



Exceptional Dispatch Report

Table 1: September 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 September 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 September 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

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>

following 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 September 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 357 exceptional dispatches in September 2017, as compared to 336 exceptional dispatches in August 2017. Exceptional dispatches issued for the following reasons accounted for approximately 44 percent of the total exceptional dispatches during the reporting period: planned transmission outages, software limitations, and operating procedure number 7110 (along with 6310, 6610, 7230, 7430, 7630, 7720, 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 September 2017

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

Chart 1: Table of Exceptional Dispatches for Period 01/August/2017 - 31/August/2017

Number	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commitment	INC_DEC	Hours	Begin Time	End Time
1	RT	Bridging Schedules	PG&E	Bay Area	9/23/2017	200	No	INC	3	21:00	23:59
2	RT	Bridging Schedules	SCE	Big Creek-Ventura	9/2/2017	100	No	INC	2	22:00	23:59
3	RT	Bridging Schedules	SCE	Big Creek-Ventura	9/3/2017	100	No	INC	24	0:00	23:59
4	RT	Bridging Schedules	SCE	LA Basin	9/1/2017	70	No	INC	1	23:00	23:59
5	RT	Bridging Schedules	SCE	LA Basin	9/3/2017	10	Yes	INC	1	23:00	23:59
6	RT	Bridging Schedules	SDG&E	San Diego-IV	9/11/2017	20	No	INC	2	22:00	23:59
7	RT	Conditions beyond the control of the CAISO	SCE	Big Creek-Ventura	9/1/2017	1100	No	DEC	2	17:55	19:29
8	RT	Contingency Dispatch	SDG&E	San Diego-IV	9/2/2017	50	No	DEC	1	16:30	16:44
9	RT	Fast Start Unit Management	PG&E	Bay Area	9/11/2017	0	No	INC	1	23:00	23:49
10	RT	Fast Start Unit Management	PG&E	Bay Area	9/19/2017	0	No	INC	2	22:50	23:54
11	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	9/1/2017	10- 40	No	DEC	24	0:00	23:59
12	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	9/1/2017	30- 40	No	INC	24	0:00	23:59
13	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	9/2/2017	10- 40	No	DEC	24	0:00	23:59
14	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	9/2/2017	30- 40	No	INC	24	0:00	23:59
15	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	9/3/2017	10- 40	No	DEC	24	0:00	23:59
16	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	9/3/2017	30- 40	No	INC	24	0:00	23:59
17	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	9/4/2017	10- 28	No	DEC	24	0:00	23:59
18	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	9/4/2017	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	9/5/2017	10- 40	No	DEC	24	0:00	23:59
20	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	9/5/2017	30- 40	No	INC	24	0:00	23:59
21	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	9/6/2017	10- 40	No	DEC	24	0:00	23:59
22	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	9/6/2017	30- 40	No	INC	24	0:00	23:59
23	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	9/7/2017	10- 40	No	DEC	24	0:00	23:59
24	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	9/7/2017	30- 40	No	INC	24	0:00	23:59
25	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	9/8/2017	10- 40	No	DEC	24	0:00	23:59
26	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	9/8/2017	30- 40	No	INC	24	0:00	23:59
27	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	9/9/2017	10- 40	No	DEC	24	0:00	23:59
28	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	9/9/2017	17- 40	No	INC	24	0:00	23:59
29	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	9/10/2017	10- 40	No	DEC	24	0:00	23:59
30	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	9/10/2017	13- 40	No	INC	24	0:00	23:59
31	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	9/11/2017	10- 40	No	DEC	24	0:00	23:59
32	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	9/11/2017	30- 40	No	INC	24	0:00	23:59
33	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	9/12/2017	10- 40	No	DEC	24	0:00	23:59
34	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	9/12/2017	30- 40	No	INC	24	0:00	23:59
35	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	9/13/2017	27- 40	No	DEC	24	0:00	23:59
36	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	9/13/2017	5- 40	No	INC	24	0:00	23:59
37	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	9/14/2017	40	No	DEC	24	0:00	23:59
38	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	9/14/2017	40	No	INC	24	0:00	23:59
39	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	9/15/2017	10- 40	No	DEC	24	0:00	23:59
40	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	9/15/2017	30- 40	No	INC	24	0:00	23:59
41	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	9/16/2017	40	No	DEC	24	0:00	23:59
42	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	9/16/2017	40	No	INC	24	0:00	23:59
43	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	9/17/2017	10- 40	No	DEC	24	0:00	23:59
44	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	9/17/2017	30- 40	No	INC	24	0:00	23:59
45	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	9/18/2017	27- 40	No	DEC	24	0:00	23:59
46	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	9/18/2017	13- 40	No	INC	24	0:00	23:59
47	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	9/19/2017	14- 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	9/19/2017	26- 40	No	INC	24	0:00	23:59
49	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	9/20/2017	10- 40	No	DEC	24	0:00	23:59
50	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	9/20/2017	30- 40	No	INC	24	0:00	23:59
51	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	9/21/2017	24- 40	No	DEC	24	0:00	23:59
52	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	9/21/2017	4- 40	No	INC	24	0:00	23:59
53	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	9/22/2017	5- 40	No	DEC	24	0:00	23:59
54	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	9/22/2017	4- 40	No	INC	24	0:00	23:59
55	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	9/23/2017	5- 40	No	DEC	24	0:00	23:59
56	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	9/23/2017	4- 40	No	INC	24	0:00	23:59
57	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	9/24/2017	5- 40	No	DEC	24	0:00	23:59
58	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	9/24/2017	4- 40	No	INC	24	0:00	23:59
59	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	9/25/2017	5- 36	No	DEC	24	0:00	23:59
60	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	9/25/2017	4- 40	No	INC	24	0:00	23:59
61	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	9/26/2017	5- 36	No	DEC	24	0:00	23:59
62	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	9/26/2017	4- 40	No	INC	24	0:00	23:59
63	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	9/27/2017	4- 40	No	DEC	24	0:00	23:59
64	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	9/27/2017	26- 40	No	INC	24	0:00	23:59
65	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	9/28/2017	5- 36	No	DEC	24	0:00	23:59
66	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	9/28/2017	4- 40	No	INC	24	0:00	23:59
67	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	9/29/2017	24- 36	No	DEC	24	0:00	23:59
68	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	9/29/2017	4- 40	No	INC	24	0:00	23:59
69	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	9/30/2017	5- 36	No	DEC	24	0:00	23:59
70	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	9/30/2017	4- 40	No	INC	24	0:00	23:59
71	RT	Incomplete or Inaccurate Transmission	PG&E	Fresno	10/1/2017	40	No	INC	24	0:00	23:59
72	RT	Incomplete or Inaccurate Transmission	PG&E	Humboldt	9/6/2017	42	No	DEC	1	18:00	18:29
73	RT	Incomplete or Inaccurate Transmission	PG&E	Humboldt	9/6/2017	28	No	INC	1	17:00	17:59
74	RT	Incomplete or Inaccurate Transmission	PG&E	N/A	9/16/2017	7	No	DEC	3	15:55	18:29
75	RT	Incomplete or Inaccurate Transmission	PG&E	N/A	9/16/2017	7	No	INC	3	15:55	18:29
76	RT	Incomplete or Inaccurate Transmission	SDG&E	San Diego-IV	9/1/2017	20	No	DEC	4	13:50	17:29

