



Exceptional Dispatch Report

Table 1: October 2020

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Introduction

This report is filed pursuant to FERC's September 2, 2009, and May 4, 2010, orders in Docket No. ER08-1178. These orders require two monthly Exceptional Dispatch reports—one issued on the 15th of each month and one originally issued on the 30th of each month. Both Table 1 and Table 2 reports will be issued on the 15th of each month due to the availability of necessary data. This report provides data on the frequency and reasons for Exceptional Dispatches issued in October 2020.

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 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 October 2020 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

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>

resource has a day-ahead schedule from 0600 till 2300, and then is shut down in 2400. If this resource had a minimum down time of 24 hours and it is required the following day, then the 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. Interconnection Reliability Operating Limits (IROL) are system operating limits that are established to prevent instability, uncontrolled separation or cascading as described in operating procedure 3100. System Operating Limit (SOL) are the facility ratings, system voltage limits, transient stability limits, and voltage stability limits that are used in the operating horizon – any of which can be the most restrictive limit at any point in time, pre – or post – contingency. Control Point (CP) are imposed to protect the area transmission network against N – 1 contingencies. There were a few other reasons used to explain exceptional dispatch instructions in October 2020, 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 325 exceptional dispatches in October 2020, as compared to 338 exceptional dispatches in September 2020. Exceptional dispatches issued for the following reasons accounted for approximately 82 percent of the total exceptional dispatches during the reporting period: load

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.

forecast uncertainty, planned transmission outages, reliability assessment, and ramping capacity. Exceptional dispatches with the reason “Reliability Assessment” were due to Real Time Contingency Analysis, Voltage Stability Analysis, and operating procedure number 7110 (along with 7230, 7430, and 7720). Reliability Assessment is the reason as explained in the operator procedure 2330C⁴ that encompasses Control Point (CP), Interconnection Reliability Operating Limit (IROL), System Operating Limit (SOL) and congestion related EDs. This reason is used to mitigate reliability issues identified through the real – time assessment tools such as Real Time Contingency Analysis (RTCA), Voltage Stability Analysis (VSA), Dynamic Stability Analysis (DSA) and/or Operating Procedure (OP) or offline study.

1) ⁴ The operator procedure 2330C - <http://www.caiso.com/Documents/2330C.pdf>

Table 1: Exceptional Dispatches in October 2020

**California Independent System Operator Corporation
Exceptional Dispatch Report
December 15, 2020**

Chart 1: Table of Exceptional Dispatches for Period 01/October/2020 - 31/October/2020

Number	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commitment	INC_DEC	Hours	Begin Time	End Time
1	RT	Bridging Schedules	SCE	Big Creek-Ventura	10/12/2020	100	No	INC	14	0:00	13:50
2	RT	Bridging Schedules	SCE	Big Creek-Ventura	10/13/2020	100	No	INC	2	22:00	0:00
3	RT	Bridging Schedules	SCE	Big Creek-Ventura	10/14/2020	50 - 100	No	INC	24	0:00	0:00
4	RT	Bridging Schedules	SCE	Big Creek-Ventura	10/15/2020	50 - 100	No	INC	24	0:00	0:00
5	RT	Bridging Schedules	SCE	LA Basin	10/1/2020	10 - 20	Yes	INC	24	0:00	0:00
6	RT	Bridging Schedules	SCE	LA Basin	10/6/2020	20	Yes	INC	1	23:00	0:00
7	RT	Bridging Schedules	SCE	LA Basin	10/13/2020	10	Yes	INC	4	20:00	0:00
8	RT	Bridging Schedules	SCE	LA Basin	10/14/2020	10 - 70	Yes	INC	2	22:00	0:00
9	RT	Bridging Schedules	SCE	LA Basin	10/15/2020	10 - 20	Yes	INC	2	22:00	0:00
10	RT	Conditions beyond the control of the CAISO	SCE	LA Basin	10/5/2020	190 - 194	No	INC	7	15:15	22:00
11	RT	Fast Start Unit Management	PGAE	Bay Area	10/6/2020	0	No	INC	2	4:00	5:05
12	RT	Fast Start Unit Management	PGAE	Fresno	10/10/2020	0	No	INC	1	17:15	18:15
13	RT	Fast Start Unit Management	SCE	Big Creek-Ventura	10/16/2020	0	No	INC	1	10:30	11:25
14	RT	Fast Start Unit Management	SCE	Big Creek-Ventura	10/31/2020	0	No	INC	1	20:30	21:30
15	RT	Fast Start Unit Management	SCE	LA Basin	10/6/2020	0	No	INC	10	4:45	13:55

