



California Independent  
System Operator Corporation

October 17, 2011

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

**Re: California Independent System Operator Corporation  
Docket Nos. ER06-615-\_\_\_ and ER07-1257-\_\_\_  
Market Disruption Report**

Dear Secretary Bose:

The California Independent System Operator Corporation (ISO) hereby submits its July/August report covering Market Disruptions reportable events under Section 7.7.15 of its FERC Electric Tariff (ISO Tariff) that occurred from August 16, 2011 to September 15, 2011.<sup>1</sup>

Please contact the undersigned with any questions.

Respectfully submitted,

**By: /s/ Anna McKenna**

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<sup>1</sup> The ISO submits the Market Disruption report pursuant to *California Independent System Operator Corp.*, 126 FERC ¶ 61,211 (2009), and Section 7.7.15.4 of the ISO Tariff.



California ISO  
Shaping a Renewed Future

# Market Disruption Report August 16, 2011 to September 15, 2011

October 15, 2011

ISO Department of Market Services

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California ISO  
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(916) 351-4400

## I. Background

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 ISO Tariff, the California Independent System Operator Corporation (ISO or CAISO) 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. 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 Unit Commitment (“RTUC”), 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.

The Market Disruption report contains 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>2</sup>

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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 ISO Tariff. ISO Tariff, Appendix A, definition of Market Disruption. Capitalized terms not otherwise defined herein have the meanings set forth in the ISO Tariff.

<sup>2</sup> *Id.* at P 29 & n.29.

**II. Report on Market Disruptions Occurring from August 16, 2011 through September 15, 2011**

The ISO’s report on Market Disruptions that occurred during the time period from August 16, 2011 through September 15, 2011, is provided in Table 1 and Attachment A below. Attachment A includes an entry for each reportable Market Disruption event and 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.

For each of the CAISO Markets, Table 1 lists 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 218 Market Disruptions for the reporting period, all of which occurred in the Real-Time Market (RTM). The number of Market Disruptions increased as compared with the September 2011 report. Table 1 also indicates that the ISO did not remove any Bids (including Self-Schedules) in any of its markets during the reporting period.

**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 Unit Commitment Interval 1	0	0
Real-Time Unit Commitment Interval 2	11	0
Real-Time Unit Commitment Interval 3	9	0
Real-Time Unit Commitment Interval 4	4	0
Real-Time Dispatch	194	0

Table 1 and Attachment A indicate that there were 24 instances of RTUC failures, including 11 HASP failures. The count of RTUC failures and HASP

failures increased by 16 compared with the September 2011 Report. Most of the RTUC failures (including the HASP failures) were caused by market suspension, software application failure, software application not running, and database issue. The frequency of RTD failures increased to 194 from 55 of such instances reported in the September 2011 Report. Most of the RTD failures were due to market suspension, software application failure, software application timing out, database issue, and broadcast results failure. RTD failures accounted for approximately 89 percent of all of the Market Disruptions during this reporting period.

On August 23 and 29, twenty RTD failures occurred due to broadcast issues, software issues, and other reasons.

On August 30, nine RTD failures and one RTUC failure occurred.

On September 8, the ISO experienced a major system disturbance and temporarily suspended the wholesale real-time energy markets as of 6:00 p.m. (Pacific Time), hour ending 19. The market suspension ended as of 1:00 a.m. (Pacific Time) hour ending 2 on September 9, 2011 for the Pacific Gas and Electric Company (PG&E) and Southern California Edison (SCE) service areas and ended as of 4:00 a.m. (Pacific Time), hour ending 5 on September 9, 2011 for the San Diego Gas and Electric (SDG&E) service area. Attachment A reflects that the entire market was suspended between 6:00 p.m. and 1:00 a.m. Although the suspension continued in the SDG&E service area until 4:00 a.m., the suspension had ended for the PG&E and SCE areas as of 1:00 a.m. Attachment 1, therefore, reflects market failures that occurred between 1:00 a.m. and 4:00 a.m. in the PG&E and SCE areas only while the SDG&E area was still under suspension.