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	SDG&E	San Diego-IV	9/1/2017	20	No	INC	4	13:50	17:29
78	RT	Incomplete or Inaccurate Transmission	SDG&E	San Diego-IV	9/2/2017	20	No	DEC	8	13:50	20:59
79	RT	Incomplete or Inaccurate Transmission	SDG&E	San Diego-IV	9/20/2017	170-619	No	INC	7	13:25	19:59
80	RT	Incomplete or Inaccurate Transmission	SDG&E	San Diego-IV	9/2/2017	20	No	DEC	7	14:15	20:59
81	RT	Load Forecast Uncertainty	Intertie	N/A	9/1/2017	235	No	INC	1	15:00	15:59
82	RT	Load Forecast Uncertainty	Intertie	N/A	9/8/2017	110	No	INC	1	18:00	18:59
83	RT	Load Forecast Uncertainty	PG&E	N/A	9/1/2017	47	No	DEC	14	7:45	20:59
84	RT	Load Forecast Uncertainty	PG&E	N/A	9/6/2017	47	No	DEC	14	8:35	21:59
85	RT	Load Forecast Uncertainty	PG&E	N/A	9/6/2017	47	No	INC	14	8:35	21:59
86	RT	Load Forecast Uncertainty	PG&E	Stockton	9/15/2017	89	No	DEC	5	15:00	19:59
87	RT	Load Forecast Uncertainty	PG&E	Stockton	9/15/2017	89	No	INC	5	15:00	19:59
88	RT	Load Forecast Uncertainty	SCE	Big Creek-Ventura	9/2/2017	50	No	INC	2	22:00	23:59
89	RT	Load Forecast Uncertainty	SCE	Big Creek-Ventura	9/3/2017	50	No	INC	24	0:00	23:59
90	RT	Load Forecast Uncertainty	SCE	LA Basin	9/3/2017	70	No	INC	22	0:00	21:59
91	RT	Load Forecast Uncertainty	SCE	LA Basin	9/4/2017	65	No	DEC	12	10:30	21:59
92	RT	Load Forecast Uncertainty	SCE	LA Basin	9/4/2017	20- 85	Yes	INC	24	0:00	23:59
93	RT	Load Forecast Uncertainty	SCE	LA Basin	9/5/2017	10- 60	Yes	INC	24	0:00	23:59
94	RT	Load Forecast Uncertainty	SCE	LA Basin	9/6/2017	25- 205	No	INC	8	16:00	23:59
95	RT	Load Forecast Uncertainty	SCE	LA Basin	9/12/2017	25	Yes	INC	8	16:00	23:59
96	RT	Load Forecast Uncertainty	SCE	LA Basin	9/25/2017	180	Yes	DEC	3	17:45	19:59
97	RT	Load Forecast Uncertainty	SCE	LA Basin	9/25/2017	180	Yes	INC	3	17:45	19:59
98	RT	Load Forecast Uncertainty	SCE	LA Basin	9/26/2017	194	No	DEC	5	15:05	19:59
99	RT	Load Forecast Uncertainty	SCE	LA Basin	9/26/2017	65	No	INC	4	16:15	19:44
100	RT	Load Forecast Uncertainty	SDG&E	San Diego-IV	9/2/2017	20	No	INC	3	21:10	23:59
101	RT	Load Forecast Uncertainty	SDG&E	San Diego-IV	9/3/2017	20	Yes	INC	24	0:00	23:59
102	RT	Load Forecast Uncertainty	SDG&E	San Diego-IV	9/4/2017	20- 146	Yes	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
103	RT	Load Forecast Uncertainty	SDG&E	San Diego-IV	9/5/2017	20- 40	Yes	INC	22	2:00	23:59
104	RT	Load Forecast Uncertainty	SDG&E	San Diego-IV	9/6/2017	20	No	INC	13	11:00	23:59
105	RT	Load Forecast Uncertainty	SDG&E	San Diego-IV	9/8/2017	63	No	INC	5	15:06	19:59
106	RT	Load Forecast Uncertainty	SDG&E	San Diego-IV	9/12/2017	197	No	DEC	3	16:00	18:59
107	RT	Load Forecast Uncertainty	SDG&E	San Diego-IV	9/12/2017	197	No	INC	3	16:00	18:59
108	RT	Load Forecast Uncertainty	SDG&E	San Diego-IV	9/25/2017	100	No	DEC	3	17:40	19:59
109	RT	Load Forecast Uncertainty	SDG&E	San Diego-IV	9/25/2017	100	No	INC	3	17:40	19:59
110	RT	Load Pull	PG&E	Fresno	9/1/2017	45	No	INC	4	17:55	20:59
111	RT	Load Pull	SCE	LA Basin	9/1/2017	300-1185	No	DEC	7	14:00	20:59
112	RT	Load Pull	SCE	LA Basin	9/2/2017	250-890	No	DEC	8	14:30	21:59
113	RT	Load Pull	SCE	LA Basin	9/6/2017	71	No	INC	3	18:00	20:59
114	RT	Load Pull	SCE	LA Basin	9/11/2017	142	No	INC	5	16:50	20:59
115	RT	Load Pull	SCE	LA Basin	9/12/2017	142	No	INC	4	17:15	20:59
116	RT	Load Pull	SCE	LA Basin	9/21/2017	194	No	DEC	5	16:20	20:59
117	RT	Load Pull	SCE	LA Basin	9/21/2017	194	No	INC	5	16:20	20:59
118	RT	Load Pull	SCE	LA Basin	9/22/2017	194	No	DEC	4	17:20	20:59
119	RT	Load Pull	SCE	LA Basin	9/22/2017	194	No	INC	4	17:20	20:59
120	RT	Load Pull	SCE	LA Basin	9/27/2017	194	No	DEC	6	15:55	20:59
121	RT	Load Pull	SDG&E	San Diego-IV	9/14/2017	63	No	INC	5	15:30	19:59
122	RT	Load Pull	SDG&E	San Diego-IV	9/27/2017	63	No	INC	6	15:55	20:59
123	RT	Market Disruption	SCE	LA Basin	9/12/2017	420	No	DEC	1	15:32	15:49
124	RT	Operating Procedure Number and Constraint	PG&E	Humboldt	9/1/2017	43	No	DEC	5	7:35	11:59
125	RT	Operating Procedure Number and Constraint	PG&E	Humboldt	9/1/2017	28- 43	No	INC	6	6:40	11:59
126	RT	Operating Procedure Number and Constraint	PG&E	Humboldt	9/2/2017	62	No	INC	1	0:30	1:29
127	RT	Operating Procedure Number and Constraint (6310)	PG&E	Bay Area	9/15/2017	20	No	INC	7	13:00	19:59

