California Independent System Operator



April 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. ER08-1178-___, and EL08-88-____ February 2014 Exceptional Dispatch Report (Chart 1 data)

Dear Secretary Bose:

Pursuant to the Commission's September 2, 2009 and May 4, 2010 orders in the above referenced dockets, the California Independent System Operator Corporation submits the attached report. The attached report provides details concerning Exceptional Dispatches the Commission directed to be included in "Chart 1" as set forth in Appendix A of the September 2 order, as modified by the ISO's September 14 motion for clarification, which the Commission granted in its May 4 order. The attached report provides Chart 1 data for the month of February 2014.

Respectfully submitted,

By: /s/ Sidney M. Davies

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Exceptional Dispatch Report

Table 1: February 2014

ISO Market Quality and Renewable Integration

April 15, 2014

CAISO 250 Outcropping Way Folsom, California 95630 (916) 351-4400

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Introduction

This report is filed pursuant to FERC's September 2, 2009 and June 4, 2010 orders in ER08-1178. These orders require two monthly Exceptional Dispatch reports—one issued on the 15th of each month and one issued on the 30th of each month. This report provides data on the frequency and reasons for Exceptional Dispatches issued in February 2014. On December 19, 2013, the ISO implemented a new exceptional dispatch tool. This tool improves the ISO's ability to automate the production of the report and provides more granularity and consistency concerning the reasons for the exceptional dispatch.

The Nature of Exceptional Dispatch

The ISO can issue exceptional dispatch instructions for a resource as a pre-dayahead unit commitment, which may also include an indicative exceptional dispatch energy schedule, a post-day-ahead unit commitment, or a real-time exceptional dispatch¹. A pre-day-ahead commitment is an exceptional dispatch instruction that commits a resource at or above its physical minimum operating level in the day-ahead market. A post-day-ahead market commitment is an exceptional dispatch instruction that commits a resource at or above its physical minimum operating level in the real-time market. A real-time exceptional dispatch instruction is a dispatch of a resource at or above its physical minimum operating point. For the purposes of this report, a real-time exceptional dispatch above the resource day-ahead award is considered an incremental exceptional dispatch instruction and an exceptional dispatch below the day-ahead award is considered a decremental dispatch instruction.

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

Many of the exceptional dispatches listed below in Table 1, were to satisfy either a local area or system reliability requirements, and are classified into local generation requirements, transmission management requirements, non-modeled transmission outages or other requirements, such as ramp requirements and intertie emergency assistance. All of the transmission procedures are available on the CAISO website².

¹ The ISO can issue exceptional dispatch instructions subject to authority of the ISO Tariff Section 34.9 and in accordance with ISO Operating Procedure 2330 (formerly M-402).

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

The following reason for exceptional dispatch instructions in February 2014 was not related to specific generation or transmission operating procedures: Software Limitation, when an exceptional dispatch instruction was used to bridge schedules across days for resources with a minimum down time of 24 hours, as the ISO software does not handle multi day commitment. For instance, a resource has a day-ahead schedule from 0600 till 2300, and then is shut down in 2400. If this resource had a minimum down time of 24 hours and it is required the following day, then the ISO issues an exceptional dispatch to commit this resource in 2400 so that it can be dispatched economically in the following day. Software limitation reason was also used for exceptional dispatches to manually issue shut down instructions to a resource because of a temporary Automatic Dispatch System ("ADS") failure, or similar issues. There were a few other reasons used to explain exceptional dispatch instructions in February, which are self explanatory.

As mentioned earlier, the data shown in Table 1 is based on a template specified in the September 2009 order³. Each entry in Attachment A is a summary of exceptional dispatches classified by (1) the reason for the exceptional dispatch; (2) the location of the resource by Participating Transmission Owner ("PTO") service area; (3) the Local Reliability Area ("LRA") where applicable; (4) the market in which the exceptional dispatch occurred (day-ahead vs. real-time); and (5) the date of the exceptional dispatch. For each classification the following information is provided: (1) Megawatts (MW); (2) Commitment (3) Inc or Dec (4) Hours; (5) Begin Time; and (6) End Time.

