July 15, 2014

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 January/February report covering Market Disruptions reportable events under Section 7.7.15 of its FERC Electric Tariff (ISO Tariff) that occurred from May 16, 2014 to June 15, 2014.[1]

Please contact the undersigned with any questions.

Respectfully submitted,

By: */s/ Anna McKenna*
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[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.

Market Disruption Report
May 16, 2014 to June 15, 2014

July 15, 2014

ISO Market Quality and Renewable Integration

California ISO
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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 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 reports Market Disruption 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), the Real-Time Market, which includes the Hour-Ahead Scheduling Process (HASP), Fifteen Minute Market (FMM), and the 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]

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[1] 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.

[2] *Id.* at P 29 & n.29.

II. Report on Market Disruptions Occurring from May 16, 2014 through June 15, 2014

The ISO's report on Market Disruptions that occurred during the time period from May 16, 2014 through June 15, 2014, 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 83 Market Disruptions for the reporting period, all of which occurred in the real-time. Table 1 also indicates that the ISO did not remove any Bids (including Self-Schedules) in any of its markets during the reporting period.

On May 1, 2014, the ISO adopted its new Fifteen Minute Market (FMM) and fifteen minute scheduling in the real-time.[3]

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		
Fifteen Minute Market Interval 1	6	0
Fifteen Minute Market Interval 2	2	0
Fifteen Minute Market Interval 3	6	0
Fifteen Minute Market Interval 4	5	0
Real-Time Dispatch	64	0

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[3] *California Indep. Sys. Operator Corp.*, 146 FERC ¶ 61,204 (2014).

Table 1 above shows the market disruptions in the real time market in order to incorporate the FMM binding intervals.

Table 1 and Attachment A indicate that there were 17 instances of FMM disruptions and 2 instances of hour-ahead scheduling process (HASP) disruptions during this reporting period. The count of FMM failures decreased by 1 to 17 and the count of HASP failures decreased by 5 compared with the May 2014 Report. Most of the Real-Time Dispatch (RTD), FMM instances (including HASP) (21 instances) were caused by system failures that required the need to fall back on back-up systems. The frequency of RTD failures decreased by 30 from 94 such instances reported in the May 2014 Report. Most of the RTD failures (29 instances) were due to planned maintenance. RTD failures accounted for approximately 77 percent of all of the Market Disruptions during this reporting period.

The frequency of RTD failures in this report was 64. On May 20, there were 8 RTD failures, 1 HASP disruption and 1 FMM disruptions because the data base servers were down and the ISO experienced an emergency that required it to fall back to back-up systems. On June 9, there were 17 RTD failures, 1 HASP failure and 7 FMM failures due to software issue. On June 12, 7 intervals in RTD market, and 3 in FMM market were run in manual due to fall forward (planned maintenance).

The ISO deployed and activated the Spring 2014 release effective May 1, 2014. The implementation of Spring 2014 release system changes was completed for activation of the Spring 2014 release projects as follows:

- FERC Order 764 Compliance / 15-Minute Market
- Post Emergency Filing BCR changes / Mandatory MSG, combined with RIMPR-Phase 1 / BCR Mitigation Measures / Bid Floor Cap
- Revisions to Price Corrections
- RDRP activation / FERC 745 Compliance

There were about 35 failures during this reporting period due to planned maintenance combined in RTD, FMM and HASP.