Number	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commitment	INC_DEC	Hours	Begin Time	End Time
128	RT	Operating Procedure Number and Constraint (6310)	PG&E	Humboldt	9/6/2017	44- 168	No	INC	8	0:00	7:44
129	RT	Operating Procedure Number and Constraint (6310)	PG&E	Humboldt	9/30/2017	32	No	DEC	9	0:00	8:59
130	RT	Operating Procedure Number and Constraint (6310)	PG&E	Humboldt	9/30/2017	32	No	INC	9	0:00	8:59
131	RT	Operating Procedure Number and Constraint (6310)	PG&E	Sierra	9/15/2017	40	No	INC	9	11:20	19:59
132	RT	Operating Procedure Number and Constraint (6610)	SCE	LA Basin	9/1/2017	300	No	DEC	5	16:15	20:59
133	RT	Operating Procedure Number and Constraint (7110)	PG&E	Humboldt	9/4/2017	65	No	DEC	4	20:45	23:59
134	RT	Operating Procedure Number and Constraint (7110)	PG&E	Humboldt	9/4/2017	65	No	INC	4	20:45	23:59
135	RT	Operating Procedure Number and Constraint (7110)	PG&E	Humboldt	9/5/2017	32- 80	No	DEC	19	5:25	23:59
136	RT	Operating Procedure Number and Constraint (7110)	PG&E	Humboldt	9/5/2017	32- 92	No	INC	24	0:00	23:59
137	RT	Operating Procedure Number and Constraint (7110)	PG&E	Humboldt	9/9/2017	32- 64	No	DEC	4	20:45	23:59
138	RT	Operating Procedure Number and Constraint (7110)	PG&E	Humboldt	9/9/2017	32- 77	No	INC	4	20:45	23:59
139	RT	Operating Procedure Number and Constraint (7110)	PG&E	Humboldt	9/10/2017	32- 61	No	DEC	20	0:25	19:59
140	RT	Operating Procedure Number and Constraint (7110)	PG&E	Humboldt	9/10/2017	29- 77	No	INC	20	0:00	19:59
141	RT	Operating Procedure Number and Constraint (7110)	PG&E	Humboldt	9/11/2017	14- 60	No	DEC	18	6:10	23:59
142	RT	Operating Procedure Number and Constraint (7110)	PG&E	Humboldt	9/11/2017	14- 60	No	INC	18	6:10	23:59
143	RT	Operating Procedure Number and Constraint (7110)	PG&E	Humboldt	9/12/2017	28- 70	No	DEC	24	0:10	23:59

