
107	5/18/09	Intertie	RT	System Energy
108	5/19/09	SDGE	DA	Transmission Outage SDGE
109	5/19/09	SDGE	DA	Transmission Outage SDGE
110	5/19/09	PGAE	DA	Transmission Outage PGAE
111	5/19/09	PGAE	DA	Transmission Outage PGAE
112	5/19/09	PGAE	DA	Transmission Outage PGAE
113	5/19/09	SCE	DA	Path 26
114	5/19/09	SCE	DA	SP26 Capacity
115	5/19/09	SCE	DA	SP26 Capacity
116	5/19/09	SCE	DA	SP26 Capacity
117	5/19/09	SCE	DA	SP26 Capacity
118	5/19/09	SCE	DA	SP26 Capacity
119	5/19/09	PGAE	RT	Software Limitation
120	5/19/09	PGAE	RT	Software Limitation
121	5/19/09	SCE	RT	Software Limitation
122	5/19/09	SDGE	RT	Over Generation
123	5/19/09	PGAE	RT	Over Generation
124	5/19/09	SCE	RT	Over Generation
125	5/19/09	SDGE	RT	Ramp Rate
126	5/19/09	SCE	RT	Ramp Rate
127	5/19/09	PGAE	RT	T-138
128	5/19/09	Intertie	RT	System Energy
129	5/19/09	Intertie	RT	System Energy
130	5/20/09	SDGE	DA	Transmission Outage SDGE
131	5/20/09	SDGE	DA	Transmission Outage SDGE
132	5/20/09	SCE	DA	Path 26
133	5/20/09	SCE	DA	Path 26
134	5/20/09	SCE	DA	Path 26
135	5/20/09	PGAE	DA	Transmission Outage PGAE

Number	Date	Resource Location	Market	Reason
136	5/20/09	PGAE	DA	Transmission Outage PGAE
137	5/20/09	SDGE	RT	Ramp Rate
138	5/20/09	HUMB	RT	T-138
139	5/20/09	HUMB	RT	T-138
140	5/20/09	PGAE	RT	Unit Testing
141	5/20/09	Intertie	RT	HASP Failure
142	5/20/09	Intertie	RT	HASP Failure
143	5/20/09	Intertie	RT	HASP Failure
144	5/20/09	Intertie	RT	HASP Failure
145	5/20/09	Intertie	RT	HASP Failure
146	5/20/09	Intertie	RT	HASP Failure
147	5/20/09	Intertie	RT	HASP Failure
148	5/21/09	SDGE	DA	Transmission Outage SDGE
149	5/21/09	SDGE	RT	Ramp Rate
150	5/21/09	SDGE	DA	Transmission Outage SDGE
151	5/21/09	SCE	DA	Path 26
152	5/21/09	SCE	DA	Path 26
153	5/21/09	SCE	DA	Path 26
154	5/21/09	PGAE	RT	Transmission Outage PGAE
155	5/21/09	PGAE	DA	Transmission Outage PGAE
156	5/21/09	HUMB	RT	Market Disruption
157	5/21/09	HUMB	RT	Market Disruption
158	5/21/09	SDGE	RT	T-132
159	5/21/09	SDGE	RT	T-132
160	5/21/09	PGAE	RT	Software Limitation
161	5/21/09	PGAE	RT	Software Limitation
162	5/21/09	PGAE	RT	Unit Testing
163	5/21/09	PGAE	RT	Unit Testing
164	5/21/09	PGAE	RT	Unit Testing
165	5/21/09	PGAE	RT	Unit Testing
166	5/22/09	SDGE	DA	G-206
167	5/22/09	SDGE	RT	Ramp Rate
168	5/22/09	SDGE	DA	G-206
169	5/22/09	SCE	DA	Path 26
170	5/22/09	SCE	DA	Path 26
171	5/22/09	SCE	DA	Path 26
172	5/22/09	SCE	DA	T-135
173	5/22/09	PGAE	DA	Transmission Outage PGAE
174	5/22/09	PGAE	RT	Transmission Outage PGAE
175	5/22/09	PGAE	DA	Transmission Outage PGAE
176	5/22/09	PGAE	RT	Transmission Outage PGAE
177	5/22/09	SCE	RT	Ramp Rate
178	5/22/09	PGAE	RT	Software Limitation
179	5/22/09	PGAE	RT	Software Limitation
180	5/22/09	SCE	RT	Ramp Rate
181	5/23/09	PGAE	DA	Transmission Outage PGAE
182	5/23/09	SDGE	DA	T-103

Number	Date	Resource Location	Market	Reason
183	5/23/09	SCE	DA	T-103
184	5/23/09	SDGE	DA	G-206
185	5/23/09	SCE	DA	T-103
186	5/23/09	PGAE	DA	Transmission Outage PGAE
187	5/23/09	SCE	DA	T-103
188	5/23/09	SCE	DA	T-103
189	5/23/09	PGAE	RT	T-129
190	5/23/09	SCE	RT	Ramp Rate
191	5/24/09	SCE	RT	G-217
192	5/24/09	SCE	RT	G-217
193	5/24/09	SCE	RT	G-217
194	5/24/09	SDGE	RT	G-206
195	5/24/09	PGAE	DA	Transmission Outage PGAE
196	5/24/09	PGAE	DA	Transmission Outage PGAE
197	5/25/09	SCE	RT	G-217
198	5/25/09	SCE	RT	G-217
199	5/25/09	SCE	RT	Ramp Rate
200	5/25/09	SCE	RT	G-217
201	5/25/09	PGAE	DA	Transmission Outage PGAE
202	5/25/09	PGAE	DA	Transmission Outage PGAE
203	5/25/09	SDGE	RT	G-206
204	5/25/09	PGAE	RT	Software Limitation
205	5/25/09	SCE	RT	Software Limitation
206	5/25/09	PGAE	RT	Software Limitation
207	5/25/09	SCE	RT	Software Limitation
208	5/25/09	Intertie	RT	HASP Failure
209	5/25/09	Intertie	RT	HASP Failure
210	5/25/09	Intertie	RT	HASP Failure
211	5/26/09	SCE	RT	G-217
212	5/26/09	SCE	RT	Ramp Rate
213	5/26/09	SDGE	DA	G-206
214	5/26/09	SDGE	DA	G-206
215	5/26/09	PGAE	DA	Transmission Outage PGAE
216	5/26/09	PGAE	DA	Transmission Outage PGAE
217	5/26/09	SCE	RT	G-219
218	5/26/09	SCE	RT	G-219
219	5/26/09	SCE	RT	G-219
220	5/26/09	HUMB	RT	T-138
221	5/26/09	HUMB	RT	Software Limitation
222	5/26/09	PGAE	RT	Transmission Outage PGAE
223	5/26/09	PGAE	RT	Transmission Outage PGAE
224	5/26/09	PGAE	RT	Transmission Outage PGAE
225	5/26/09	PGAE	RT	T-154
226	5/26/09	PGAE	RT	T-154
227	5/26/09	PGAE	RT	T-154
228	5/26/09	PGAE	RT	T-154
229	5/27/09	SDGE	DA	G-206

Number	Date	Resource Location	Market	Reason
230	5/27/09	SDGE	RT	Ramp Rate
231	5/27/09	SDGE	DA	Transmission Outage SDGE
232	5/27/09	PGAE	DA	Transmission Outage PGAE
233	5/27/09	PGAE	DA	Transmission Outage PGAE
234	5/27/09	SCE	DA	G-219
235	5/27/09	SCE	RT	Ramp Rate
236	5/27/09	SCE	DA	G-219
237	5/27/09	SCE	DA	G-219
238	5/27/09	SCE	DA	Ramp Rate
239	5/27/09	SCE	RT	G-217
240	5/27/09	SCE	RT	System Capacity
241	5/27/09	SCE	RT	System Capacity
242	5/27/09	SCE	RT	System Capacity
243	5/27/09	SCE	RT	Ramp Rate
244	5/27/09	PGAE	RT	System Capacity
245	5/27/09	SCE	RT	Software Limitation
246	5/27/09	SCE	RT	Ramp Rate
247	5/27/09	HUMB	RT	T-138
248	5/27/09	SDGE	RT	Software Limitation
249	5/27/09	PGAE	RT	T-154
250	5/27/09	PGAE	RT	T-154
251	5/27/09	PGAE	RT	T-154
252	5/27/09	PGAE	RT	Transmission Outage PGAE
253	5/27/09	PGAE	RT	Transmission Outage PGAE
254	5/27/09	PGAE	RT	Transmission Outage PGAE
255	5/28/09	SCE	DA	G-219
256	5/28/09	SDGE	DA	Transmission Outage SDGE
257	5/28/09	SCE	DA	G-217
258	5/28/09	SCE	DA	G-219
259	5/28/09	SCE	DA	G-219
260	5/28/09	SDGE	DA	G-206
261	5/28/09	SCE	DA	G-217
262	5/28/09	PGAE	DA	Transmission Outage PGAE
263	5/28/09	PGAE	DA	Transmission Outage PGAE
264	5/28/09	PGAE	DA	System Capacity
265	5/28/09	PGAE	RT	Transmission Outage PGAE
266	5/28/09	SCE	RT	System Capacity
267	5/28/09	SCE	RT	System Capacity
268	5/28/09	SCE	RT	Ramp Rate
269	5/28/09	SCE	RT	Dispatchability
270	5/28/09	SCE	RT	G-219
271	5/28/09	SDGE	DA	Transmission Outage SDGE
272	5/28/09	SDGE	RT	Transmission Outage SDGE
273	5/28/09	PGAE	RT	Transmission Outage PGAE
274	5/28/09	PGAE	RT	Unit Testing
275	5/28/09	SCE	RT	System Capacity
276	5/28/09	PGAE	RT	Transmission Outage PGAE

Number	Date	Resource Location	Market	Reason
277	5/28/09	PGAE	RT	Transmission Outage PGAE
278	5/28/09	HUMB	RT	Transmission Outage PGAE
279	5/28/09	HUMB	RT	Transmission Outage PGAE
280	5/28/09	HUMB	RT	Transmission Outage PGAE
281	5/28/09	HUMB	RT	Software Limitation
282	5/28/09	PGAE	RT	Software Limitation
283	5/28/09	PGAE	RT	T-154
284	5/28/09	PGAE	RT	T-154
285	5/28/09	PGAE	RT	T-154
286	5/28/09	SCE	RT	System Capacity
287	5/28/09	PGAE	RT	Transmission Outage PGAE
288	5/28/09	PGAE	RT	Transmission Outage PGAE
289	5/28/09	HUMB	RT	T-138
290	5/28/09	HUMB	RT	T-138
291	5/28/09	PGAE	RT	Transmission Outage PGAE
292	5/28/09	SDGE	RT	Software Limitation
293	5/28/09	PGAE	RT	Software Limitation
294	5/28/09	PGAE	RT	Unit Testing
295	5/28/09	PGAE	RT	Unit Testing
296	5/28/09	Intertie	RT	System Energy
297	5/28/09	Intertie	RT	System Energy
298	5/28/09	Intertie	RT	System Energy
299	5/28/09	Intertie	RT	System Energy
300	5/28/09	Intertie	RT	System Energy
301	5/28/09	Intertie	RT	HASP Failure
302	5/28/09	Intertie	RT	HASP Failure
303	5/28/09	Intertie	RT	HASP Failure
304	5/28/09	Intertie	RT	HASP Failure
305	5/28/09	Intertie	RT	HASP Failure
306	5/28/09	Intertie	RT	HASP Failure
307	5/28/09	Intertie	RT	HASP Failure
308	5/28/09	Intertie	RT	HASP Failure
309	5/28/09	Intertie	RT	HASP Failure
310	5/28/09	Intertie	RT	HASP Failure
311	5/28/09	Intertie	RT	HASP Failure
312	5/28/09	Intertie	RT	HASP Failure
313	5/28/09	Intertie	RT	System Energy
314	5/28/09	Intertie	RT	System Energy
315	5/28/09	Intertie	RT	System Energy
316	5/28/09	Intertie	RT	System Energy
317	5/28/09	Intertie	RT	System Energy
318	5/28/09	Intertie	RT	System Energy
319	5/28/09	Intertie	RT	System Energy
320	5/28/09	Intertie	RT	System Energy
321	5/29/09	SDGE	DA	G-206
322	5/29/09	SDGE	DA	Transmission Outage SDGE
323	5/29/09	SDGE	DA	Transmission Outage SDGE