In addition to the suspension discussed above, on September 8 and 9, 114 RTD failures, four RTUC failures, and ten HASP failures occurred. Most of these failures were nevertheless related to the major system disturbance.

On September 10, fourteen RTD failures occurred due to broadcast issues and other reasons.

On February 8, 2011, the ISO suspended the following intertie locations from the list of convergence bidding eligible locations due to real-time physical schedule cuts:

INTERM1G\_7\_N501  
GONDER\_2\_N501  
MONA\_3\_N501  
MARKETPL\_5\_N501  
MEADN\_2\_N501  
MEAD\_5\_N501

WESTWING\_5\_N501  
FOURCORN\_3\_N501  
MCCULLGX\_5\_N501

The ISO exercised its authority under Section 7.9, 7.7.15 and 31.8 of the ISO tariff. The rules implemented to enforce tariff section 31.8 did not work at the identified suspended locations. These locations were returned to service as of July 20, 2011 and are no longer suspended. The market notice information the market is available at the following link:

[http://www.caiso.com/Documents/ConvergenceBiddingIntertieLocationsRe-enabled\\_TradingDateJuly20.htm](http://www.caiso.com/Documents/ConvergenceBiddingIntertieLocationsRe-enabled_TradingDateJuly20.htm)

## **ATTACHMENT A**

**California Independent System Operator Corporation  
Market Disruption Report  
October 15, 2011**

**Table 1: 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	8/16/2011	16	4	RTUC	RTUC failed due to software issues. This interval was filled either automatically or interactively. MQS published PNode clearing and resource awards for this interval.
2	8/16/2011	16	6	RTD	RTD did not run due to software patch deployment. Loss clearing payload and LMP filled from last good interval.
3	8/16/2011	16	7	RTD	RTD did not run due to software patch deployment. Loss clearing payload and LMP filled from last good interval.
4	8/16/2011	20	3	RTUC	RTUC failed due to software issues. This interval was filled either automatically or interactively. MQS published PNode clearing and resource awards for this interval.
5	8/17/2011	16	8	RTD	Broadcast of RTD results failed. Loss clearing payload and LMP filled from last good interval.
6	8/18/2011	11	11	RTD	RTD failed due to software issues. Loss clearing payload and LMP filled from advisory results.
7	8/18/2011	11	12	RTD	RTD failed due to software issues. Loss clearing payload and LMP filled from advisory results.
8	8/20/2011	1	1	RTD	RTD 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
9	8/21/2011	18	3	RTD	RTD failed. Loss clearing payload and LMP filled from last good interval.
10	8/22/2011	23	1	RTD	RTD failed. Loss clearing payload and LMP filled from last good interval.
11	8/23/2011	7	1	RTD	Broadcast of RTD results failed. Loss clearing payload and LMP filled from last good interval.
12	8/23/2011	11	11	RTD	RTD failed due to software issues. Loss clearing payload and LMP filled from advisory results.
13	8/23/2011	11	12	RTD	RTD failed due to software issues. Loss clearing payload and LMP filled from advisory results.
14	8/23/2011	19	1	RTD	Broadcast of RTD results failed. Loss clearing payload and LMP filled from last good interval.
15	8/23/2011	19	2	RTD	RTD failed. Loss clearing payload and LMP filled from last good interval.
16	8/23/2011	19	3	RTD	RTD failed. Loss clearing payload and LMP filled from last good interval.
17	8/23/2011	19	5	RTD	RTD failed. Loss clearing payload and LMP filled from last good interval.
18	8/23/2011	22	4	RTD	RTD failed. Loss clearing payload and LMP filled from last good interval.
19	8/24/2011	13	4	RTD	Broadcast of RTD results failed. Loss clearing payload and LMP filled from last good interval.
20	8/24/2011	15	11	RTD	Broadcast of RTD results 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
21	8/24/2011	21	6	RTD	Broadcast of RTD results failed. Loss clearing payload and LMP filled from last good interval.
22	8/24/2011	23	1	RTD	Broadcast of RTD results failed. Loss clearing payload and LMP filled from last good interval.
23	8/25/2011	9	1	RTD	Broadcast of RTD results failed. Loss clearing payload and LMP filled from last good interval.
24	8/25/2011	10	4	RTUC	RTUC failed due to software issues. This interval was filled either automatically or interactively. MQS published PNode clearing and resource awards for this interval.
25	8/25/2011	10	7	RTD	Broadcast of RTD results failed. Loss clearing payload and LMP filled from last good interval.
26	8/25/2011	10	9	RTD	Broadcast of RTD results failed. Loss clearing payload and LMP filled from last good interval.
27	8/25/2011	10	11	RTD	Broadcast of RTD results failed. Loss clearing payload and LMP filled from last good interval.
28	8/25/2011	23	1	RTD	Broadcast of RTD results failed. Loss clearing payload and LMP filled from last good interval.
29	8/28/2011	3	2	RTD	Broadcast of RTD results failed. Loss clearing payload and LMP filled from last good interval.
30	8/28/2011	12	9	RTD	RTD failed due to solution infeasibility. Loss clearing payload and LMP filled from advisory results.
31	8/29/2011	10	10	RTD	Broadcast of RTD results failed. Loss clearing payload and LMP filled from last good interval.
32	8/29/2011	11	1	RTD	Broadcast of RTD results 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
33	8/29/2011	12	2	RTD	Broadcast of RTD results failed. Loss clearing payload and LMP filled from last good interval.
34	8/29/2011	12	6	RTD	Broadcast of RTD results failed. Loss clearing payload and LMP filled from last good interval.
35	8/29/2011	13	6	RTD	Broadcast of RTD results failed. Loss clearing payload and LMP filled from last good interval.
36	8/29/2011	13	9	RTD	Broadcast of RTD results failed. Loss clearing payload and LMP filled from last good interval.
37	8/29/2011	14	3	RTD	Broadcast of RTD results failed. Loss clearing payload and LMP filled from last good interval.
38	8/29/2011	14	5	RTD	Broadcast of RTD results failed. Loss clearing payload and LMP filled from last good interval.
39	8/29/2011	14	6	RTD	Broadcast of RTD results failed. Loss clearing payload and LMP filled from last good interval.
40	8/29/2011	15	9	RTD	Broadcast of RTD results failed. Loss clearing payload and LMP filled from last good interval.
41	8/29/2011	15	10	RTD	Broadcast of RTD results failed. Loss clearing payload and LMP filled from last good interval.
42	8/29/2011	23	1	RTD	Broadcast of RTD results failed. Loss clearing payload and LMP filled from last good interval.
43	8/30/2011	3	2	RTD	Broadcast of RTD results failed. Loss clearing payload and LMP filled from last good interval.
44	8/30/2011	9	5	RTD	Broadcast of RTD results 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
