



Exceptional Dispatch Report

Table 1: June 2017

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Introduction

This report is filed pursuant to FERC's September 2, 2009 and July 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 June 2017.

The Nature of Exceptional Dispatch

The CAISO 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 dispatch.¹ 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. A real-time exceptional dispatch above the resource day-ahead award is an incremental exceptional dispatch instruction and an exceptional dispatch below the day-ahead award is a decremental dispatch instruction.

The CAISO issues exceptional dispatch instructions to maintain the reliability of the grid when the market software cannot do so. Whenever the CAISO issues an exceptional dispatch instruction, the operator logs the dispatch and the associated reason.

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 non-modeled constraints or requirements and intertie emergency assistance. All of the transmission procedures are available on the CAISO website.²

The following reason for exceptional dispatch instructions in June 2017 was not related to 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 CAISO 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

¹ The CAISO can issue exceptional dispatch instructions subject to authority of the CAISO Tariff Section 34.11 and in accordance with CAISO Operating Procedure 2330 (formerly M-402).

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

day, then the CAISO issues an exceptional dispatch to commit this resource in 2400 so 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 June 2017, which are self explanatory.

The data in Table 1 is based on a template specified in the September 2009 order.³ 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 column specifies if there was an incremental dispatch or a decremental dispatch from the IFM schedule. 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 there were 383 exceptional dispatches in June 2017, as compared to 487 exceptional dispatches in May 2017. Exceptional dispatches issued for the following reasons accounted for approximately 35 percent of the total exceptional dispatches during the reporting period: planned transmission outages, software limitations, and operating procedure number 7110 (along with 7230, 7410, 7430, 7670, and 7820). Many of the exceptional dispatches with the reason “Other Reliability Requirement” were due to Real Time Contingency Analysis.

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.

Table 1: Exceptional Dispatches in June 2017

**California Independent System Operator Corporation
Exceptional Dispatch Report
August 15, 2017**

Chart 1: Table of Exceptional Dispatches for Period 01/June/2017 - 30/June/2017

Number	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commitment	INC_DEC	Hours	Begin Time	End Time
1	RT	Bridging Schedules	SCE	LA Basin	6/17/2017	70	No	INC	8	16:00	23:59
2	RT	Bridging Schedules	SCE	LA Basin	6/21/2017	20	Yes	INC	1	23:00	23:59
3	RT	Bridging Schedules	SDG&E	San Diego-IV	6/20/2017	20	Yes	INC	1	23:00	23:59
4	RT	Bridging Schedules	SDG&E	San Diego-IV	6/22/2017	20	Yes	INC	2	22:00	23:59
5	RT	Contingency Dispatch	PG&E	Bay Area	6/16/2017	480-640	No	INC	2	5:33	6:59
6	RT	Contingency Dispatch	SCE	LA Basin	6/16/2017	500	No	DEC	1	6:02	6:59
7	RT	Contingency Dispatch	SCE	LA Basin	6/16/2017	182-188	No	INC	1	5:33	6:23
8	RT	Contingency Dispatch	SDG&E	San Diego-IV	6/16/2017	300	No	DEC	1	6:00	6:59
9	RT	Fast Start Unit Management	PG&E	Bay Area	6/16/2017	0	No	INC	2	8:15	9:19
10	RT	Fast Start Unit Management	PG&E	Bay Area	6/23/2017	0	No	INC	2	12:30	13:34
11	RT	Fast Start Unit Management	SCE	Big Creek-Ventura	6/23/2017	0	No	INC	1	12:30	13:29
12	RT	Fast Start Unit Management	SCE	LA Basin	6/8/2017	0	No	INC	1	15:05	16:04
13	RT	Fast Start Unit Management	SCE	LA Basin	6/16/2017	0	No	INC	2	8:15	9:19
14	RT	Fast Start Unit Management	SCE	LA Basin	6/23/2017	0	No	INC	2	12:30	14:29
15	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	6/1/2017	10- 40	No	DEC	24	0:00	23:59
16	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	6/1/2017	4- 40	No	INC	24	0:00	23:59
17	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	6/2/2017	10- 40	No	DEC	24	0:00	23:59
18	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	6/2/2017	13- 40	No	INC	24	0:00	23:59

Number	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commitment	INC_DEC	Hours	Begin Time	End Time
19	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	6/3/2017	10- 40	No	DEC	24	0:00	23:59
20	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	6/3/2017	13- 40	No	INC	24	0:00	23:59
21	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	6/4/2017	10- 40	No	DEC	24	0:00	23:59
22	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	6/4/2017	13- 40	No	INC	24	0:00	23:59
23	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	6/5/2017	10- 40	No	DEC	24	0:00	23:59
24	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	6/5/2017	13- 40	No	INC	24	0:00	23:59
25	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	6/6/2017	10- 40	No	DEC	24	0:00	23:59
26	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	6/6/2017	17- 40	No	INC	24	0:00	23:59
27	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	6/7/2017	10- 40	No	DEC	24	0:00	23:59
28	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	6/7/2017	13- 40	No	INC	24	0:00	23:59
29	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	6/8/2017	10- 40	No	DEC	24	0:00	23:59
30	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	6/8/2017	30- 40	No	INC	24	0:00	23:59
31	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	6/9/2017	28- 40	No	DEC	24	0:00	23:59
32	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	6/9/2017	10- 40	No	INC	24	0:00	23:59
33	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	6/10/2017	10- 40	No	DEC	24	0:00	23:59
34	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	6/10/2017	4- 40	No	INC	24	0:00	23:59
35	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	6/11/2017	5- 40	No	DEC	24	0:00	23:59
36	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	6/11/2017	4- 40	No	INC	24	0:00	23:59
37	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	6/12/2017	5- 40	No	DEC	24	0:00	23:59
38	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	6/12/2017	10- 40	No	INC	24	0:00	23:59
39	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	6/13/2017	5- 40	No	DEC	24	0:00	23:59
40	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	6/13/2017	4- 40	No	INC	24	0:00	23:59
41	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	6/14/2017	5- 40	No	DEC	24	0:00	23:59
42	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	6/14/2017	30- 40	No	INC	24	0:00	23:59
43	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	6/15/2017	10- 40	No	DEC	24	0:00	23:59
44	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	6/15/2017	30- 40	No	INC	24	0:00	23:59
45	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	6/16/2017	10- 40	No	DEC	24	0:00	23:59
46	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	6/16/2017	30- 40	No	INC	24	0:00	23:59
47	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	6/17/2017	10- 40	No	DEC	24	0:00	23:59