Number	Date	Resource Location	Market	Reason
324	5/29/09	PGAE	DA	Transmission Outage PGAE
325	5/29/09	PGAE	DA	Transmission Outage PGAE
326	5/29/09	SCE	DA	G-219
327	5/29/09	SCE	DA	G-219
328	5/29/09	SCE	DA	G-217
329	5/29/09	SCE	DA	G-217
330	5/29/09	PGAE	RT	Transmission Outage PGAE
331	5/29/09	PGAE	RT	Transmission Outage PGAE
332	5/29/09	PGAE	RT	System Capacity
333	5/29/09	PGAE	RT	Transmission Outage PGAE
334	5/29/09	PGAE	DA	Transmission Outage PGAE
335	5/29/09	PGAE	RT	Delta Dispatch
336	5/29/09	SCE	RT	System Capacity
337	5/29/09	SCE	RT	System Capacity
338	5/29/09	SCE	RT	System Capacity
339	5/29/09	PGAE	RT	Software Limitation
340	5/29/09	PGAE	RT	Unit Testing
341	5/29/09	PGAE	RT	Unit Testing
342	5/29/09	PGAE	RT	Unit Testing
343	5/29/09	PGAE	RT	Unit Testing
344	5/29/09	PGAE	RT	Unit Testing
345	5/29/09	PGAE	RT	Unit Testing
346	5/30/09	PGAE	DA	Transmission Outage PGAE
347	5/30/09	PGAE	DA	Transmission Outage PGAE
348	5/30/09	SCE	DA	G-217
349	5/30/09	SCE	RT	Ramp Rate
350	5/30/09	SCE	DA	G-219
351	5/30/09	SDGE	DA	G-206
352	5/30/09	SCE	RT	T-103
353	5/30/09	PGAE	RT	Delta Dispatch
354	5/30/09	PGAE	RT	Delta Dispatch
355	5/30/09	SCE	RT	T-103
356	5/30/09	SCE	RT	T-103
357	5/30/09	PGAE	RT	G-233
358	5/30/09	PGAE	RT	Software Limitation
359	5/30/09	HUMB	RT	T-138
360	5/30/09	HUMB	RT	T-138
361	5/30/09	Intertie	RT	HASP Failure
362	5/30/09	Intertie	RT	HASP Failure
363	5/30/09	Intertie	RT	HASP Failure
364	5/30/09	Intertie	RT	HASP Failure
365	5/30/09	Intertie	RT	HASP Failure
366	5/30/09	Intertie	RT	HASP Failure
367	5/30/09	Intertie	RT	HASP Failure
368	5/30/09	Intertie	RT	HASP Failure
369	5/30/09	Intertie	RT	HASP Failure
370	5/30/09	Intertie	RT	HASP Failure

Number	Date	Resource Location	Market	Reason
371	5/30/09	Intertie	RT	HASP Failure
372	5/30/09	Intertie	RT	HASP Failure
373	5/30/09	Intertie	RT	HASP Failure
374	5/30/09	Intertie	RT	HASP Failure
375	5/30/09	Intertie	RT	HASP Failure
376	5/30/09	Intertie	RT	HASP Failure
377	5/30/09	PGAE	RT	Software Limitation
378	5/30/09	PGAE	RT	T-154
379	5/30/09	Intertie	RT	System Energy
380	5/30/09	Intertie	RT	System Energy
381	5/30/09	Intertie	RT	System Energy
382	5/30/09	Intertie	RT	System Energy
383	5/30/09	Intertie	RT	System Energy
384	5/30/09	Intertie	RT	System Energy
385	5/30/09	PGAE	RT	NP26 Capacity
386	5/31/09	SDGE	RT	G-206
387	5/31/09	SCE	RT	Ramp Rate
388	5/31/09	SCE	RT	G-217
389	5/31/09	SCE	RT	G-217
390	5/31/09	SCE	RT	G-217
391	5/31/09	SCE	RT	G-217
392	5/31/09	SCE	RT	G-217
393	5/31/09	SCE	RT	Ramp Rate
394	5/31/09	SCE	RT	G-217
395	5/31/09	SCE	RT	Ramp Rate
396	5/31/09	SCE	RT	G-217
397	5/31/09	PGAE	RT	NP26 Capacity
398	5/31/09	Intertie	RT	System Energy
399	5/31/09	Intertie	RT	System Energy
400	5/31/09	Intertie	RT	System Energy
401	5/31/09	Intertie	RT	System Energy
402	5/31/09	Intertie	RT	System Energy
403	5/31/09	Intertie	RT	System Energy
404	5/31/09	Intertie	RT	System Energy
405	5/31/09	Intertie	RT	System Energy
406	5/31/09	Intertie	RT	System Energy
407	5/31/09	Intertie	RT	System Energy
408	5/31/09	Intertie	RT	System Energy
409	5/31/09	Intertie	RT	System Energy
410	5/31/09	Intertie	RT	System Energy
411	6/1/09	PGAE	DA	G-233
412	6/1/09	PGAE	DA	Transmission Outage PGAE
413	6/1/09	PGAE	DA	Software Limitation
414	6/1/09	SCE	DA	G-219
415	6/1/09	SCE	DA	G-219
416	6/1/09	PGAE	DA	Transmission Outage PGAE
417	6/1/09	SDGE	RT	G-206

Number	Date	Resource Location	Market	Reason
418	6/1/09	SCE	RT	G-217
419	6/1/09	SCE	RT	Ramp Rate
420	6/1/09	SCE	RT	Path 26
421	6/1/09	SCE	RT	G-217
422	6/1/09	SCE	RT	Path 26
423	6/1/09	SCE	RT	SP26 Capacity
424	6/1/09	PGAE	RT	Software Limitation
425	6/1/09	PGAE	DA	G-233
426	6/1/09	PGAE	DA	Software Limitation
427	6/1/09	Intertie	RT	HASP Failure
428	6/1/09	Intertie	RT	HASP Failure
429	6/1/09	Intertie	RT	HASP Failure
430	6/1/09	Intertie	RT	HASP Failure
431	6/1/09	Intertie	RT	HASP Failure
432	6/1/09	Intertie	RT	HASP Failure
433	6/1/09	Intertie	RT	HASP Failure
434	6/1/09	Intertie	RT	HASP Failure
435	6/1/09	Intertie	RT	HASP Failure
436	6/1/09	Intertie	RT	HASP Failure
437	6/1/09	Intertie	RT	HASP Failure
438	6/1/09	Intertie	RT	HASP Failure
439	6/1/09	Intertie	RT	HASP Failure
440	6/1/09	Intertie	RT	HASP Failure
441	6/1/09	Intertie	RT	HASP Failure
442	6/1/09	Intertie	RT	HASP Failure
443	6/1/09	Intertie	RT	HASP Failure
444	6/1/09	Intertie	RT	HASP Failure
445	6/1/09	Intertie	RT	HASP Failure
446	6/1/09	PGAE	RT	Software Limitation
447	6/1/09	Intertie	RT	System Energy
448	6/2/09	SCE	DA	T-103
449	6/2/09	SCE	RT	Ramp Rate
450	6/2/09	SCE	DA	T-103
451	6/2/09	SCE	DA	T-103
452	6/2/09	SDGE	DA	G-206
453	6/2/09	SCE	DA	Transmission Outage SCE
454	6/2/09	SCE	DA	T-103
455	6/2/09	PGAE	DA	Transmission Outage PGAE
456	6/2/09	PGAE	RT	Transmission Outage PGAE
457	6/3/09	PGAE	DA	Transmission Outage PGAE
458	6/3/09	SDGE	DA	G-206
459	6/3/09	PGAE	DA	Transmission Outage PGAE
460	6/3/09	PGAE	DA	G-233
461	6/3/09	SCE	DA	G-219
462	6/3/09	SCE	DA	G-219
463	6/3/09	SDGE	RT	Transmission Outage SDGE
464	6/4/09	SCE	DA	G-219

Number	Date	Resource Location	Market	Reason
465	6/4/09	SCE	DA	G-219
466	6/4/09	PGAE	DA	Transmission Outage PGAE
467	6/4/09	Intertie	RT	Market Disruption
468	6/4/09	Intertie	RT	Market Disruption
469	6/4/09	Intertie	RT	Market Disruption
470	6/4/09	Intertie	RT	Market Disruption
471	6/4/09	Intertie	RT	Market Disruption
472	6/4/09	Intertie	RT	System Energy
473	6/4/09	Intertie	RT	System Energy
474	6/4/09	Intertie	RT	System Energy
475	6/4/09	Intertie	RT	System Energy
476	6/4/09	Intertie	RT	System Energy
477	6/4/09	Intertie	RT	System Energy
478	6/4/09	Intertie	RT	System Energy
479	6/4/09	Intertie	RT	System Energy
480	6/4/09	Intertie	RT	System Energy
481	6/4/09	SDGE	RT	Software Limitation
482	6/4/09	Intertie	RT	System Energy
483	6/4/09	Intertie	RT	System Energy
484	6/4/09	Intertie	RT	System Energy
485	6/4/09	Intertie	RT	System Energy
486	6/4/09	Intertie	RT	System Energy
487	6/4/09	Intertie	RT	System Energy
488	6/4/09	PGAE	RT	Software Limitation
489	6/4/09	SCE	RT	G-217
490	6/4/09	Intertie	RT	HASP Failure
491	6/4/09	Intertie	RT	HASP Failure
492	6/4/09	Intertie	RT	HASP Failure
493	6/4/09	Intertie	RT	HASP Failure
494	6/4/09	Intertie	RT	HASP Failure
495	6/4/09	Intertie	RT	HASP Failure
496	6/4/09	Intertie	RT	HASP Failure
497	6/4/09	Intertie	RT	HASP Failure
498	6/4/09	Intertie	RT	HASP Failure
499	6/4/09	Intertie	RT	HASP Failure
500	6/4/09	Intertie	RT	HASP Failure
501	6/4/09	Intertie	RT	HASP Failure
502	6/4/09	SCE	RT	Unit Testing
503	6/4/09	SCE	RT	Unit Testing
504	6/5/09	PGAE	DA	Transmission Outage PGAE
505	6/5/09	SDGE	DA	G-206
506	6/5/09	SDGE	RT	G-206
507	6/5/09	SDGE	RT	G-206
508	6/5/09	SCE	DA	G-217
509	6/5/09	SCE	RT	Software Limitation
510	6/5/09	SCE	DA	G-219
511	6/5/09	SCE	RT	Software Limitation

