

June 14, 2013

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-___ April 2013 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 April2013.

Respectfully submitted,

By: /s/ Sidney M. Davies

Nancy Saracino
General Counsel
Roger Collanton
Deputy General Counsel
Sidney M. Davies
Assistant General Counsel
California Independent System
Operator Corporation
250 Outcropping Way
Folsom, CA 95630
Tel: (916) 608-7144

Fax (916) 608-7144 Fax (916) 608-7222 sdavies@casio.com



Exceptional Dispatch Report

Table 1: April 2013

TABLE OF CONTENTS

Introduction	3
The Nature of Exceptional Dispatch	
Appendix A: Explanation by Example	
Example 1: Exceptional Dispatch Instructions Prior to DAM	
Example 2: Incremental Exceptional Dispatch Instructions in RTM	13
Example 3: Decremental Exceptional Dispatch Instructions in RTM	
LIST OF TABLES AND FIGURES Table 1: Exceptional Dispatches in April 2013	6
	6
Table 2: Instructions Prior to Day-Ahead Market	12
Table 3: FERC Summary of Instructions Prior to DAM	13
Table 4: Incremental Exceptional Dispatch Instructions in RTM	13
Table 5: FERC Summary of ED Instructions in RTM	14
Table 6: Decremental Exceptional Dispatch Instructions in RTM	15
Table 7: FERC Summary of Decremental ED Instructions in RTM	15

Introduction

This report is filed pursuant to FERC's September 2, 2009 and May 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 April 2013.

The Nature of Exceptional Dispatch

The ISO can issue exceptional dispatch instructions for a resource as a pre-day-ahead 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 reason codes starting with "G" refer to an ISO operating procedure for generation requirements and reason codes starting with "T" refer to an ISO operating procedure for transmission facilities. Most of the generation procedures are internal to the ISO and not available on the ISO website. 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).

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

In April 2013, the ISO issued exceptional dispatches for the following generation and transmission operating requirements: (1) 7110, transmission facilities in Humboldt area, (2) 7120, North Geysers Area 115 kV Lines (3) 7430, transmission facilities in Fresno area (4) 7810, San Diego area generation requirements (5) 7820, transmission facilities in San Diego and Imperial Valley area, and (6) 7830, Management of outages of both SONGS Units #2 and #3 for Summer operation

The following additional reason for exceptional dispatch instructions in April 2013 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 April, 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

available when the CAISO files the Table 2 report for the reporting period.

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

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 123 exceptional dispatches in April 2013, increasing by 29 as compared to the May 15, 2013 report for March 2013. Exceptional dispatches issued for the following reasons accounted for approximately 64.23 percent of the total exceptional dispatches during the reporting period: software limitation, unit testing, transmission outage PG&E, and transmission outage SDG&E.

Table 1: Exceptional Dispatches in April 2013

California Independent System Operator Corporation Exceptional Dispatch Report June 14, 2013

Chart 1: Table of Exceptional Dispatches for Period 01/April/2013 - 30/ April /2013

Num ber	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commitment	INC_ DEC	Hours	Begin Time	End Time
1	RT	7110	PG&E	Humboldt	26-Apr-13	15	No	INC	5	16:45	20:02
2	RT	7120	PG&E	NCNB	29-Apr-13	5- 47	No	DEC	11	10:21	20:59
3	RT	7120	PG&E	NCNB	30-Apr-13	22- 23	No	DEC	10	12:10	21:59
4	RT	7430	PG&E	Fresno	22-Apr-13	20	No	INC	6	12:02	17:59
5	RT	7430	PG&E	Fresno	29-Apr-13	20	No	INC	11	12:25	22:59
6	RT	7430	PG&E	Fresno	30-Apr-13	20	No	INC	2	15:40	16:59
7	RT	7810	SDG&E	San Diego-IV	10-Apr-13	0	Yes	INC	8	7:55	14:24
8	RT	7820	SCE	LA Basin	28-Apr-13	20- 70	Yes	INC	4	4:00	7:59
9	RT	7820	SDG&E	San Diego-IV	6-Apr-13	117- 142	Yes	INC	14	10:07	23:59
10	RT	7820	SDG&E	San Diego-IV	7-Apr-13	117- 155	Yes	INC	24	0:00	23:59
11	RT	7820	SDG&E	San Diego-IV	23-Apr-13	20	Yes	INC	24	0:00	23:59
12	RT	7820	SDG&E	San Diego-IV	28-Apr-13	868- 1105	No	INC	6	1:00	6:59
13	RT	7830	SDG&E	San Diego-IV	1-Apr-13	50	No	INC	8	14:45	21:29
14	RT	Fast Start Unit Management	SCE	LA Basin	4-Apr-13	0	Yes	INC	2	0:30	1:29
15	RT	Generation Outage	PG&E	Bay Area	24-Apr-13	45	Yes	INC	4	20:20	23:59
16	RT	Generation Outage	PG&E	Bay Area	25-Apr-13	45	Yes	INC	10	0:00	9:59