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

Table 1 indicates that there were a total of 110 exceptional dispatches in February 2014, as compared to 42 exceptional dispatches in January 2014. Exceptional dispatches issued for the following reasons accounted for

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

approximately 59 percent of the total exceptional dispatches during the reporting period: Shutdown, Fast start unit management, load forecast uncertainty and condition beyond the control of the CAISO.

Table 1: Exceptional Dispatches in February 2014

		Californ		dent System tional Dispat April 15, 20		orporatior	1							
	Chart 1: Table of Exceptional Dispatches for Period 01/February/2014 – 28/February/2014													
Num Market Local Local Commit INC_ ber Type Reason Location Area Trade Date MW ment DEC Hours														
1	RT	Bridging Schedules	SDG&E	San Diego- IV	26-Feb-14	20	Yes	INC	9	14:00	22:59			
2	RT	Conditions beyond the control of the CAISO	Intertie	N/A	4-Feb-14	300	No	INC	1	7:00	7:59			
3	RT	Conditions beyond the control of the CAISO	Intertie	N/A	4-Feb-14	0	No	INC	1	7:00	7:59			
4	RT	Conditions beyond the control of the CAISO	Intertie	N/A	6-Feb-14	50-1075	No	INC	13	7:00	19:59			
5	RT	Conditions beyond the control of the CAISO	Intertie	N/A	7-Feb-14	375- 650	No	INC	2	5:00	6:59			
6	RT	Conditions beyond the control of the CAISO	Intertie	N/A	20-Feb-14	100	No	INC	2	16:00	17:59			
7	RT	Conditions beyond the control of the CAISO	PG&E	Bay Area	5-Feb-14	45	No	INC	1	22:55	22:59			
8	RT	Conditions beyond the control of the CAISO	PG&E	Bay Area	6-Feb-14	45- 317	No	INC	12	11:25	22:59			
9	RT	Conditions beyond the control of the CAISO	PG&E	Bay Area	7-Feb-14	45- 525	Yes	INC	20	3:00	22:59			
10	RT	Conditions beyond the control of the CAISO	PG&E	Fresno	6-Feb-14	50- 80	No	INC	15	6:33	20:59			
11	RT	Conditions beyond the control of the CAISO	PG&E	Fresno	7-Feb-14	-321	No	INC	7	0:30	6:24			
12	RT	Conditions beyond the control of	PG&E	Fresno	23-Feb-14	-624-	No	INC	7	1:40	7:59			

Num ber	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commit ment	INC_ DEC	Hours	Begin Time	End Time
		the CAISO				166					
13	RT	Conditions beyond the control of the CAISO	PG&E	N/A	6-Feb-14	30- 80	No	INC	5	6:33	10:59
14	RT	Conditions beyond the control of the CAISO	PG&E	N/A	28-Feb-14	47- 300	No	INC	8	13:40	20:59
15	RT	Conditions beyond the control of the CAISO	PG&E	Sierra	6-Feb-14	42- 166	No	INC	17	6:33	22:59
16	RT	Conditions beyond the control of the CAISO	SCE	Big Creek- Ventura	6-Feb-14	100- 815	No	INC	10	11:00	20:59
17	RT	Conditions beyond the control of the CAISO	SCE	Big Creek- Ventura	7-Feb-14	100	Yes	INC	14	9:00	22:59
18	RT	Conditions beyond the control of the CAISO	SCE	LA Basin	3-Feb-14	49- 287	No	INC	5	6:00	10:59
19	RT	Conditions beyond the control of the CAISO	SCE	LA Basin	6-Feb-14	2386	No	INC	18	3:35	20:59
20	RT	Conditions beyond the control of the CAISO	SCE	LA Basin	7-Feb-14	0	No	INC	11	3:55	13:14
21	RT	Conditions beyond the control of the CAISO	SCE	LA Basin	20-Feb-14	98	No	INC	18	1:00	18:59
22	RT	Conditions beyond the control of the CAISO	SCE	N/A	6-Feb-14	506	No	INC	8	13:40	20:59
23	RT	Conditions beyond the control of the CAISO	SDG&E	San Diego- IV	6-Feb-14	0	No	INC	9	7:15	15:29
24	RT	Conditions beyond the control of the CAISO	SDG&E	San Diego- IV	10-Feb-14	589- 688	No	INC	22	1:00	22:59
25	RT	Conditions beyond the control of the CAISO	SDG&E	San Diego- IV	20-Feb-14	23	No	INC	20	3:00	22:59
26	RT	Contingency Dispatch	PG&E	Fresno	2-Feb-14	83	No	INC	1	11:00	11:59
27	RT	Fast Start Unit Management	PG&E	Fresno	25-Feb-14	0	No	INC	2	17:45	18:44
28	RT	Fast Start Unit Management	PG&E	N/A	3-Feb-14	0	No	INC	3	0:35	2:59
29	RT	Fast Start Unit Management	PG&E	N/A	17-Feb-14	0	No	INC	4	1:25	4:59
30	RT	Fast Start Unit Management	SCE	Big Creek-	12-Feb-14	0	No	INC	1	22:00	22:59