Number	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commitment	INC_DEC	Hours	Begin Time	End Time
144	RT	Operating Procedure Number and Constraint (7110)	PG&E	Humboldt	9/12/2017	30- 70	No	INC	24	0:10	23:59
145	RT	Operating Procedure Number and Constraint (7110)	PG&E	Humboldt	9/13/2017	14- 156	No	DEC	22	2:25	23:59
146	RT	Operating Procedure Number and Constraint (7110)	PG&E	Humboldt	9/13/2017	28- 77	No	INC	24	0:00	23:59
147	RT	Operating Procedure Number and Constraint (7110)	PG&E	Humboldt	9/14/2017	15- 31	No	DEC	24	0:00	23:59
148	RT	Operating Procedure Number and Constraint (7110)	PG&E	Humboldt	9/14/2017	31- 77	No	INC	24	0:00	23:59
149	RT	Operating Procedure Number and Constraint (7110)	PG&E	Humboldt	9/15/2017	15- 75	No	DEC	24	0:00	23:59
150	RT	Operating Procedure Number and Constraint (7110)	PG&E	Humboldt	9/15/2017	30- 75	No	INC	24	0:00	23:59
151	RT	Operating Procedure Number and Constraint (7110)	PG&E	Humboldt	9/16/2017	28- 56	No	DEC	18	6:30	23:59
152	RT	Operating Procedure Number and Constraint (7110)	PG&E	Humboldt	9/16/2017	28- 75	No	INC	24	0:00	23:59
153	RT	Operating Procedure Number and Constraint (7110)	PG&E	Humboldt	9/16/2017	28	No	INC	1	23:15	23:59
154	RT	Operating Procedure Number and Constraint (7110)	PG&E	Humboldt	9/17/2017	14- 42	No	DEC	24	0:15	23:59
155	RT	Operating Procedure Number and Constraint (7110)	PG&E	Humboldt	9/17/2017	28- 84	No	INC	24	0:00	23:59
156	RT	Operating Procedure Number and Constraint (7110)	PG&E	Humboldt	9/17/2017	28	No	INC	1	0:00	0:29
157	RT	Operating Procedure Number and Constraint (7110)	PG&E	Humboldt	9/18/2017	14- 56	No	DEC	14	10:10	23:59
158	RT	Operating Procedure Number and Constraint (7110)	PG&E	Humboldt	9/18/2017	28- 70	No	INC	24	0:00	23:59
159	RT	Operating Procedure Number and Constraint (7110)	PG&E	Humboldt	9/19/2017	32- 48	No	DEC	16	8:35	23:59

Number	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commitment	INC_DEC	Hours	Begin Time	End Time
160	RT	Operating Procedure Number and Constraint (7110)	PG&E	Humboldt	9/19/2017	31- 79	No	INC	24	0:00	23:59
161	RT	Operating Procedure Number and Constraint (7110)	PG&E	Humboldt	9/20/2017	16- 30	No	DEC	22	2:15	23:59
162	RT	Operating Procedure Number and Constraint (7110)	PG&E	Humboldt	9/20/2017	30- 75	No	INC	24	0:00	23:59
163	RT	Operating Procedure Number and Constraint (7110)	PG&E	Humboldt	9/21/2017	15- 76	No	DEC	24	0:55	23:59
164	RT	Operating Procedure Number and Constraint (7110)	PG&E	Humboldt	9/21/2017	60- 76	No	INC	24	0:00	23:59
165	RT	Operating Procedure Number and Constraint (7110)	PG&E	Humboldt	9/22/2017	28- 56	No	DEC	16	8:50	23:59
166	RT	Operating Procedure Number and Constraint (7110)	PG&E	Humboldt	9/22/2017	28- 72	No	INC	24	0:00	23:59
167	RT	Operating Procedure Number and Constraint (7110)	PG&E	Humboldt	9/23/2017	14	No	DEC	6	18:30	23:59
168	RT	Operating Procedure Number and Constraint (7110)	PG&E	Humboldt	9/23/2017	14- 70	No	INC	24	0:00	23:59
169	RT	Operating Procedure Number and Constraint (7110)	PG&E	Humboldt	9/24/2017	14- 30	No	DEC	24	0:00	23:59
170	RT	Operating Procedure Number and Constraint (7110)	PG&E	Humboldt	9/24/2017	14- 60	No	INC	24	0:00	23:59
171	RT	Operating Procedure Number and Constraint (7110)	PG&E	Humboldt	9/25/2017	15	No	DEC	1	0:00	0:29
172	RT	Operating Procedure Number and Constraint (7110)	PG&E	Humboldt	9/25/2017	15- 32	No	INC	17	7:04	23:59
173	RT	Operating Procedure Number and Constraint (7110)	PG&E	Humboldt	9/26/2017	14- 30	No	INC	24	0:00	23:59
174	RT	Operating Procedure Number and Constraint (7110)	PG&E	Humboldt	9/27/2017	14- 60	No	INC	24	0:00	23:59
175	RT	Operating Procedure Number and Constraint (7110)	PG&E	Humboldt	9/28/2017	14	No	DEC	14	6:55	19:59

Number	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commitment	INC_DEC	Hours	Begin Time	End Time
176	RT	Operating Procedure Number and Constraint (7110)	PG&E	Humboldt	9/28/2017	14- 15	No	INC	20	0:00	19:59
177	RT	Operating Procedure Number and Constraint (7110)	PG&E	Humboldt	9/29/2017	45	No	DEC	1	20:47	21:09
178	RT	Operating Procedure Number and Constraint (7110)	PG&E	Humboldt	9/29/2017	32- 195	No	INC	4	20:47	23:59
179	RT	Operating Procedure Number and Constraint (7230)	PG&E	Sierra	9/5/2017	23- 28	No	INC	6	15:20	20:29
180	RT	Operating Procedure Number and Constraint (7230)	PG&E	Sierra	9/9/2017	20	Yes	INC	5	18:00	22:59
181	RT	Operating Procedure Number and Constraint (7230)	PG&E	Sierra	9/10/2017	20	No	DEC	9	14:10	22:59
182	RT	Operating Procedure Number and Constraint (7230)	PG&E	Sierra	9/10/2017	20	No	INC	9	14:10	22:59
183	RT	Operating Procedure Number and Constraint (7430)	PG&E	Fresno	9/2/2017	70	No	INC	3	16:50	18:59
184	RT	Operating Procedure Number and Constraint (7430)	PG&E	Fresno	9/4/2017	83	No	INC	1	22:00	22:59
185	RT	Operating Procedure Number and Constraint (7630)	SCE	LA Basin	9/5/2017	65	No	DEC	13	9:35	21:59
186	RT	Operating Procedure Number and Constraint (7630)	SCE	LA Basin	9/5/2017	65	No	INC	13	9:35	21:59
187	RT	Operating Procedure Number and Constraint (7720)	SCE	N/A	9/1/2017	411-470	No	DEC	9	15:55	23:59
188	RT	Operating Procedure Number and Constraint (7720)	SCE	N/A	9/1/2017	411-470	No	DEC	8	16:15	23:59
189	RT	Operating Procedure Number and Constraint (7720)	SCE	N/A	9/2/2017	440-460	No	DEC	12	12:00	23:59
190	RT	Operating Procedure Number and Constraint (7720)	SCE	N/A	9/3/2017	440	No	DEC	7	0:00	6:44
191	RT	Operating Procedure Number and Constraint (7720)	SCE	N/A	9/3/2017	440	No	INC	20	0:00	19:59