Number	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commitment	INC_DEC	Hours	Begin Time	End Time
48	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	6/17/2017	5- 40	No	INC	24	0:00	23:59
49	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	6/18/2017	10- 40	No	DEC	24	0:00	23:59
50	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	6/18/2017	30- 40	No	INC	24	0:00	23:59
51	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	6/19/2017	5- 40	No	DEC	24	0:00	23:59
52	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	6/19/2017	30- 40	No	INC	24	0:00	23:59
53	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	6/20/2017	5- 40	No	DEC	24	0:00	23:59
54	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	6/20/2017	16- 40	No	INC	24	0:00	23:59
55	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	6/21/2017	10- 40	No	DEC	24	0:00	23:59
56	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	6/21/2017	5- 40	No	INC	24	0:00	23:59
57	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	6/22/2017	5- 40	No	DEC	24	0:00	23:59
58	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	6/22/2017	10- 40	No	INC	24	0:00	23:59
59	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	6/23/2017	5- 40	No	DEC	24	0:00	23:59
60	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	6/23/2017	30- 40	No	INC	24	0:00	23:59
61	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	6/24/2017	10- 40	No	DEC	24	0:00	23:59
62	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	6/24/2017	17- 40	No	INC	24	0:00	23:59
63	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	6/25/2017	10- 40	No	DEC	24	0:00	23:59
64	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	6/25/2017	17- 40	No	INC	24	0:00	23:59
65	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	6/26/2017	10- 40	No	DEC	24	0:00	23:59
66	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	6/26/2017	4- 40	No	INC	24	0:00	23:59
67	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	6/27/2017	10- 40	No	DEC	24	0:00	23:59
68	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	6/27/2017	4- 40	No	INC	24	0:00	23:59
69	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	6/28/2017	10- 40	No	DEC	24	0:00	23:59
70	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	6/28/2017	4- 40	No	INC	24	0:00	23:59
71	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	6/29/2017	10- 40	No	DEC	24	0:00	23:59
72	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	6/29/2017	4- 40	No	INC	24	0:00	23:59
73	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	6/30/2017	10- 40	No	DEC	24	0:00	23:59
74	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	6/30/2017	4- 40	No	INC	24	0:00	23:59
75	RT	Incomplete or Inaccurate Transmission	PG&E	N/A	6/2/2017	18- 74	No	DEC	8	12:25	19:59
76	RT	Incomplete or Inaccurate Transmission	PG&E	N/A	6/2/2017	68- 142	No	INC	8	12:25	19:59

Number	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commitment	INC_DEC	Hours	Begin Time	End Time
77	RT	Incomplete or Inaccurate Transmission	PG&E	N/A	6/3/2017	18- 138	No	DEC	9	11:05	19:59
78	RT	Incomplete or Inaccurate Transmission	PG&E	N/A	6/3/2017	15- 138	No	INC	9	11:05	19:59
79	RT	Incomplete or Inaccurate Transmission	PG&E	NCNB	6/19/2017	78	No	DEC	2	13:05	14:14
80	RT	Incomplete or Inaccurate Transmission	PG&E	Stockton	6/1/2017	70	No	DEC	24	0:00	23:59
81	RT	Incomplete or Inaccurate Transmission	PG&E	Stockton	6/1/2017	70	No	INC	24	0:00	23:59
82	RT	Incomplete or Inaccurate Transmission	PG&E	Stockton	6/2/2017	20- 70	No	DEC	20	0:00	19:59
83	RT	Incomplete or Inaccurate Transmission	PG&E	Stockton	6/2/2017	20- 70	No	INC	20	0:00	19:59
84	RT	Incomplete or Inaccurate Transmission	PG&E	Stockton	6/3/2017	50- 65	No	DEC	13	7:57	19:59
85	RT	Incomplete or Inaccurate Transmission	PG&E	Stockton	6/3/2017	30- 56	No	INC	12	7:57	18:59
86	RT	Incomplete or Inaccurate Transmission	PG&E	Stockton	6/5/2017	30	No	DEC	10	10:31	19:59
87	RT	Incomplete or Inaccurate Transmission	PG&E	Stockton	6/5/2017	30	No	INC	10	10:31	19:59
88	RT	Incomplete or Inaccurate Transmission	PG&E	Stockton	6/6/2017	42- 120	No	DEC	20	3:20	22:59
89	RT	Incomplete or Inaccurate Transmission	PG&E	Stockton	6/6/2017	30- 70	No	INC	22	1:15	22:59
90	RT	Incomplete or Inaccurate Transmission	PG&E	Stockton	6/9/2017	80	No	DEC	3	21:23	23:59
91	RT	Incomplete or Inaccurate Transmission	PG&E	Stockton	6/9/2017	60- 75	No	INC	6	1:02	6:59
92	RT	Incomplete or Inaccurate Transmission	PG&E	Stockton	6/10/2017	80	No	INC	8	0:00	7:59
93	RT	Incomplete or Inaccurate Transmission	PG&E	Stockton	6/20/2017	70	No	DEC	4	20:30	23:59
94	RT	Incomplete or Inaccurate Transmission	PG&E	Stockton	6/20/2017	70- 80	No	INC	6	16:00	21:59
95	RT	Incomplete or Inaccurate Transmission	SDG&E	San Diego-IV	6/2/2017	17	No	DEC	9	9:10	17:59
96	RT	Incomplete or Inaccurate Transmission	SDG&E	San Diego-IV	6/2/2017	26- 49	No	INC	10	8:50	17:59
97	RT	Incomplete or Inaccurate Transmission	SDG&E	San Diego-IV	6/9/2017	37	No	DEC	7	14:35	20:59
98	RT	Incomplete or Inaccurate Transmission	SDG&E	San Diego-IV	6/9/2017	37	No	INC	7	14:35	20:59
99	RT	Incomplete or Inaccurate Transmission	SDG&E	San Diego-IV	6/23/2017	15	No	INC	6	10:00	15:29
100	RT	Load Forecast Uncertainty	Intertie	N/A	6/19/2017	8	No	DEC	1	16:00	16:59
101	RT	Load Forecast Uncertainty	Intertie	N/A	6/19/2017	85- 129	No	INC	2	15:00	16:59
102	RT	Load Forecast Uncertainty	Intertie	N/A	6/20/2017	94	No	INC	1	17:00	17:59
103	RT	Load Forecast Uncertainty	Intertie	N/A	6/21/2017	35- 164	No	INC	3	16:00	18:59
104	RT	Load Forecast Uncertainty	N/A	N/A	6/19/2017	0	No	INC	1	17:00	17:59
105	RT	Load Forecast Uncertainty	N/A	N/A	6/21/2017	20- 100	No	INC	2	17:00	18:59

