

July 15, 2011

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

Re: California Independent System Operator Corporation

Docket Nos. ER08-1178- and EL08-88-

May 2011 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 May 2011.

Respectfully submitted,

By: /s/ Sidney M. Davies\_

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# **Exceptional Dispatch Report**

**Table 1: May 2011** 

**ISO Market Services** 

July 15, 2011

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#### 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 15<sup>th</sup> of each month and one issued on the 30<sup>th</sup> of each month. This report provides data on the frequency and reasons for Exceptional Dispatches issued in May 2011.

#### The Nature of Exceptional Dispatch

The ISO can issue exceptional dispatch instructions for a resource as a pre-day-ahead unit commitment, a post-day-ahead unit commitment, or a real-time exceptional dispatch<sup>1</sup>. 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 website<sup>2</sup>.

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<sup>&</sup>lt;sup>1</sup> The ISO can issue exceptional dispatch instruction subject to authority of the ISO Tariff Section 34.9 and in accordance with ISO Operating Procedure M-402.

<sup>&</sup>lt;sup>2</sup> 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 May 2011, the ISO issued exceptional dispatches for the following local area generation requirement: (1) G-206, San Diego area generation requirements. Exceptional dispatch instructions were also issued for the following transmission management requirements: (1) T-129, transmission facilities in Fresno area; (2) T-132, transmission facilities in San Diego and Imperial Valley area; (3) T-135, Lugo-Victorville 500 kV Line and Sylmar Transformer Banks Operation; (4) T-138, transmission facilities in Humboldt area; 5) T-163, South of Magunden Nomograms; 6) T-167, transmission facilities in Tesla/Bellota Area; and (7) other transmission outages in PG&E, SCE and SDG&E area.

The following additional reasons for exceptional dispatch instructions in May 2011 were not related to specific generation or transmission operating procedures: (1) 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.); (2) Market Disruption, when the exceptional dispatch instructions were issued due to HASP failures; and (3) Ramp Rate, when exceptional dispatch instructions were issued to dispatch a resource above its physical minimum to a level where the resource has significantly higher ramp rate capability. For example, a resource could have a ramp rate of 2 MW/min at its physical minimum of 100 MW, but a significantly higher ramp rate of 10 MW/min at 250 MW. The operators could issue an exceptional dispatch for this resource to be dispatched to 250 MW, so that the resource could respond to the anticipated steep load ramp or to a potential contingency. There were a few other reasons used to explain exceptional dispatch instructions in May, which are self explanatory.

As mentioned earlier, the data shown in Table 1 is based on a template specified in the September 2009 order<sup>3</sup>. 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

<sup>&</sup>lt;sup>3</sup> 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.

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 175 exceptional dispatches in May 2011, declining by 148 as compared to the June 15, 2011 report for April 2011. There were no exceptional dispatches in the day-ahead market. All exceptional dispatches in May were issued in the real-time market. Exceptional dispatches issued for the following reasons accounted for approximately 58 percent of the total exceptional dispatches during the reporting period: Software Limitation, Transmission Outage PG&E, T-129 and T-167.