Num ber	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commit ment	INC_ DEC	Hours	Begin Time	End Time
				Ventura							
31	RT	Fast Start Unit Management	SCE	Big Creek- Ventura	18-Feb-14	0	No	INC	2	18:45	19:44
32	RT	Fast Start Unit Management	SCE	Big Creek- Ventura	26-Feb-14	0	No	INC	2	18:40	19:39
33	RT	Fast Start Unit Management	SCE	LA Basin	4-Feb-14	0	No	INC	0	23:10	22:59
34	RT	Fast Start Unit Management	SCE	LA Basin	9-Feb-14	150	No	INC	17	6:40	22:59
35	RT	Fast Start Unit Management	SCE	LA Basin	11-Feb-14	0	No	INC	2	10:30	11:29
36	RT	Fast Start Unit Management	SCE	LA Basin	13-Feb-14	0	No	INC	2	21:20	22:59
37	RT	Fast Start Unit Management	SCE	LA Basin	14-Feb-14	0	No	INC	-1	23:00	21:14
38	RT	Fast Start Unit Management	SCE	LA Basin	17-Feb-14	0	No	INC	2	1:05	2:04
39	RT	Fast Start Unit Management	SCE	LA Basin	19-Feb-14	0	No	INC	2	7:50	8:19
40	RT	Fast Start Unit Management	SCE	LA Basin	25-Feb-14	0	No	INC	21	1:05	21:59
41	RT	Fast Start Unit Management	SCE	LA Basin	26-Feb-14	0	No	INC	3	19:15	21:39
42	RT	Fast Start Unit Management	SCE	LA Basin	28-Feb-14	0	No	INC	2	21:00	22:59
43	RT	Load Forecast Uncertainty	Intertie	N/A	2-Feb-14	44	No	INC	1	16:00	16:59
44	RT	Load Forecast Uncertainty	Intertie	N/A	5-Feb-14	1	No	INC	1	9:05	9:09
45	RT	Load Forecast Uncertainty	Intertie	N/A	18-Feb-14	385	No	INC	1	16:00	16:59
46	RT	Load Forecast Uncertainty	Intertie	N/A	28-Feb-14	19	No	INC	1	11:00	11:59
47	RT	Load Forecast Uncertainty	PG&E	Bay Area	19-Feb-14	175	No	INC	13	7:00	19:59
48	RT	Load Forecast Uncertainty	PG&E	Bay Area	20-Feb-14	175	No	INC	8	13:00	20:59
49	RT	Load Forecast Uncertainty	PG&E	Bay Area	26-Feb-14	45	No	INC	8	15:00	22:59
50	RT	Load Forecast Uncertainty	PG&E	Bay Area	27-Feb-14	45	Yes	INC	14	9:00	22:59
51	RT	Load Forecast Uncertainty	SCE	Big Creek- Ventura	10-Feb-14	40- 200	No	INC	22	1:00	22:59
52	RT	Load Forecast Uncertainty	SCE	LA Basin	10-Feb-14	25	Yes	INC	8	14:00	21:59
53	RT	Load Forecast Uncertainty	SCE	LA Basin	20-Feb-14	230	No	INC	18	1:00	18:59
54	RT	Load Forecast Uncertainty	SDG&E	San Diego- IV	10-Feb-14	20	No	INC	22	1:00	22:59
55	RT	Load Forecast Uncertainty	SDG&E	San Diego-	20-Feb-14	20	No	INC	20	3:00	22:59

