



California Independent
System Operator Corporation

October 15, 2010

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 Aug/Sept report covering Market Disruptions reportable events under Section 7.7.15 of its FERC Electric Tariff (ISO Tariff) that occurred from August 16, 2010 to September 15, 2010.¹

Please contact the undersigned with any questions.

Respectfully submitted,

By: /s/ Anna McKenna

Nancy Saracino
General Counsel
Anthony Ivancovich
Assistant General Counsel
Anna McKenna
Senior Counsel
California Independent System
Operator Corporation
151 Blue Ravine Road
Folsom, CA 95630
Tel: (916) 608-7209
Fax: (916) 608-7296
amckenna@caiso.com

¹ 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
Your Link to Power

Market Disruption Report August 16, 2010 to September 15, 2010

October 15, 2010

ISO Department of Market Services

CAISO
151 Blue Ravine Road
Folsom, California 95630
(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.¹ Pursuant to Section 7.7.15 of the CAISO 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 7.7.15.²

¹ 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.

² *Id.* at P 29 & n.29.

II. Report on Market Disruptions Occurring from August 16, 2010 through September 15, 2010

The ISO's report on Market Disruptions that occurred during the time period from August 16, 2010 through September 15, 2010, 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 81 Market Disruptions for the reporting period, all of which occurred in the Real-Time Market (RTM). The number of Market Disruptions decreased significantly by 60 compared with those reported in the September 2010 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 and Attachment A indicate that there were 25 instances of RTUC failures, including four HASP failures. The count of RTUC failures and HASP failures remained approximately the same compared with the September 2010 Report. Most of the RTUC failures (including the HASP failure) were caused by software application failure, software application not running, database issue or patch deployment issue. The frequency of RTD failures decreased to 56 from 114 such instances reported in the September 2010 Report. Most of the RTD failures were due to software application failure, software application timing out, database issue or broadcast results failure. RTD failures accounted for approximately 70 percent of all of the Market Disruptions during this reporting period.

On August 26, there were four RTD failures and one RTUC failure due to full network model promotion. On September 3, there were seven RTD failures and three RTUC failures due to a planned data maintenance effort. On September 4, four RTD and one RTUC failures occurred due to system

slowness. Four other RTUC failures and one HASP failure occurred on the same day due to forbidden operating region functionality.

On September 8, five RTD failures and three RTUC failures occurred due a failure of the Day-Ahead Market transmission constraint broadcast. Advisory results were sent out for RTD failures. On September 13, there were 11 consecutive RTD failures due to unique constraint violation and advisory results were sent out. Four RTUC failures also occurred on the same day due to unique constraint violation. On September 15, a lock on the initial resource status table caused three RTD failures and then advisory results were sent out. One HASP failure also occurred on that day due to ADS dispatch issues.

Table 1: Summary of Market Disruption Report

Type of CAISO Market	Market Disruption or Reportable Events	Removal of Bids (including Self-Schedules)
Day-Ahead		
IFM	0	0
RUC	0	0
Real-Time		
Real-Time Unit Commitment Interval 1	4	0
Real-Time Unit Commitment Interval 2	4	0
Real-Time Unit Commitment Interval 3	12	0
Real-Time Unit Commitment Interval 4	5	0
Real-Time Dispatch	56	0

ATTACHMENT A

**California Independent System Operator Corporation
Market Disruption Report
October 15, 2010**

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	8/16/2010	1	3	RTD	Broadcast of RTD results failed. Loss clearing payload and LMP filled from last good interval.
2	8/17/2010	1	3	RTD	Broadcast of RTD results failed. Loss clearing payload and LMP filled from last good interval.
3	8/17/2010	14	3	RTUC	RTUC failed due to solution infeasibility. This interval was filled either automatically or interactively. MQS published PNode clearing and resource awards for this interval.
4	8/18/2010	17	7	RTD	Broadcast of RTD results failed. Loss clearing payload and LMP filled from last good interval.
5	8/19/2010	20	3	RTUC	RTUC did not run due to bid transfer failure. This interval was filled either automatically or interactively. MQS published PNode clearing and resource awards for this interval.
6	8/19/2010	23	4	RTD	Broadcast of RTD results failed. Loss clearing payload and LMP filled from last good interval.
7	8/20/2010	1	3	RTD	Broadcast of RTD results failed. Loss clearing payload and LMP filled from last good interval.
8	8/20/2010	10	2	RTD	Broadcast of RTD results failed due to RTD taking longer than expected time to solve. 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	8/20/2010	15	1	RTD	RTD failed. Loss clearing payload and LMP filled from advisory results.
10	8/21/2010	1	3	RTD	Broadcast of RTD results failed. Loss clearing payload and LMP filled from last good interval.
11	8/22/2010	1	6	RTD	Broadcast of RTD results failed. Loss clearing payload and LMP filled from last good interval.
12	8/26/2010	1	1	RTD	RTD did not run due to full network model promotion. Loss clearing payload and LMP filled from next good interval.
13	8/26/2010	1	1	RTUC	RTUC did not run due to model promotion. This interval was filled either automatically or interactively. MQS published PNode clearing and resource awards for this interval.
14	8/26/2010	1	2	RTD	RTD did not run due to full network model promotion. Loss clearing payload and LMP filled from last good interval.
15	8/26/2010	1	3	RTD	Broadcast of RTD results failed. Loss clearing payload and LMP filled from last good interval.
16	8/26/2010	16	7	RTD	RTD did not run due to database log buffer maintenance. Loss clearing payload and LMP filled from last good interval.
17	8/28/2010	1	3	RTD	Broadcast of RTD results failed. Loss clearing payload and LMP filled from last good interval.
18	8/30/2010	12	3	RTUC	RTUC failed due to bad telemetry data. This interval was filled either automatically or interactively. MQS published PNode clearing and resource awards for this interval.
19	8/31/2010	1	3	RTD	Broadcast of RTD results failed. Loss clearing payload and LMP filled from last good interval.
20	8/31/2010	24	10	RTD	RTD failed. Loss clearing payload and LMP filled from advisory results.