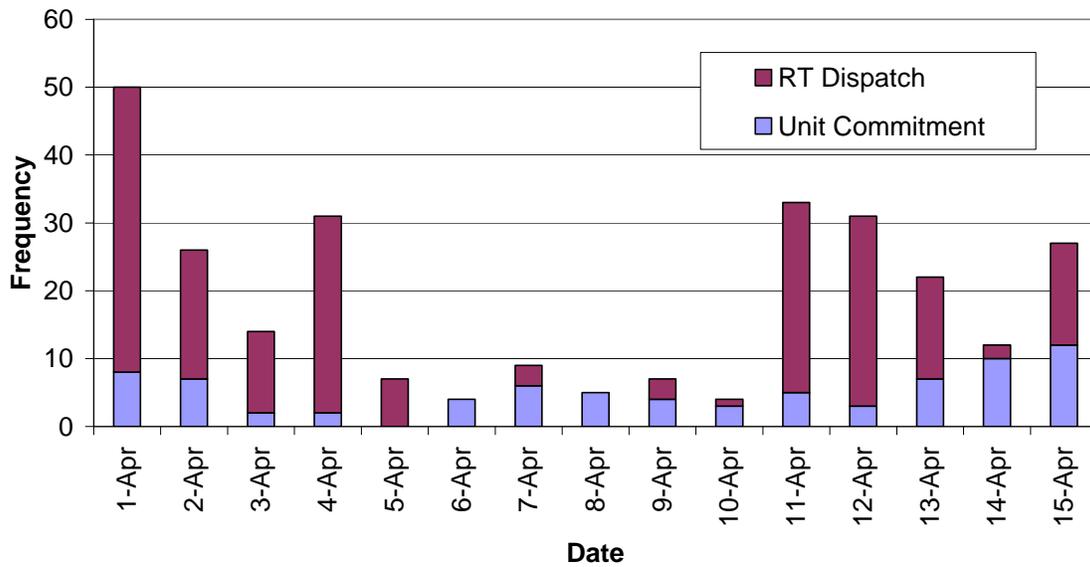
Number	Date	Resource Location	Market	Reason
512	6/5/09	SCE	DA	G-217
513	6/5/09	SCE	RT	G-217
514	6/5/09	SCE	RT	G-217
515	6/5/09	PGAE	DA	Transmission Outage PGAE
516	6/5/09	Intertie	RT	HASP Failure
517	6/5/09	Intertie	RT	HASP Failure
518	6/5/09	Intertie	RT	HASP Failure
519	6/5/09	Intertie	RT	HASP Failure
520	6/5/09	Intertie	RT	HASP Failure
521	6/5/09	Intertie	RT	HASP Failure
522	6/5/09	Intertie	RT	HASP Failure
523	6/5/09	Intertie	RT	HASP Failure
524	6/5/09	Intertie	RT	HASP Failure
525	6/5/09	Intertie	RT	HASP Failure
526	6/5/09	Intertie	RT	HASP Failure
527	6/5/09	Intertie	RT	HASP Failure
528	6/5/09	Intertie	RT	HASP Failure
529	6/5/09	Intertie	RT	HASP Failure
530	6/5/09	Intertie	RT	HASP Failure
531	6/5/09	Intertie	RT	HASP Failure
532	6/5/09	Intertie	RT	HASP Failure
533	6/5/09	Intertie	RT	HASP Failure
534	6/5/09	Intertie	RT	HASP Failure
535	6/5/09	Intertie	RT	HASP Failure
536	6/5/09	PGAE	RT	Software Limitation
537	6/5/09	PGAE	RT	Software Limitation
538	6/5/09	PGAE	RT	T-129
539	6/5/09	SCE	RT	Unit Testing
540	6/5/09	SCE	RT	Unit Testing
541	6/6/09	PGAE	DA	Transmission Outage PGAE
542	6/6/09	SCE	DA	G-217
543	6/6/09	SCE	DA	G-217
544	6/6/09	PGAE	RT	Software Limitation
545	6/7/09	SCE	DA	G-217
546	6/7/09	SCE	RT	Ramp Rate
547	6/7/09	SCE	DA	G-217
548	6/7/09	SDGE	RT	G-206
549	6/7/09	Intertie	RT	HASP Failure
550	6/7/09	Intertie	RT	HASP Failure
551	6/7/09	Intertie	RT	HASP Failure
552	6/7/09	PGAE	RT	Software Limitation
553	6/7/09	PGAE	RT	Software Limitation
554	6/7/09	PASA	RT	Software Limitation
555	6/7/09	PASA	RT	Software Limitation
556	6/8/09	SCE	DA	G-219
557	6/8/09	PGAE	DA	Transmission Outage PGAE
558	6/8/09	PGAE	DA	Transmission Outage PGAE

Number	Date	Resource Location	Market	Reason
559	6/8/09	SCE	DA	G-217
560	6/8/09	PGAE	RT	Software Limitation
561	6/8/09	PGAE	RT	Transmission Outage PGAE
562	6/9/09	SCE	DA	G-217
563	6/9/09	SCE	DA	G-219
564	6/9/09	SDGE	DA	G-206
565	6/9/09	SCE	DA	G-219
566	6/9/09	SCE	RT	Transmission Outage SCE
567	6/9/09	PGAE	RT	Transmission Outage PGAE
568	6/9/09	PGAE	RT	Transmission Outage PGAE
569	6/9/09	PGAE	RT	Transmission Outage PGAE
570	6/9/09	PGAE	RT	Transmission Outage PGAE
571	6/9/09	PGAE	RT	Transmission Outage PGAE
572	6/9/09	Intertie	RT	System Energy
573	6/9/09	Intertie	RT	System Energy
574	6/9/09	Intertie	RT	System Energy
575	6/9/09	Intertie	RT	System Energy
576	6/9/09	Intertie	RT	System Energy
577	6/10/09	SCE	DA	G-219
578	6/10/09	SCE	DA	G-219
579	6/10/09	SCE	DA	G-217
580	6/10/09	PGAE	RT	Transmission Outage PGAE
581	6/10/09	PGAE	RT	Software Limitation
582	6/10/09	Intertie	RT	HASP Failure
583	6/10/09	Intertie	RT	HASP Failure
584	6/10/09	Intertie	RT	HASP Failure
585	6/10/09	Intertie	RT	HASP Failure
586	6/10/09	Intertie	RT	HASP Failure
587	6/10/09	Intertie	RT	HASP Failure
588	6/10/09	Intertie	RT	HASP Failure
589	6/10/09	Intertie	RT	HASP Failure
590	6/10/09	Intertie	RT	HASP Failure
591	6/10/09	Intertie	RT	HASP Failure
592	6/10/09	Intertie	RT	HASP Failure
593	6/10/09	Intertie	RT	HASP Failure
594	6/10/09	Intertie	RT	HASP Failure
595	6/10/09	Intertie	RT	HASP Failure
596	6/10/09	Intertie	RT	HASP Failure
597	6/10/09	Intertie	RT	HASP Failure
598	6/10/09	Intertie	RT	HASP Failure
599	6/10/09	Intertie	RT	HASP Failure
600	6/10/09	SDGE	RT	Software Limitation
601	6/10/09	SCE	RT	Transmission Outage SCE
602	6/10/09	SCE	RT	Transmission Outage SCE
603	6/10/09	SDGE	RT	Software Limitation
604	6/11/09	SCE	DA	G-219
605	6/11/09	PGAE	DA	Transmission Outage PGAE

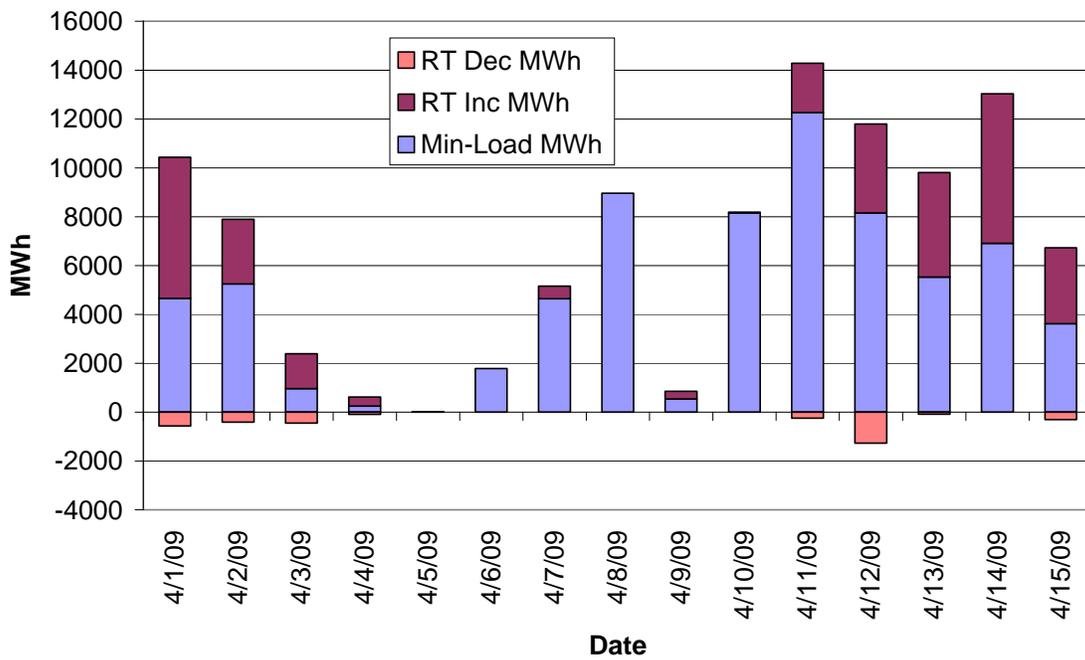
Number	Date	Resource Location	Market	Reason
606	6/11/09	PGAE	RT	Software Limitation
607	6/11/09	SCE	DA	G-219
608	6/11/09	SCE	DA	G-217
609	6/11/09	HUMB	DA	T-138
610	6/11/09	PASA	RT	Software Limitation
611	6/11/09	Intertie	RT	System Energy
612	6/11/09	Intertie	RT	System Energy
613	6/11/09	PGAE	RT	Software Limitation
614	6/12/09	Intertie	RT	System Energy
615	6/12/09	PGAE	RT	Software Limitation
616	6/12/09	SCE	DA	G-219
617	6/12/09	PGAE	RT	Transmission Outage PGAE
618	6/12/09	PASA	RT	Software Limitation
619	6/14/09	PGAE	RT	Software Limitation
620	6/14/09	PGAE	RT	Software Limitation
621	6/15/09	SCE	RT	Transmission Outage SCE
622	6/15/09	SCE	RT	Transmission Outage SCE
623	6/15/09	SCE	RT	Transmission Outage SCE
624	6/15/09	SCE	RT	Transmission Outage SCE
625	6/15/09	SCE	RT	Transmission Outage SCE
626	6/15/09	SCE	RT	G-219
627	6/15/09	SCE	RT	Software Limitation
628	6/15/09	SCE	RT	Software Limitation
629	6/15/09	PGAE	RT	Software Limitation
630	6/15/09	PGAE	RT	Software Limitation
631	6/15/09	SCE	RT	Software Limitation

## **ATTACHMENT B**

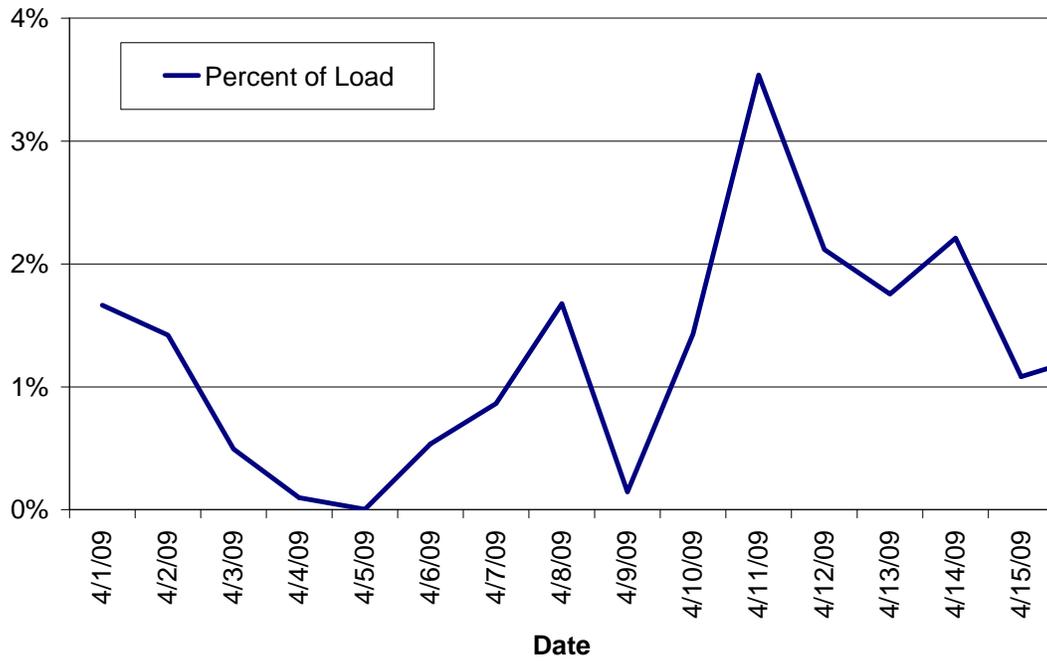
**Figure 6: Summary of Exceptional Dispatch Frequency**