Number	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commitment	INC_DEC	Hours	Begin Time	End Time
106	RT	Load Forecast Uncertainty	PG&E	Bay Area	6/14/2017	140	No	INC	9	15:00	23:59
107	RT	Load Forecast Uncertainty	PG&E	Bay Area	6/18/2017	175	No	DEC	24	0:00	23:59
108	RT	Load Forecast Uncertainty	PG&E	Bay Area	6/18/2017	175	No	INC	24	0:00	23:59
109	RT	Load Forecast Uncertainty	PG&E	Bay Area	6/19/2017	120	No	DEC	5	15:00	19:59
110	RT	Load Forecast Uncertainty	PG&E	Bay Area	6/19/2017	360	No	INC	6	15:00	20:59
111	RT	Load Forecast Uncertainty	PG&E	Bay Area	6/20/2017	120-175	No	INC	21	0:00	20:59
112	RT	Load Forecast Uncertainty	PG&E	Bay Area	6/23/2017	240	No	INC	1	10:49	11:44
113	RT	Load Forecast Uncertainty	PG&E	N/A	6/10/2017	142	No	INC	5	17:00	21:59
114	RT	Load Forecast Uncertainty	SCE	Big Creek-Ventura	6/2/2017	140	No	INC	12	12:00	23:59
115	RT	Load Forecast Uncertainty	SCE	Big Creek-Ventura	6/17/2017	50	No	INC	12	12:00	23:59
116	RT	Load Forecast Uncertainty	SCE	Big Creek-Ventura	6/18/2017	240-290	Yes	INC	13	11:00	23:59
117	RT	Load Forecast Uncertainty	SCE	Big Creek-Ventura	6/21/2017	50	No	INC	1	23:00	23:59
118	RT	Load Forecast Uncertainty	SCE	Big Creek-Ventura	6/22/2017	50- 250	No	DEC	24	0:00	23:59
119	RT	Load Forecast Uncertainty	SCE	Big Creek-Ventura	6/22/2017	50- 500	No	INC	24	0:00	23:59
120	RT	Load Forecast Uncertainty	SCE	Big Creek-Ventura	6/23/2017	50- 83	No	INC	20	0:00	19:59
121	RT	Load Forecast Uncertainty	SCE	LA Basin	6/1/2017	20	No	INC	24	0:00	23:59
122	RT	Load Forecast Uncertainty	SCE	LA Basin	6/12/2017	20	No	INC	9	15:00	23:59
123	RT	Load Forecast Uncertainty	SCE	LA Basin	6/14/2017	20	No	INC	9	15:00	23:59
124	RT	Load Forecast Uncertainty	SCE	LA Basin	6/15/2017	10- 205	No	INC	10	14:00	23:59
125	RT	Load Forecast Uncertainty	SCE	LA Basin	6/16/2017	20- 220	No	INC	13	11:00	23:59
126	RT	Load Forecast Uncertainty	SCE	LA Basin	6/17/2017	70	No	DEC	8	16:00	23:58
127	RT	Load Forecast Uncertainty	SCE	LA Basin	6/17/2017	70	No	INC	8	16:00	23:58

Number	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commitment	INC_DEC	Hours	Begin Time	End Time
128	RT	Load Forecast Uncertainty	SCE	LA Basin	6/18/2017	130	No	DEC	22	2:00	23:58
129	RT	Load Forecast Uncertainty	SCE	LA Basin	6/18/2017	130	No	INC	22	2:00	23:58
130	RT	Load Forecast Uncertainty	SCE	LA Basin	6/19/2017	98- 147	No	DEC	6	15:35	20:59
131	RT	Load Forecast Uncertainty	SCE	LA Basin	6/19/2017	147	No	INC	6	15:35	20:59
132	RT	Load Forecast Uncertainty	SCE	LA Basin	6/21/2017	150	No	DEC	3	13:15	15:59
133	RT	Load Forecast Uncertainty	SCE	LA Basin	6/21/2017	20	No	INC	1	23:15	23:59
134	RT	Load Forecast Uncertainty	SCE	LA Basin	6/22/2017	20- 110	Yes	INC	24	0:00	23:59
135	RT	Load Forecast Uncertainty	SCE	LA Basin	6/23/2017	48- 235	No	INC	1	10:49	11:44
136	RT	Load Forecast Uncertainty	SCE	LA Basin	6/24/2017	65- 245	No	DEC	9	13:00	21:59
137	RT	Load Forecast Uncertainty	SCE	LA Basin	6/24/2017	115- 572	Yes	INC	24	0:00	23:59
138	RT	Load Forecast Uncertainty	SCE	LA Basin	6/25/2017	65- 425	No	DEC	7	15:00	21:59
139	RT	Load Forecast Uncertainty	SCE	LA Basin	6/25/2017	95- 501	No	INC	24	0:00	23:59
140	RT	Load Forecast Uncertainty	SCE	LA Basin	6/26/2017	95- 166	Yes	INC	24	0:00	23:59
141	RT	Load Forecast Uncertainty	SDG&E	San Diego-IV	6/5/2017	20	No	INC	10	14:00	23:59
142	RT	Load Forecast Uncertainty	SDG&E	San Diego-IV	6/13/2017	20	No	INC	2	22:00	23:59
143	RT	Load Forecast Uncertainty	SDG&E	San Diego-IV	6/14/2017	20	No	INC	24	0:00	23:59
144	RT	Load Forecast Uncertainty	SDG&E	San Diego-IV	6/15/2017	20	No	INC	24	0:00	23:59
145	RT	Load Forecast Uncertainty	SDG&E	San Diego-IV	6/16/2017	20	No	INC	12	12:00	23:59
146	RT	Load Forecast Uncertainty	SDG&E	San Diego-IV	6/17/2017	40	No	INC	12	12:00	23:59
147	RT	Load Forecast Uncertainty	SDG&E	San Diego-IV	6/18/2017	40- 80	No	INC	24	0:00	23:59
148	RT	Load Forecast Uncertainty	SDG&E	San Diego-IV	6/19/2017	95	No	DEC	4	17:26	20:59
149	RT	Load Forecast Uncertainty	SDG&E	San Diego-IV	6/19/2017	95	No	INC	4	17:26	20:59
150	RT	Load Forecast Uncertainty	SDG&E	San Diego-IV	6/20/2017	200	No	INC	4	17:15	20:59
151	RT	Load Forecast Uncertainty	SDG&E	San Diego-IV	6/21/2017	100	No	DEC	4	16:35	19:59
152	RT	Load Forecast Uncertainty	SDG&E	San Diego-IV	6/21/2017	20- 200	Yes	INC	24	0:00	23:59
153	RT	Load Forecast Uncertainty	SDG&E	San Diego-IV	6/24/2017	20- 136	No	INC	20	2:00	21:59
154	RT	Load Forecast Uncertainty	SDG&E	San Diego-IV	6/25/2017	20- 136	No	INC	12	12:00	23:59
155	RT	Load Forecast Uncertainty	SDG&E	San Diego-IV	6/26/2017	20- 126	No	INC	14	9:00	22:59