Table 1: Exceptional Dispatches in May 2011

#### California Independent System Operator Corporation Exceptional Dispatch Report July 15, 2011

## Chart 1: Table of Exceptional Dispatches for Period 01/May/2011 - 31/May/2011

Num ber	Market	Reason	Location	Local Reliability Area	Trade Date	MW	Commi	INC DEC	Hours	Begin Time	End Time
1	<b>Type</b> RT	G-206	SDG&E	San Diego	2-May-11	40	Yes	INC_DEC	13	11:00	23:59
2	RT	Generation Outage	SCE	LA Basin	29-May-11	160	No	INC	5	19:30	23:59
3	RT	Market Disruption	N/A	N/A	23-May-11	200	No	DEC	1	5:00	5:59
4	RT	Market Disruption	N/A	N/A	23-May-11	160	Yes	INC	1	5:00	5:59
5	RT	Market Disruption	N/A	N/A	26-May-11	400	Yes	INC	1	19:00	19:59
6	RT	Over Generation	PG&E	Fresno	8-May-11	0	No	INC	1	23:35	23:59
7	RT	Over Generation	PG&E	Fresno	19-May-11	310	No	DEC	1	5:55	5:59
8	RT	Over Generation	PG&E	Fresno	19-May-11	-310	No	INC	1	6:00	6:14
9	RT	PACI Scheduling Rights	N/A	N/A	13-May-11	178- 185	No	DEC	4	14:05	17:59
				Big Creek-	,						
10	RT	Path 26	SCE	Ventura	25-May-11	50	Yes	INC	7	15:45	21:59
11	RT	Pump Management	PG&E	Fresno	7-May-11	2	Yes	INC	1	0:00	0:59
12	RT	Pump Management	PG&E	Fresno	9-May-11	0	Yes	INC	1	0:00	0:39
13	RT	Pump Management	PG&E	Fresno	13-May-11	310	No	INC	1	0:00	0:29
14	RT	Pump Management	PG&E	Fresno	24-May-11	0	No	INC	1	23:05	23:34
15	RT	Ramp Rate	SCE	LA Basin	9-May-11	142	Yes	INC	4	17:25	20:59
16	RT	Ramp Rate	SCE	LA Basin	28-May-11	88	No	DEC	3	18:25	20:59
17	RT	Ramp Rate	SCE	LA Basin	28-May-11	74- 170	No	INC	3	18:25	20:59
18	RT	SP26 Capacity	PG&E	Bay Area	31-May-11	94	Yes	INC	2	13:00	14:44
19	RT	SP26 Capacity	PG&E	N/A	31-May-11	46	Yes	INC	2	13:00	14:59
20	RT	SP26 Capacity	SCE	LA Basin	9-May-11	25	Yes	INC	17	7:00	23:59

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Num	Market			Local Reliability			Commi			Begin	End
ber	Type	Reason	Location	Area	Trade Date	MW	tment	INC_DEC	Hours	Time	Time
21	RT	SP26 Capacity	SCE	LA Basin	14-May-11	20	Yes	INC	15	9:00	23:58
22	RT	SP26 Capacity	SCE	LA Basin	25-May-11	190	Yes	INC	5	16:20	20:59
23	RT	SP26 Capacity	SCE	LA Basin	30-May-11	160	No	INC	12	9:00	20:59
24	RT	SP26 Capacity	SDG&E	San Diego	31-May-11	15- 75	Yes	INC	9	13:00	21:29
25	RT	Software Limitation	N/A	N/A	10-May-11	282- 385	Yes	DEC	6	7:00	12:59
26	RT	Software Limitation	N/A	N/A	10-May-11	503- 550	No	INC	2	12:20	13:29
27	RT	Software Limitation	PG&E	Bay Area	1-May-11	0	Yes	INC	2	22:04	23:19
28	RT	Software Limitation	PG&E	Bay Area	9-May-11	0	Yes	INC	7	6:35	12:29
29	RT	Software Limitation	PG&E	Bay Area	11-May-11	0	Yes	INC	3	11:44	13:09
30	RT	Software Limitation	PG&E	Bay Area	12-May-11	0	Yes	INC	7	9:15	15:59
31	RT	Software Limitation	PG&E	Bay Area	31-May-11	510	No	INC	3	10:45	12:07
32	RT	Software Limitation	PG&E	Fresno	2-May-11	0	No	INC	1	23:13	23:59
33	RT	Software Limitation	PG&E	Fresno	6-May-11	0	No	INC	1	23:30	23:44
34	RT	Software Limitation	PG&E	Fresno	7-May-11	310	No	INC	15	9:40	23:29
35	RT	Software Limitation	PG&E	Fresno	9-May-11	0	Yes	DEC	2	6:55	7:59
36	RT	Software Limitation	PG&E	Fresno	9-May-11	83	Yes	INC	18	6:55	23:59
37	RT	Software Limitation	PG&E	Fresno	10-May-11	398- 501	No	INC	2	12:20	13:29
38	RT	Software Limitation	PG&E	Fresno	11-May-11	0	No	INC	1	23:15	23:59
39	RT	Software Limitation	PG&E	Fresno	21-May-11	0	No	INC	24	0:00	23:44
40	RT	Software Limitation	PG&E	Fresno	22-May-11	310	No	DEC	1	23:30	23:59
41	RT	Software Limitation	PG&E	Fresno	22-May-11	0	No	INC	1	23:00	23:29
42	RT	Software Limitation	PG&E	Fresno	23-May-11	160	No	INC	5	14:37	18:36
43	RT	Software Limitation	PG&E	Fresno	27-May-11	310	No	INC	1	0:15	0:59
44	RT	Software Limitation	PG&E	Fresno	29-May-11	0	No	INC	1	23:05	23:59
45	RT	Software Limitation	PG&E	Fresno	30-May-11	310	Yes	INC	24	0:00	23:59
46	RT	Software Limitation	PG&E	Fresno	31-May-11	310	Yes	INC	23	0:00	22:39
47	RT	Software Limitation	PG&E	N/A	9-May-11	0	Yes	INC	2	6:35	7:14
48	RT	Software Limitation	PG&E	N/A	28-May-11	3	Yes	INC	1	17:15	17:59
49	RT	Software Limitation	PG&E	Sierra	12-May-11	0	Yes	INC	1	12:00	12:22