Num ber	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commit ment	INC_ DEC	Hours	Begin Time	End Time
				IV							
56	RT	Load Pull	SCE	LA Basin	6-Feb-14	190	No	INC	18	3:35	20:59
57	RT	Load Pull	SCE	LA Basin	10-Feb-14	49	No	INC	8	14:00	21:59
58	RT	Manual Dispatch	Intertie	N/A	6-Feb-14	200	No	INC	13	7:00	19:59
59	RT	Manual Dispatch	Intertie	N/A	6-Feb-14	150- 502	No	INC	13	7:00	19:59
60	RT	Market Disruption	Intertie	N/A	4-Feb-14	75	No	INC	1	7:00	7:59
61	RT	Market Disruption	Intertie	N/A	4-Feb-14	0	No	INC	1	7:00	7:59
62	RT	Market Disruption	Intertie	N/A	20-Feb-14	325- 700	No	INC	2	16:00	17:59
63	RT	Operating Procedure Number and Constraint	PG&E	Humboldt	25-Feb-14	30- 60	No	INC	16	5:32	20:59
64	RT	Operating Procedure Number and Constraint	SCE	N/A	22-Feb-14	430- 860	No	INC	23	0:00	22:59
65	RT	Operating Procedure Number and Constraint	SCE	N/A	23-Feb-14	420- 900	No	INC	23	0:00	22:59
66	RT	Other Reliability Requirement	SCE	Big Creek- Ventura	10-Feb-14	100- 200	No	INC	22	1:00	22:59
67	RT	Other Reliability Requirement	SCE	LA Basin	25-Feb-14	49	No	INC	21	1:05	21:59
68	RT	Other Reliability Requirement	SCE	N/A	19-Feb-14	40	No	INC	22	1:00	22:59
69	RT	Other Reliability Requirement	SCE	N/A	22-Feb-14	40	Yes	INC	23	0:00	22:59
70	RT	Other Reliability Requirement	SCE	N/A	23-Feb-14	40	Yes	INC	23	0:00	22:59
71	RT	Other Reliability Requirement	SCE	N/A	24-Feb-14	420	No	INC	1	23:05	23:29
72	RT	Other Reliability Requirement	SDG&E	San Diego- IV	25-Feb-14	20	No	INC	12	6:00	17:59
73	RT	Planned Transmission and Constraint	PG&E	Humboldt	6-Feb-14	29	No	INC	4	9:10	12:59
74	RT	Planned Transmission Outage and Constraint	PG&E	Fresno	7-Feb-14	0	No	INC	7	0:30	6:24
75	RT	Planned Transmission Outage and Constraint	SCE	LA Basin	12-Feb-14	65	No	INC	1	17:00	17:59