Number	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commitment	INC_DEC	Hours	Begin Time	End Time
156	RT	Load Pull	PG&E	Fresno	6/14/2017	83	No	INC	4	5:40	8:59
157	RT	Load Pull	SCE	Big Creek-Ventura	6/23/2017	250	No	INC	3	18:10	20:59
158	RT	Load Pull	SCE	LA Basin	6/17/2017	142	No	INC	7	15:30	21:59
159	RT	Load Pull	SCE	LA Basin	6/18/2017	480	No	DEC	6	16:00	21:59
160	RT	Load Pull	SCE	LA Basin	6/18/2017	382	No	INC	7	15:50	21:59
161	RT	Load Pull	SCE	LA Basin	6/19/2017	360-502	No	DEC	8	13:40	20:59
162	RT	Load Pull	SCE	LA Basin	6/20/2017	360-502	No	DEC	8	13:45	20:59
163	RT	Load Pull	SCE	LA Basin	6/20/2017	142	No	INC	8	13:50	20:59
164	RT	Load Pull	SCE	LA Basin	6/21/2017	502	No	DEC	7	14:25	20:59
165	RT	Load Pull	SCE	LA Basin	6/23/2017	180	No	DEC	3	18:05	20:59
166	RT	Load Pull	SCE	LA Basin	6/23/2017	322	No	INC	3	18:05	20:59
167	RT	Load Pull	SCE	LA Basin	6/25/2017	240	No	INC	4	18:00	21:59
168	RT	Load Pull	SCE	LA Basin	6/26/2017	150	No	INC	2	18:00	19:59
169	RT	Load Pull	SCE	LA Basin	6/28/2017	65	No	INC	2	18:00	19:59
170	RT	Load Pull	SCE	LA Basin	6/29/2017	65	No	INC	1	17:00	17:59
171	RT	Load Pull	SDG&E	San Diego-IV	6/13/2017	68	No	INC	16	5:45	20:59
172	RT	Load Pull	SDG&E	San Diego-IV	6/14/2017	68	No	INC	15	5:45	19:59
173	RT	Load Pull	SDG&E	San Diego-IV	6/15/2017	68	No	INC	15	6:00	20:59
174	RT	Load Pull	SDG&E	San Diego-IV	6/16/2017	68	No	INC	3	16:30	18:59
175	RT	Load Pull	SDG&E	San Diego-IV	6/17/2017	68	No	INC	7	15:30	21:59
176	RT	Load Pull	SDG&E	San Diego-IV	6/18/2017	131	No	INC	6	16:05	21:59
177	RT	Load Pull	SDG&E	San Diego-IV	6/22/2017	131	No	DEC	6	14:00	19:59
178	RT	Load Pull	SDG&E	San Diego-IV	6/22/2017	131	No	INC	6	14:00	19:59
179	RT	Load Pull	SDG&E	San Diego-IV	6/27/2017	63	No	INC	3	18:00	20:59
180	RT	Load Pull	SCE	LA Basin	6/27/2017	65	No	DEC	2	18:00	19:59
181	RT	Load Pull	SCE	LA Basin	6/27/2017	65	No	INC	2	18:00	19:59

Number	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commitment	INC_DEC	Hours	Begin Time	End Time
182	RT	Load Pull	SDG&E	San Diego-IV	6/27/2017	68	No	INC	2	18:00	19:59
183	RT	Operating Procedure Number and Constraint (7110)	PG&E	Humboldt	6/1/2017	15- 42	No	INC	24	0:00	23:59
184	RT	Operating Procedure Number and Constraint (7110)	PG&E	Humboldt	6/2/2017	12	No	DEC	5	2:15	6:59
185	RT	Operating Procedure Number and Constraint (7110)	PG&E	Humboldt	6/2/2017	12- 24	No	INC	7	0:00	6:59
186	RT	Operating Procedure Number and Constraint (7110)	PG&E	Humboldt	6/3/2017	30	No	INC	1	22:00	22:59
187	RT	Operating Procedure Number and Constraint (7110)	PG&E	Humboldt	6/4/2017	22- 26	No	INC	17	7:45	23:59
188	RT	Operating Procedure Number and Constraint (7110)	PG&E	Humboldt	6/5/2017	12	No	DEC	4	4:50	7:59
189	RT	Operating Procedure Number and Constraint (7110)	PG&E	Humboldt	6/5/2017	12- 24	No	INC	8	0:00	7:59
190	RT	Operating Procedure Number and Constraint (7110)	PG&E	Humboldt	6/6/2017	20	No	DEC	3	21:00	23:59
191	RT	Operating Procedure Number and Constraint (7110)	PG&E	Humboldt	6/6/2017	10- 20	No	INC	3	21:00	23:59
192	RT	Operating Procedure Number and Constraint (7110)	PG&E	Humboldt	6/7/2017	13	No	DEC	6	14:35	19:59
193	RT	Operating Procedure Number and Constraint (7110)	PG&E	Humboldt	6/7/2017	10- 20	No	INC	20	0:00	19:59
194	RT	Operating Procedure Number and Constraint (7110)	PG&E	Humboldt	6/10/2017	15	No	DEC	5	19:30	23:59
195	RT	Operating Procedure Number and Constraint (7110)	PG&E	Humboldt	6/10/2017	12- 30	No	INC	14	10:55	23:59
196	RT	Operating Procedure Number and Constraint (7110)	PG&E	Humboldt	6/11/2017	15	No	DEC	17	7:40	23:59
197	RT	Operating Procedure Number and Constraint (7110)	PG&E	Humboldt	6/11/2017	15- 45	No	INC	24	0:00	23:59