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	9/1/2010	1	3	RTD	Broadcast of RTD results failed. Loss clearing payload and LMP filled from last good interval.
22	9/1/2010	1	4	RTD	Broadcast of RTD results failed. Loss clearing payload and LMP filled from last good interval.
23	9/1/2010	10	2	HASP	HASP did not run. ISO issued a notice through the Market Notification System 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 an Operational Adjustment (Tier 2) for Settlement purposes.
24	9/1/2010	10	3	RTUC	RTUC failed. This interval was filled either automatically or interactively. MQS published PNode clearing and resource awards for this interval.
25	9/2/2010	1	3	RTD	Broadcast of RTD results failed. Loss clearing payload and LMP filled from last good interval.
26	9/2/2010	24	10	RTD	RTD failed. Loss clearing payload and LMP filled from advisory results.
27	9/2/2010	24	11	RTD	RTD failed. Loss clearing payload and LMP filled from advisory results.
28	9/3/2010	2	3	RTD	RTD did not run due to planned RTN Split effort. Loss clearing payload and LMP filled from last good interval.
29	9/3/2010	2	3	RTUC	RTUC did not run due to planned RTN Split effort. This interval was filled either automatically or interactively. MQS published PNode clearing and resource awards for this interval.
30	9/3/2010	2	4	RTD	RTD did not run due to planned RTN Split effort. 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
31	9/3/2010	2	4	RTUC	RTUC failed. This interval was filled either automatically or interactively. MQS published PNode clearing and resource awards for this interval.
32	9/3/2010	2	5	RTD	RTD did not run due to planned RTN Split effort. Loss clearing payload and LMP filled from last good interval.
33	9/3/2010	2	6	RTD	RTD did not run due to planned RTN Split effort. Loss clearing payload and LMP filled from last good interval.
34	9/3/2010	2	7	RTD	RTD did not run due to planned RTN Split effort. Loss clearing payload and LMP filled from last good interval.
35	9/3/2010	2	8	RTD	RTD failed. Loss clearing payload and LMP filled from advisory results.
36	9/3/2010	2	9	RTD	RTD failed. Loss clearing payload and LMP filled from advisory results.
37	9/3/2010	18	3	RTUC	RTUC failed. This interval was filled either automatically or interactively. MQS published PNode clearing and resource awards for this interval.
38	9/4/2010	15	4	RTUC	RTUC timed out due to slowness in the system. This interval was filled either automatically or interactively. MQS published PNode clearing and resource awards for this interval.
39	9/4/2010	15	9	RTD	RTD timed out due to slowness in system. Loss clearing payload and LMP filled from last good interval.
40	9/4/2010	15	10	RTD	RTD timed out due to slowness in system. Loss clearing payload and LMP filled from last good interval.
41	9/4/2010	15	11	RTD	Broadcast of RTD results failed due to slowness in system. Loss clearing payload and LMP filled from last good interval.
42	9/4/2010	15	12	RTD	Broadcast of RTD results failed due to slowness in system. 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
43	9/4/2010	16	1	RTD	Broadcast of RTD results failed due to slowness in system. Loss clearing payload and LMP filled from last good interval.
44	9/4/2010	21	3	RTUC	RTUC failed due to forbidden operating region functionality. This interval was filled either automatically or interactively. MQS published PNode clearing and resource awards for this interval.
45	9/4/2010	22	3	RTUC	RTUC failed due to forbidden operating region functionality. This interval was filled either automatically or interactively. MQS published PNode clearing and resource awards for this interval.
46	9/4/2010	23	3	RTUC	RTUC failed due to forbidden operating region functionality. This interval was filled either automatically or interactively. MQS published PNode clearing and resource awards for this interval.
47	9/4/2010	24	2	HASP	HASP did not run due to forbidden operating region functionality. ISO issued a notice through the Market Notification System 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 an Operational Adjustment (Tier 2) for Settlement purposes.
48	9/4/2010	24	3	RTUC	RTUC failed due to forbidden operating region functionality. This interval was filled either automatically or interactively. MQS published PNode clearing and resource awards for this interval.
49	9/4/2010	24	4	RTUC	RTUC failed. This interval was filled either automatically or interactively. MQS published PNode clearing and resource awards for this interval.
50	9/5/2010	1	1	RTUC	RTUC did not run. This interval was filled either automatically or interactively. MQS published PNode clearing and resource awards for this interval.
51	9/5/2010	17	6	RTD	RTD did not run. 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
52	9/5/2010	17	7	RTD	RTD did not run. Loss clearing payload and LMP filled from last good interval.
53	9/7/2010	24	10	RTD	RTD failed. Loss clearing payload and LMP filled from advisory results.
54	9/7/2010	24	11	RTD	RTD failed. Loss clearing payload and LMP filled from advisory results.
55	9/8/2010	13	1	RTD	RTD failed due to DAM transmission constraint broadcast failure. Loss clearing payload and LMP filled from advisory results.
56	9/8/2010	13	2	RTD	RTD failed due to DAM transmission constraint broadcast failure. Loss clearing payload and LMP filled from advisory results.
57	9/8/2010	13	3	RTD	RTD failed due to DAM transmission constraint broadcast failure. Loss clearing payload and LMP filled from advisory results.
58	9/8/2010	13	3	RTUC	RTUC failed due to DAM Transmission Constraint Broadcast failure. This interval was filled either automatically or interactively. MQS published PNode clearing and resource awards for this interval.
59	9/8/2010	13	4	RTD	RTD failed due to DAM transmission constraint broadcast failure. Loss clearing payload and LMP filled from advisory results.
60	9/8/2010	13	4	RTUC	RTUC did not run due to DAM Transmission Constraint Broadcast failure. This interval was filled either automatically or interactively. MQS published PNode clearing and resource awards for this interval.
61	9/8/2010	13	5	RTD	RTD failed due to DAM transmission constraint broadcast failure. Loss clearing payload and LMP filled from advisory results.
62	9/8/2010	14	1	RTUC	RTUC timed out due to DAM Transmission Constraint Broadcast failure. 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
63	9/12/2010	8	2	HASP	HASP failed. ISO issued a notice through the Market Notification System 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 an Operational Adjustment (Tier 2) for Settlement purposes.
64	9/13/2010	4	1	RTD	RTD failed due to unique constraint violation. Loss clearing payload and LMP filled from advisory results.
65	9/13/2010	4	2	RTD	RTD failed due to unique constraint violation. Loss clearing payload and LMP filled from advisory results.
66	9/13/2010	4	3	RTD	RTD failed due to unique constraint violation. Loss clearing payload and LMP filled from advisory results.
67	9/13/2010	4	3	RTUC	RTUC failed due to unique constraint violation. This interval was filled either automatically or interactively. MQS published PNode clearing and resource awards for this interval.
68	9/13/2010	4	4	RTD	RTD failed due to unique constraint violation. Loss clearing payload and LMP filled from advisory results.
69	9/13/2010	4	4	RTUC	RTUC did not run due to unique constraint violation. This interval was filled either automatically or interactively. MQS published PNode clearing and resource awards for this interval.
70	9/13/2010	4	5	RTD	RTD failed due to unique constraint violation. Loss clearing payload and LMP filled from advisory results.
71	9/13/2010	4	6	RTD	RTD failed due to unique constraint violation. Loss clearing payload and LMP filled from advisory results.
72	9/13/2010	4	7	RTD	RTD failed due to unique constraint violation. Loss clearing payload and LMP filled from advisory results.