45	8/30/2011	9	6	RTD	Broadcast of RTD results failed. Loss clearing payload and LMP filled from last good interval.
46	8/30/2011	9	7	RTD	Broadcast of RTD results failed. Loss clearing payload and LMP filled from last good interval.
47	8/30/2011	10	6	RTD	Broadcast of RTD results failed. Loss clearing payload and LMP filled from last good interval.
48	8/30/2011	10	5	RTD	Broadcast of RTD results failed. Loss clearing payload and LMP filled from last good interval.
49	8/30/2011	10	10	RTD	Broadcast of RTD results failed. Loss clearing payload and LMP filled from last good interval.
50	8/30/2011	11	7	RTD	Broadcast of RTD results failed. Loss clearing payload and LMP filled from last good interval.
51	8/30/2011	11	9	RTD	Broadcast of RTD results failed. Loss clearing payload and LMP filled from last good interval.
52	8/30/2011	11	4	RTUC	Broadcast of RTUC results failed. This interval was filled either automatically or interactively. MQS published PNode clearing and resource awards for this interval.
53	8/31/2011	1	1	RTD	RTD failed. Loss clearing payload and LMP filled from last good interval.
54	8/31/2011	7	10	RTD	RTD failed. Loss clearing payload and LMP filled from last good interval.
55	8/31/2011	23	5	RTD	RTD failed due to software issues. Loss clearing payload and LMP filled from advisory results.
56	9/1/2011	1	1	RTD	RTD 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
57	9/1/2011	14	5	RTD	RTD did not run due to software patch deployment. Loss clearing payload and LMP filled from last good interval.
58	9/1/2011	14	6	RTD	RTD did not run due to software patch deployment. Loss clearing payload and LMP filled from last good interval.
59	9/1/2011	21	4	RTD	RTD failed. Loss clearing payload and LMP filled from last good interval.
60	9/2/2011	17	2	HASP	HASP did not run. This interval was filled either automatically or interactively. MQS published PNode clearing and resource awards for this interval.
61	9/2/2011	17	3	RTUC	RTUC did not run. This interval was filled either automatically or interactively. MQS published PNode clearing and resource awards for this interval.
62	9/4/2011	10	3	RTD	Broadcast of RTD results failed. Loss clearing payload and LMP filled from last good interval.
63	9/5/2011	22	8	RTD	Broadcast of RTD results failed. Loss clearing payload and LMP filled from last good interval.
64	9/5/2011	22	10	RTD	RTD failed. Loss clearing payload and LMP filled from last good interval.
65	9/6/2011	20	3	RTUC	RTUC failed due to software issues. This interval was filled either automatically or interactively. MQS published PNode clearing and resource awards for this interval.
66	9/6/2011	21	7	RTD	RTD failed. Loss clearing payload and LMP filled from last good interval.
67	9/6/2011	22	6	RTD	Broadcast of RTD results failed. Loss clearing payload and LMP filled from last good interval.
68	9/6/2011	23	7	RTD	RTD 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
69	9/8/2011	7	3	RTUC	RTUC failed due to software issues. This interval was filled either automatically or interactively. MQS published PNode clearing and resource awards for this interval.
70	9/8/2011	16	11	RTD	RTD failed. Loss clearing payload and LMP filled from last good interval.
71	9/8/2011	16	12	RTD	RTD failed. Loss clearing payload and LMP filled from last good interval.
72	9/8/2011	17	1	RTD	RTD failed. Loss clearing payload and LMP filled from last good interval.
73	9/8/2011	17	2	RTD	RTD failed. Loss clearing payload and LMP filled from last good interval.
74	9/8/2011	17	3	RTD	RTD failed. Loss clearing payload and LMP filled from last good interval.
75	9/8/2011	17	3	RTUC	RTUC failed due to system disturbance. This interval was filled either automatically or interactively. MQS published PNode clearing and resource awards for this interval.
76	9/8/2011	17	4	RTD	RTD failed. Loss clearing payload and LMP filled from last good interval.
77	9/8/2011	17	5	RTD	RTD failed. Loss clearing payload and LMP filled from last good interval.
78	9/8/2011	17	6	RTD	RTD failed. Loss clearing payload and LMP filled from last good interval.
79	9/8/2011	17	7	RTD	RTD failed. Loss clearing payload and LMP filled from last good interval.
80	9/8/2011	17	8	RTD	RTD 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
81	9/8/2011	17	9	RTD	RTD failed. Loss clearing payload and LMP filled from last good interval.
82	9/8/2011	17	10	RTD	RTD failed. Loss clearing payload and LMP filled from last good interval.
83	9/8/2011	17	11	RTD	RTD failed. Loss clearing payload and LMP filled from last good interval.
84	9/8/2011	17	12	RTD	RTD failed. Loss clearing payload and LMP filled from last good interval.
85	9/8/2011	18	1	RTD	RTD failed. Loss clearing payload and LMP filled from last good interval.
86	9/8/2011	18	2	RTD	RTD failed. Loss clearing payload and LMP filled from last good interval.
87	9/8/2011	18	3	RTD	RTD failed. Loss clearing payload and LMP filled from last good interval.
88	9/8/2011	18	3	RTUC	RTUC failed due to software issues. This interval was filled either automatically or interactively. MQS published PNode clearing and resource awards for this interval.
89	9/8/2011	18	4	RTD	RTD failed. Loss clearing payload and LMP filled from last good interval.
90	9/8/2011	18	5	RTD	RTD failed. Loss clearing payload and LMP filled from last good interval.
91	9/8/2011	18	6	RTD	RTD failed. Loss clearing payload and LMP filled from last good interval.
92	9/8/2011	18	7	RTD	RTD 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
93	9/8/2011	18	8	RTD	RTD failed. Loss clearing payload and LMP filled from last good interval.
94	9/8/2011	18	9	RTD	RTD failed. Loss clearing payload and LMP filled from last good interval.
95	9/8/2011	18	10	RTD	RTD failed. Loss clearing payload and LMP filled from last good interval.
96	9/8/2011	18	11	RTD	RTD failed. Loss clearing payload and LMP filled from last good interval.
97	9/8/2011	18	12	RTD	RTD failed. Loss clearing payload and LMP filled from last good interval.
98	9/8/2011	19	1	RTD	RTD suspended due to system disturbance. Loss LMP filled with \$250 price..
99	9/8/2011	19	2	RTD	RTD suspended due to system disturbance. Loss LMP filled with \$250 price.
100	9/8/2011	19	3	RTD	RTD suspended due to system disturbance. Loss LMP filled with \$250 price.
101	9/8/2011	19	4	RTD	RTD suspended due to system disturbance. Loss LMP filled with \$250 price.
102	9/8/2011	19	5	RTD	RTD suspended due to system disturbance. Loss LMP filled with \$250 price.
103	9/8/2011	19	6	RTD	RTD suspended due to system disturbance. Loss LMP filled with \$250 price.
104	9/8/2011	19	7	RTD	RTD suspended due to system disturbance. Loss LMP filled with \$250 price.