Number	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commitment	INC_DEC	Hours	Begin Time	End Time
192	RT	Operating Procedure Number and Constraint (7720)	SCE	N/A	9/5/2017	410	No	DEC	5	17:55	21:59
193	RT	Operating Procedure Number and Constraint (7720)	SCE	N/A	9/12/2017	450-465	No	DEC	11	12:45	22:59
194	RT	Operating Procedure Number and Constraint (7720)	SCE	N/A	9/12/2017	450	No	INC	4	12:45	15:59
195	RT	Operating Procedure Number and Constraint (7820)	SDG&E	San Diego-IV	9/11/2017	68	No	DEC	13	8:50	20:59
196	RT	Operating Procedure Number and Constraint (7820)	SDG&E	San Diego-IV	9/11/2017	68	No	INC	13	8:50	20:59
197	RT	Operating Procedure Number and Constraint (7820)	SDG&E	San Diego-IV	9/16/2017	50	Yes	INC	2	7:15	8:59
198	RT	Other Reliability Requirement	Intertie	N/A	9/1/2017	0	No	INC	1	16:00	16:59
199	RT	Other Reliability Requirement	Intertie	N/A	9/1/2017	373-469	No	INC	4	16:00	19:59
200	RT	Other Reliability Requirement	Intertie	N/A	9/2/2017	50- 400	No	INC	6	16:00	21:59
201	RT	Other Reliability Requirement	Intertie	N/A	9/2/2017	80	No	INC	1	16:29	16:59
202	RT	Other Reliability Requirement	Intertie	N/A	9/5/2017	125	No	INC	1	19:00	19:59
203	RT	Other Reliability Requirement	Intertie	N/A	9/11/2017	105	No	INC	1	17:00	17:59
204	RT	Other Reliability Requirement	Intertie	N/A	9/11/2017	247	No	INC	1	19:00	19:59
205	RT	Other Reliability Requirement	Intertie	N/A	9/11/2017	247	No	INC	1	18:00	18:59
206	RT	Other Reliability Requirement	Intertie	N/A	9/11/2017	83	No	INC	1	18:00	18:59
207	RT	Other Reliability Requirement	PG&E	Fresno	9/2/2017	35	No	DEC	3	17:15	19:59
208	RT	Other Reliability Requirement	PG&E	Humboldt	9/1/2017	48	No	DEC	9	13:35	21:59
209	RT	Other Reliability Requirement	PG&E	Humboldt	9/2/2017	32- 90	No	DEC	21	3:45	23:59
210	RT	Other Reliability Requirement	PG&E	Humboldt	9/2/2017	58- 169	No	INC	24	0:15	23:59
211	RT	Other Reliability Requirement	PG&E	Humboldt	9/2/2017	45	No	INC	1	0:30	0:44
212	RT	Other Reliability Requirement	PG&E	Humboldt	9/3/2017	32- 93	No	DEC	22	2:10	23:59
213	RT	Other Reliability Requirement	PG&E	Humboldt	9/3/2017	45- 93	No	INC	24	0:00	23:59
214	RT	Other Reliability Requirement	PG&E	Humboldt	9/4/2017	32- 48	No	DEC	15	7:45	22:29