Num ber	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commit ment	INC_ DEC	Hours	Begin Time	End Time
76	RT	Planned Transmission Outage and Constraint	SDG&E	San Diego- IV	3-Feb-14	20	No	INC	19	4:10	22:59
77	RT	Planned Transmission Outage and Constraint	SDG&E	San Diego- IV	5-Feb-14	20	No	INC	23	0:10	22:59
78	RT	Planned Transmission Outage and Constraint	SDG&E	San Diego- IV	11-Feb-14	68	No	INC	10	8:30	17:59
79	RT	Planned Transmission Outage and Constraint	SDG&E	San Diego- IV	12-Feb-14	20	Yes	INC	22	1:00	22:59
80	RT	Planned Transmission Outage and Constraint	SDG&E	San Diego- IV	20-Feb-14	20	No	INC	20	3:00	22:59
81	RT	Planned Transmission Outage and Constraint	SDG&E	San Diego- IV	21-Feb-14	20- 142	No	INC	16	3:00	18:59
82	RT	Shutdown	SCE	LA Basin	4-Feb-14	0	No	INC	0	23:10	22:59
83	RT	Shutdown	SCE	LA Basin	6-Feb-14	0	No	INC	18	3:35	20:59
84	RT	Shutdown	SCE	LA Basin	7-Feb-14	0	No	INC	11	3:55	13:14
85	RT	Shutdown	SCE	LA Basin	13-Feb-14	0	No	INC	2	21:20	22:59
86	RT	Shutdown	SCE	LA Basin	14-Feb-14	0	No	INC	-1	23:00	21:14
87	RT	Shutdown	SCE	LA Basin	15-Feb-14	0	No	INC	2	21:20	22:19
88	RT	Shutdown	SCE	LA Basin	18-Feb-14	0	No	INC	2	18:45	19:44
89	RT	Shutdown	SCE	LA Basin	20-Feb-14	0	No	INC	18	1:00	18:59
90	RT	Shutdown	SCE	LA Basin	22-Feb-14	0	No	INC	2	7:30	8:29
91	RT	Shutdown	SCE	LA Basin	25-Feb-14	0	No	INC	21	1:05	21:59
92	RT	Shutdown	SCE	LA Basin	26-Feb-14	0	No	INC	3	19:15	21:39
93	RT	Shutdown	SCE	LA Basin	27-Feb-14	0	No	INC	1	18:35	18:59
94	RT	Software Limitation	SCE	LA Basin	3-Feb-14	0	No	INC	5	6:00	10:59
95	RT	Software Limitation	SCE	LA Basin	9-Feb-14	150	No	INC	17	6:40	22:59
96	RT	Software Limitation	SDG&E	San Diego- IV	14-Feb-14	0	No	INC	22	1:40	22:59
97	RT	System Emergency	Intertie	N/A	2-Feb-14	400	No	INC	1	16:00	16:59
98	RT	System Emergency	Intertie	N/A	6-Feb-14	0	No	INC	13	7:00	19:59

Num ber	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commit ment	INC_ DEC	Hours	Begin Time	End Time
99	RT	Unit Testing	SCE	Big Creek- Ventura	11-Feb-14	868	No	INC	1	12:08	12:37
100	RT	Unplanned Outage	PG&E	Bay Area	2-Feb-14	178	No	INC	4	15:45	18:59
101	RT	Unplanned Outage	PG&E	Bay Area	3-Feb-14	45	No	INC	17	6:10	22:59
102	RT	Unplanned Outage	PG&E	Bay Area	4-Feb-14	45-90	No	INC	0	23:10	22:59
103	RT	Unplanned Outage	SCE	Big Creek- Ventura	3-Feb-14	20	Yes	INC	16	7:00	22:59
104	RT	Unplanned Outage	SCE	LA Basin	2-Feb-14	100- 402	No	INC	8	11:50	18:59
105	RT	Unplanned Outage	SCE	LA Basin	3-Feb-14	20- 225	Yes	INC	5	6:00	10:59
106	RT	Unplanned Outage	SCE	LA Basin	4-Feb-14	10- 40	No	INC	0	23:10	22:59
107	RT	Unplanned Outage	SDG&E	San Diego- IV	3-Feb-14	20- 40	No	INC	19	4:10	22:59
108	RT	Unplanned Outage	SDG&E	San Diego- IV	4-Feb-14	20- 100	No	INC	12	11:10	22:54
109	RT	Voltage Support	PG&E	Fresno	9-Feb-14	-660 330	No	INC	23	0:40	22:59
110	RT	Voltage Support	PG&E	N/A	8-Feb-14	2	No	INC	2	4:30	5:59

Appendix A: Explanation by Example

All examples listed below are based on fictitious data.