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
105	9/8/2011	19	8	RTD	RTD suspended due to system disturbance. Loss LMP filled with \$250 price.
106	9/8/2011	19	9	RTD	RTD suspended due to system disturbance. Loss LMP filled with \$250 price.
107	9/8/2011	19	10	RTD	RTD suspended due to system disturbance. Loss LMP filled with \$250 price.
108	9/8/2011	19	11	RTD	RTD suspended due to system disturbance. Loss LMP filled with \$250 price.
109	9/8/2011	19	12	RTD	RTD suspended due to system disturbance. Loss LMP filled with \$250 price.
110	9/8/2011	20	1	RTD	RTD suspended due to system disturbance. Loss LMP filled with \$250 price.
111	9/8/2011	20	2	RTD	RTD suspended due to system disturbance. Loss LMP filled with \$250 price.
112	9/8/2011	20	3	RTD	RTD suspended due to system disturbance. Loss LMP filled with \$250 price.
113	9/8/2011	20	4	RTD	RTD suspended due to system disturbance. Loss LMP filled with \$250 price.
114	9/8/2011	20	5	RTD	RTD suspended due to system disturbance. Loss LMP filled with \$250 price.
115	9/8/2011	20	6	RTD	RTD suspended due to system disturbance. Loss LMP filled with \$250 price.
116	9/8/2011	20	7	RTD	RTD suspended due to system disturbance. Loss LMP filled with \$250 price.