**Figure 7: Total Exceptional Dispatch MWh Volume**



**Figure 8: Exceptional Dispatch Percent of Total Load**



**California Independent System Operator Corporation  
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**Table 1: Exceptional Dispatches--April 1 through April 15**

<b>Number</b>	<b>Date</b>	<b>Resource Location</b>	<b>Market</b>	<b>Reason</b>
1	4/1/2009	PGAE	Real-Time	T-138
2	4/1/2009	SCE	Real-Time	Market Disruption
3	4/1/2009	PGAE	Real-Time	T-138
4	4/1/2009	SCE	Real-Time	Software Limitation
5	4/1/2009	PGAE	Real-Time	Software Limitation
6	4/1/2009	PGAE	Real-Time	T-138
7	4/1/2009	PGAE	Real-Time	T-138
8	4/1/2009	PGAE	Real-Time	T-138
9	4/1/2009	SDGE	Real-Time	Ramp Rate
10	4/1/2009	SCE	Real-Time	Software Limitation
11	4/1/2009	PGAE	Real-Time	Software Limitation
12	4/1/2009	PGAE	Real-Time	Software Limitation
13	4/1/2009	PGAE	Real-Time	T-138
14	4/1/2009	PGAE	Real-Time	T-138
15	4/1/2009	SCE	Real-Time	Software Limitation
16	4/1/2009	SCE	Real-Time	Software Limitation
17	4/1/2009	PGAE	Real-Time	System Capacity
18	4/1/2009	SCE	Real-Time	System Capacity
19	4/1/2009	SCE	Real-Time	System Capacity
20	4/1/2009	SDGE	Real-Time	System Capacity
21	4/1/2009	SDGE	Real-Time	System Capacity
22	4/1/2009	Intertie	Real-Time	System Energy
23	4/1/2009	Intertie	Real-Time	System Energy
24	4/1/2009	Intertie	Real-Time	System Energy
25	4/1/2009	Intertie	Real-Time	System Energy
26	4/1/2009	Intertie	Real-Time	System Energy
27	4/1/2009	Intertie	Real-Time	System Energy
28	4/1/2009	Intertie	Real-Time	System Energy
29	4/1/2009	Intertie	Real-Time	System Energy
30	4/1/2009	Intertie	Real-Time	HASP Failure
31	4/1/2009	Intertie	Real-Time	HASP Failure
32	4/1/2009	Intertie	Real-Time	HASP Failure
33	4/1/2009	Intertie	Real-Time	System Energy
34	4/1/2009	Intertie	Real-Time	System Energy
35	4/1/2009	Intertie	Real-Time	System Energy
36	4/1/2009	Intertie	Real-Time	System Energy
37	4/1/2009	Intertie	Real-Time	System Energy
38	4/1/2009	Intertie	Real-Time	System Energy
39	4/1/2009	Intertie	Real-Time	System Energy
40	4/1/2009	Intertie	Real-Time	System Energy

Number	Date	Resource Location	Market	Reason
41	4/1/2009	Intertie	Real-Time	System Energy
42	4/1/2009	Intertie	Real-Time	System Energy
43	4/1/2009	Intertie	Real-Time	System Energy
44	4/1/2009	Intertie	Real-Time	System Energy
45	4/1/2009	Intertie	Real-Time	System Energy
46	4/1/2009	Intertie	Real-Time	System Energy
47	4/1/2009	Intertie	Real-Time	System Energy
48	4/1/2009	Intertie	Real-Time	System Energy
49	4/1/2009	Intertie	Real-Time	System Energy
50	4/1/2009	Intertie	Real-Time	System Energy
51	4/2/2009	SDGE	Real-Time	Transmission Outage SDGE
52	4/2/2009	SDGE	Real-Time	Transmission Outage SDGE
53	4/2/2009	SCE	Real-Time	G-217
54	4/2/2009	SCE	Real-Time	System Capacity
55	4/2/2009	PGAE	Real-Time	Software Limitation
56	4/2/2009	PGAE	Real-Time	Software Limitation
57	4/2/2009	PGAE	Real-Time	Software Limitation
58	4/2/2009	PGAE	Real-Time	Software Limitation
59	4/2/2009	PGAE	Real-Time	Software Limitation
60	4/2/2009	SCE	Real-Time	Ramp Rate
61	4/2/2009	PGAE	Real-Time	T-138
62	4/2/2009	PGAE	Real-Time	T-138
63	4/2/2009	SCE	Real-Time	Software Limitation
64	4/2/2009	SCE	Real-Time	Software Limitation
65	4/2/2009	Intertie	Real-Time	HASP Failure
66	4/2/2009	Intertie	Real-Time	HASP Failure
67	4/2/2009	Intertie	Real-Time	System Energy
68	4/2/2009	Intertie	Real-Time	System Energy
69	4/2/2009	Intertie	Real-Time	System Energy
70	4/2/2009	Intertie	Real-Time	System Energy
71	4/2/2009	Intertie	Real-Time	System Energy
72	4/2/2009	Intertie	Real-Time	System Energy
73	4/2/2009	Intertie	Real-Time	System Energy
74	4/2/2009	Intertie	Real-Time	System Energy
75	4/2/2009	Intertie	Real-Time	System Energy
76	4/2/2009	Intertie	Real-Time	System Energy
77	4/3/2009	SDGE	Real-Time	Transmission Outage SDGE
78	4/3/2009	SDGE	Real-Time	Ramp Rate
79	4/3/2009	SDGE	Real-Time	Transmission Outage SDGE
80	4/3/2009	PGAE	Real-Time	Software Limitation
81	4/3/2009	SDGE	Real-Time	Software Limitation
82	4/3/2009	PGAE	Real-Time	Transmission Outage PGAE
83	4/3/2009	PGAE	Real-Time	Transmission Outage PGAE
84	4/3/2009	SDGE	Real-Time	Software Limitation
85	4/3/2009	Intertie	Real-Time	System Energy
86	4/3/2009	Intertie	Real-Time	System Energy

Number	Date	Resource Location	Market	Reason
87	4/3/2009	Intertie	Real-Time	System Energy
88	4/3/2009	Intertie	Real-Time	System Energy
89	4/3/2009	Intertie	Real-Time	System Energy
90	4/3/2009	Intertie	Real-Time	System Energy
91	4/4/2009	PGAE	Real-Time	Software Limitation
92	4/4/2009	PGAE	Real-Time	Software Limitation
93	4/4/2009	PGAE	Real-Time	Telemetry Error
94	4/4/2009	PGAE	Real-Time	Telemetry Error
95	4/4/2009	PGAE	Real-Time	Telemetry Error
96	4/4/2009	PGAE	Real-Time	Telemetry Error
97	4/4/2009	PGAE	Real-Time	Software Limitation
98	4/4/2009	PGAE	Real-Time	Software Limitation
99	4/4/2009	PGAE	Real-Time	Software Limitation
100	4/4/2009	SDGE	Real-Time	Market Disruption
101	4/4/2009	SDGE	Real-Time	Market Disruption
102	4/4/2009	SDGE	Real-Time	Software Limitation
103	4/4/2009	PGAE	Real-Time	Software Limitation
104	4/4/2009	PGAE	Real-Time	Software Limitation
105	4/4/2009	PGAE	Real-Time	Market Disruption
106	4/4/2009	PASA	Real-Time	Software Limitation
107	4/4/2009	PASA	Real-Time	Software Limitation
108	4/4/2009	SDGE	Real-Time	Software Limitation
109	4/4/2009	SDGE	Real-Time	Software Limitation
110	4/4/2009	SDGE	Real-Time	Software Limitation
111	4/4/2009	PGAE	Real-Time	Software Limitation
112	4/4/2009	Intertie	Real-Time	System Energy
113	4/4/2009	Intertie	Real-Time	System Energy
114	4/4/2009	Intertie	Real-Time	System Energy
115	4/4/2009	Intertie	Real-Time	HASP Failure
116	4/4/2009	Intertie	Real-Time	HASP Failure
117	4/4/2009	Intertie	Real-Time	HASP Failure
118	4/4/2009	Intertie	Real-Time	HASP Failure
119	4/4/2009	Intertie	Real-Time	HASP Failure
120	4/4/2009	Intertie	Real-Time	System Energy
121	4/4/2009	Intertie	Real-Time	System Energy
122	4/5/2009	PGAE	Real-Time	T-138
123	4/5/2009	PGAE	Real-Time	Software Limitation
124	4/5/2009	PGAE	Real-Time	Software Limitation
125	4/5/2009	PGAE	Real-Time	Transmission Outage PGAE
126	4/5/2009	PGAE	Real-Time	Transmission Outage PGAE
127	4/5/2009	PGAE	Real-Time	Transmission Outage PGAE
128	4/5/2009	PGAE	Real-Time	Transmission Outage PGAE
129	4/6/2009	SCE	Real-Time	G-219
130	4/6/2009	SDGE	Real-Time	Transmission Outage SDGE
131	4/6/2009	SDGE	Real-Time	Transmission Outage SDGE
132	4/6/2009	SDGE	Real-Time	Transmission Outage SDGE
133	4/7/2009	SDGE	Real-Time	Transmission Outage SDGE

Number	Date	Resource Location	Market	Reason
134	4/7/2009	SDGE	Real-Time	Transmission Outage SDGE
135	4/7/2009	SDGE	Real-Time	Transmission Outage SDGE
136	4/7/2009	SCE	Real-Time	T-137
137	4/7/2009	SCE	Real-Time	G-219
138	4/7/2009	SCE	Real-Time	Transmission Outage SCE
139	4/7/2009	PGAE	Real-Time	Software Limitation
140	4/7/2009	SCE	Real-Time	Software Limitation
141	4/7/2009	SCE	Real-Time	Ramp Rate
142	4/8/2009	SDGE	Real-Time	Transmission Outage SDGE
143	4/8/2009	SDGE	Real-Time	Transmission Outage SDGE
144	4/8/2009	SCE	Real-Time	G-219
145	4/8/2009	SCE	Real-Time	Transmission Outage SCE
146	4/8/2009	SCE	Real-Time	Transmission Outage SCE
147	4/9/2009	SCE	Real-Time	G-219
148	4/9/2009	SDGE	Real-Time	Transmission Outage SDGE
149	4/9/2009	SDGE	Real-Time	Transmission Outage SDGE
150	4/9/2009	SCE	Real-Time	Transmission Outage SCE
151	4/9/2009	SCE	Real-Time	Transmission Outage SCE
152	4/9/2009	PGAE	Real-Time	Software Limitation
153	4/9/2009	PGAE	Real-Time	Software Limitation
154	4/10/2009	SDGE	Real-Time	Transmission Outage SDGE
155	4/10/2009	SCE	Real-Time	Transmission Outage SCE
156	4/10/2009	SCE	Real-Time	Transmission Outage SCE
157	4/10/2009	SCE	Real-Time	Transmission Outage SCE
158	4/11/2009	SDGE	Real-Time	Transmission Outage SDGE
159	4/11/2009	SCE	Real-Time	Transmission Outage SCE
160	4/11/2009	SCE	Real-Time	Transmission Outage SCE
161	4/11/2009	PGAE	Real-Time	Transmission Outage PGAE
162	4/11/2009	PGAE	Real-Time	Transmission Outage PGAE
163	4/11/2009	PGAE	Real-Time	T-138
164	4/11/2009	PGAE	Real-Time	T-138
165	4/11/2009	PGAE	Real-Time	T-138
166	4/11/2009	PGAE	Real-Time	Over Generation
167	4/11/2009	PGAE	Real-Time	Over Generation
168	4/11/2009	CWRP	Real-Time	Over Generation
169	4/11/2009	PGAE	Real-Time	Over Generation
170	4/11/2009	SCE	Real-Time	Over Generation
171	4/11/2009	SCE	Real-Time	Over Generation
172	4/11/2009	PGAE	Real-Time	Over Generation
173	4/11/2009	PGAE	Real-Time	Over Generation
174	4/11/2009	PGAE	Real-Time	Over Generation
175	4/11/2009	PGAE	Real-Time	Over Generation
176	4/11/2009	PGAE	Real-Time	Over Generation
177	4/11/2009	PGAE	Real-Time	Transmission Outage PGAE
178	4/11/2009	Intertie	Real-Time	HASP Failure
179	4/11/2009	Intertie	Real-Time	HASP Failure
180	4/11/2009	Intertie	Real-Time	HASP Failure