Num ber	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commitment	INC_ DEC	Hours	Begin Time	End Time
17	RT	Generation Outage	SCE	LA Basin	22-Apr-13	20- 60	Yes	INC	17	7:35	23:59
18	RT	Generation Outage	SDG&E	San Diego-IV	15-Apr-13	20	No	INC	18	6:00	23:59
19	RT	Load Forecast Uncertainty	PG&E	Bay Area	1-Apr-13	45	Yes	INC	7	17:00	23:59
20	RT	Load Forecast Uncertainty	SCE	LA Basin	1-Apr-13	10- 45	Yes	INC	11	13:30	23:59
21	RT	Load Forecast Uncertainty	SCE	LA Basin	2-Apr-13	20	Yes	INC	24	0:00	23:59
22	RT	Load Forecast Uncertainty	SCE	LA Basin	3-Apr-13	20	Yes	INC	24	0:00	23:59
23	RT	Load Forecast Uncertainty	SCE	N/A	1-Apr-13	40	Yes	INC	8	16:00	23:59
24	RT	System Capacity	PG&E	Stockton	29-Apr-13	89	No	INC	6	16:30	21:59
25	RT	Over Generation	SCE	Big Creek- Ventura San	8-Apr-13	46- 127	No	INC	2	2:43	3:59
26	RT	Over Generation	SDG&E	Diego-IV	8-Apr-13	20	No	INC	1	3:00	3:59
27	RT	Pump Management	PG&E	Fresno	14-Apr-13	304	Yes	DEC	3	9:50	11:59
28	RT	Pump Management	PG&E	Fresno	14-Apr-13	0	Yes	INC	3	7:45	9:59
29	RT	Pump Management	PG&E	Fresno	21-Apr-13	300	Yes	DEC	1	5:00	5:59
30	RT	Software Limitation	PG&E	Bay Area	23-Apr-13	45- 268	No	DEC	21	0:00	20:59
31	RT	Software Limitation	PG&E	Bay Area	25-Apr-13	45	No	DEC	4	3:00	6:59
32	RT	Software Limitation	PG&E	Fresno	2-Apr-13	83	Yes	INC	3	13:45	15:14
33	RT	Software Limitation	PG&E	Fresno	3-Apr-13	0	Yes	INC	1	9:00	9:59
34	RT	Software Limitation	PG&E	Fresno	5-Apr-13	310- 620	Yes	DEC	5	0:45	4:59
35	RT	Software Limitation	PG&E	Fresno	7-Apr-13	311	Yes	DEC	1	1:00	1:59
36	RT	Software Limitation	PG&E	Fresno	7-Apr-13	254- 255	No	INC	15	0:00	14:59
37	RT	Software Limitation	PG&E	Fresno	8-Apr-13	309- 311	Yes	DEC	6	0:11	5:59
38	RT	Software Limitation	PG&E	Fresno	10-Apr-13	97	Yes	DEC	8	12:45	19:59
39	RT	Software Limitation	PG&E	Fresno	10-Apr-13	83	Yes	INC	8	12:45	19:59
40	RT	Software Limitation	PG&E	Fresno	18-Apr-13	0	Yes	INC	1	23:15	23:44