Number	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commitment	INC_DEC	Hours	Begin Time	End Time
198	RT	Operating Procedure Number and Constraint (7110)	PG&E	Humboldt	6/12/2017	15	No	INC	8	0:00	7:59
199	RT	Operating Procedure Number and Constraint (7110)	PG&E	Humboldt	6/17/2017	32	No	DEC	3	21:45	23:59
200	RT	Operating Procedure Number and Constraint (7110)	PG&E	Humboldt	6/17/2017	32	No	INC	3	21:45	23:59
201	RT	Operating Procedure Number and Constraint (7110)	PG&E	Humboldt	6/18/2017	32	No	INC	2	0:00	1:59
202	RT	Operating Procedure Number and Constraint (7110)	PG&E	Humboldt	6/19/2017	24	No	INC	2	22:25	23:59
203	RT	Operating Procedure Number and Constraint (7110)	PG&E	Humboldt	6/20/2017	12- 25	No	DEC	23	1:40	23:59
204	RT	Operating Procedure Number and Constraint (7110)	PG&E	Humboldt	6/20/2017	12- 24	No	INC	21	0:00	20:59
205	RT	Operating Procedure Number and Constraint (7110)	PG&E	Humboldt	6/21/2017	12	No	DEC	8	0:00	7:59
206	RT	Operating Procedure Number and Constraint (7110)	PG&E	Humboldt	6/21/2017	12	No	INC	8	0:00	7:59
207	RT	Operating Procedure Number and Constraint (7110)	PG&E	Humboldt	6/22/2017	15- 30	No	DEC	17	7:30	23:59
208	RT	Operating Procedure Number and Constraint (7110)	PG&E	Humboldt	6/22/2017	30	No	INC	2	22:50	23:59
209	RT	Operating Procedure Number and Constraint (7110)	PG&E	Humboldt	6/23/2017	20	No	DEC	9	3:40	11:59
210	RT	Operating Procedure Number and Constraint (7110)	PG&E	Humboldt	6/23/2017	20- 32	No	INC	24	0:00	23:59
211	RT	Operating Procedure Number and Constraint (7110)	PG&E	Humboldt	6/24/2017	32	No	DEC	2	22:20	23:59
212	RT	Operating Procedure Number and Constraint (7110)	PG&E	Humboldt	6/24/2017	32	No	INC	2	22:20	23:59
213	RT	Operating Procedure Number and Constraint (7110)	PG&E	Humboldt	6/25/2017	16- 25	No	DEC	22	1:10	22:59

Number	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commitment	INC_DEC	Hours	Begin Time	End Time
214	RT	Operating Procedure Number and Constraint (7110)	PG&E	Humboldt	6/25/2017	16- 32	No	INC	23	0:00	22:59
215	RT	Operating Procedure Number and Constraint (7110)	PG&E	Humboldt	6/26/2017	20	No	DEC	12	8:00	19:59
216	RT	Operating Procedure Number and Constraint (7110)	PG&E	Humboldt	6/26/2017	20	No	INC	12	8:00	19:59
217	RT	Operating Procedure Number and Constraint (7110)	PG&E	Humboldt	6/27/2017	16	No	DEC	2	19:40	20:44
218	RT	Operating Procedure Number and Constraint (7110)	PG&E	Humboldt	6/27/2017	21- 33	No	INC	18	6:45	23:59
219	RT	Operating Procedure Number and Constraint (7110)	PG&E	Humboldt	6/28/2017	10- 25	No	INC	12	0:00	11:59
220	RT	Operating Procedure Number and Constraint (7110)	PG&E	Humboldt	6/29/2017	30	No	DEC	5	18:35	23:29
221	RT	Operating Procedure Number and Constraint (7110)	PG&E	Humboldt	6/29/2017	30- 60	No	INC	6	18:35	23:59
222	RT	Operating Procedure Number and Constraint (7110)	PG&E	Humboldt	6/30/2017	30	No	INC	2	0:00	1:14
223	RT	Operating Procedure Number and Constraint (7230)	PG&E	Sierra	6/24/2017	20- 46	No	INC	8	16:06	23:59
224	RT	Operating Procedure Number and Constraint (7230)	PG&E	Sierra	6/25/2017	20- 42	No	INC	24	0:00	23:59
225	RT	Operating Procedure Number and Constraint (7230)	PG&E	Sierra	6/26/2017	20	No	INC	24	0:00	23:59
226	RT	Operating Procedure Number and Constraint (7230)	PG&E	Sierra	6/27/2017	20	No	INC	1	0:00	0:29
227	RT	Operating Procedure Number and Constraint (7410)	PG&E	Sierra	6/19/2017	20	No	DEC	4	20:40	23:59
228	RT	Operating Procedure Number and Constraint (7410)	PG&E	Sierra	6/19/2017	20	No	INC	4	20:40	23:59
229	RT	Operating Procedure Number and Constraint (7410)	PG&E	Sierra	6/20/2017	20	Yes	INC	1	0:00	0:59

Number	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commitment	INC_DEC	Hours	Begin Time	End Time
230	RT	Operating Procedure Number and Constraint (7410)	PG&E	Stockton	6/19/2017	261	No	DEC	5	19:25	23:59
231	RT	Operating Procedure Number and Constraint (7410)	PG&E	Stockton	6/19/2017	80	No	INC	5	19:50	23:59
232	RT	Operating Procedure Number and Constraint (7410)	PG&E	Stockton	6/20/2017	106	No	DEC	5	18:40	23:14
233	RT	Operating Procedure Number and Constraint (7410)	PG&E	Stockton	6/20/2017	341	No	INC	1	0:00	0:29
234	RT	Operating Procedure Number and Constraint (7410)	PG&E	Stockton	6/22/2017	70	No	DEC	2	20:00	21:59
235	RT	Operating Procedure Number and Constraint (7410)	PG&E	Stockton	6/22/2017	70- 80	No	INC	6	16:35	21:59
236	RT	Operating Procedure Number and Constraint (7430)	PG&E	Fresno	6/3/2017	300-380	No	INC	1	23:09	23:59
237	RT	Operating Procedure Number and Constraint (7430)	PG&E	Fresno	6/4/2017	300	No	INC	2	0:00	1:59
238	RT	Operating Procedure Number and Constraint (7430)	PG&E	Fresno	6/13/2017	65	No	INC	6	18:20	23:59
239	RT	Operating Procedure Number and Constraint (7430)	PG&E	Fresno	6/14/2017	65- 75	No	INC	24	0:00	23:59
240	RT	Operating Procedure Number and Constraint (7430)	PG&E	Fresno	6/15/2017	75	No	INC	7	0:00	6:59
241	RT	Operating Procedure Number and Constraint (7430)	PG&E	Fresno	6/21/2017	83	No	INC	3	0:05	2:29
242	RT	Operating Procedure Number and Constraint (7430)	PG&E	Fresno	6/24/2017	70- 74	No	INC	7	5:45	11:59
243	RT	Operating Procedure Number and Constraint (7430)	PG&E	Fresno	6/25/2017	485	No	INC	2	20:00	21:29
244	RT	Operating Procedure Number and Constraint (7430)	PG&E	N/A	6/23/2017	318	No	INC	3	2:13	4:59
245	RT	Operating Procedure Number and Constraint (7670)	SCE	LA Basin	6/26/2017	20	No	INC	8	16:45	23:59