ATTACHMENT A

California Independent System Operator Corporation **Market Disruption Report** **July 15, 2014**					
Table 3: 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	5/16/2014	11	11	RTD	RTD did not run due to application problem. Loss clearing payload and LMP filled from previous good interval. Software failure / Unplanned outage
2	5/16/2014	14	2	RTD	RTD did not run due to application problem. Loss clearing payload and LMP filled from previous good interval. Planned maintenance
3	5/16/2014	14	3	RTD	RTD did not run due to application problem. Loss clearing payload and LMP filled from previous good interval. Planned maintenance
4	5/17/2014	14	3	FMM	FMM did not run due to application problem. This interval was filled either automatically or interactively. MQS published Pnode clearing and resource awards for this interval.
5	5/17/2014	14	4	RTD	RTD did not run due to application problem. Loss clearing payload and LMP filled from previous good interval.
6	5/17/2014	14	4	FMM	FMM did not run due to application problem. This interval was filled either automatically or interactively. MQS published Pnode clearing and resource awards for this interval.
7	5/17/2014	14	5	RTD	RTD did not run due to application problem. Loss clearing payload and LMP filled from previous 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
8	5/17/2014	14	6	RTD	RTD did not run due to application problem. Loss clearing payload and LMP filled from previous good interval.
9	5/17/2014	14	7	RTD	RTD did not run due to application problem. Loss clearing payload and LMP filled from previous good interval.
10	5/17/2014	14	8	RTD	RTD did not run due to application problem. Loss clearing payload and LMP filled from previous good interval.
11	5/17/2014	14	9	RTD	RTD did not run due to application problem. Loss clearing payload and LMP filled from previous good interval.
12	5/17/2014	14	10	RTD	RTD did not run due to application problem. Loss clearing payload and LMP filled from previous good interval.
13	5/17/2014	14	11	RTD	RTD did not run due to application problem. Loss clearing payload and LMP filled from previous good interval.
14	5/17/2014	14	12	RTD	RTD did not run due to application problem. Loss clearing payload and LMP filled from previous good interval.
15	5/17/2014	15	1	FMM	FMM did not run due to application problem. This interval was filled either automatically or interactively. MQS published Pnode clearing and resource awards for this interval.
16	5/18/2014	20	9	RTD	RTD results were blocked and previous solution used.
17	5/18/2014	24	8	RTD	RTD did not run due to application problem. Loss clearing payload and LMP filled from previous 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
18	5/20/2014	14	9	RTD	RTD did not run due to application problem. Loss clearing payload and LMP filled from previous good interval. Fall-back / Fall-Forward
19	5/20/2014	14	10	RTD	RTD did not run due to application problem. Loss clearing payload and LMP filled from previous good interval. Fall-back / Fall-Forward
20	5/20/2014	14	11	RTD	RTD did not run due to application problem. Loss clearing payload and LMP filled from previous good interval. Fall-back / Fall-Forward
21	5/20/2014	14	12	RTD	RTD did not run due to application problem. Loss clearing payload and LMP filled from previous good interval. Fall-back / Fall-Forward
22	5/20/2014	15	1	RTD	RTD did not run due to application problem. Loss clearing payload and LMP filled from previous good interval. Fall-back / Fall-Forward
23	5/20/2014	15	1	FMM	FMM did not run due to application problem. This interval was filled either automatically or interactively. MQS published Pnode clearing and resource awards for this interval. Fall-back / Fall-Forward
24	5/20/2014	15	2	RTD	RTD did not run due to application problem. Loss clearing payload and LMP filled from previous good interval. Fall-back / Fall-Forward
25	5/20/2014	15	2	HASP	HASP did not run due to application problem. This interval was filled either automatically or interactively. MQS published Pnode clearing and resource awards for this interval. Fall-back / Fall-Forward
26	5/20/2014	20	3	RTD	RTD did not run due to application problem. Loss clearing payload and LMP filled from previous good interval. Fall-back / Fall-Forward
27	5/20/2014	20	4	RTD	RTD did not run due to application problem. Loss clearing payload and LMP filled from previous good interval. Fall-back / Fall-Forward