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Num	Market			Local Reliability			Commi			Begin	End
ber	Type	Reason	Location	Area	Trade Date	MW	tment	INC DEC	Hours	Time	Time
50	RT	Software Limitation	SCE	LA Basin	3-May-11	20	Yes	INC	1	23:00	23:59
51	RT	Software Limitation	SCE	LA Basin	11-May-11	0	Yes	INC	2	14:20	15:04
52	RT	Software Limitation	SCE	LA Basin	19-May-11	0	Yes	INC	2	11:25	12:24
53	RT	Software Limitation	SCE	LA Basin	24-May-11	0	Yes	INC	1	8:20	8:49
54	RT	Software Limitation	SCE	LA Basin	25-May-11	0	No	INC	3	6:45	8:44
55	RT	Software Limitation	SCE	LA Basin	26-May-11	227	No	DEC	6	18:50	23:59
56	RT	Software Limitation	SDG&E	San Diego	1-May-11	20	No	INC	3	21:25	23:54
57	RT	Software Limitation	SDG&E	San Diego	18-May-11	93	Yes	INC	3	17:42	19:19
58	RT	Software Limitation	SDG&E	San Diego	21-May-11	0	No	INC	1	23:30	23:59
59	RT	Software Limitation	SDG&E	San Diego	22-May-11	0	Yes	INC	6	0:00	5:29
60	RT	System Capacity	PG&E	Bay Area	31-May-11	93	Yes	INC	2	13:00	14:59
61	RT	System Capacity	PG&E	Fresno	1-May-11	83	No	INC	2	19:20	20:34
62	RT	System Capacity	PG&E	Fresno	7-May-11	83	Yes	INC	4	19:47	22:59
63	RT	System Capacity	PG&E	Fresno	28-May-11	22	Yes	INC	1	18:05	18:59
64	RT	System Capacity	PG&E	N/A	23-May-11	208	No	INC	2	21:57	22:51
65	RT	System Capacity	SCE	LA Basin	2-May-11	20	Yes	INC	17	7:00	23:59
66	RT	System Capacity	SDG&E	San Diego	31-May-11	15	Yes	INC	1	13:00	13:29
67	RT	System Energy	N/A	N/A	1-May-11	200	Yes	INC	1	6:00	6:59
68	RT	System Energy	N/A	N/A	2-May-11	725	Yes	INC	1	0:00	0:59
69	RT	System Energy	N/A	N/A	3-May-11	200- 259	Yes	INC	18	5:00	22:59
70	RT	System Energy	N/A	N/A	15-May-11	400	Yes	INC	1	5:00	5:59
71	RT	System Energy	N/A	N/A	16-May-11	436	No	DEC	1	6:00	6:59
72	RT	System Energy	N/A	N/A	16-May-11	384	Yes	INC	1	6:00	6:59
73	RT	System Energy	N/A	N/A	17-May-11	300	Yes	INC	1	12:00	12:59
74	RT	System Energy	N/A	N/A	29-May-11	387- 457	Yes	INC	2	7:00	8:59
75	RT	System Energy	N/A	N/A	31-May-11	259- 717	Yes	INC	2	13:00	14:59
76	RT	System Energy	PG&E	Bay Area	31-May-11	47	Yes	INC	5	8:48	12:07
77	RT	System Energy	PG&E	N/A	31-May-11	300	No	INC	4	9:51	12:07
78	RT	T-129	PG&E	Fresno	7-May-11	310	No	INC	3	2:05	4:59