				Local							
Num	Market	_		Reliability				INC_		Begin	End
ber	Туре	Reason	Location	Area	Trade Date	MW	Commitment	DEC	Hours	Time	Time
41	RT	Software Limitation	PG&E	Fresno	20-Apr-13	0	Yes	INC	17	6:45	22:19
42	RT	Software Limitation	PG&E	Humboldt	4-Apr-13	15	No	INC	2	11:55	12:59
43	RT	Software Limitation	PG&E	N/A	30-Apr-13	330	No	INC	2	20:40	21:59
44	RT	Software Limitation	PG&E	Sierra	20-Apr-13	0	Yes	INC	2	3:40	4:39
45	RT	Software Limitation	SCE	Big Creek- Ventura	10-Apr-13	50	Yes	INC	2	5:00	6:59
46	RT	Software Limitation	SCE	Big Creek- Ventura	29-Apr-13	0	Yes	INC	1	23:35	23:59
47	RT	Software Limitation	SCE	Big Creek- Ventura	30-Apr-13	0	No	INC	1	0:00	0:34
48	RT	Software Limitation	SCE	LA Basin	10-Apr-13	0	Yes	INC	2	14:30	15:29
						300-					
49	RT	Software Limitation	SCE	LA Basin	17-Apr-13	305	No	INC	5	7:17	11:59
50	RT	Software Limitation	SCE	LA Basin	19-Apr-13	0	No	INC	1	23:55	23:59
51	RT	Software Limitation	SCE	LA Basin	20-Apr-13	0	No	INC	2	0:00	1:24
52	RT	Software Limitation	SCE	LA Basin	23-Apr-13	0	Yes	INC	1	23:15	23:59
53	RT	Software Limitation	SCE	LA Basin	24-Apr-13	300	No	INC	20	0:00	19:59
54	RT	Software Limitation	SDG&E	San Diego-IV	1-Apr-13	478	No	INC	1	9:16	9:59
55	RT	Software Limitation	SDG&E	San Diego-IV	9-Apr-13	80	No	DEC	1	12:00	12:59
56	RT	Software Limitation	SDG&E	San Diego-IV	9-Apr-13	6	No	INC	1	11:30	11:59
57	RT	Software Limitation	SDG&E	San Diego-IV	29-Apr-13	25	Yes	INC	3	14:45	16:59
58	RT	System Energy	Intertie	N/A	8-Apr-13	100- 500	Yes	INC	3	17:00	19:59
59	RT	System Energy	Intertie	N/A	9-Apr-13	0	No	INC	1	18:00	18:59
60	RT	Thermal Margin	SCE	LA Basin	29-Apr-13	20	Yes	INC	2	22:00	23:59
61	RT	Transmission Mitigation	PG&E	Bay Area	20-Apr-13	83- 139	Yes	INC	3	20:27	22:59
62	RT	Transmission Mitigation	PG&E	Fresno	30-Apr-13	6	Yes	INC	1	23:35	23:59