Number	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commitment	INC_DEC	Hours	Begin Time	End Time
246	RT	Operating Procedure Number and Constraint (7670)	SCE	LA Basin	6/27/2017	20	No	DEC	17	0:00	16:44
247	RT	Operating Procedure Number and Constraint (7670)	SCE	LA Basin	6/27/2017	20- 40	No	INC	24	0:00	23:59
248	RT	Operating Procedure Number and Constraint (7820)	SCE	LA Basin	6/28/2017	20	No	INC	10	14:00	23:59
249	RT	Other Reliability Requirement	PG&E	Fresno	6/16/2017	83	No	INC	1	5:53	6:44
250	RT	Other Reliability Requirement	PG&E	Fresno	6/26/2017	0	No	DEC	1	23:20	23:59
251	RT	Other Reliability Requirement	PG&E	N/A	6/26/2017	50	No	DEC	1	23:20	23:59
252	RT	Other Reliability Requirement	PG&E	Sierra	6/7/2017	200	No	DEC	3	19:42	21:59
253	RT	Other Reliability Requirement	PG&E	Sierra	6/7/2017	200	No	INC	3	19:42	21:59
254	RT	Other Reliability Requirement	PG&E	Sierra	6/8/2017	10	No	DEC	2	17:30	19:14
255	RT	Other Reliability Requirement	PG&E	Stockton	6/4/2017	35- 50	No	DEC	16	6:41	21:52
256	RT	Other Reliability Requirement	PG&E	Stockton	6/10/2017	50	No	DEC	24	0:01	23:58
257	RT	Other Reliability Requirement	PG&E	Stockton	6/10/2017	50	No	INC	24	0:01	23:58
258	RT	Other Reliability Requirement	PG&E	Stockton	6/11/2017	50	No	DEC	24	0:01	23:58
259	RT	Other Reliability Requirement	PG&E	Stockton	6/11/2017	50	No	INC	24	0:01	23:58
260	RT	Other Reliability Requirement	PG&E	Stockton	6/12/2017	50	No	DEC	12	0:01	11:36
261	RT	Other Reliability Requirement	PG&E	Stockton	6/12/2017	50	No	INC	12	0:01	11:36
262	RT	Other Reliability Requirement	PG&E	Stockton	6/13/2017	60	No	DEC	17	5:27	21:59
263	RT	Other Reliability Requirement	PG&E	Stockton	6/14/2017	60	No	DEC	1	0:00	0:24
264	RT	Other Reliability Requirement	PG&E	Stockton	6/15/2017	55	No	DEC	1	0:00	0:14
265	RT	Other Reliability Requirement	PG&E	Stockton	6/17/2017	56	No	DEC	4	6:35	9:59
266	RT	Other Reliability Requirement	PG&E	Stockton	6/17/2017	56	No	INC	4	6:35	9:59
267	RT	Other Reliability Requirement	PG&E	Stockton	6/22/2017	23	No	DEC	2	20:47	21:59
268	RT	Other Reliability Requirement	PG&E	Stockton	6/22/2017	23	No	INC	2	20:47	21:59
269	RT	Other Reliability Requirement	SCE	LA Basin	6/16/2017	65	No	INC	2	5:33	6:59
270	RT	Planned Transmission Outage and Constraint	PG&E	Bay Area	6/8/2017	180-660	No	INC	14	7:42	20:59

Number	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commitment	INC_DEC	Hours	Begin Time	End Time
271	RT	Planned Transmission Outage and Constraint	PG&E	Bay Area	6/30/2017	140	No	INC	10	10:00	19:59
272	RT	Planned Transmission Outage and Constraint	PG&E	Humboldt	6/2/2017	30- 65	No	DEC	12	12:05	23:59
273	RT	Planned Transmission Outage and Constraint	PG&E	Humboldt	6/2/2017	40- 129	No	INC	18	6:45	23:59
274	RT	Planned Transmission Outage and Constraint	PG&E	Humboldt	6/3/2017	15- 30	No	DEC	8	0:00	7:59
275	RT	Planned Transmission Outage and Constraint	PG&E	Humboldt	6/3/2017	15- 76	No	INC	18	0:00	17:59
276	RT	Planned Transmission Outage and Constraint	PG&E	Humboldt	6/5/2017	24- 105	No	INC	2	22:05	23:59
277	RT	Planned Transmission Outage and Constraint	PG&E	Humboldt	6/6/2017	15	No	DEC	14	6:50	19:59
278	RT	Planned Transmission Outage and Constraint	PG&E	Humboldt	6/6/2017	15- 24	No	INC	20	0:00	19:59
279	RT	Planned Transmission Outage and Constraint	PG&E	Humboldt	6/7/2017	15- 31	No	INC	17	6:30	22:59
280	RT	Planned Transmission Outage and Constraint	PG&E	Humboldt	6/9/2017	15- 65	No	INC	15	0:05	14:59
281	RT	Planned Transmission Outage and Constraint	PG&E	Humboldt	6/13/2017	30- 45	No	DEC	8	16:15	23:59
282	RT	Planned Transmission Outage and Constraint	PG&E	Humboldt	6/13/2017	30- 48	No	INC	18	6:50	23:59
283	RT	Planned Transmission Outage and Constraint	PG&E	Humboldt	6/14/2017	15- 16	No	DEC	21	1:20	22:14
284	RT	Planned Transmission Outage and Constraint	PG&E	Humboldt	6/14/2017	15- 47	No	INC	24	0:00	23:59
285	RT	Planned Transmission Outage and Constraint	PG&E	Humboldt	6/15/2017	32- 45	No	INC	24	0:00	23:59
286	RT	Planned Transmission Outage and Constraint	PG&E	Humboldt	6/16/2017	10- 250	No	DEC	20	0:00	19:59