Example 1: Exceptional Dispatch Instructions Prior to DAM

In this fictitious example, the ISO issued an exceptional dispatch instruction for resource A to be committed at its physical minimum (Pmin) of 50 MW from hours ending 5 through 10 for a generation procedure 7630. Similarly, the ISO issued additional instructions to resources B and C for the same reason as shown in Table 2. Generally, exceptional dispatches prior to the day-ahead market are commitments to minimum load. In this case the dispatch levels are all at minimum load.

Date	Market	Resource	Location	Local Reliability Area (LRA)	Begin Time	End Time	Dispatch Level (MW)	Reason
01-Jul-09	DA	A	SCE	LA BASIN	05:00	10:00	50	7630
01-Jul-09	DA	В	SCE	LA BASIN	08:00	20:00	30	7630
01-Jul-09	DA	С	SCE	LA BASIN	09:00	23:00	20	7630

Table 2: Instructions Prior to Day-Ahead Market

This data is summarized as shown in Table 3, which is the prescribed format specified in the FERC order on September 02, 2009. This summary classifies the data by reason, resource location, local reliability area, and trade date. The MW column in Table 3 is the range of MW; in this case the minimum instruction MW is 20 MW for resource C which occurs from hours ending 21 through 23. The maximum instruction occurs in hour ending 10. In this hour resource A is committed at 50 MW, resource B is committed at 30 MW and resource C is committed at 20 MW. This adds up to 100 MW. Thus the MW column shows the minimum and maximum of the overlaps of all the exceptional dispatch instructions. The Commitment column shows whether a resource was committed between the begin time and end time. Commitments are broken out separately from energy dispatches. In the day-ahead, however the exceptional dispatches are nearly always just commitments, as in this example. The Begin Time column shows hour ending 5 as this was the hour ending for first dispatch of the day, and the End Time column shows hour ending 23, as this was the hour with last dispatch. It is also possible that there might be some hours between the begin time and the end time where there might not be exceptional dispatch instructions for the given reason, meaning that the range between the begin time and end time and end time can include null hours with no dispatch.

Number	Market Type	Reason	Location	Local Reliability Area (LRA)	Trade Date	MW	Commitment	INC/DEC	Hour	Begin Time	End Time
1	DA	7630	SCE	LA Basin	1-Jul-09	20- 100	Yes	N/A	19	05:00	23:00

Example 2: Incremental Exceptional Dispatch Instructions in RTM

In this fictitious example, the ISO issued an exceptional dispatch instruction to resource A to be committed at its Pmin of 30 MW from hours ending 7 through 11 after completion of the day-ahead market for the transmission procedure 7110. This resource did not have a day-ahead award in those hours. The ISO issued another exceptional dispatch instruction to resource B, to be dispatched at 40 MW from hours ending 8 through 9 in real-time for the transmission procedure 7110. This resource had a day-ahead schedule of 20 MW from the day-ahead market, which implies that this exceptional dispatch instruction was an incremental instruction and the exceptional dispatch MW was 20 MW. Similarly, the details of exceptional dispatch (ED) instruction for resource C are shown in Table 4.

Date	Market	Resource	Location	Local Reliability Area (LRA)	Begin Time	End Time	Dispatch Level (MW)	Day- Ahead Award (MW)	Commitment	INC/DEC	ED (MW)	Reason
01-Jul-09	RT	А	PG&E	Humboldt	06:00	11:00	30	0	Yes	INC	30	7110
01-Jul-09	RT	В	PG&E	Humboldt	07:00	09:00	40	20	No	INC	20	7110
01-Jul-09	RT	С	PG&E	Humboldt	12:00	15:00	50	50	No	INC	0	7110
01-Jul-09	RT	С	PG&E	Humboldt	16:00	20:00	50	40	No	INC	10	7110