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Num	Market			Local Reliability			Commi			Begin	End
ber	Type	Reason	Location	Area	Trade Date	MW	tment	INC_DEC	Hours	Time	Time
79	RT	T-129	PG&E	Fresno	8-May-11	0	No	INC	2	0:20	1:04
80	RT	T-129	PG&E	Fresno	10-May-11	5- 10	No	INC	14	8:00	21:59
81	RT	T-129	PG&E	Fresno	11-May-11	3- 5	No	DEC	17	7:20	23:59
82	RT	T-129	PG&E	Fresno	12-May-11	5	No	INC	24	0:00	23:59
83	RT	T-129	PG&E	Fresno	13-May-11	0	No	INC	24	0:00	23:59
84	RT	T-129	PG&E	Fresno	14-May-11	5	No	DEC	24	0:35	23:59
85	RT	T-129	PG&E	Fresno	14-May-11	0	No	INC	1	0:00	0:34
86	RT	T-129	PG&E	Fresno	15-May-11	5	No	DEC	21	0:00	20:49
87	RT	T-129	PG&E	Fresno	15-May-11	0	No	INC	4	20:50	23:59
88	RT	T-129	PG&E	Fresno	16-May-11	5	No	DEC	20	4:55	23:59
89	RT	T-129	PG&E	Fresno	16-May-11	50	No	INC	24	0:00	23:59
90	RT	T-129	PG&E	Fresno	17-May-11	5	No	DEC	7	0:00	6:44
91	RT	T-129	PG&E	Fresno	17-May-11	45	No	INC	24	0:00	23:59
92	RT	T-129	PG&E	Fresno	22-May-11	5	No	DEC	3	11:20	13:59
93	RT	T-129	PG&E	Fresno	23-May-11	10	No	DEC	1	16:35	16:49
94	RT	T-129	PG&E	Fresno	24-May-11	2- 5	No	DEC	24	0:00	23:59
95	RT	T-129	PG&E	Fresno	24-May-11	15- 65	No	INC	24	0:00	23:59
96	RT	T-129	PG&E	Fresno	30-May-11	1- 6	No	INC	9	12:35	20:59
97	RT	T-129	PG&E	Stockton	11-May-11	2- 8	No	DEC	14	9:20	22:59
98	RT	T-129	PG&E	Stockton	11-May-11	10	No	INC	14	9:20	22:59
99	RT	T-132	SDG&E	N/A	6-May-11	150	Yes	DEC	1	12:10	12:14
100	RT	T-132	SDG&E	San Diego	18-May-11	83- 372	Yes	INC	4	17:38	20:59
101	RT	T-135	PG&E	Bay Area	31-May-11	187	Yes	INC	1	14:00	14:59
102	RT	T-135	PG&E	N/A	31-May-11	46	Yes	INC	1	14:00	14:59
103	RT	T-135	PG&E	Sierra	31-May-11	46	Yes	INC	1	13:15	13:59
104	RT	T-135	SCE	LA Basin	31-May-11	42- 47	Yes	INC	2	13:00	14:29
105	RT	T-135	SDG&E	San Diego	31-May-11	194	Yes	INC	4	12:45	15:29
106	RT	T-138	N/A	N/A	31-May-11	29	No	INC	3	12:05	14:59
107	RT	T-138	PG&E	Humboldt	3-May-11	30	No	INC	3	20:35	22:59