Number	Date	Resource Location	Market	Reason
181	4/11/2009	Intertie	Real-Time	HASP Failure
182	4/11/2009	Intertie	Real-Time	HASP Failure
183	4/11/2009	Intertie	Real-Time	HASP Failure
184	4/11/2009	Intertie	Real-Time	HASP Failure
185	4/11/2009	Intertie	Real-Time	HASP Failure
186	4/11/2009	Intertie	Real-Time	HASP Failure
187	4/11/2009	Intertie	Real-Time	HASP Failure
188	4/11/2009	Intertie	Real-Time	HASP Failure
189	4/11/2009	Intertie	Real-Time	HASP Failure
190	4/11/2009	Intertie	Real-Time	HASP Failure
191	4/12/2009	SDGE	Real-Time	Transmission Outage SDGE
192	4/12/2009	SCE	Real-Time	Transmission Outage SCE
193	4/12/2009	SCE	Real-Time	Transmission Outage SCE
194	4/12/2009	PGAE	Real-Time	Over Generation
195	4/12/2009	PGAE	Real-Time	Over Generation
196	4/12/2009	PGAE	Real-Time	Over Generation
197	4/12/2009	SCE	Real-Time	Over Generation
198	4/12/2009	PGAE	Real-Time	Software Limitation
199	4/12/2009	Intertie	Real-Time	HASP Failure
200	4/12/2009	Intertie	Real-Time	HASP Failure
201	4/12/2009	Intertie	Real-Time	HASP Failure
202	4/12/2009	Intertie	Real-Time	HASP Failure
203	4/12/2009	Intertie	Real-Time	System Energy
204	4/12/2009	Intertie	Real-Time	System Energy
205	4/12/2009	Intertie	Real-Time	System Energy
206	4/12/2009	Intertie	Real-Time	System Energy
207	4/12/2009	Intertie	Real-Time	System Energy
208	4/12/2009	Intertie	Real-Time	System Energy
209	4/12/2009	Intertie	Real-Time	System Energy
210	4/12/2009	Intertie	Real-Time	System Energy
211	4/12/2009	Intertie	Real-Time	System Energy
212	4/12/2009	Intertie	Real-Time	System Energy
213	4/12/2009	Intertie	Real-Time	System Energy
214	4/12/2009	Intertie	Real-Time	System Energy
215	4/12/2009	Intertie	Real-Time	System Energy
216	4/12/2009	Intertie	Real-Time	System Energy
217	4/12/2009	Intertie	Real-Time	System Energy
218	4/12/2009	Intertie	Real-Time	System Energy
219	4/12/2009	Intertie	Real-Time	System Energy
220	4/12/2009	Intertie	Real-Time	System Energy
221	4/12/2009	Intertie	Real-Time	System Energy
222	4/13/2009	SDGE	Real-Time	Transmission Outage SDGE
223	4/13/2009	SDGE	Real-Time	Transmission Outage SDGE
224	4/13/2009	SCE	Real-Time	Transmission Outage SCE
225	4/13/2009	SCE	Real-Time	Transmission Outage SCE
226	4/13/2009	SCE	Real-Time	G-219
227	4/13/2009	SCE	Real-Time	Transmission Outage SCE

Number	Date	Resource Location	Market	Reason
228	4/13/2009	SDGE	Real-Time	G-206
229	4/13/2009	SDGE	Real-Time	Software Limitation
230	4/13/2009	SCE	Real-Time	Ramp Rate
231	4/13/2009	SDGE	Real-Time	Ramp Rate
232	4/13/2009	PGAE	Real-Time	Market Disruption
233	4/13/2009	PGAE	Real-Time	Market Disruption
234	4/13/2009	SCE	Real-Time	Market Disruption
235	4/13/2009	PGAE	Real-Time	Market Disruption
236	4/13/2009	Intertie	Real-Time	System Energy
237	4/13/2009	Intertie	Real-Time	System Energy
238	4/13/2009	Intertie	Real-Time	System Energy
239	4/13/2009	Intertie	Real-Time	System Energy
240	4/13/2009	Intertie	Real-Time	System Energy
241	4/13/2009	Intertie	Real-Time	System Energy
242	4/13/2009	Intertie	Real-Time	System Energy
243	4/13/2009	Intertie	Real-Time	System Energy
244	4/14/2009	SDGE	Real-Time	T-103
245	4/14/2009	SDGE	Real-Time	G-206
246	4/14/2009	SDGE	Real-Time	G-206
247	4/14/2009	SCE	Real-Time	G-219
248	4/14/2009	SCE	Real-Time	T-103
249	4/14/2009	PGAE	Real-Time	System Capacity
250	4/14/2009	SCE	Real-Time	T-103
251	4/14/2009	SCE	Real-Time	T-103
252	4/14/2009	SCE	Real-Time	T-103
253	4/14/2009	SCE	Real-Time	T-103
254	4/14/2009	SCE	Real-Time	Ramp Rate
255	4/14/2009	SDGE	Real-Time	Ramp Rate
256	4/15/2009	SDGE	Real-Time	T-103
257	4/15/2009	SDGE	Real-Time	Transmission Outage SDGE
258	4/15/2009	SDGE	Real-Time	Transmission Outage SDGE
259	4/15/2009	SDGE	Real-Time	Transmission Outage SDGE
260	4/15/2009	SCE	Real-Time	Ramp Rate
261	4/15/2009	SCE	Real-Time	G-219
262	4/15/2009	SCE	Real-Time	T-103
263	4/15/2009	SCE	Real-Time	Ramp Rate
264	4/15/2009	SCE	Real-Time	T-103
265	4/15/2009	SCE	Real-Time	T-103
266	4/15/2009	SCE	Real-Time	T-103
267	4/15/2009	SCE	Real-Time	T-103
268	4/15/2009	SCE	Real-Time	Ramp Rate
269	4/15/2009	SCE	Real-Time	T-103
270	4/15/2009	SCE	Real-Time	Ramp Rate
271	4/15/2009	SCE	Real-Time	T-103
272	4/15/2009	SCE	Real-Time	Ramp Rate
273	4/15/2009	SCE	Real-Time	T-103
274	4/15/2009	SDGE	Real-Time	Transmission Outage SDGE

<b>Number</b>	<b>Date</b>	<b>Resource Location</b>	<b>Market</b>	<b>Reason</b>
275	4/15/2009	PGAE	Real-Time	Transmission Outage PGAE
276	4/15/2009	PGAE	Real-Time	Transmission Outage PGAE
277	4/15/2009	Intertie	Real-Time	System Energy
278	4/15/2009	Intertie	Real-Time	System Energy
279	4/15/2009	Intertie	Real-Time	System Energy
280	4/15/2009	Intertie	Real-Time	System Energy
281	4/15/2009	Intertie	Real-Time	System Energy
282	4/15/2009	Intertie	Real-Time	System Energy

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**Table 2: Exceptional Dispatch Costs -- April 1 through April 15**

<b>Number</b>	<b>Date</b>	<b>Resource Location</b>	<b>CC 6470-Inc</b>	<b>CC 6470-Dec</b>	<b>CC 6482</b>
1	4/1/2009	Intertie	565.65	0.00	-31.00
2	4/1/2009	Intertie	0.00	70.00	0.00
3	4/1/2009	Intertie	0.00	450.00	0.00
4	4/1/2009	Intertie	0.00	350.00	0.00
5	4/1/2009	Intertie	0.00	475.00	0.00
6	4/1/2009	SCE	0.00	-148.09	0.00
7	4/1/2009	Intertie	437.39	776.00	0.00
8	4/1/2009	Intertie	0.00	1077.69	0.00
9	4/1/2009	Intertie	0.00	1083.41	0.00
10	4/1/2009	Intertie	0.00	776.00	0.00
11	4/1/2009	SDGE	18704.40	0.00	0.00
12	4/1/2009	SCE	34047.62	0.00	0.00
13	4/1/2009	SCE	0.00	2733.61	0.00
14	4/1/2009	SCE	4028.29	0.00	0.00
15	4/1/2009	PGAE	25729.17	0.00	0.00
16	4/1/2009	PGAE	77369.76	0.00	0.00
17	4/1/2009	PGAE	86397.02	0.00	0.00
18	4/1/2009	PGAE	46.28	0.00	0.00
19	4/1/2009	Intertie	0.00	-500.00	0.00
20	4/1/2009	Intertie	0.00	0.00	0.00
21	4/1/2009	Intertie	0.00	1398.75	0.00
22	4/1/2009	Intertie	0.00	650.00	0.00
23	4/1/2009	Intertie	1604.17	0.00	0.00
24	4/1/2009	Intertie	0.00	205.00	0.00
25	4/1/2009	Intertie	913.80	0.00	-50.00
26	4/1/2009	Intertie	0.00	19732.56	0.00
27	4/1/2009	Intertie	1804.58	-4001.46	-33.33
28	4/1/2009	Intertie	1804.58	0.00	-100.00
29	4/1/2009	Intertie	0.00	4815.97	0.00
30	4/1/2009	Intertie	1368.51	0.00	-75.00
31	4/1/2009	Intertie	0.00	10460.46	0.00
32	4/1/2009	Intertie	2496.84	0.00	-60.67
33	4/1/2009	Intertie	130.06	0.00	-2.33
34	4/1/2009	Intertie	836.09	0.00	-15.00
35	4/1/2009	Intertie	928.99	0.00	-50.00
36	4/1/2009	Intertie	908.25	0.00	-50.00
37	4/1/2009	Intertie	0.00	-268.80	0.00
38	4/1/2009	Intertie	8781.27	0.00	0.00
39	4/1/2009	Intertie	0.00	0.00	0.00
40	4/1/2009	Intertie	0.00	0.00	0.00
41	4/1/2009	Intertie	0.00	-803.44	0.00