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
117	9/8/2011	20	8	RTD	RTD suspended due to system disturbance. Loss LMP filled with \$250 price.
118	9/8/2011	20	9	RTD	RTD suspended due to system disturbance. Loss LMP filled with \$250 price.
119	9/8/2011	20	10	RTD	RTD suspended due to system disturbance. Loss LMP filled with \$250 price.
120	9/8/2011	20	11	RTD	RTD suspended due to system disturbance. Loss LMP filled with \$250 price.
121	9/8/2011	20	12	RTD	RTD suspended due to system disturbance. Loss LMP filled with \$250 price.
122	9/8/2011	21	1	RTD	RTD suspended due to system disturbance. Loss LMP filled with \$250 price.
123	9/8/2011	21	2	RTD	RTD suspended due to system disturbance. Loss LMP filled with \$250 price.
124	9/8/2011	21	3	RTD	RTD suspended due to system disturbance. Loss LMP filled with \$250 price.
125	9/8/2011	21	4	RTD	RTD suspended due to system disturbance. Loss LMP filled with \$250 price.
126	9/8/2011	21	5	RTD	RTD suspended due to system disturbance. Loss LMP filled with \$250 price.
127	9/8/2011	21	6	RTD	RTD suspended due to system disturbance. Loss LMP filled with \$250 price.
128	9/8/2011	21	7	RTD	RTD suspended due to system disturbance. Loss LMP filled with \$250 price.