				Local							
Num	Market	Bassan	Location	Reliability	Trada Data	N/INA/	Commitment	INC_ DEC	Неше	Begin	End
ber 63	Type RT	Reason Transmission Mitigation	Location PG&E	Area Sierra	Trade Date	MW 5- 39	Commitment	DEC	Hours	Time	Time
		Transmission Mitigation			5-Apr-13		No		9	14:50	22:59
64	RT	Transmission Outage Other	PG&E	Bay Area	19-Apr-13	0 580-	No	DEC	8	13:40	20:59
65	RT	Transmission Outage Other	PG&E	Bay Area	19-Apr-13	1156	Yes	INC	9	13:40	21:59
66	RT	Transmission Outage Other	PG&E	Fresno	28-Apr-13	390	No	INC	14	10:55	23:59
67	RT	Transmission Outage Other	PG&E	N/A	19-Apr-13	45	No	INC	7	14:05	20:59
68	RT	Transmission Outage Other	PG&E	Stockton	19-Apr-13	191	No	INC	8	14:39	21:59
69	RT	Transmission Outage PG&E	PG&E	Bay Area	16-Apr-13	139- 260	Yes	INC	21	3:10	23:59
						139-				-	
70	RT	Transmission Outage PG&E	PG&E	Bay Area	17-Apr-13	216	Yes	INC	24	0:00	23:59
71	RT	Transmission Outage PG&E	PG&E	Bay Area	18-Apr-13	20- 139	Yes	INC	23	0:00	22:59
72	RT	Transmission Outage PG&E	PG&E	Bay Area	21-Apr-13	19	No	INC	2	20:30	21:29
73	RT	Transmission Outage PG&E	PG&E	Bay Area	23-Apr-13	48- 367	Yes	INC	16	6:49	21:18
74	RT	Transmission Outage PG&E	PG&E	Bay Area	24-Apr-13	45	Yes	INC	10	11:34	20:59
75	RT	Transmission Outage PG&E	PG&E	Bay Area	30-Apr-13	1- 9	No	DEC	7	17:15	23:58
76	RT	Transmission Outage PG&E	PG&E	Bay Area	30-Apr-13	0	No	INC	7	17:15	23:58
77	RT	Transmission Outage PG&E	PG&E	Fresno	16-Apr-13	604	Yes	DEC	1	6:00	6:59
78	RT	Transmission Outage PG&E	PG&E	Fresno	23-Apr-13	254	No	INC	15	5:19	19:02
				_		375-					
79	RT	Transmission Outage PG&E	PG&E	Fresno	29-Apr-13	395	No	INC	17	6:16	22:59
80	RT	Transmission Outage PG&E	PG&E	Fresno	30-Apr-13	390	No	INC	17	6:00	22:59
81	RT	Transmission Outage PG&E	PG&E	Humboldt	25-Apr-13	45- 90	No	INC	18	6:22	23:59
82	RT	Transmission Outage PG&E	PG&E	Humboldt	26-Apr-13	29- 58	No	INC	17	0:00	16:44
83	RT	Transmission Outage PG&E	PG&E	N/A	23-Apr-13	52	No	INC	14	10:00	23:59
84	RT	Transmission Outage PG&E	PG&E	Sierra	28-Apr-13	20- 30	Yes	INC	11	11:31	21:59
85	RT	Transmission Outage PG&E	PG&E	Sierra	29-Apr-13	20- 46	Yes	INC	11	10:55	20:59
86	RT	Transmission Outage PG&E	PG&E	Stockton	9-Apr-13	10- 15	No	DEC	3	20:10	22:59
87	RT	Transmission Outage PG&E	PG&E	Stockton	10-Apr-13	5	No	DEC	10	11:20	20:59
88	RT	Transmission Outage SCE	SCE	LA Basin	18-Apr-13	37	No	DEC	6	12:35	17:59

Num	Market			Local Reliability				INC		Begin	End
ber	Type	Reason	Location	Area	Trade Date	MW	Commitment	DEC	Hours	Time	Time
89	RT	Transmission Outage SCE	SCE	LA Basin	30-Apr-13	20	Yes	INC	24	0:00	23:59
90	RT	Transmission Outage SCE	SCE	N/A	26-Apr-13	32- 42	Yes	DEC	1	11:05	11:59
				San	•						
91	RT	Transmission Outage SCE	SDG&E	Diego-IV	28-Apr-13	20	Yes	INC	2	2:15	3:59
92	RT	Transmission Outage SDG&E	SCE	LA Basin	25-Apr-13	20- 40	Yes	INC	24	0:00	23:59
93	RT	Transmission Outage SDG&E	SCE	LA Basin	26-Apr-13	20	Yes	INC	4	0:00	3:59
94	RT	Transmission Outage SDG&E	SDG&E	San Diego-IV	3-Apr-13	20	Yes	INC	2	22:00	23:59
95	RT	Transmission Outage SDG&E	SDG&E	San Diego-IV	4-Apr-13	44	No	DEC	6	8:00	13:59
96	RT	Transmission Outage SDG&E	SDG&E	San Diego-IV	4-Apr-13	20- 42	Yes	INC	21	0:00	20:59
97	RT	Transmission Outage SDG&E	SDG&E	San Diego-IV	6-Apr-13	20	Yes	INC	1	23:00	23:59
98	RT	Transmission Outage SDG&E	SDG&E	San Diego-IV	12-Apr-13	20	No	INC	20	2:00	21:59
99	RT	Transmission Outage SDG&E	SDG&E	San Diego-IV	22-Apr-13	20	Yes	INC	8	16:00	23:59
100	RT	Transmission Outage SDG&E	SDG&E	San Diego-IV	24-Apr-13	20	Yes	INC	24	0:00	23:59
101	RT	Transmission Outage SDG&E	SDG&E	San Diego-IV	25-Apr-13	20- 95	Yes	INC	24	0:00	23:59
102	RT	Transmission Outage SDG&E	SDG&E	San Diego-IV	27-Apr-13	20	No	INC	22	2:00	23:59
103	RT	Unit Testing	PG&E	Bay Area	4-Apr-13	250- 380	Yes	INC	6	13:50	18:59
104	RT	Unit Testing	PG&E	Bay Area	12-Apr-13	253	No	INC	8	14:00	21:14
105	RT	Unit Testing	PG&E	Fresno	25-Apr-13	308	Yes	DEC	1	23:45	23:59
106	RT	Unit Testing	PG&E	Fresno	25-Apr-13	138	No	INC	1	16:13	16:23
107	RT	Unit Testing	PG&E	Fresno	26-Apr-13	308	Yes	DEC	1	0:00	0:59