Number	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commitment	INC_DEC	Hours	Begin Time	End Time
215	RT	Other Reliability Requirement	PG&E	Humboldt	9/4/2017	16- 93	No	INC	24	0:00	23:59
216	RT	Other Reliability Requirement	PG&E	Humboldt	9/5/2017	16	No	INC	1	0:00	0:29
217	RT	Other Reliability Requirement	PG&E	Sierra	9/3/2017	20	No	DEC	7	15:00	21:59
218	RT	Other Reliability Requirement	PG&E	Sierra	9/3/2017	20	No	INC	7	15:00	21:59
219	RT	Other Reliability Requirement	SCE	LA Basin	9/1/2017	225	No	DEC	5	17:50	21:59
220	RT	Other Reliability Requirement	SCE	LA Basin	9/1/2017	225	No	INC	5	17:50	21:59
221	RT	Other Reliability Requirement	SCE	N/A	9/1/2017	440-475	No	DEC	7	10:05	16:14
222	RT	Other Reliability Requirement	SDG&E	San Diego-IV	9/1/2017	20	No	DEC	4	14:15	17:44
223	RT	Other Reliability Requirement	SDG&E	San Diego-IV	9/1/2017	20	No	INC	4	14:15	17:44
224	RT	Other Reliability Requirement	SDG&E	San Diego-IV	9/2/2017	48- 73	No	DEC	8	11:35	18:59
225	RT	Other Reliability Requirement	SDG&E	San Diego-IV	9/2/2017	24- 48	No	INC	8	11:05	18:59
226	RT	Other Reliability Requirement	SDG&E	San Diego-IV	9/3/2017	25	No	INC	4	9:00	12:59
227	RT	Planned Transmission Outage and Constraint	Intertie	N/A	9/7/2017	600	No	DEC	2	9:40	10:59
228	RT	Planned Transmission Outage and Constraint	Intertie	N/A	9/18/2017	800	No	INC	7	12:00	18:59
229	RT	Planned Transmission Outage and Constraint	Intertie	N/A	9/18/2017	600	No	DEC	2	8:25	9:29
230	RT	Planned Transmission Outage and Constraint	Intertie	N/A	9/18/2017	600-800	No	INC	10	8:25	17:59
231	RT	Planned Transmission Outage and Constraint	PG&E	Bay Area	9/6/2017	20- 80	No	INC	7	13:25	19:59
232	RT	Planned Transmission Outage and Constraint	PG&E	Bay Area	9/13/2017	570-670	No	DEC	4	20:15	23:59
233	RT	Planned Transmission Outage and Constraint	PG&E	Bay Area	9/13/2017	80	No	INC	1	20:15	21:14
234	RT	Planned Transmission Outage and Constraint	PG&E	Bay Area	9/14/2017	450	No	DEC	1	0:00	0:14
235	RT	Planned Transmission Outage and Constraint	PG&E	Bay Area	9/15/2017	54- 175	No	INC	2	19:50	21:29

Number	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commitment	INC_DEC	Hours	Begin Time	End Time
236	RT	Planned Transmission Outage and Constraint	PG&E	Bay Area	9/18/2017	175	No	INC	5	16:00	20:59
237	RT	Planned Transmission Outage and Constraint	PG&E	Bay Area	9/19/2017	175	No	INC	13	7:00	19:59
238	RT	Planned Transmission Outage and Constraint	PG&E	Bay Area	9/20/2017	275-357	No	INC	8	15:20	22:59
239	RT	Planned Transmission Outage and Constraint	PG&E	Bay Area	9/21/2017	363	No	INC	7	14:30	20:59
240	RT	Planned Transmission Outage and Constraint	PG&E	Bay Area	9/22/2017	175	No	INC	14	6:00	19:59
241	RT	Planned Transmission Outage and Constraint	PG&E	Bay Area	9/24/2017	200-400	No	INC	15	2:15	16:59
242	RT	Planned Transmission Outage and Constraint	PG&E	Bay Area	9/26/2017	930	No	INC	1	21:15	21:59
243	RT	Planned Transmission Outage and Constraint	PG&E	Humboldt	9/10/2017	14- 42	No	INC	2	22:00	23:59
244	RT	Planned Transmission Outage and Constraint	PG&E	Humboldt	9/11/2017	14	No	DEC	6	2:20	7:29
245	RT	Planned Transmission Outage and Constraint	PG&E	Humboldt	9/11/2017	14- 28	No	INC	8	0:00	7:29
246	RT	Planned Transmission Outage and Constraint	PG&E	Humboldt	9/12/2017	48	No	DEC	5	17:00	21:59
247	RT	Planned Transmission Outage and Constraint	PG&E	Humboldt	9/29/2017	30	No	DEC	6	12:45	17:59
248	RT	Planned Transmission Outage and Constraint	PG&E	Humboldt	9/29/2017	28- 43	No	INC	12	6:20	17:59
249	RT	Planned Transmission Outage and Constraint	PG&E	Humboldt	9/30/2017	28- 75	No	DEC	18	5:55	23:29
250	RT	Planned Transmission Outage and Constraint	PG&E	Humboldt	9/30/2017	28- 75	No	INC	19	5:55	23:59
251	RT	Planned Transmission Outage and Constraint	PG&E	Humboldt	10/1/2017	45	No	INC	4	0:00	3:04