Number	Date	Resource Location	CC 6470-Inc	CC 6470-Dec	CC 6482
42	4/1/2009	Intertie	0.00	1525.00	0.00
43	4/1/2009	Intertie	0.00	-2541.11	0.00
44	4/1/2009	Intertie	0.00	500.00	0.00
45	4/2/2009	Intertie	0.00	50.00	0.00
46	4/2/2009	Intertie	0.00	50.00	0.00
47	4/2/2009	Intertie	0.00	100.00	0.00
48	4/2/2009	Intertie	0.00	-141.33	0.00
49	4/2/2009	Intertie	0.00	47.55	0.00
50	4/2/2009	SDGE	24536.35	0.00	0.00
51	4/2/2009	SCE	22364.96	0.00	0.00
52	4/2/2009	PGAE	415.96	0.00	0.00
53	4/2/2009	Intertie	326.17	0.00	0.00
54	4/2/2009	Intertie	0.00	-17.00	0.00
55	4/2/2009	Intertie	0.00	200.00	0.00
56	4/2/2009	Intertie	0.00	202.00	0.00
57	4/2/2009	Intertie	0.00	-7917.67	0.00
58	4/2/2009	SCE	21824.88	0.00	0.00
59	4/2/2009	Intertie	0.00	0.00	0.00
60	4/2/2009	Intertie	0.00	0.00	0.00
61	4/3/2009	Intertie	0.00	-250.00	0.00
62	4/3/2009	Intertie	0.00	0.00	0.00
63	4/3/2009	SDGE	6.28	0.00	0.00
64	4/3/2009	SDGE	20783.83	0.00	0.00
65	4/3/2009	Intertie	0.00	-300.00	0.00
66	4/3/2009	Intertie	0.00	-434.03	0.00
67	4/3/2009	Intertie	0.00	2847.48	0.00
68	4/3/2009	Intertie	0.00	-0.45	0.00
69	4/4/2009	Intertie	0.00	637.25	0.00
70	4/4/2009	Intertie	642.17	0.00	-20.83
71	4/4/2009	Intertie	3195.11	0.00	-12.50
72	4/4/2009	PGAE	0.00	0.00	0.00
73	4/4/2009	PGAE	0.00	-605.99	0.00
74	4/4/2009	PGAE	0.00	-417.66	0.00
75	4/4/2009	SDGE	0.00	0.00	0.00
76	4/4/2009	SDGE	3.96	0.00	0.00
77	4/4/2009	SDGE	22.34	0.00	0.00
78	4/4/2009	PGAE	0.00	0.00	0.00
79	4/4/2009	PGAE	2710.58	0.00	0.00
80	4/4/2009	Intertie	0.00	0.00	0.00
81	4/4/2009	Intertie	2686.38	0.00	-100.00
82	4/4/2009	Intertie	2581.29	0.00	-57.33
83	4/4/2009	Intertie	1278.59	0.00	-5.00
84	4/4/2009	Intertie	9429.65	0.00	-66.67
85	4/5/2009	PGAE	0.00	0.00	0.00
86	4/5/2009	PGAE	0.00	0.00	0.00
87	4/5/2009	PGAE	2960.25	0.00	0.00
88	4/7/2009	SCE	15968.00	0.00	0.00

Number	Date	Resource Location	CC 6470-Inc	CC 6470-Dec	CC 6482
89	4/7/2009	SCE	0.00	0.00	0.00
90	4/9/2009	PGAE	2107.24	0.00	0.00
91	4/9/2009	SCE	13218.96	0.00	0.00
92	4/10/2009	SCE	1468.00	0.00	0.00
93	4/11/2009	Intertie	0.00	0.00	0.00
94	4/11/2009	Intertie	0.00	0.00	0.00
95	4/11/2009	Intertie	38.87	0.00	0.00
96	4/11/2009	Intertie	0.00	125.00	0.00
97	4/11/2009	Intertie	0.00	0.00	0.00
98	4/11/2009	PGAE	0.00	1035.46	0.00
99	4/11/2009	PGAE	980.75	0.00	0.00
100	4/11/2009	PGAE	1905.26	0.00	0.00
101	4/11/2009	CWRP	0.00	2901.48	0.00
102	4/11/2009	Intertie	0.00	-231.34	0.00
103	4/11/2009	Intertie	0.00	-50.00	0.00
104	4/11/2009	Intertie	0.00	0.00	0.00
105	4/11/2009	Intertie	0.00	-50.00	0.00
106	4/11/2009	Intertie	0.00	0.00	0.00
107	4/11/2009	PGAE	0.00	463.18	0.00
108	4/11/2009	PGAE	0.00	463.18	0.00
109	4/11/2009	PGAE	0.00	532.65	0.00
110	4/11/2009	Intertie	0.00	0.00	0.00
111	4/11/2009	Intertie	0.00	0.00	0.00
112	4/11/2009	Intertie	0.00	136.00	0.00
113	4/11/2009	Intertie	0.00	0.00	0.00
114	4/11/2009	Intertie	0.00	498.00	0.00
115	4/11/2009	Intertie	0.00	0.00	0.00
116	4/11/2009	Intertie	0.00	1110.00	0.00
117	4/11/2009	Intertie	0.00	0.00	0.00
118	4/11/2009	PGAE	0.00	621.12	0.00
119	4/11/2009	PGAE	0.00	621.12	0.00
120	4/11/2009	Intertie	0.00	-174.99	0.00
121	4/11/2009	Intertie	0.00	0.00	0.00
122	4/11/2009	Intertie	0.00	-47.88	0.00
123	4/11/2009	Intertie	0.00	0.00	0.00
124	4/11/2009	Intertie	0.00	-49.59	0.00
125	4/11/2009	Intertie	0.00	0.00	0.00
126	4/12/2009	PGAE	0.00	1325.48	0.00
127	4/12/2009	Intertie	0.00	2902.40	0.00
128	4/12/2009	Intertie	0.00	2755.04	0.00
129	4/12/2009	Intertie	0.00	-750.00	0.00
130	4/12/2009	Intertie	0.00	-50.00	0.00
131	4/12/2009	SCE	0.00	6525.66	0.00
132	4/12/2009	PGAE	0.00	975.10	0.00
133	4/12/2009	Intertie	0.00	-390.00	0.00
134	4/12/2009	Intertie	0.00	-1200.00	0.00
135	4/12/2009	Intertie	0.00	-1500.00	0.00

Number	Date	Resource Location	CC 6470-Inc	CC 6470-Dec	CC 6482
136	4/12/2009	Intertie	0.00	-1495.00	0.00
137	4/12/2009	Intertie	0.00	1220.00	0.00
138	4/12/2009	Intertie	0.00	-2342.37	0.00
139	4/12/2009	Intertie	0.00	1219.00	0.00
140	4/12/2009	Intertie	0.00	-660.55	0.00
141	4/12/2009	Intertie	0.00	-720.90	0.00
142	4/12/2009	Intertie	0.00	0.00	0.00
143	4/12/2009	Intertie	0.00	-25.00	0.00
144	4/12/2009	Intertie	0.00	0.00	0.00
145	4/12/2009	Intertie	0.00	-75.00	0.00
146	4/12/2009	Intertie	0.00	0.00	0.00
147	4/13/2009	SCE	54225.10	0.00	0.00
148	4/13/2009	SCE	0.00	0.00	0.00
149	4/13/2009	Intertie	0.00	-150.00	0.00
150	4/13/2009	Intertie	0.00	100.00	0.00
151	4/13/2009	Intertie	0.00	-150.00	0.00
152	4/13/2009	SDGE	11395.47	0.00	0.00
153	4/13/2009	SDGE	0.00	0.00	0.00
154	4/13/2009	Intertie	0.00	-144.00	0.00
155	4/13/2009	Intertie	0.00	0.00	0.00
156	4/13/2009	Intertie	0.00	2645.28	0.00
157	4/13/2009	Intertie	0.00	976.00	0.00
158	4/13/2009	Intertie	0.00	-90.45	0.00
159	4/13/2009	SCE	4944.33	0.00	0.00
160	4/13/2009	Intertie	0.00	100.00	0.00
161	4/14/2009	SCE	56746.06	0.00	0.00
162	4/14/2009	SCE	0.00	0.00	0.00
163	4/14/2009	SCE	55054.46	0.00	0.00
164	4/14/2009	SCE	0.00	0.00	0.00
165	4/14/2009	SDGE	21200.61	0.00	0.00
166	4/14/2009	SDGE	0.00	0.00	0.00
167	4/14/2009	SCE	13749.47	0.00	0.00
168	4/14/2009	SCE	0.00	0.00	0.00
169	4/14/2009	SCE	27644.82	0.00	0.00
170	4/14/2009	SCE	0.00	0.00	0.00
171	4/15/2009	SCE	25708.32	0.00	0.00
172	4/15/2009	SCE	0.00	0.00	0.00
173	4/15/2009	SCE	27353.53	0.00	0.00
174	4/15/2009	SCE	0.00	0.00	0.00
175	4/15/2009	Intertie	0.00	0.00	0.00
176	4/15/2009	Intertie	0.00	-5127.76	0.00
177	4/15/2009	PGAE	0.00	0.00	0.00
178	4/15/2009	PGAE	0.00	0.00	0.00
179	4/15/2009	SCE	7924.63	0.00	0.00
180	4/15/2009	SCE	0.00	0.00	0.00
181	4/15/2009	SDGE	11160.43	0.00	0.00
182	4/15/2009	SDGE	0.00	0.00	0.00

<b>Number</b>	<b>Date</b>	<b>Resource Location</b>	<b>CC 6470-Inc</b>	<b>CC 6470-Dec</b>	<b>CC 6482</b>
183	4/15/2009	SCE	16001.93	0.00	0.00
184	4/15/2009	SCE	0.00	0.00	0.00
185	4/15/2009	SCE	9129.88	0.00	0.00
186	4/15/2009	SCE	0.00	0.00	0.00
187	4/15/2009	Intertie	0.00	-3782.70	0.00
188	4/15/2009	SCE	0.00	0.00	0.00
189	4/15/2009	Intertie	0.00	0.00	0.00
190	4/15/2009	Intertie	0.00	0.00	0.00
		<b>Net Total</b>	<b>762597.56</b>	<b>42860.33</b>	<b>-729.67</b>



California ISO  
Your Link to Power

# **Market Disruption Report May 16 to June 15, 2009**

July 15, 2009

## I. Background

### A. The ISO's Market Disruption Reporting

A Market Disruption is an action or event that causes a failure of a CAISO Market, related to system operation issues or System Emergencies.<sup>1</sup> Pursuant to Section 7.7.15 of the CAISO Tariff, the ISO can take one or more of a number of specified actions in the event of a Market Disruption, to prevent a Market Disruption, or to minimize the extent of a Market Disruption.

In an order issued in Docket Nos. ER06-615-023 and ER07-1257-005 on March 9, 2009,<sup>2</sup> the Commission conditionally accepted tariff provisions related to Market Disruptions and other matters that the ISO had submitted in an earlier compliance filing, effective upon the implementation of the ISO's Market Redesign and Technology Upgrade ("MRTU").<sup>3</sup> Also, the Commission directed the ISO to file, on compliance, tariff provisions requiring the ISO to submit informational Market Disruption reports that contain the following information:

- The frequency and types of actions taken by the ISO pursuant to Section 7.7.15;
- The nature of the Market Disruptions that caused the ISO to take action, or the Market Disruptions that were successfully prevented or minimized by the ISO as a result of taking action, and the ISO's rationale for taking such actions pursuant to Section 7.7.15;
- Information about the Bids (including Self-Schedules) removed pursuant to Section 7.7.15 (*i.e.* megawatt quantity, point of interconnection, specification of the Day-Ahead versus Real-Time Bid, and Energy or Ancillary Services Bid); and
- The ISO's rationale for its removal of Bids (including Self-Schedules) pursuant to Section 7.7.15.<sup>4</sup>

Pursuant to the directives in the March 9 Order, the ISO submitted a compliance filing on April 8, 2009, that included new Section 7.7.15.4 of the

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<sup>1</sup> These system operation issues or System Emergencies are referred to in Sections 7.6 and 7.7, respectively, of the CAISO Tariff. CAISO Tariff, Appendix A, definition of Market Disruption. Capitalized terms not otherwise defined herein have the meanings set forth in the CAISO Tariff.

<sup>2</sup> *California Independent System Operator Corp.*, 126 FERC ¶ 61,211 (2009) ("March 9 Order").

<sup>3</sup> MRTU became effective on March 31, 2009, for the Day-Ahead Market for the April 1, 2009, Trading Day.

<sup>4</sup> *Id.* at P 29 & n.29.

CAISO Tariff. Section 7.7.15.4 requires the ISO to submit reports that contain the information listed above.<sup>5</sup>

## **B. Timing of the ISO's Market Disruption Reports**

In the March 9 Order, the Commission directed the ISO to file its first report on Market Disruptions within 60 days of the implementation of MRTU and to file each subsequent Market Disruption report every 60 days thereafter.<sup>6</sup> The ISO filed its first Market Disruption report on May 15, 2009, as corrected on May 18, 2009 ("May 2009 Report"), and filed its second Market Disruption report on June 15, 2009 ("June 2009 Report"). This is the third such report.