Num ber	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commitment	INC_ DEC	Hours	Begin Time	End Time
108	RT	Unit Testing	PG&E	N/A	4-Apr-13	125- 200	Yes	INC	10	8:35	17:59
100	17.1	Offic resulting	FGaL	IN/A	4-Api-13	120-	163	INC	10	0.55	17.55
109	RT	Unit Testing	PG&E	N/A	5-Apr-13	200	Yes	INC	2	8:00	9:59
110	RT	Unit Testing	PG&E	N/A	13-Apr-13	200	Yes	INC	13	6:40	18:59
111	RT	Unit Testing	PG&E	N/A	14-Apr-13	200- 400	Yes	INC	10	9:20	18:59
112	RT	Unit Testing	PG&E	N/A	16-Apr-13	198- 202	Yes	INC	19	5:25	23:59
113	RT	Unit Testing	PG&E	N/A	17-Apr-13	200	Yes	INC	12	0:00	11:59
114	RT	Unit Testing	PG&E	N/A	18-Apr-13	242	Yes	INC	11	8:00	18:59
115	RT	Unit Testing	PG&E	N/A	22-Apr-13	470- 798	Yes	INC	11	6:50	16:59
116	RT	Unit Testing	SCE	Big Creek- Ventura	10-Apr-13	435- 611	No	DEC	2	22:00	23:59
117	RT	Unit Testing	SCE	Big Creek- Ventura	11-Apr-13	140	No	INC	2	0:00	1:59
118	RT	Unit Testing	SCE	N/A	1-Apr-13	90- 100	Yes	INC	3	10:00	12:59
110	RT	Unit Testing	SCE	NI/A	10 Apr 12	180-	Vaa	INC	13	11.50	22.50
119		Unit Testing	SCE	N/A	10-Apr-13	728	Yes			11:50	23:59
120	RT	Unit Testing	SCE	N/A	11-Apr-13	728	Yes	INC	24	0:00	23:59
121	RT	Unit Testing	SCE	N/A	12-Apr-13	728	Yes	INC	13	1:40	13:59
122	RT	Unit Testing	SCE	N/A	17-Apr-13	96- 192	Yes	INC	6	13:51	18:29
123	RT	Unit Testing	SCE	N/A	23-Apr-13	96- 196	No	INC	3	13:45	15:15

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.

Table 2: Instructions Prior to Day-Ahead Market

Date	Market	Resource	Location	Local Reliability Area (LRA)	Begin Time	End Time	Dispatch Level (MW)	Reason
01-Jul-09	DA	Α	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

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 can include null hours with no dispatch.

Table 3: FERC Summary of Instructions Prior to DAM

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.

Table 4: Incremental Exceptional Dispatch Instructions in RTM

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	Α	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

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.

Table 5: FERC Summary of 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	7110	PG&E	Humboldt	1-Jul-09	0-50	Yes	INC	15	06:00	20:00

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.

Table 6: Decremental Exceptional Dispatch Instructions in RTM

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	Α	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

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

Νι	ımber	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 14th day of June 2014.

<u>(s/ Anna Pascuzzo</u> Anna Pascuzzo