Table 4: Incremental Exceptional Dispatch Instructions in RTM

This data is summarized as shown in Table 5 and is classified by reason, resource location, local reliability area, and trade date. The MW column in Table 5 is the range of MW; in this case the minimum instruction MW is 0 MW for resource C which occurs from hours ending 13 through 15. The maximum instruction occurs in hours ending 8 & 9, as during these two hours both resources A and B have an ED MW of 30MW and 20MW, respectively. This adds up to 50 MW. Thus the MW column shows the minimum and maximum of the overlaps of all the exceptional dispatch instructions. The Commitment column shows whether a resource was committed between the begin time and end time. This column shows a commitment if there was a single commitment in the entire interval of exceptional dispatch. The Begin Time column shows the time of the first dispatch of the day. This is a time not a range. Similarly the End Time column shows a time and not a range. Exceptional dispatches occurred between these two times. Since there was a commitment between the begin time and end time then the Commitment column displays yes for the summary. Similarly, the INC/DEC column shows an INC as there was an incremental dispatch between the begin time and end time. As mentioned in the previous example it is possible that there might be some hours between the begin time and end time where there were no exceptional dispatch instructions for the given reason.

Number	Market Type	Reason	Location	Local Reliability Area (LRA)	Trade Date	MW	Commitment	INC/DEC	Hour	Begin Time	End Time
1	RT	7110	PG&E	Humboldt	1-Jul-09	0-50	Yes	INC	15	06:00	20:00

Table 5: FERC Summary of ED Instructions in RTM

Example 3: Decremental Exceptional Dispatch Instructions in RTM

This example highlights decremental exceptional dispatch instructions in the real-time market. In this fictitious example the ISO issued an exceptional dispatch instruction to resource A to be committed at its Pmin of 20 MW from hours ending 15 through 20 after completion of the day-ahead market for the transmission procedure 7430. The ISO issued additional exceptional dispatch instructions for resources B and C; details of those instructions are shown in Table 6.

Date	Market Type	Resource	Location	Local Reliability Area (LRA)	Begin Time	End Time	Dispatch Level (MW)	Day- Ahead Award (MW)	Commitment	INC/ DEC	ED (MW)	Reason
01-Jul-09	RT	А	PG&E	Fresno	15:00	20:00	20	0	Yes	INC	20	7430
01-Jul-09	RT	В	PG&E	Fresno	07:00	09:00	40	60	No	DEC	20	7430
01-Jul-09	RT	С	PG&E	Fresno	10:00	14:00	40	50	No	DEC	10	7430

Table 6: Decremental Exceptional Dispatch Instructions in RTM

This data is summarized according to FERC convention as shown in Table 7. This summary classifies the data by reason, resource location, local reliability area, and trade date. Please note that inc and dec are broken out separately. The inc entry is self-explanatory and similar to the previous example. Regarding the dec entry the MW column is the range of MW; in this case the minimum dec instruction is 10 MW (actually -10MW as it is a dec) for resource C which occurs from hours ending 10 through 14. The maximum instruction occurs from hours ending 7 through 9, when resource B was issued a dec instruction of 20 MW. Thus the MW column shows the minimum and maximum of the overlaps of all the exceptional dispatch instructions. The Commitment column shows whether a resource was committed between the begin time and end time.

 Table 7: FERC Summary of Decremental ED Instructions in RTM

Number	Market Type	Reason	Location	Local Reliability Area (LRA)	Trade Date	MW	Commitment	INC/DEC	Hour	Begin Time	End Time
1	RT	7430	PG&E	Fresno	1-Jul-09	20	Yes	INC	6	15:00	20:00
1	RT	7430	PG&E	Fresno	1-Jul-09	10-20	Yes	DEC	8	07:00	14:00

CERTIFICATE OF SERVICE

I hereby certify that I have served the foregoing document upon the parties listed on the official service lists in the above-referenced 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 April 2014.

<u>Isl Anna Pascuzzo</u>

Anna Pascuzzo