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
129	9/8/2011	21	8	RTD	RTD suspended due to system disturbance. Loss LMP filled with \$250 price.
130	9/8/2011	21	9	RTD	RTD suspended due to system disturbance. Loss LMP filled with \$250 price.
131	9/8/2011	21	10	RTD	RTD suspended due to system disturbance. Loss LMP filled with \$250 price.
132	9/8/2011	21	11	RTD	RTD suspended due to system disturbance. Loss LMP filled with \$250 price.
133	9/8/2011	21	12	RTD	RTD suspended due to system disturbance. Loss LMP filled with \$250 price.
134	9/8/2011	22	1	RTD	RTD suspended due to system disturbance. Loss LMP filled with \$100 price.
135	9/8/2011	22	2	RTD	RTD suspended due to system disturbance. Loss LMP filled with \$100 price.
136	9/8/2011	22	3	RTD	RTD suspended due to system disturbance. Loss LMP filled with \$100 price.
137	9/8/2011	22	4	RTD	RTD suspended due to system disturbance. Loss LMP filled with \$100 price.
138	9/8/2011	22	5	RTD	RTD suspended due to system disturbance. Loss LMP filled with \$100 price.
139	9/8/2011	22	6	RTD	RTD suspended due to system disturbance. Loss LMP filled with \$100 price.
140	9/8/2011	22	7	RTD	RTD suspended due to system disturbance. Loss LMP filled with \$100 price.

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
141	9/8/2011	22	8	RTD	RTD suspended due to system disturbance. Loss LMP filled with \$100 price.
142	9/8/2011	22	9	RTD	RTD suspended due to system disturbance. Loss LMP filled with \$100 price.
143	9/8/2011	22	10	RTD	RTD suspended due to system disturbance. Loss LMP filled with \$100 price.
144	9/8/2011	22	11	RTD	RTD suspended due to system disturbance. Loss LMP filled with \$100 price.
145	9/8/2011	22	12	RTD	
146	9/8/2011	19	2	HASP	HASP suspended due to system disturbance. HASP LMP filled with \$250 price.
147	9/8/2011	20	2	HASP	HASP suspended due to system disturbance. HASP LMP filled with \$250 price.
148	9/8/2011	21	2	HASP	HASP suspended due to system disturbance. HASP LMP filled with \$250 price.
149	9/8/2011	22	2	HASP	HASP suspended due to system disturbance. HASP LMP filled with \$250 price.
150	9/8/2011	23	1	RTD	RTD suspended due to system disturbance. Loss LMP filled with \$100 price.
151	9/8/2011	23	2	RTD	RTD suspended due to system disturbance. Loss LMP filled with \$100 price.
152	9/8/2011	23	3	RTD	RTD suspended due to system disturbance. Loss LMP filled with \$100 price.