Number	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commitment	INC_DEC	Hours	Begin Time	End Time
16	RT	Fast Start Unit Management	SCE	LA Basin	10/9/2020	0	No	INC	1	8:30	9:00
17	RT	Fast Start Unit Management	SCE	LA Basin	10/14/2020	0	No	INC	1	23:45	0:00
18	RT	Fast Start Unit Management	SCE	LA Basin	10/15/2020	0	No	INC	2	0:00	1:50
19	RT	Load Forecast Uncertainty	Intertie	NA	10/15/2020	395	No	INC	1	18:00	19:00
20	RT	Load Forecast Uncertainty	PGAE	Bay Area	10/16/2020	20	No	DEC	6	14:00	20:00
21	RT	Load Forecast Uncertainty	PGAE	Bay Area	10/17/2020	20	No	DEC	5	16:00	21:00
22	RT	Load Forecast Uncertainty	PGAE	Bay Area	10/17/2020	20	No	INC	1	15:40	16:00
23	RT	Load Forecast Uncertainty	SCE	Big Creek-Ventura	10/1/2020	741	No	DEC	2	17:00	19:00
24	RT	Load Forecast Uncertainty	SCE	Big Creek-Ventura	10/1/2020	741 - 750	No	INC	6	16:15	22:00
25	RT	Load Forecast Uncertainty	SCE	Big Creek-Ventura	10/10/2020	50 - 100	No	INC	6	18:00	0:00
26	RT	Load Forecast Uncertainty	SCE	Big Creek-Ventura	10/11/2020	50 - 100	No	INC	24	0:00	0:00
27	RT	Load Forecast Uncertainty	SCE	LA Basin	10/1/2020	650	No	DEC	6	16:00	22:00
28	RT	Load Forecast Uncertainty	SCE	LA Basin	10/1/2020	175 - 480	No	INC	6	16:00	22:00
29	RT	Load Forecast Uncertainty	SCE	LA Basin	10/7/2020	20	Yes	INC	24	0:00	0:00
30	RT	Load Forecast Uncertainty	SCE	LA Basin	10/14/2020	47	No	INC	3	18:00	21:00
31	RT	Load Forecast Uncertainty	SCE	LA Basin	10/25/2020	20	No	INC	8	16:00	0:00
32	RT	Load Forecast Uncertainty	SCE	LA Basin	10/26/2020	10 - 20	Yes	INC	15	9:00	0:00
33	RT	Load Forecast Uncertainty	SCE	LA Basin	10/27/2020	10	No	DEC	9	0:00	9:00
34	RT	Load Forecast Uncertainty	SCE	LA Basin	10/27/2020	20	No	INC	11	0:00	10:30
35	RT	Load Forecast Uncertainty	SDGE	San Diego-IV	10/1/2020	24	No	DEC	9	13:40	22:00
36	RT	Load Forecast Uncertainty	SDGE	San Diego-IV	10/7/2020	97	No	INC	7	14:00	21:00
37	RT	Load Forecast Uncertainty	SDGE	San Diego-IV	10/15/2020	24	No	DEC	10	12:40	22:00
38	RT	Load Forecast Uncertainty	SDGE	San Diego-IV	10/17/2020	24	No	DEC	6	15:40	21:00
39	RT	Market Disruption	PGAE	Bay Area	10/27/2020	290	No	DEC	1	15:00	15:30
40	RT	Market Disruption	PGAE	Bay Area	10/27/2020	290	No	INC	1	14:35	15:00