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
28	5/21/2014	15	4	RTD	RTD failed due to application time-out. Loss clearing payload and LMP filled from previous good interval.
29	5/21/2014	16	3	RTD	RTD did not run due to application problem. Loss clearing payload and LMP filled from previous good interval.
30	5/22/2014	15	3	RTD	RTD was run in Manual Planned maintenance
31	5/22/2014	15	3	FMM	FMM was run in Manual Planned maintenance
32	5/22/2014	15	4	RTD	RTD was run in Manual Planned maintenance
33	5/22/2014	15	5	RTD	RTD was run in Manual Planned maintenance
34	5/22/2014	18	3	RTD	RTD did not run due to application problem. Loss clearing payload and LMP filled from previous good interval. Planned maintenance
35	5/22/2014	18	3	RTD	RTD was run in Manual Planned maintenance
36	5/22/2014	18	3	FMM	FMM did not run due to application problem. This interval was filled either automatically or interactively. MQS published Pnode clearing and resource awards for this interval.
37	5/23/2014	18	4	FMM	FMM did not run due to application problem. 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
38	5/23/2014	18	6	RTD	RTD was run in Manual Planned maintenance
39	5/29/2014	18	6	RTD	RTD did not run due to application problem. Loss clearing payload and LMP filled from previous good interval.
40	6/3/2014	15	3	RTD	RTD was run in Manual Planned maintenance
41	6/3/2014	15	4	RTD	RTD was run in Manual Planned maintenance
42	6/7/2014	14	4	RTD	RTD results were blocked and previous solution used.
43	6/9/2014	2	11	RTD	RTD did not run due to application problem. Loss clearing payload and LMP filled from previous good interval.
44	6/9/2014	2	12	RTD	RTD did not run due to application problem. Loss clearing payload and LMP filled from previous good interval.
45	6/9/2014	3	1	RTD	RTD did not run due to application problem. Loss clearing payload and LMP filled from previous good interval.
46	6/9/2014	3	1	FMM	FMM did not run due to application problem. This interval was filled either automatically or interactively. MQS published Pnode clearing and resource awards for this interval.
47	6/9/2014	3	2	RTD	RTD did not run due to application problem. Loss clearing payload and LMP filled from previous 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
48	6/9/2014	3	3	RTD	RTD did not run due to application problem. Loss clearing payload and LMP filled from previous good interval.
49	6/9/2014	3	3	FMM	FMM did not run due to application problem. This interval was filled either automatically or interactively. MQS published Pnode clearing and resource awards for this interval.
50	6/9/2014	3	4	RTD	RTD did not run due to application problem. Loss clearing payload and LMP filled from previous good interval.
51	6/9/2014	3	4	FMM	FMM failed due to application problem. This interval was filled either automatically or interactively. MQS published Pnode clearing and resource awards for this interval.
52	6/9/2014	3	5	RTD	RTD did not run due to application problem. Loss clearing payload and LMP filled from previous good interval.
53	6/9/2014	3	6	RTD	RTD did not run due to application problem. Loss clearing payload and LMP filled from previous good interval.
54	6/9/2014	3	7	RTD	RTD did not run due to application problem. Loss clearing payload and LMP filled from previous good interval.
55	6/9/2014	3	8	RTD	RTD did not run due to application problem. Loss clearing payload and LMP filled from previous good interval.
56	6/9/2014	3	9	RTD	RTD did not run due to application problem. Loss clearing payload and LMP filled from previous good interval.
57	6/9/2014	3	10	RTD	RTD did not run due to application problem. Loss clearing payload and LMP filled from previous 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
58	6/9/2014	3	11	RTD	RTD did not run due to application problem. Loss clearing payload and LMP filled from previous good interval.
59	6/9/2014	3	12	RTD	RTD did not run due to application problem. Loss clearing payload and LMP filled from previous good interval.
60	6/9/2014	4	1	RTD	RTD did not run due to application problem. Loss clearing payload and LMP filled from previous good interval.
61	6/9/2014	4	1	FMM	FMM failed due to application problem. This interval was filled either automatically or interactively. MQS published Pnode clearing and resource awards for this interval.
62	6/9/2014	4	2	RTD	RTD did not run due to application problem. Loss clearing payload and LMP filled from previous good interval.
63	6/9/2014	4	3	RTD	RTD did not run due to application problem. Loss clearing payload and LMP filled from previous good interval.
64	6/9/2014	4	3	FMM	FMM did not run due to application problem. This interval was filled either automatically or interactively. MQS published Pnode clearing and resource awards for this interval.
65	6/9/2014	4	4	FMM	FMM failed due to application time-out. Loss clearing payload and LMP filled from previous good interval.
66	6/9/2014	5	1	FMM	FMM did not run due to application problem. This interval was filled either automatically or interactively. MQS published Pnode clearing and resource awards for this interval.
67	6/9/2014	5	2	HASP	HASP did not run due to application problem. 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
68	6/10/2014	16	3	RTD	RTD was run in Manual Planned maintenance
69	6/11/2014	17	3	RTD	RTD did not run due to application problem. Loss clearing payload and LMP filled from previous good interval. Planned maintenance
70	6/12/2014	14	3	FMM	FMM was run in Manual Fall-back / Fall-Forward
71	6/12/2014	14	4	RTD	RTD was run in Manual Fall-back / Fall-Forward
72	6/12/2014	14	4	FMM	FMM was run in Manual Fall-back / Fall-Forward
73	6/12/2014	14	5	RTD	RTD was run in Manual Fall-back / Fall-Forward
74	6/12/2014	14	6	RTD	RTD was run in Manual Fall-back / Fall-Forward
75	6/12/2014	14	7	RTD	RTD was run in Manual Fall-back / Fall-Forward
76	6/12/2014	14	8	RTD	RTD was run in Manual Fall-back / Fall-Forward
77	6/12/2014	14	9	RTD	RTD was run in Manual Fall-back / Fall-Forward

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
78	6/12/2014	14	10	RTD	RTD was run in Manual Fall-back / Fall-Forward
79	6/12/2014	15	1	FMM	FMM was run in Manual Fall-back / Fall-Forward
80	6/13/2014	14	3	RTD	RTD was run in Manual Planned maintenance
81	6/14/2014	1	1	RTD	RTD results were blocked and previous solution used.
82	6/15/2014	18	11	RTD	RTD Broadcast failed. Loss clearing payload and LMP filled from previous good interval.
83	6/15/2014	18	12	RTD	RTD did not run due to application problem. Loss clearing payload and LMP filled from previous good 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.
Fifteen Minute Market (FMM) 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.
Fifteen Minute Market (FMM) 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.
Fifteen Minute Market (FMM) 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.
Fifteen Minute Market (FMM) Interval 4: The fourth of a series of four market runs conducted every Trading Hour. This interval is for the Fifteen Minute Market 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 July 2014.

/s/ Anna Pascuzzo
Anna Pascuzzo