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#### Department of Market Services - California ISO

Num	Market			Local Reliability			Commi			Begin	End
ber	Type	Reason	Location	Area	Trade Date	MW	tment	INC_DEC	Hours	Time	Time
108	RT	T-138	PG&E	Humboldt	31-May-11	29	No	INC	4	11:48	14:59
400	БТ	T 400	005	Big Creek-	5 May 44	00 004	NIa	DEO		44.50	40.00
109	RT	T-163	SCE	Ventura Big Creek-	5-May-11	62- 201	No	DEC	9	11:52	19:29
110	RT	T-163	SCE	Ventura	5-May-11	1	No	INC	9	11:52	19:29
111	RT	T-167	PG&E	Stockton	4-May-11	10- 15	No	DEC	15	9:40	23:59
112	RT	T-167	PG&E	Stockton	12-May-11	4- 11	No	DEC	22	2:05	23:59
113	RT	T-167	PG&E	Stockton	12-May-11	55	No	INC	22	2:05	23:59
114	RT	T-167	PG&E	Stockton	13-May-11	3- 11	No	DEC	24	0:00	23:59
115	RT	T-167	PG&E	Stockton	13-May-11	25	No	INC	24	0:00	23:59
116	RT	T-167	PG&E	Stockton	14-May-11	2- 9	No	DEC	24	0:00	23:59
117	RT	T-167	PG&E	Stockton	14-May-11	55	No	INC	24	0:00	23:59
118	RT	T-167	PG&E	Stockton	15-May-11	7	No	DEC	22	0:00	21:04
119	RT	T-167	PG&E	Stockton	15-May-11	10- 55	No	INC	22	0:00	21:04
120	RT	T-167	PG&E	Stockton	28-May-11	11	No	DEC	2	22:35	23:59
121	RT	T-167	PG&E	Stockton	29-May-11	8- 10	No	DEC	24	0:00	23:59
122	RT	T-167	PG&E	Stockton	29-May-11	10- 55	No	INC	24	0:00	23:59
123	RT	T-167	PG&E	Stockton	30-May-11	25- 60	No	INC	6	5:10	10:39
124	RT	Transmission Mitigation	N/A	N/A	24-May-11	50- 64	No	DEC	5	11:00	15:59
125	RT	Transmission Outage Other	PG&E	Sierra	6-May-11	20	Yes	INC	4	7:58	10:59
126	RT	Transmission Outage PG&E	PG&E	Fresno	6-May-11	3- 10	No	DEC	8	7:25	14:29
127	RT	Transmission Outage PG&E	PG&E	Fresno	6-May-11	2- 10	No	INC	1	14:30	14:59
128	RT	Transmission Outage PG&E	PG&E	N/A	13-May-11	10- 15	No	DEC	2	11:30	12:09
129	RT	Transmission Outage PG&E	PG&E	NCNB	11-May-11	12- 32	No	DEC	1	10:01	10:54
130	RT	Transmission Outage PG&E	PG&E	Stockton	1-May-11	15- 54	No	DEC	24	0:00	23:59
131	RT	Transmission Outage PG&E	PG&E	Stockton	1-May-11	20	No	INC	24	0:40	23:59
132	RT	Transmission Outage PG&E	PG&E	Stockton	2-May-11	25- 46	No	DEC	24	0:00	23:59
133	RT	Transmission Outage PG&E	PG&E	Stockton	2-May-11	35	No	INC	24	0:00	23:59
134	RT	Transmission Outage PG&E	PG&E	Stockton	3-May-11	6- 62	Yes	DEC	24	0:00	23:59