Number	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commitment	INC_DEC	Hours	Begin Time	End Time
41	RT	Market Disruption	SCE	NA	10/27/2020	411	No	INC	1	14:45	15:30
42	RT	Other Reliability Requirement	Intertie	NA	10/14/2020	300	No	INC	1	18:00	19:00
43	RT	Planned Transmission Outage	PGAE	Fresno	10/14/2020	2 - 9	No	DEC	16	8:30	0:00
44	RT	Planned Transmission Outage	PGAE	Fresno	10/14/2020	1 - 3	No	INC	11	8:30	19:00
45	RT	Planned Transmission Outage	PGAE	Fresno	10/15/2020	2 - 9	No	DEC	17	0:00	17:00
46	RT	Planned Transmission Outage	PGAE	Fresno	10/15/2020	1 - 2	No	INC	9	8:45	17:00
47	RT	Planned Transmission Outage	PGAE	Fresno	10/16/2020	2	No	DEC	9	8:40	17:00
48	RT	Planned Transmission Outage	PGAE	Fresno	10/16/2020	1 - 2	No	INC	10	8:40	18:00
49	RT	Planned Transmission Outage	PGAE	Fresno	10/17/2020	1 - 2.4	No	DEC	11	8:00	18:30
50	RT	Planned Transmission Outage	PGAE	Fresno	10/17/2020	2 - 2.4	No	INC	11	8:00	18:30
51	RT	Planned Transmission Outage	PGAE	Fresno	10/18/2020	2	No	DEC	12	7:00	18:30
52	RT	Planned Transmission Outage	PGAE	Fresno	10/18/2020	1 - 2	No	INC	12	7:00	18:30
53	RT	Planned Transmission Outage	PGAE	Fresno	10/19/2020	2	No	DEC	12	6:50	18:30
54	RT	Planned Transmission Outage	PGAE	Fresno	10/19/2020	1 - 2	No	INC	12	6:50	18:30
55	RT	Planned Transmission Outage	PGAE	Fresno	10/20/2020	2	No	DEC	9	8:50	17:00
56	RT	Planned Transmission Outage	PGAE	Fresno	10/20/2020	1 - 2	No	INC	16	8:50	0:00
57	RT	Planned Transmission Outage	PGAE	Fresno	10/21/2020	2	No	DEC	10	8:00	18:00
58	RT	Planned Transmission Outage	PGAE	Fresno	10/21/2020	1 - 2	No	INC	24	0:00	0:00
59	RT	Planned Transmission Outage	PGAE	Fresno	10/22/2020	2	No	DEC	9	8:00	17:00
60	RT	Planned Transmission Outage	PGAE	Fresno	10/22/2020	1 - 10	No	INC	18	0:00	18:00
61	RT	Planned Transmission Outage	PGAE	Fresno	10/23/2020	2	No	DEC	5	7:00	11:30
62	RT	Planned Transmission Outage	PGAE	Fresno	10/23/2020	1 - 2	No	INC	4	7:00	10:15
63	RT	Planned Transmission Outage	PGAE	Humboldt	10/1/2020	43 - 64	No	DEC	9	13:00	22:00
64	RT	Planned Transmission Outage	PGAE	Humboldt	10/1/2020	43 - 64	No	INC	24	0:00	0:00
65	RT	Planned Transmission Outage	PGAE	Humboldt	10/2/2020	30 - 60	No	DEC	12	10:00	22:00
66	RT	Planned Transmission Outage	PGAE	Humboldt	10/2/2020	30 - 64	No	INC	24	0:00	0:00
67	RT	Planned Transmission Outage	PGAE	Humboldt	10/3/2020	30 - 45	No	DEC	11	10:00	21:00
68	RT	Planned Transmission Outage	PGAE	Humboldt	10/3/2020	30 - 45	No	INC	24	0:00	0:00
69	RT	Planned Transmission Outage	PGAE	Humboldt	10/4/2020	30	No	DEC	4	16:00	20:00