Number	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commitment	INC_DEC	Hours	Begin Time	End Time
252	RT	Planned Transmission Outage and Constraint	PG&E	Stockton	9/16/2017	40	No	DEC	3	12:00	14:59
253	RT	Planned Transmission Outage and Constraint	PG&E	Stockton	9/16/2017	16- 89	No	INC	7	11:05	17:14
254	RT	Planned Transmission Outage and Constraint	SCE	LA Basin	9/1/2017	93	No	INC	4	16:15	19:59
255	RT	Planned Transmission Outage and Constraint	SCE	LA Basin	9/8/2017	20	Yes	INC	1	23:00	23:59
256	RT	Planned Transmission Outage and Constraint	SCE	LA Basin	9/9/2017	20- 40	No	INC	21	0:00	20:59
257	RT	Planned Transmission Outage and Constraint	SCE	LA Basin	9/26/2017	20- 40	No	INC	15	9:00	23:59
258	RT	Planned Transmission Outage and Constraint	SCE	LA Basin	9/27/2017	20	No	INC	9	0:00	8:59
259	RT	Planned Transmission Outage and Constraint	SCE	N/A	9/11/2017	410-475	No	DEC	9	7:35	15:59
260	RT	Planned Transmission Outage and Constraint	SCE	N/A	9/11/2017	425-485	No	INC	14	7:55	20:59
261	RT	Planned Transmission Outage and Constraint	SDG&E	San Diego-IV	9/6/2017	20	No	INC	2	22:00	23:59
262	RT	Planned Transmission Outage and Constraint	SDG&E	San Diego-IV	9/7/2017	20	No	INC	24	0:00	23:59
263	RT	Planned Transmission Outage and Constraint	SDG&E	San Diego-IV	9/8/2017	20	No	INC	14	8:00	21:59
264	RT	Planned Transmission Outage and Constraint	SDG&E	San Diego-IV	9/9/2017	20	No	INC	14	8:00	21:59
265	RT	Planned Transmission Outage and Constraint	SDG&E	San Diego-IV	9/12/2017	68	No	DEC	11	9:05	19:59
266	RT	Planned Transmission Outage and Constraint	SDG&E	San Diego-IV	9/12/2017	20- 63	No	INC	24	0:00	23:59
267	RT	Planned Transmission Outage and Constraint	SDG&E	San Diego-IV	9/13/2017	20- 131	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
268	RT	Planned Transmission Outage and Constraint	SDG&E	San Diego-IV	9/14/2017	20	No	INC	24	0:00	23:59
269	RT	Planned Transmission Outage and Constraint	SDG&E	San Diego-IV	9/18/2017	20	No	INC	16	8:00	23:59
270	RT	Planned Transmission Outage and Constraint	SDG&E	San Diego-IV	9/19/2017	75	No	DEC	10	10:39	19:59
271	RT	Planned Transmission Outage and Constraint	SDG&E	San Diego-IV	9/19/2017	75	No	INC	10	10:39	19:59
272	RT	Planned Transmission Outage and Constraint	SDG&E	San Diego-IV	9/19/2017	37	No	INC	1	11:15	11:29
273	RT	Planned Transmission Outage and Constraint	SDG&E	San Diego-IV	9/20/2017	40- 592	No	INC	14	6:00	19:59
274	RT	Planned Transmission Outage and Constraint	SDG&E	San Diego-IV	9/25/2017	20- 63	No	INC	16	6:00	21:44
275	RT	Planned Transmission Outage and Constraint	SDG&E	San Diego-IV	9/26/2017	20- 63	No	INC	15	6:30	20:59
276	RT	Planned Transmission Outage and Constraint	SDG&E	San Diego-IV	9/27/2017	20- 63	No	INC	11	6:00	16:14
277	RT	Planned Transmission Outage and Constraint	SDG&E	San Diego-IV	9/28/2017	20	Yes	INC	2	18:00	19:59
278	RT	Software Limitation	PG&E	Bay Area	9/3/2017	0	No	INC	2	3:50	4:54
279	RT	Software Limitation	PG&E	Bay Area	9/29/2017	287	No	DEC	4	17:10	20:59
280	RT	Software Limitation	PG&E	Humboldt	9/6/2017	0	No	DEC	1	4:00	4:24
281	RT	Software Limitation	PG&E	Humboldt	9/6/2017	33	No	INC	3	21:30	23:59
282	RT	Software Limitation	PG&E	Humboldt	9/7/2017	48	No	INC	1	1:30	1:59
283	RT	Software Limitation	PG&E	Humboldt	9/16/2017	32- 64	No	INC	2	21:15	22:59
284	RT	Software Limitation	PG&E	Humboldt	9/17/2017	16	No	INC	1	0:30	0:59
285	RT	Software Limitation	PG&E	Humboldt	9/22/2017	32	No	INC	1	12:45	13:44
286	RT	Software Limitation	PG&E	N/A	9/3/2017	0	No	DEC	5	19:55	23:59
287	RT	Software Limitation	PG&E	N/A	9/3/2017	0	No	INC	5	19:55	23:59
288	RT	Software Limitation	PG&E	N/A	9/4/2017	47	No	DEC	7	13:35	19:59