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
153	9/8/2011	23	4	RTD	RTD suspended due to system disturbance. Loss LMP filled with \$100 price.
154	9/8/2011	23	5	RTD	RTD suspended due to system disturbance. Loss LMP filled with \$100 price.
155	9/8/2011	23	6	RTD	RTD suspended due to system disturbance. Loss LMP filled with \$100 price.
156	9/8/2011	23	7	RTD	RTD suspended due to system disturbance. Loss LMP filled with \$100 price.
157	9/8/2011	23	8	RTD	RTD suspended due to system disturbance. Loss LMP filled with \$100 price.
158	9/8/2011	23	9	RTD	RTD suspended due to system disturbance. Loss LMP filled with \$100 price.
159	9/8/2011	23	10	RTD	RTD suspended due to system disturbance. Loss LMP filled with \$100 price.
160	9/8/2011	23	11	RTD	RTD suspended due to system disturbance. Loss LMP filled with \$100 price.
161	9/8/2011	23	12	RTD	RTD suspended due to system disturbance. Loss LMP filled with \$100 price.
162	9/8/2011	24	1	RTD	RTD suspended due to system disturbance. Loss LMP filled with \$100 price.
163	9/8/2011	24	2	RTD	RTD suspended due to system disturbance. Loss LMP filled with \$100 price.
164	9/8/2011	24	3	RTD	RTD suspended due to system disturbance. Loss LMP filled with \$100 price.

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
165	9/8/2011	24	4	RTD	RTD suspended due to system disturbance. Loss LMP filled with \$100 price.
166	9/8/2011	24	5	RTD	RTD suspended due to system disturbance. Loss LMP filled with \$100 price.
167	9/8/2011	24	6	RTD	RTD suspended due to system disturbance. Loss LMP filled with \$100 price.
168	9/8/2011	24	7	RTD	RTD suspended due to system disturbance. Loss LMP filled with \$100 price.
169	9/8/2011	24	8	RTD	RTD suspended due to system disturbance. Loss LMP filled with \$100 price.
170	9/8/2011	24	9	RTD	RTD suspended due to system disturbance. Loss LMP filled with \$100 price..
171	9/8/2011	24	10	RTD	RTD suspended due to system disturbance. Loss LMP filled with \$100 price.
172	9/8/2011	24	11	RTD	RTD suspended due to system disturbance. Loss LMP filled with \$100 price.
173	9/8/2011	24	12	RTD	RTD suspended due to system disturbance. Loss LMP filled with \$100 price.
174	9/8/2011	23	2	HASP	HASP suspended due to system disturbance. HASP LMP filled with \$100 price.
175	9/8/2011	24	2	HASP	HASP suspended due to system disturbance. HASP LMP filled with \$100 price.
176	9/9/2011	1	1	RTD	RTD suspended due to system disturbance. Loss LMP filled with \$100 price.

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
177	9/9/2011	1	2	RTD	RTD suspended due to system disturbance. Loss LMP filled with \$100 price.
178	9/9/2011	1	3	RTD	RTD suspended due to system disturbance. Loss LMP filled with \$100 price.
179	9/9/2011	1	4	RTD	RTD suspended due to system disturbance. Loss LMP filled with \$100 price.
180	9/9/2011	1	5	RTD	RTD suspended due to system disturbance. Loss LMP filled with \$100 price.
181	9/9/2011	1	6	RTD	RTD suspended due to system disturbance. Loss LMP filled with \$100 price.
182	9/9/2011	1	7	RTD	RTD suspended due to system disturbance. Loss LMP filled with \$100 price.
183	9/9/2011	1	8	RTD	RTD suspended due to system disturbance. Loss LMP filled with \$100 price.
184	9/9/2011	1	9	RTD	RTD suspended due to system disturbance. Loss LMP filled with \$100 price.
185	9/9/2011	1	10	RTD	RTD suspended due to system disturbance. Loss LMP filled with \$100 price.
186	9/9/2011	1	11	RTD	RTD suspended due to system disturbance. Loss LMP filled with \$100 price.
187	9/9/2011	1	12	RTD	RTD suspended due to system disturbance. Loss LMP filled with \$100 price.
188	9/9/2011	1	2	HASP	HASP suspended due to system disturbance. HASP LMP filled with \$250 price.