Number	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commitment	INC_DEC	Hours	Begin Time	End Time
70	RT	Planned Transmission Outage	PGAE	Humboldt	10/4/2020	15 - 45	No	INC	24	0:00	0:00
71	RT	Planned Transmission Outage	PGAE	Humboldt	10/5/2020	15 - 45	No	DEC	7	14:00	21:00
72	RT	Planned Transmission Outage	PGAE	Humboldt	10/5/2020	15 - 45	No	INC	24	0:00	0:00
73	RT	Planned Transmission Outage	PGAE	Humboldt	10/6/2020	14 - 42	No	DEC	6	16:00	22:00
74	RT	Planned Transmission Outage	PGAE	Humboldt	10/6/2020	14 - 75	No	INC	24	0:00	0:00
75	RT	Planned Transmission Outage	PGAE	Humboldt	10/7/2020	14 - 60	No	DEC	4	16:00	20:00
76	RT	Planned Transmission Outage	PGAE	Humboldt	10/7/2020	14 - 60	No	INC	24	0:00	0:00
77	RT	Planned Transmission Outage	PGAE	Humboldt	10/8/2020	30 - 45	No	INC	24	0:00	0:00
78	RT	Planned Transmission Outage	PGAE	Humboldt	10/9/2020	28 - 45	No	INC	24	0:00	0:00
79	RT	Planned Transmission Outage	PGAE	Humboldt	10/10/2020	14 - 42	No	INC	24	0:00	0:00
80	RT	Planned Transmission Outage	PGAE	Humboldt	10/11/2020	14 - 28	No	DEC	6	18:00	0:00
81	RT	Planned Transmission Outage	PGAE	Humboldt	10/11/2020	28 - 30	No	INC	24	0:00	0:00
82	RT	Planned Transmission Outage	PGAE	Humboldt	10/12/2020	28 - 42	No	DEC	6	15:00	21:00
83	RT	Planned Transmission Outage	PGAE	Humboldt	10/12/2020	14 - 42	No	INC	24	0:00	0:00
84	RT	Planned Transmission Outage	PGAE	Humboldt	10/13/2020	14 - 48	No	DEC	14	6:00	20:00
85	RT	Planned Transmission Outage	PGAE	Humboldt	10/13/2020	14 - 48	No	INC	24	0:00	0:00
86	RT	Planned Transmission Outage	PGAE	Humboldt	10/14/2020	30 - 48	No	DEC	7	14:00	21:00
87	RT	Planned Transmission Outage	PGAE	Humboldt	10/14/2020	30 - 48	No	INC	24	0:00	0:00
88	RT	Planned Transmission Outage	PGAE	Humboldt	10/15/2020	15 - 56	No	DEC	16	5:00	21:00
89	RT	Planned Transmission Outage	PGAE	Humboldt	10/15/2020	15 - 70	No	INC	24	0:00	0:00
90	RT	Planned Transmission Outage	PGAE	Humboldt	10/16/2020	14 - 42	No	DEC	16	5:00	21:00
91	RT	Planned Transmission Outage	PGAE	Humboldt	10/16/2020	14 - 42	No	INC	24	0:00	0:00
92	RT	Planned Transmission Outage	PGAE	Humboldt	10/17/2020	16 - 42	No	DEC	12	12:00	0:00
93	RT	Planned Transmission Outage	PGAE	Humboldt	10/17/2020	28 - 48	No	INC	24	0:00	0:00
94	RT	Planned Transmission Outage	PGAE	Humboldt	10/18/2020	16	No	DEC	13	11:00	0:00
95	RT	Planned Transmission Outage	PGAE	Humboldt	10/18/2020	16 - 62	No	INC	24	0:00	0:00
96	RT	Planned Transmission Outage	PGAE	Humboldt	10/19/2020	16 - 28	No	DEC	5	14:00	18:15
97	RT	Planned Transmission Outage	PGAE	Humboldt	10/19/2020	16 - 28	No	INC	17	0:00	17:00
98	RT	Planned Transmission Outage	PGAE	Humboldt	10/25/2020	30 - 96	No	INC	2	10:30	12:30