Number	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commitment	INC_DEC	Hours	Begin Time	End Time
287	RT	Planned Transmission Outage and Constraint	PG&E	Humboldt	6/16/2017	10- 25	No	INC	20	0:00	19:59
288	RT	Planned Transmission Outage and Constraint	PG&E	Humboldt	6/19/2017	21	No	INC	2	8:05	9:59
289	RT	Planned Transmission Outage and Constraint	PG&E	Humboldt	6/20/2017	50	No	DEC	12	12:55	23:59
290	RT	Planned Transmission Outage and Constraint	PG&E	Humboldt	6/20/2017	13- 50	No	INC	17	7:05	23:59
291	RT	Planned Transmission Outage and Constraint	PG&E	Humboldt	6/21/2017	50	No	INC	6	0:00	5:59
292	RT	Planned Transmission Outage and Constraint	PG&E	Humboldt	6/28/2017	39- 79	No	INC	3	21:30	23:59
293	RT	Planned Transmission Outage and Constraint	PG&E	Humboldt	6/29/2017	21- 26	No	INC	16	0:00	15:29
294	RT	Planned Transmission Outage and Constraint	PG&E	N/A	6/21/2017	30- 40	No	DEC	5	17:05	21:59
295	RT	Planned Transmission Outage and Constraint	PG&E	NCNB	6/6/2017	158- 184	No	DEC	11	2:36	13:29
296	RT	Planned Transmission Outage and Constraint	PG&E	Sierra	6/13/2017	25- 61	No	DEC	6	18:45	23:59
297	RT	Planned Transmission Outage and Constraint	PG&E	Sierra	6/13/2017	25- 40	No	INC	3	21:30	23:59
298	RT	Planned Transmission Outage and Constraint	PG&E	Sierra	6/21/2017	46	No	INC	2	22:10	23:59
299	RT	Planned Transmission Outage and Constraint	PG&E	Sierra	6/22/2017	20- 46	No	INC	1	0:00	0:59
300	RT	Planned Transmission Outage and Constraint	PG&E	Sierra	6/25/2017	36- 72	No	INC	2	16:00	17:14
301	RT	Planned Transmission Outage and Constraint	PG&E	Stockton	6/1/2017	20	No	INC	23	0:00	22:59
302	RT	Planned Transmission Outage and Constraint	PG&E	Stockton	6/8/2017	40	No	DEC	10	6:52	16:09

Number	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commitment	INC_DEC	Hours	Begin Time	End Time
303	RT	Planned Transmission Outage and Constraint	PG&E	Stockton	6/8/2017	35- 56	No	DEC	15	6:49	20:59
304	RT	Planned Transmission Outage and Constraint	PG&E	Stockton	6/8/2017	96- 401	No	INC	14	7:39	20:59
305	RT	Planned Transmission Outage and Constraint	PG&E	Stockton	6/9/2017	40- 50	No	DEC	24	0:00	23:58
306	RT	Planned Transmission Outage and Constraint	PG&E	Stockton	6/10/2017	60- 65	No	DEC	6	18:55	23:59
307	RT	Planned Transmission Outage and Constraint	PG&E	Stockton	6/11/2017	60- 65	No	DEC	24	0:00	23:59
308	RT	Planned Transmission Outage and Constraint	PG&E	Stockton	6/11/2017	60- 70	No	INC	24	0:00	23:59
309	RT	Planned Transmission Outage and Constraint	PG&E	Stockton	6/12/2017	53- 130	No	DEC	24	0:00	23:59
310	RT	Planned Transmission Outage and Constraint	PG&E	Stockton	6/12/2017	60- 226	No	INC	24	0:00	23:59
311	RT	Planned Transmission Outage and Constraint	PG&E	Stockton	6/13/2017	55	No	DEC	16	6:05	21:59
312	RT	Planned Transmission Outage and Constraint	PG&E	Stockton	6/13/2017	55- 110	No	INC	16	6:05	21:59
313	RT	Planned Transmission Outage and Constraint	PG&E	Stockton	6/14/2017	75	No	DEC	2	22:00	23:59
314	RT	Planned Transmission Outage and Constraint	PG&E	Stockton	6/15/2017	75	No	INC	7	0:00	6:59
315	RT	Planned Transmission Outage and Constraint	PG&E	Stockton	6/18/2017	56	No	DEC	4	6:55	9:59
316	RT	Planned Transmission Outage and Constraint	PG&E	Stockton	6/18/2017	56	No	INC	4	6:55	9:59
317	RT	Planned Transmission Outage and Constraint	SDG&E	San Diego-IV	6/8/2017	37	No	DEC	9	12:30	20:59
318	RT	Planned Transmission Outage and Constraint	SDG&E	San Diego-IV	6/8/2017	37	No	INC	9	12:30	20:59

Number	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commitment	INC_DEC	Hours	Begin Time	End Time
319	RT	Planned Transmission Outage and Constraint	SDG&E	San Diego-IV	6/10/2017	24	No	INC	10	9:05	18:29
320	RT	Planned Transmission Outage and Constraint	SDG&E	San Diego-IV	6/12/2017	20- 140	No	INC	17	7:00	23:59
321	RT	Planned Transmission Outage and Constraint	SDG&E	San Diego-IV	6/13/2017	20	No	INC	22	0:00	21:59
322	RT	Planned Transmission Outage and Constraint	SDG&E	San Diego-IV	6/19/2017	37- 38	No	DEC	2	15:10	16:44
323	RT	Planned Transmission Outage and Constraint	SDG&E	San Diego-IV	6/19/2017	21	No	INC	2	15:10	16:29
324	RT	Planned Transmission Outage and Constraint	SDG&E	San Diego-IV	6/22/2017	30	No	INC	1	23:50	23:59
325	RT	Planned Transmission Outage and Constraint	SDG&E	San Diego-IV	6/23/2017	30	No	INC	1	0:00	0:59
326	RT	Planned Transmission Outage and Constraint	SDG&E	San Diego-IV	6/27/2017	20- 175	No	INC	18	2:00	19:59
327	RT	Planned Transmission Outage and Constraint	SDG&E	San Diego-IV	6/28/2017	20- 163	No	INC	16	4:00	19:59
328	RT	Pump Management	PG&E	Fresno	6/11/2017	0	No	INC	1	11:30	12:29
329	RT	Pump Management	PG&E	Fresno	6/23/2017	-326	No	DEC	1	12:35	12:59
330	RT	Reverse Commitment Instruction	SDG&E	San Diego-IV	6/12/2017	0	No	INC	8	7:00	14:59
331	RT	Software Limitation	PG&E	Fresno	6/19/2017	0	No	DEC	3	19:30	21:39
332	RT	Software Limitation	PG&E	Fresno	6/19/2017	0	No	INC	3	19:30	21:39
333	RT	Software Limitation	PG&E	Kern	6/25/2017	0	No	INC	2	0:00	1:59
334	RT	Software Limitation	PG&E	N/A	6/21/2017	0	No	DEC	1	14:30	15:29
335	RT	Software Limitation	PG&E	N/A	6/25/2017	307	No	INC	3	0:00	2:14
336	RT	Software Limitation	PG&E	Sierra	6/2/2017	0	No	INC	1	23:30	23:59
337	RT	Software Limitation	PG&E	Sierra	6/3/2017	0	No	INC	5	0:00	4:29
338	RT	Software Limitation	SCE	LA Basin	6/23/2017	25	No	INC	1	23:15	23:59
339	RT	Software Limitation	SCE	LA Basin	6/24/2017	0	No	INC	24	0:00	23:44
340	RT	Software Limitation	SCE	LA Basin	6/25/2017	0	No	INC	8	0:00	7:59