Number	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commitment	INC_DEC	Hours	Begin Time	End Time
289	RT	Software Limitation	PG&E	N/A	9/5/2017	298-304	No	DEC	4	19:25	22:29
290	RT	Software Limitation	PG&E	Sierra	9/7/2017	5- 105	Yes	INC	7	11:30	18:14
291	RT	Software Limitation	PG&E	Stockton	9/14/2017	0	No	DEC	6	18:25	23:59
292	RT	Software Limitation	PG&E	Stockton	9/14/2017	0	No	INC	6	18:25	23:59
293	RT	Software Limitation	SCE	LA Basin	9/9/2017	20	No	INC	3	21:00	23:59
294	RT	Software Limitation	SCE	LA Basin	9/10/2017	20	Yes	INC	24	0:00	23:59
295	RT	Software Limitation	SCE	LA Basin	9/11/2017	20	No	DEC	15	0:00	14:59
296	RT	Software Limitation	SCE	LA Basin	9/11/2017	20	No	INC	15	0:00	14:59
297	RT	Software Limitation	SCE	LA Basin	9/29/2017	0	No	INC	1	10:50	10:59
298	RT	Software Limitation	SCE	LA Basin	9/30/2017	250	No	DEC	1	23:45	23:59
299	RT	Software Limitation	SCE	LA Basin	10/1/2017	250	No	INC	1	0:00	0:44
300	RT	Software Limitation	SDG&E	San Diego-IV	9/2/2017	0	No	DEC	1	16:45	17:44
301	RT	Software Limitation	SDG&E	San Diego-IV	9/11/2017	11	No	INC	1	14:20	14:59
302	RT	Software Limitation	SDG&E	San Diego-IV	9/19/2017	0	No	INC	2	11:00	12:24
303	RT	Unit Testing	Intertie	N/A	9/1/2017	100	No	INC	24	0:00	23:59
304	RT	Unit Testing	Intertie	N/A	9/2/2017	100	No	INC	22	0:00	21:59
305	RT	Unit Testing	Intertie	N/A	9/3/2017	100	No	INC	15	9:00	23:59
306	RT	Unit Testing	Intertie	N/A	9/4/2017	100	No	INC	24	0:00	23:59
307	RT	Unit Testing	Intertie	N/A	9/5/2017	100	No	INC	24	0:00	23:59
308	RT	Unit Testing	Intertie	N/A	9/6/2017	100	No	INC	24	0:00	23:59
309	RT	Unit Testing	Intertie	N/A	9/7/2017	100	No	INC	24	0:00	23:59
310	RT	Unit Testing	Intertie	N/A	9/8/2017	100	No	INC	24	0:00	23:59
311	RT	Unit Testing	Intertie	N/A	9/9/2017	100	No	INC	24	0:00	23:59
312	RT	Unit Testing	Intertie	N/A	9/10/2017	100	No	INC	24	0:00	23:59
313	RT	Unit Testing	Intertie	N/A	9/11/2017	100	No	INC	19	5:45	23:59
314	RT	Unit Testing	Intertie	N/A	9/12/2017	100	No	INC	24	0:00	23:59
315	RT	Unit Testing	Intertie	N/A	9/13/2017	100	No	INC	24	0:00	23:59
316	RT	Unit Testing	Intertie	N/A	9/14/2017	100	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
317	RT	Unit Testing	Intertie	N/A	9/15/2017	100	No	INC	24	0:00	23:59
318	RT	Unit Testing	Intertie	N/A	9/16/2017	100	No	INC	24	0:00	23:59
319	RT	Unit Testing	Intertie	N/A	9/17/2017	100	No	INC	24	0:00	23:59
320	RT	Unit Testing	Intertie	N/A	9/18/2017	100	No	INC	24	0:00	23:59
321	RT	Unit Testing	Intertie	N/A	9/19/2017	100-102	No	INC	24	0:00	23:59
322	RT	Unit Testing	Intertie	N/A	9/20/2017	100	No	INC	24	0:00	23:59
323	RT	Unit Testing	Intertie	N/A	9/21/2017	100	No	INC	24	0:00	23:59
324	RT	Unit Testing	Intertie	N/A	9/22/2017	100	No	INC	24	0:00	23:59
325	RT	Unit Testing	Intertie	N/A	9/23/2017	100	No	INC	24	0:00	23:59
326	RT	Unit Testing	Intertie	N/A	9/24/2017	100	No	INC	24	0:00	23:59
327	RT	Unit Testing	Intertie	N/A	9/25/2017	100	No	INC	24	0:00	23:59
328	RT	Unit Testing	Intertie	N/A	9/26/2017	100	No	INC	24	0:00	23:59
329	RT	Unit Testing	Intertie	N/A	9/27/2017	100	No	INC	24	0:00	23:59
330	RT	Unit Testing	Intertie	N/A	9/28/2017	100	No	INC	24	0:00	23:59
331	RT	Unit Testing	Intertie	N/A	9/29/2017	100	No	INC	24	0:00	23:59
332	RT	Unit Testing	Intertie	N/A	9/30/2017	100	No	INC	24	0:00	23:59
333	RT	Unit Testing	PG&E	Bay Area	9/19/2017	150	No	INC	1	20:15	20:59
334	RT	Unit Testing	PG&E	Bay Area	9/28/2017	148	No	INC	1	18:45	19:14
335	RT	Unit Testing	PG&E	Fresno	9/12/2017	22	No	INC	1	19:29	20:09
336	RT	Unit Testing	PG&E	N/A	9/15/2017	60	No	INC	1	21:45	22:09
337	RT	Unit Testing	PG&E	N/A	9/30/2017	19	No	INC	1	19:40	20:39
338	RT	Unit Testing	PG&E	Sierra	9/2/2017	46	No	INC	2	20:13	21:44
339	RT	Unit Testing	PG&E	Sierra	9/27/2017	29	No	INC	1	12:55	13:29
340	RT	Unit Testing	SCE	LA Basin	9/15/2017	45- 364	No	INC	12	10:47	22:24
341	RT	Unit Testing	SCE	LA Basin	9/19/2017	40	No	INC	1	0:45	0:59
342	RT	Voltage Support	PG&E	Humboldt	9/1/2017	28- 42	No	DEC	10	0:00	9:59
343	RT	Voltage Support	PG&E	Humboldt	9/1/2017	28- 42	No	INC	10	0:00	9:59
344	RT	Voltage Support	PG&E	Humboldt	9/6/2017	16- 98	No	DEC	12	12:45	23:59

Number	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commitment	INC_DEC	Hours	Begin Time	End Time
345	RT	Voltage Support	PG&E	Humboldt	9/6/2017	32- 93	No	INC	17	7:30	23:59
346	RT	Voltage Support	PG&E	Humboldt	9/7/2017	42- 90	No	DEC	23	1:30	23:59
347	RT	Voltage Support	PG&E	Humboldt	9/7/2017	42- 138	No	INC	24	0:00	23:59
348	RT	Voltage Support	PG&E	Humboldt	9/8/2017	16- 90	No	DEC	17	7:05	23:59
349	RT	Voltage Support	PG&E	Humboldt	9/8/2017	45- 90	No	INC	24	0:00	23:59
350	RT	Voltage Support	PG&E	Humboldt	9/9/2017	16- 77	No	DEC	20	0:00	19:59
351	RT	Voltage Support	PG&E	Humboldt	9/9/2017	32- 77	No	INC	20	0:00	19:59
352	RT	Voltage Support	PG&E	Sierra	9/3/2017	42	No	INC	1	10:00	10:59
353	RT	Voltage Support	PG&E	Sierra	9/5/2017	20	No	INC	2	6:50	7:59
354	RT	Voltage Support	PG&E	Sierra	9/16/2017	20	No	INC	12	10:20	21:59
355	RT	Voltage Support	PG&E	Sierra	9/17/2017	20	No	INC	12	11:30	22:59
356	RT	Voltage Support	PG&E	Sierra	9/23/2017	20	No	INC	4	20:00	23:59
357	RT	Voltage Support	PG&E	Sierra	9/24/2017	20	No	INC	15	0:00	14:59

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