Number	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commitment	INC_DEC	Hours	Begin Time	End Time
99	RT	Planned Transmission Outage	PGAE	Humboldt	10/28/2020	15 - 30	No	DEC	15	6:00	21:00
100	RT	Planned Transmission Outage	PGAE	Humboldt	10/28/2020	30 - 60	No	INC	19	5:00	0:00
101	RT	Planned Transmission Outage	PGAE	Humboldt	10/29/2020	30	No	DEC	3	15:00	18:00
102	RT	Planned Transmission Outage	PGAE	Humboldt	10/29/2020	30 - 60	No	INC	18	0:00	18:00
103	RT	Planned Transmission Outage	PGAE	Humboldt	10/30/2020	30 - 75	No	INC	17	7:00	0:00
104	RT	Planned Transmission Outage	PGAE	Humboldt	10/31/2020	29 - 60	No	INC	24	0:00	0:00
105	RT	Planned Transmission Outage	PGAE	NA	10/13/2020	0.14	No	INC	1	23:20	0:00
106	RT	Planned Transmission Outage	PGAE	NA	10/14/2020	0.14	No	INC	1	0:00	0:30
107	RT	Planned Transmission Outage	PGAE	Sierra	10/5/2020	20	No	INC	8	7:15	15:00
108	RT	Planned Transmission Outage	PGAE	Sierra	10/8/2020	20	No	INC	2	22:25	0:00
109	RT	Planned Transmission Outage	PGAE	Sierra	10/9/2020	20	No	INC	22	0:00	22:00
110	RT	Planned Transmission Outage	PGAE	Sierra	10/10/2020	20	No	INC	6	16:40	22:00
111	RT	Planned Transmission Outage	PGAE	Sierra	10/12/2020	44	No	DEC	2	6:30	8:00
112	RT	Planned Transmission Outage	PGAE	Sierra	10/12/2020	44	No	INC	1	8:00	8:30
113	RT	Planned Transmission Outage	PGAE	Sierra	10/25/2020	20	No	INC	3	19:45	22:00
114	RT	Planned Transmission Outage	PGAE	Stockton	10/22/2020	89	No	INC	6	10:45	16:00
115	RT	Planned Transmission Outage	SCE	Big Creek-Ventura	10/3/2020	50 - 100	No	INC	2	22:00	0:00
116	RT	Planned Transmission Outage	SCE	Big Creek-Ventura	10/4/2020	100	No	DEC	9	15:00	0:00
117	RT	Planned Transmission Outage	SCE	Big Creek-Ventura	10/4/2020	50 - 100	No	INC	24	0:00	0:00
118	RT	Planned Transmission Outage	SCE	Big Creek-Ventura	10/5/2020	50 - 100	No	DEC	18	6:00	0:00
119	RT	Planned Transmission Outage	SCE	Big Creek-Ventura	10/5/2020	50 - 100	No	INC	12	0:00	12:00
120	RT	Planned Transmission Outage	SCE	Big Creek-Ventura	10/6/2020	50 - 100	No	DEC	13	11:00	0:00
121	RT	Planned Transmission Outage	SCE	Big Creek-Ventura	10/6/2020	50 - 100	No	INC	11	0:00	11:00