The May 2009 Report concerned Market Disruptions that occurred during the time period from MRTU implementation through April 15, 2009, and the June 2009 Report concerned Market Disruptions that occurred from April 15 through June 15, 2009.<sup>7</sup> As the ISO explained in the May 2009 Report, the ISO proposes to file each subsequent report on a monthly basis rather than every 60 days. Filing on a monthly basis means that each subsequent report will be submitted well within the 60-day time period stated in the March 9 Order. Also, in the May 2009 Report, the ISO explained that it proposes to file its monthly reports on the fifteenth day of each month to cover the time period ending on the fifteenth day of the prior month, thus giving the ISO 30 days to analyze and validate the data and draft the report. Consistent with these proposals, the ISO's third report is being filed on July 15, 2009, and concerns Market Disruptions that occurred from May 16 through June 15, 2009.<sup>8</sup>

## **II. Report on Market Disruptions Occurring from May 16 through June 15, 2009**

The ISO's report on Market Disruptions that occurred during the time period from May 16 through June 15, 2009, is provided in Table 1 and Attachment A, below. As required by the March 9 Order and Section 7.7.15.4 of the CAISO Tariff, the report details the frequency of the Market Disruptions as well as the types of actions taken by the ISO pursuant to Section 7.7.15 of the CAISO Tariff. In addition, the report catalogs the nature of the Market Disruptions and the rationale for any actions taken. The report also includes

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<sup>5</sup> Commission action on the compliance filing is pending.

<sup>6</sup> March 9 Order at P 29.

<sup>7</sup> The May 2009 and June 2009 Reports also included reports on Exceptional Dispatches that occurred during those same time periods. See the discussion in the Exceptional Dispatch report submitted concurrently with the instant report.

<sup>8</sup> May 2009 Report at 1-2. In the May 2009 Report, the ISO explained that it had also made these proposals in the answer to comments and protests the ISO filed on April 28, 2009, in the Exceptional Dispatch proceeding (Docket Nos. ER08-1788 and EL08-88). If the Commission denies any of the proposals, the ISO will modify its future reporting of Market Disruptions in accordance with the Commission's directives.

information about any Bids (including Self-Schedules) removed as a result of a Market Disruption pursuant to Section 7.7.15, and the rationale for their removal.

As explained above, a Market Disruption is defined as an action or event that causes a failure of a CAISO Market related to system operations issues or System Emergencies. The ISO interprets this to mean that a Market Disruption occurs and the ISO is obligated to report its occurrence in any of the following circumstances:

- When any of the ISO market processes fail to publish, including the Integrated Forward Market (“IFM”), Residual Unit Commitment (“RUC”), Hour-Ahead Scheduling Process (“HASP”), Real-Time Pre-Dispatch (“RTPD”), or Real-Time Dispatch (“RTD”) processes;
- When the ISO manually overrides the closing of the Day-Ahead Market; or
- Any time that the ISO removes Bids from a CAISO Market to prevent a Market Disruption or to minimize the extent of a Market Disruption.

Attachment A includes an entry for each reportable Market Disruption event that occurred from May 16 through June 15, 2009. Each entry also indicates:

- (1) the date of the Market Disruption;
- (2) the hour and Dispatch Interval when the Market Disruption ended;
- (3) the type of CAISO Market in which the Market Disruption occurred; and
- (4) a description of the nature of the Market Disruption, the nature of any actions taken by the ISO, the rationale for such actions, and the Market Disruption prevented or minimized as a result of taking such actions.

Table 1 lists, for each type of CAISO Market, the number of Market Disruptions and the number of times that the ISO removed Bids (including Self-Schedules) during the time period covered by this report. As shown in Table 1, there were a total of 65 Market Disruptions for the reporting period, slightly higher than 63 Market Disruptions listed in the June 2009 Report. Table 1 also indicates that no reportable events occurred in the Day-Ahead Market (IFM or RUC) and that the ISO did not remove any Bids (including Self-Schedules) during the reporting period.

As shown in Table 1 and Attachment A, there were 37 total instances of RTPD failure, including 14 HASP failures. Compared with the June 2009 Report, the count of RTPD failures decreased by one and the count of HASP failures

increased by five. Most of the HASP failures can be attributed to the ISO’s receiving no bids, the ISO’s receiving bids late, or the software application timing out. The RTPD failures (including HASP failures) accounted for approximately 57 percent of all of the Market Disruptions during this reporting period.

The number of RTD failures increased to 28 from the 25 such instances listed in the June 2009 Report. As Attachment A indicates, on average there was less than one RTD failure per day during the May 16-June 15 time period. As discussed further below, the majority of these were RTD failures that occurred on a single day (June 5) for 15 consecutive intervals due to a lack of “clean” bids. These failures accounted for about 54 percent of the Real-Time Market Disruptions listed in Attachment A. Approximately 29 percent of the RTD Market Disruption events reported in Attachment A were due to missing or failed broadcasts from RTD or the software application timing out.

On June 5, one table in the ISO’s Scheduling Infrastructure Business Rules (“SIBR”) database was locked and, as a result, SIBR did not process any bids from 1:45 am to 3:45 am. Consequently, ISO Grid Operators had to run the ISO Market using a completely manual dispatch for 1 hour and 15 minutes. This resulted in 15 consecutive RTD failures and 9 consecutive RTPD failures (including 2 HASP failures) on June 5 as shown in Attachment A. A total of 24 Market Disruptions occurred due to this single event, which accounted for approximately 37 percent of Market Disruptions during the reporting period. This SIBR database issue was subsequently resolved and the cause is under investigation by the vendor.

**Table 1: Summary of Market Disruption Report**

Type of CAISO Market	Market Disruption or Reportable Events	Removal of Bids (including Self-Schedules)
<b>Day-Ahead</b>		
IFM	0	0
RUC	0	0
<b>Real-Time</b>		
Real-Time Pre-Dispatch Interval 1	3	0
Real-Time Pre-Dispatch Interval 2	15	0
Real-Time Pre-Dispatch Interval 3	15	0
Real-Time Pre-Dispatch Interval 4	4	0
Real-Time Dispatch	28	0

## **ATTACHMENT A**

**California Independent System Operator Corporation  
Market Disruption Report  
July 15, 2009**

**Market Disruptions, Nature of Actions Taken by the California ISO, Rationale and/or Market Disruption Prevented or Minimized as a Result of such Actions**

Count	Date	Hour	Interval	Market	Nature of Actions, Nature of Market Disruption, Rationale and/or Market Disruption Prevented or Minimized as a Result of such Actions
1	5/18/2009	13	7	RTD	RTD did not run due to missing bids. Loss clearing payload and LMP filled from last good interval.
2	5/20/2009	9	2	HASP	HASP failed due to no bids. Market Disruptions limited to one interval. ISO issued a Market Notification System notice instructing resources to follow Day-Ahead Schedules and Awards for interties. This interval was filled either automatically or interactively. MQS published PNode clearing and resource awards for this interval. Any incremental or decremental Real-Time Energy at the interties beyond the Day-Ahead Schedules that was not dispatched by the ISO is treated as Operational Adjustment for (Tier 2) settlement purposes.
3	5/21/2009	1	2	RTD	RTD broadcast missing. Loss clearing payload and LMP filled from last good interval.
4	5/21/2009	1	2	HASP	HASP failed due to no load forecast. ISO issued a Market Notification System notice instructing resources to follow Day-Ahead Schedules and Awards for interties. This interval was filled either automatically or interactively. MQS published PNode clearing and resource awards for this interval. Any incremental or decremental Real-Time Energy at the interties beyond the Day-Ahead Schedules that was not dispatched by the ISO is treated as Operational Adjustment for (Tier 2) settlement purposes.
5	5/21/2009	24	9	RTD	RTD Broadcast failed. Loss clearing payload and LMP filled from last good interval.

Count	Date	Hour	Interval	Market	Nature of Actions, Nature of Market Disruption, Rationale and/or Market Disruption Prevented or Minimized as a Result of such Actions
6	5/25/2009	2	2	RTD	RTD application timed out. Loss clearing payload and LMP filled in with last good interval.
7	5/25/2009	21	2	HASP	HASP failed due to software issues. ISO issued a Market Notification System notice instructing resources to follow Day-Ahead Schedules and Awards for interties. This interval was filled either automatically or interactively. MQS published PNode clearing and resource awards for this interval. Any incremental or decremental Real-Time Energy at the interties beyond the Day-Ahead Schedules that was not dispatched by the ISO is treated as Operational Adjustment for (Tier 2) settlement purposes.
8	5/25/2009	21	3	RTPD	RTPD failed. This interval was filled either automatically or interactively. MQS published PNode clearing and resource awards for this interval.
9	5/27/2009	5	4	RTPD	RTPD did not run. This interval was filled either automatically or interactively. MQS published PNode clearing and resource awards for this interval.
10	5/28/2009	2	2	RTD	RTD broadcast missing. Loss clearing payload and LMP filled from last good interval.
11	5/28/2009	11	2	HASP	HASP application timed out. ISO issued a Market Notification System notice instructing resources to follow Day-Ahead Schedules and Awards for interties. This interval was filled either automatically or interactively. MQS published PNode clearing and resource awards for this interval. Any incremental or decremental Real-Time Energy at the interties beyond the Day-Ahead Schedules that was not dispatched by the ISO is treated as Operational Adjustment for (Tier 2) settlement purposes.
12	5/28/2009	12	2	HASP	HASP application timed out. ISO issued a Market Notification System notice instructing resources to follow Day-Ahead Schedules and Awards for interties. This interval was filled either automatically or interactively. MQS published PNode clearing and resource awards for this interval. Any incremental or decremental Real-Time Energy at the interties beyond the Day-Ahead Schedules that was not dispatched by the ISO is treated as Operational Adjustment for (Tier 2) settlement purposes.

Count	Date	Hour	Interval	Market	Nature of Actions, Nature of Market Disruption, Rationale and/or Market Disruption Prevented or Minimized as a Result of such Actions
13	5/28/2009	17	3	RTPD	RTPD failed due to application infeasibility. This interval was filled either automatically or interactively. MQS published PNode clearing and resource awards for this interval.
14	5/28/2009	18	3	RTPD	RTPD failed due to software issue. This interval was filled either automatically or interactively. MQS published PNode clearing and resource awards for this interval.
15	5/29/2009	16	1	RTPD	RTPD failed due to software patching required at that time for stability of the market. This interval was filled either automatically or interactively. MQS published PNode clearing and resource awards for this interval.
16	5/29/2009	16	3	RTPD	RTPD did not run due to database and network connectivity issue during software patch installation. This interval was filled either automatically or interactively. MQS published PNode clearing and resource awards for this interval.
17	5/29/2009	16	4	RTD	RTD did not run due to database and network connectivity issue. Loss clearing payload and LMP filled from last good interval.
18	5/30/2009	3	2	HASP	HASP failed due to late bids. ISO issued a Market Notification System notice instructing resources to follow Day-Ahead Schedules and Awards for interties. This interval was filled either automatically or interactively. MQS published PNode clearing and resource awards for this interval. Any incremental or decremental Real-Time Energy at the interties beyond the Day-Ahead Schedules that was not dispatched by the ISO is treated as Operational Adjustment for (Tier 2) settlement purposes.
19	5/30/2009	3	3	RTPD	RTPD did not run. This interval was filled either automatically or interactively. MQS published PNode clearing and resource awards for this interval.
20	6/1/2009	1	2	HASP	HASP broadcast timed out due to database slowness. Market Disruptions limited to one interval. ISO issued a Market Notification System notice instructing resources to follow Day-Ahead Schedules and Awards for interties. This interval was filled either automatically or interactively. MQS published PNode clearing and resource awards for this interval. Any incremental or decremental Real-Time Energy at the interties beyond the Day-Ahead Schedules that was not dispatched by the ISO is treated as Operational Adjustment for (Tier 2) settlement purposes.