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#### Department of Market Services - California ISO

Num ber	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commi tment	INC DEC	Hours	Begin Time	End Time
135	RT	Transmission Outage PG&E	PG&E	Stockton	3-May-11	67	Yes	INC	14	4:25	17:24
136	RT	Transmission Outage PG&E	PG&E	Stockton	4-May-11	2- 20	No	DEC	10	0:00	9:04
137	RT	Transmission Outage PG&E	PG&E	Stockton	4-May-11	5- 85	Yes	INC	14	0:00	13:29
138	RT	Transmission Outage PG&E	PG&E	Stockton	5-May-11	2- 12	No	DEC	24	0:25	23:59
139	RT	Transmission Outage PG&E	PG&E	Stockton	5-May-11	17	No	INC	24	0:25	23:59
140	RT	Transmission Outage PG&E	PG&E	Stockton	6-May-11	5- 17	No	DEC	24	0:00	23:59
141	RT	Transmission Outage PG&E	PG&E	Stockton	6-May-11	25	No	INC	7	0:00	6:14
142	RT	Transmission Outage PG&E	PG&E	Stockton	7-May-11	0- 5	No	DEC	24	0:00	23:59
143	RT	Transmission Outage PG&E	PG&E	Stockton	7-May-11	27	No	INC	24	0:00	23:59
144	RT	Transmission Outage PG&E	PG&E	Stockton	8-May-11	0- 11	No	DEC	24	0:00	23:59
145	RT	Transmission Outage PG&E	PG&E	Stockton	8-May-11	1- 25	No	INC	24	0:00	23:59
146	RT	Transmission Outage PG&E	PG&E	Stockton	9-May-11	5- 12	No	DEC	24	0:00	23:59
147	RT	Transmission Outage PG&E	PG&E	Stockton	9-May-11	25	No	INC	24	0:00	23:59
148	RT	Transmission Outage PG&E	PG&E	Stockton	10-May-11	1- 8	No	DEC	17	7:10	23:59
149	RT	Transmission Outage PG&E	PG&E	Stockton	10-May-11	27	No	INC	17	7:05	23:59
150	RT	Transmission Outage PG&E	PG&E	Stockton	17-May-11	9- 10	No	DEC	3	19:10	21:39
151	RT	Transmission Outage PG&E	PG&E	Stockton	17-May-11	25	No	INC	5	19:10	23:59
152	RT	Transmission Outage PG&E	PG&E	Stockton	18-May-11	1- 19	No	DEC	23	1:30	23:59
153	RT	Transmission Outage PG&E	PG&E	Stockton	18-May-11	15	No	INC	23	1:30	23:59
154	RT	Transmission Outage PG&E	PG&E	Stockton	19-May-11	2- 21	No	DEC	24	0:00	23:59
155	RT	Transmission Outage PG&E	PG&E	Stockton	19-May-11	15	No	INC	24	0:00	23:59
156	RT	Transmission Outage PG&E	PG&E	Stockton	24-May-11	1- 16	No	DEC	24	0:35	23:59
157	RT	Transmission Outage PG&E	PG&E	Stockton	24-May-11	5- 50	No	INC	24	0:35	23:59
158	RT	Transmission Outage SCE	N/A	N/A	9-May-11	20	Yes	INC	17	7:00	23:59
159	RT	Transmission Outage SCE	SCE	LA Basin	3-May-11	3	Yes	DEC	3	17:45	19:59
160	RT	Transmission Outage SCE	SCE	LA Basin	3-May-11	45- 445	Yes	INC	13	7:40	19:59
161	RT	Transmission Outage SCE	SCE	LA Basin	4-May-11	20	Yes	INC	24	0:00	23:59
162	RT	Transmission Outage SCE	SCE	LA Basin	13-May-11	35- 71	Yes	INC	3	13:15	15:44
163	RT	Transmission Outage SCE	SDG&E	N/A	3-May-11	126- 128	No	DEC	2	7:05	8:14