Number	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commitment	INC_DEC	Hours	Begin Time	End Time
122	RT	Planned Transmission Outage	SCE	Big Creek-Ventura	10/7/2020	50 - 100	No	DEC	9	13:00	22:00
123	RT	Planned Transmission Outage	SCE	Big Creek-Ventura	10/7/2020	50 - 100	No	INC	24	0:00	0:00
124	RT	Planned Transmission Outage	SCE	Big Creek-Ventura	10/8/2020	50 - 100	No	DEC	5	16:00	21:00
125	RT	Planned Transmission Outage	SCE	Big Creek-Ventura	10/8/2020	50 - 100	No	INC	24	0:00	0:00
126	RT	Planned Transmission Outage	SCE	Big Creek-Ventura	10/9/2020	50 - 100	No	INC	24	0:00	0:00
127	RT	Planned Transmission Outage	SCE	Big Creek-Ventura	10/10/2020	50 - 100	No	INC	18	0:00	18:00
128	RT	Planned Transmission Outage	SCE	Big Creek-Ventura	10/16/2020	50 - 100	No	INC	2	22:00	0:00
129	RT	Planned Transmission Outage	SCE	Big Creek-Ventura	10/17/2020	50 - 100	No	DEC	24	0:00	0:00
130	RT	Planned Transmission Outage	SCE	Big Creek-Ventura	10/17/2020	50 - 100	No	INC	23	1:00	0:00
131	RT	Planned Transmission Outage	SCE	Big Creek-Ventura	10/18/2020	100	No	DEC	7	15:00	22:00
132	RT	Planned Transmission Outage	SCE	Big Creek-Ventura	10/18/2020	50 - 100	No	INC	24	0:00	0:00
133	RT	Planned Transmission Outage	SCE	Big Creek-Ventura	10/19/2020	50 - 100	No	DEC	8	14:00	22:00
134	RT	Planned Transmission Outage	SCE	Big Creek-Ventura	10/19/2020	50 - 100	No	INC	24	0:00	0:00
135	RT	Planned Transmission Outage	SCE	Big Creek-Ventura	10/20/2020	50 - 100	No	INC	24	0:00	0:00
136	RT	Planned Transmission Outage	SCE	Big Creek-Ventura	10/21/2020	50 - 100	No	DEC	4	14:00	18:00
137	RT	Planned Transmission Outage	SCE	Big Creek-Ventura	10/21/2020	50 - 100	No	INC	22	0:00	22:00

Number	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commitment	INC_DEC	Hours	Begin Time	End Time
138	RT	Planned Transmission Outage	SCE	LA Basin	10/6/2020	20	No	DEC	3	16:00	19:00
139	RT	Planned Transmission Outage	SCE	LA Basin	10/6/2020	20	No	INC	7	10:55	17:00
140	RT	Planned Transmission Outage	SCE	LA Basin	10/12/2020	20	No	DEC	1	19:15	19:30
141	RT	Planned Transmission Outage	SCE	NA	10/3/2020	330	No	DEC	1	15:55	16:15
142	RT	Planned Transmission Outage	SCE	NA	10/4/2020	125	No	DEC	24	0:00	0:00
143	RT	Planned Transmission Outage	SCE	NA	10/5/2020	125	No	DEC	24	0:00	0:00
144	RT	Planned Transmission Outage	SCE	NA	10/6/2020	125	No	DEC	24	0:00	0:00
145	RT	Planned Transmission Outage	SCE	NA	10/6/2020	125	No	INC	1	9:00	10:00
146	RT	Planned Transmission Outage	SCE	NA	10/7/2020	125	No	DEC	24	0:00	0:00
147	RT	Planned Transmission Outage	SCE	NA	10/7/2020	125	No	INC	6	9:00	15:00
148	RT	Planned Transmission Outage	SCE	NA	10/8/2020	125	No	DEC	24	0:00	0:00
149	RT	Planned Transmission Outage	SCE	NA	10/8/2020	125	No	INC	7	3:00	10:00
150	RT	Planned Transmission Outage	SCE	NA	10/9/2020	125	No	DEC	24	0:00	0:00
151	RT	Planned Transmission Outage	SCE	NA	10/9/2020	125	No	INC	1	9:00	10:00
152	RT	Planned Transmission Outage	SCE	NA	10/10/2020	125	No	DEC	24	0:00	0:00
153	RT	Planned Transmission Outage	SCE	NA	10/10/2020	125	No	INC	1	12:00	13:00
154	RT	Planned Transmission Outage	SCE	NA	10/11/2020	125	No	DEC	24	0:00	0:00
155	RT	Planned Transmission Outage	SCE	NA	10/11/2020	125	No	INC	3	9:00	12:00
156	RT	Planned Transmission Outage	SCE	NA	10/12/2020	125 - 290	No	DEC	24	0:00	0:00
157	RT	Planned Transmission Outage	SCE	NA	10/12/2020	125 - 290	No	INC	4	9:00	13:00
158	RT	Planned Transmission Outage	SCE	NA	10/13/2020	125	No	DEC	24	0:20	0:00
159	RT	Planned Transmission Outage	SCE	NA	10/13/2020	125	No	INC	7	8:00	15:00
160	RT	Planned Transmission Outage	SCE	NA	10/14/2020	125 - 290	No	DEC	24	0:00	0:00
161	RT	Planned Transmission Outage	SCE	NA	10/14/2020	125 - 290	No	INC	11	11:00	22:00
162	RT	Planned Transmission Outage	SCE	NA	10/15/2020	125	No	DEC	24	0:00	0:00