Number	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commitment	INC_DEC	Hours	Begin Time	End Time
341	RT	Software Limitation	SDG&E	San Diego-IV	6/13/2017	70- 95	No	INC	11	6:30	16:59
342	RT	Software Limitation	SDG&E	San Diego-IV	6/30/2017	0	No	INC	3	12:35	15:14
343	RT	Unit Testing	Intertie	N/A	6/9/2017	13	No	INC	13	11:00	23:59
344	RT	Unit Testing	Intertie	N/A	6/10/2017	13	No	INC	24	0:00	23:59
345	RT	Unit Testing	Intertie	N/A	6/11/2017	13	No	INC	24	0:00	23:59
346	RT	Unit Testing	Intertie	N/A	6/12/2017	13- 32	No	INC	24	0:00	23:59
347	RT	Unit Testing	Intertie	N/A	6/13/2017	32	No	INC	24	0:00	23:59
348	RT	Unit Testing	Intertie	N/A	6/14/2017	32	No	INC	24	0:00	23:59
349	RT	Unit Testing	Intertie	N/A	6/15/2017	32	No	INC	24	0:00	23:59
350	RT	Unit Testing	Intertie	N/A	6/16/2017	32	No	INC	24	0:00	23:59
351	RT	Unit Testing	Intertie	N/A	6/17/2017	32	No	INC	24	0:00	23:59
352	RT	Unit Testing	Intertie	N/A	6/18/2017	32	No	INC	24	0:00	23:59
353	RT	Unit Testing	Intertie	N/A	6/20/2017	42	No	INC	24	0:00	23:59
354	RT	Unit Testing	Intertie	N/A	6/21/2017	42	No	INC	24	0:00	23:59
355	RT	Unit Testing	Intertie	N/A	6/22/2017	42	No	INC	24	0:00	23:59
356	RT	Unit Testing	Intertie	N/A	6/23/2017	42	No	INC	24	0:00	23:59
357	RT	Unit Testing	Intertie	N/A	6/24/2017	42	No	INC	24	0:00	23:59
358	RT	Unit Testing	Intertie	N/A	6/25/2017	42	No	INC	24	0:00	23:59
359	RT	Unit Testing	Intertie	N/A	6/26/2017	42	No	INC	24	0:00	23:59
360	RT	Unit Testing	Intertie	N/A	6/27/2017	42	No	INC	24	0:00	23:59
361	RT	Unit Testing	Intertie	N/A	6/28/2017	42	No	INC	24	0:00	23:59
362	RT	Unit Testing	Intertie	N/A	6/29/2017	42	No	INC	24	0:00	23:59
363	RT	Unit Testing	Intertie	N/A	6/30/2017	42	No	INC	24	0:00	23:59
364	RT	Unit Testing	N/A	N/A	6/11/2017	16	No	INC	5	10:57	14:59
365	RT	Unit Testing	PG&E	Bay Area	6/15/2017	166	No	INC	1	0:06	0:49
366	RT	Unit Testing	PG&E	Bay Area	6/26/2017	500	No	INC	2	20:05	21:44
367	RT	Unit Testing	PG&E	Fresno	6/6/2017	43- 84	No	INC	8	10:45	17:59
368	RT	Unit Testing	PG&E	N/A	6/29/2017	2	No	INC	1	8:45	8:59
369	RT	Unit Testing	SCE	LA Basin	6/3/2017	10	Yes	INC	3	21:00	23:59

Number	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commitment	INC_DEC	Hours	Begin Time	End Time
370	RT	Unit Testing	SCE	LA Basin	6/4/2017	10	No	INC	24	0:00	23:59
371	RT	Unit Testing	SCE	LA Basin	6/5/2017	10- 495	Yes	INC	24	0:00	23:59
372	RT	Unit Testing	SCE	LA Basin	6/6/2017	130	No	INC	6	0:00	5:59
373	RT	Unit Testing	SCE	LA Basin	6/16/2017	15- 92	No	INC	4	20:05	23:59
374	RT	Unit Testing	SCE	LA Basin	6/17/2017	15	No	INC	1	0:00	0:04
375	RT	Unplanned Outage	PG&E	Stockton	6/20/2017	23	No	INC	10	13:02	22:09
376	RT	Unplanned Outage	PG&E	Stockton	6/21/2017	23	Yes	INC	2	22:00	23:14
377	RT	Voltage Support	PG&E	Fresno	6/11/2017	83	Yes	INC	15	3:10	17:59
378	RT	Voltage Support	PG&E	Sierra	6/11/2017	20	Yes	INC	14	10:45	23:59
379	RT	Voltage Support	PG&E	Sierra	6/12/2017	20	No	INC	7	0:00	6:59
380	RT	Voltage Support	PG&E	Sierra	6/16/2017	42	No	INC	7	10:00	16:54
381	RT	Voltage Support	PG&E	Sierra	6/17/2017	42	No	DEC	13	10:00	22:59
382	RT	Voltage Support	PG&E	Sierra	6/17/2017	42	No	INC	13	10:00	22:59
383	RT	Voltage Support	SCE	N/A	6/27/2017	172	No	INC	13	0:40	12:59

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 CAISO 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 CAISO 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. Here 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	A	SCE	LA BASIN	05:00	10:00	50	7630
01-Jul-09	DA	B	SCE	LA BASIN	08:00	20:00	30	7630
01-Jul-09	DA	C	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. 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 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 CAISO 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 had no day-ahead award in those hours. The CAISO 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	A	PG&E	Humboldt	06:00	11:00	30	0	Yes	INC	30	7110
01-Jul-09	RT	B	PG&E	Humboldt	07:00	09:00	40	20	No	INC	20	7110
01-Jul-09	RT	C	PG&E	Humboldt	12:00	15:00	50	50	No	INC	0	7110
01-Jul-09	RT	C	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. 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 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 CAISO 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 CAISO 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	A	PG&E	Fresno	15:00	20:00	20	0	Yes	INC	20	7430
01-Jul-09	RT	B	PG&E	Fresno	07:00	09:00	40	60	No	DEC	20	7430
01-Jul-09	RT	C	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. 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