Count	Date	Hour	Interval	Market	Nature of Actions, Nature of Market Disruption, Rationale and/or Market Disruption Prevented or Minimized as a Result of such Actions
21	6/2/2009	15	3	RTPD	RTPD failed due to database slowness. This interval was filled either automatically or interactively. MQS published PNode clearing and resource awards for this interval.
22	6/2/2009	15	4	RTD	RTD broadcast missing. Loss clearing payload and LMP filled from last good interval.
23	6/2/2009	15	4	RTPD	RTPD did not run. This interval was filled either automatically or interactively. MQS published PNode clearing and resource awards for this interval.
24	6/2/2009	15	5	RTD	RTD application timed out. Loss clearing payload and LMP filled in with last good interval.
25	6/2/2009	15	6	RTD	RTD application timed out. Loss clearing payload and LMP filled in with last good interval.
26	6/2/2009	15	7	RTD	RTD did not run. Loss clearing payload and LMP filled from last good interval.
27	6/2/2009	15	8	RTD	RTD did not run. Loss clearing payload and LMP filled from last good interval.
28	6/3/2009	24	2	HASP	HASP failed due to time out. Market Disruptions limited to one interval. ISO issued a Market Notification System notice instructing resources to follow Day-Ahead Schedules and Awards for interties. This interval was filled either automatically or interactively. MQS published PNode clearing and resource awards for this interval. Any incremental or decremental Real-Time Energy at the interties beyond the Day-Ahead Schedules that was not dispatched by the ISO is treated as Operational Adjustment for (Tier 2) settlement purposes.
29	6/4/2009	17	2	HASP	HASP timed out. ISO issued a Market Notification System notice instructing resources to follow Day-Ahead Schedules and Awards for interties. This interval was filled either automatically or interactively. MQS published PNode clearing and resource awards for this interval. Any incremental or decremental Real-Time Energy at the interties beyond the Day-Ahead Schedules that was not dispatched by the ISO is treated as Operational Adjustment for (Tier 2) settlement purposes.

Count	Date	Hour	Interval	Market	Nature of Actions, Nature of Market Disruption, Rationale and/or Market Disruption Prevented or Minimized as a Result of such Actions
30	6/4/2009	17	3	RTPD	RTPD did not run. This interval was filled either automatically or interactively. MQS published PNode clearing and resource awards for this interval.
31	6/5/2009	3	2	HASP	HASP failed due to no clean bids. ISO issued a Market Notification System notice instructing resources to follow Day-Ahead Schedules and Awards for interties. This interval was filled either automatically or interactively. MQS published PNode clearing and resource awards for this interval. Any incremental or decremental Real-Time Energy at the interties beyond the Day-Ahead Schedules that was not dispatched by the ISO is treated as Operational Adjustment for (Tier 2) settlement purposes.
32	6/5/2009	3	3	RTPD	RTPD failed due to no clean bids. This interval was filled either automatically or interactively. MQS published PNode clearing and resource awards for this interval using best information available.
33	6/5/2009	3	4	RTPD	RTPD failed due to no clean bids. This interval was filled either automatically or interactively. MQS published PNode clearing and resource awards for this interval.
34	6/5/2009	4	1	RTD	RTD did not run due to lack of clean bids for the entire hour. Loss clearing payload and LMP filled from last good interval or best information available.
35	6/5/2009	4	1	RTPD	RTPD failed due to no clean bids. This interval was filled either automatically or interactively. MQS published PNode clearing and resource awards for this interval.
36	6/5/2009	4	2	RTD	RTD did not run due to lack of clean bids for the entire hour. Loss clearing payload and LMP filled from last good interval or best information available.
37	6/5/2009	4	2	HASP	HASP failed due to no clean bids. ISO issued a Market Notification System notice instructing resources to follow Day-Ahead Schedules and Awards for interties. This interval was filled either automatically or interactively. MQS published PNode clearing and resource awards for this interval. Any incremental or decremental Real-Time Energy at the interties beyond the Day-Ahead Schedules that was not dispatched by the ISO is treated as Operational Adjustment for (Tier 2) settlement purposes.
38	6/5/2009	4	3	RTD	RTD did not run due to lack of clean bids for the entire hour. Loss clearing payload and LMP filled from last good interval or best information available.

Count	Date	Hour	Interval	Market	Nature of Actions, Nature of Market Disruption, Rationale and/or Market Disruption Prevented or Minimized as a Result of such Actions
39	6/5/2009	4	3	RTPD	RTPD failed due to no clean bids. This interval was filled either automatically or interactively. MQS published PNode clearing and resource awards for this interval.
40	6/5/2009	4	4	RTD	RTD did not run due to lack of clean bids for the entire hour. Loss clearing payload and LMP filled from last good interval or best information available.
41	6/5/2009	4	4	RTPD	RTPD failed due to no clean bids. This interval was filled either automatically or interactively. MQS published PNode clearing and resource awards for this interval.
42	6/5/2009	4	5	RTD	RTD did not run due to lack of clean bids for the entire hour. Loss clearing payload and LMP filled from last good interval or best information available.
43	6/5/2009	4	6	RTD	RTD did not run due to lack of clean bids for the entire hour. Loss clearing payload and LMP filled from last good interval or best information available.
44	6/5/2009	4	7	RTD	RTD did not run due to lack of clean bids for the entire hour. Loss clearing payload and LMP filled from last good interval or best information available.
45	6/5/2009	4	8	RTD	RTD did not run due to lack of clean bids for the entire hour. Loss clearing payload and LMP filled from last good interval or best information available.
46	6/5/2009	4	9	RTD	RTD did not run due to lack of clean bids for the entire hour. Loss clearing payload and LMP filled from last good interval or best information available.
47	6/5/2009	4	10	RTD	RTD did not run due to lack of clean bids for the entire hour. Loss clearing payload and LMP filled from last good interval or best information available.
48	6/5/2009	4	11	RTD	RTD did not run due to lack of clean bids for the entire hour. Loss clearing payload and LMP filled from last good interval or best information available.
49	6/5/2009	4	12	RTD	RTD did not run due to lack of clean bids for the entire hour. Loss clearing payload and LMP filled from last good interval or best information available.
50	6/5/2009	5	1	RTD	RTD did not run due to lack of clean bids. Loss clearing payload and LMP filled from last good interval or best information available.
51	6/5/2009	5	1	RTPD	RTPD did not run. This interval was filled either automatically or Interactively. MQS published PNode clearing and resource awards for this interval.

Count	Date	Hour	Interval	Market	Nature of Actions, Nature of Market Disruption, Rationale and/or Market Disruption Prevented or Minimized as a Result of such Actions
52	6/5/2009	5	2	RTD	RTD did not run due to lack of clean bids. Loss clearing payload and LMP filled from last good interval or best information available.
53	6/5/2009	5	2	RTPD	RTPD failed. This interval was filled either automatically or Interactively. MQS published PNode clearing and resource awards for this interval.
54	6/5/2009	5	3	RTD	RTD did not run due to lack of clean bids for the entire hour. Loss clearing payload and LMP filled from last good interval or best information available.
55	6/5/2009	5	12	RTD	RTD Broadcast failed. Loss clearing payload and LMP filled from last good interval.
56	6/7/2009	1	2	HASP	HASP timed out. ISO issued a Market Notification System notice instructing resources to follow Day-Ahead Schedules and Awards for interties. This interval was filled either automatically or interactively. MQS published PNode clearing and resource awards for this interval. Any incremental or decremental Real-Time Energy at the interties beyond the Day-Ahead Schedules that was not dispatched by the ISO is treated as Operational Adjustment for (Tier 2) settlement purposes.
57	6/7/2009	1	3	RTPD	RTPD did not run. This interval was filled either automatically or interactively. MQS published PNode clearing and resource awards for this interval.
58	6/9/2009	15	3	RTPD	RTPD failed. This interval was filled either automatically or interactively. MQS published PNode clearing and resource awards for this interval.
59	6/9/2009	17	11	RTD	RTD did not run. Loss clearing payload and LMP filled from last good interval.
60	6/10/2009	3	2	HASP	HASP failed due to late bid transfer. ISO issued a Market Notification System notice instructing resources to follow Day-Ahead Schedules and Awards for interties. This interval was filled either automatically or interactively. MQS published PNode clearing and resource awards for this interval. Any incremental or decremental Real-Time Energy at the interties beyond the Day-Ahead Schedules that was not dispatched by the ISO is treated as Operational Adjustment for (Tier 2) settlement purposes.
61	6/10/2009	3	3	RTPD	RTPD did not run. This interval was filled either automatically or interactively. MQS published PNode clearing and resource awards for this interval.

Count	Date	Hour	Interval	Market	Nature of Actions, Nature of Market Disruption, Rationale and/or Market Disruption Prevented or Minimized as a Result of such Actions
62	6/10/2009	15	3	RTPD	STUC timed out. This interval was filled either automatically or interactively. MQS published PNode clearing and resource awards for this interval.
63	6/12/2009	16	3	RTPD	STUC timed out. This interval was filled either automatically or interactively. MQS published PNode clearing and resource awards for this interval.
64	6/15/2009	24	2	HASP	HASP did not run due to late bid transfer. ISO issued a Market Notification System notice instructing resources to follow Day-Ahead Schedules and Awards for interties. This interval was filled either automatically or interactively. MQS published PNode clearing and resource awards for this interval. Any incremental or decremental Real-Time Energy at the interties beyond the Day-Ahead Schedules that was not dispatched by the ISO is treated as Operational Adjustment for (Tier 2) settlement purposes.
65	6/15/2009	24	3	RTPD	RTPD broadcast missing. This interval was filled either automatically or interactively. MQS published PNode clearing and resource awards for this interval.
<b>Notes:</b>					
Integrated Forward Market (IFM): The Day-Ahead Market run in which the ISO conducts the market for purchases and sales of Energy for all hours of the next Trading Day based on submitted supply and demand bids, and performs the procurement of Ancillary Services.					
Residual Unit Commitment (RUC): The Day-Ahead Market run in which the ISO conducts unit commitment of additional resources based on submitted availability bids and the forecast of demand for every hour of the next Trading Day.					
Real-Time Pre-Dispatch (RTPD) Interval 1: The first of a series of four market runs conducted every Trading Hour in advance of the Operating Hour. In this run the ISO conducts the Market Power Mitigation and Reliability Requirement Determination for submitted Bids, which applies to all of the Real-Time Market processes for the given Trading Hour. In this interval the ISO also conducts the procurement of incremental Ancillary Services from internal resources and dynamic external resources.					
Real-Time Pre-Dispatch (RTPD) Interval 2: The second of a series of four market runs conducted every Trading Hour in advance of the Operating Hour during which the ISO conducts the HASP. In the HASP, the ISO conducts the procurement and sale of Energy and Ancillary services from non-dynamic System Resources based on submitted Bids and the CAISO Forecast of CAISO Demand. In this interval the ISO also conducts the advisory procurement of incremental Ancillary Services from internal resources and dynamic external resources from T to T+60 minutes and procurement for the given Trading Hour.					
Real-Time Pre-Dispatch (RTPD) Interval 3: The third of a series of four market runs conducted every Trading Hour. During this interval the ISO conducts the commitment of internal Short-Start and Fast Start Units for the Time Horizon of T-30 minutes to T+240 minutes. In this interval the ISO also conducts the procurement of incremental Ancillary Services from internal resources and dynamic external resources for the given Trading Hour.					
Real-Time Pre-Dispatch (RTPD) Interval 4: The fourth of a series of four market runs conducted every Trading Hour. This interval is for the Real-					

time Unit Commitment for the T-105 minutes to T+60 minutes time horizon. In this interval the ISO also conducts 15-minute Ancillary Service Awards for non-Hourly System Resources, internal resources and dynamic external resources for the given Trading Hour.

Real-Time Dispatch (RTD): The five minute interval of any given Operating Hour during which the ISO conducts the market for Energy based on submitted bids and the CAISO Forecast of CAISO Demand.

## 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 proceeding, 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 July, 2009.

*Anna Pascuzzo*  
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