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
73	9/13/2010	4	8	RTD	RTD failed due to unique constraint violation. Loss clearing payload and LMP filled from advisory results.
74	9/13/2010	4	9	RTD	RTD failed due to unique constraint violation. Loss clearing payload and LMP filled from advisory results.
75	9/13/2010	4	10	RTD	RTD failed due to unique constraint violation. Loss clearing payload and LMP filled from advisory results.
76	9/13/2010	4	11	RTD	RTD failed due to unique constraint violation. Loss clearing payload and LMP filled from last good interval.
77	9/13/2010	5	1	RTUC	RTUC failed due to unique constraint violation. This interval was filled either automatically or interactively. MQS published PNode clearing and resource awards for this interval.
78	9/15/2010	6	1	RTD	RTD failed. Loss clearing payload and LMP filled from advisory results.
79	9/15/2010	6	2	RTD	RTD failed. Loss clearing payload and LMP filled from advisory results.
80	9/15/2010	6	3	RTD	RTD failed. Loss clearing payload and LMP filled from advisory results.
81	9/15/2010	16	2	HASP	HASP failed due to ADS dispatch issues. ISO issued a notice through the Market Notification System 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 an Operational Adjustment (Tier 2) for Settlement purposes.
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 15th day of October, 2010.

/s/ Jane Ostapovich

Jane Ostapovich