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Num ber	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commi tment	INC_DEC	Hours	Begin Time	End Time
164	RT	Transmission Outage SCE	SDG&E	N/A	3-May-11	360	No	INC	2	7:15	8:14
165	RT	Transmission Outage SCE	SDG&E	San Diego	3-May-11	172	No	DEC	2	7:15	8:14
166	RT	Transmission Outage SCE	SDG&E	San Diego	3-May-11	69	No	INC	2	7:15	8:14
167	RT	Transmission Outage SDG&E	SDG&E	San Diego	18-May-11	80	No	INC	1	18:25	18:44
168	RT	Unit Testing	N/A	N/A	12-May-11	43	Yes	INC	2	16:35	17:59
169	RT	Unit Testing	N/A	N/A	18-May-11	98	No	INC	2	9:07	10:24
170	RT	Unit Testing	PG&E	Fresno	12-May-11	46	Yes	INC	3	15:50	17:59
171	RT	Unit Testing	SCE	LA Basin	8-May-11	130- 201	Yes	INC	4	5:45	8:39
172	RT	Unit Testing	SCE	LA Basin	9-May-11	130- 220	Yes	INC	18	6:55	23:59
173	RT	Unit Testing	SCE	LA Basin	10-May-11	130- 495	Yes	INC	12	0:00	11:29
174	RT	Unit Testing	SDG&E	San Diego	21-May-11	200- 340	No	INC	9	13:20	21:59
175	RT	Unit Testing	SDG&E	San Diego	22-May-11	220- 256	Yes	INC	4	17:00	20:59

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### **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 G-219. 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 dayahead market are commitments to minimum load. In this case the dispatch levels are all at minimum load.

Local Reliability Dispatch Begin End Time Reason Date Market Resource Location Time Level (MW) Area (LRA) SCE G-219 01-Jul-09 DA Α LA BASIN 05:00 10:00 50 В SCE LA BASIN G-219 01-Jul-09 DA 20:00 30 08:00 С SCE G-219. 01-Jul-09 DA LA BASIN 23:00 20 09:00

**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 shows hour ending 5 as this was the hour ending for first dispatch of the day, and the end time 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	G-219	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 T-138. 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 T-138. 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 is 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	t-138
01-Jul-09	RT	В	PG&E	Humboldt	07:00	09:00	40	20	No	INC	20	t-138
01-Jul-09	RT	С	PG&E	Humboldt	12:00	15:00	50	50	No	INC	0	t-138
01-Jul-09	RT	С	PG&E	Humboldt	16:00	20:00	50	40	No	INC	10	t-138

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 shows the time of the first dispatch of the day. This is a time not a range. Similarly the End Time 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	T-138	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 T-129. The ISO issued additional exceptional dispatch instructions for resources B and C; details of those instructions are shown in Table 6.

Dispatch Commitment INC/ ED **Date** Market Resource Location Local Begin End Day-Reason Type Reliability Time Time Level Ahead **DEC** (MW) (MW) Award Area (LRA) (MW) **INC** 01-Jul-09 RT Α PG&E 15:00 20:00 20 Yes 20 t-129 Fresno 0 01-Jul-09 RT В PG&E 07:00 09:00 60 **DEC** 20 t-129 Fresno 40 No PG&E 01-Jul-09 RT C Fresno 10:00 14:00 50 **DEC** t-129 40 No 10

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	T-129	PG&E	Fresno	1-Jul-09	20	Yes	INC	6	15:00	20:00
1	RT	T-129	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 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 15<sup>th</sup> day of July, 2011.

<u>Isl Susan L. Montana</u> Susan L. Montana