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
189	9/9/2011	1	3	RTUC	HASP suspended due to system disturbance. HASP LMP filled with \$250 price.
190	9/9/2011	2	2	HASP	Broadcast of HASP results failed. This interval was filled either automatically or interactively. MQS published PNode clearing and resource awards for this interval.
191	9/9/2011	3	2	HASP	Broadcast of HASP results failed. This interval was filled either automatically or interactively. MQS published PNode clearing and resource awards for this interval.
192	9/9/2011	3	8	RTD	RTD failed. Loss clearing payload and LMP filled from last good interval.
193	9/9/2011	3	9	RTD	RTD failed. Loss clearing payload and LMP filled from last good interval.
194	9/9/2011	4	2	HASP	HASP failed due to operator aborted run. This interval was filled either automatically or interactively. MQS published PNode clearing and resource awards for this interval.
195	9/9/2011	23	3	RTD	Broadcast of RTD results failed. Loss clearing payload and LMP filled from last good interval.
196	9/9/2011	23	6	RTD	Broadcast of RTD results failed. Loss clearing payload and LMP filled from last good interval.
197	9/10/2011	9	1	RTD	RTD failed. Loss clearing payload and LMP filled from last good interval.
198	9/10/2011	9	2	RTD	RTD failed. Loss clearing payload and LMP filled from last good interval.
199	9/10/2011	10	1	RTD	RTD failed. Loss clearing payload and LMP filled from last good interval.
200	9/10/2011	11	1	RTD	RTD 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
201	9/10/2011	11	2	RTD	RTD failed. Loss clearing payload and LMP filled from last good interval.
202	9/10/2011	12	1	RTD	RTD failed. Loss clearing payload and LMP filled from last good interval.
203	9/10/2011	12	2	RTD	RTD failed. Loss clearing payload and LMP filled from last good interval.
204	9/10/2011	13	1	RTD	RTD failed. Loss clearing payload and LMP filled from last good interval.
205	9/10/2011	13	2	RTD	RTD failed. Loss clearing payload and LMP filled from last good interval.
206	9/10/2011	15	10	RTD	Broadcast of RTD results failed. Loss clearing payload and LMP filled from last good interval.
207	9/10/2011	15	11	RTD	Broadcast of RTD results failed. Loss clearing payload and LMP filled from last good interval.
208	9/10/2011	17	4	RTD	RTD failed. Loss clearing payload and LMP filled from last good interval.
209	9/10/2011	20	9	RTD	Broadcast of RTD results failed. Loss clearing payload and LMP filled from last good interval.
210	9/10/2011	20	10	RTD	Broadcast of RTD results failed. Loss clearing payload and LMP filled from last good interval.
211	9/11/2011	15	4	RTD	Broadcast of RTD results failed. Loss clearing payload and LMP filled from last good interval.
212	9/13/2011	15	5	RTD	Broadcast of RTD results 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
213	9/13/2011	20	6	RTD	Broadcast of RTD results failed. Loss clearing payload and LMP filled from last good interval.
214	9/13/2011	20	8	RTD	Broadcast of RTD results failed. Loss clearing payload and LMP filled from last good interval.
215	9/14/2011	19	3	RTUC	RTUC failed due to software issues. This interval was filled either automatically or interactively. MQS published PNode clearing and resource awards for this interval.
216	9/14/2011	23	1	RTD	Broadcast of RTD results failed. Loss clearing payload and LMP filled from last good interval.
217	9/14/2011	24	3	RTUC	RTUC failed due to software issues. This interval was filled either automatically or interactively. MQS published PNode clearing and resource awards for this interval.
218	9/14/2011	24	4	RTUC	RTUC failed due to software issues. This interval was filled either automatically or interactively. MQS published PNode clearing and resource awards for this interval.
Notes:					
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 Unit commitment (RTUC) 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 Unit commitment (RTUC) 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 Unit commitment (RTUC) 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 Unit commitment (RTUC) 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 proceedings, in accordance with the requirements of Rule 2010 of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2010).

Dated at Folsom, California this 17<sup>th</sup> day of October, 2011.

*Susan L. Montana*  
Susan L. Montana