Number	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commitment	INC_DEC	Hours	Begin Time	End Time
163	RT	Planned Transmission Outage	SCE	NA	10/16/2020	125	No	DEC	24	0:00	0:00
164	RT	Planned Transmission Outage	SCE	NA	10/17/2020	125	No	DEC	24	0:00	0:00
165	RT	Planned Transmission Outage	SCE	NA	10/18/2020	125	No	DEC	24	0:00	0:00
166	RT	Planned Transmission Outage	SCE	NA	10/18/2020	125	No	INC	3	8:00	11:00
167	RT	Planned Transmission Outage	SCE	NA	10/19/2020	125	No	DEC	24	0:00	0:00
168	RT	Planned Transmission Outage	SCE	NA	10/20/2020	125	No	DEC	24	0:00	0:00
169	RT	Planned Transmission Outage	SCE	NA	10/21/2020	125	No	DEC	24	0:00	0:00
170	RT	Planned Transmission Outage	SCE	NA	10/21/2020	125	No	INC	1	9:00	10:00
171	RT	Planned Transmission Outage	SCE	NA	10/22/2020	125	No	DEC	22	0:00	21:45
172	RT	Planned Transmission Outage	SCE	NA	10/23/2020	475 - 700	No	DEC	4	8:50	12:30
173	RT	Planned Transmission Outage	SDGE	San Diego-IV	10/5/2020	48 - 116	No	DEC	5	9:55	14:00
174	RT	Planned Transmission Outage	SDGE	San Diego-IV	10/7/2020	97 - 317	No	INC	4	13:25	16:40
175	RT	Planned Transmission Outage	SDGE	San Diego-IV	10/12/2020	50	No	INC	1	19:00	20:00
176	RT	Planned Transmission Outage	SDGE	San Diego-IV	10/22/2020	0	No	INC	8	9:35	16:45
177	RT	Ramping Capacity	PGAE	Bay Area	10/30/2020	48	No	DEC	1	18:00	19:00
178	RT	Ramping Capacity	PGAE	Humboldt	10/30/2020	30	No	INC	3	4:45	7:00
179	RT	Ramping Capacity	PGAE	NCNB	10/27/2020	40	No	DEC	1	19:00	19:45
180	RT	Ramping Capacity	SCE	Big Creek-Ventura	10/1/2020	400.1	No	DEC	1	16:00	16:15
181	RT	Ramping Capacity	SCE	Big Creek-Ventura	10/1/2020	400.1	No	INC	1	15:00	16:00
182	RT	Ramping Capacity	SCE	Big Creek-Ventura	10/6/2020	400.1	No	DEC	2	17:00	19:00
183	RT	Ramping Capacity	SCE	Big Creek-Ventura	10/6/2020	400.1	No	INC	6	14:25	20:00
184	RT	Ramping Capacity	SCE	Big Creek-Ventura	10/12/2020	400.1	No	INC	9	13:50	22:00
185	RT	Ramping Capacity	SCE	Big Creek-Ventura	10/13/2020	401	No	DEC	4	16:00	20:00

Number	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commitment	INC_DEC	Hours	Begin Time	End Time
186	RT	Ramping Capacity	SCE	Big Creek-Ventura	10/13/2020	401	No	INC	8	13:30	21:00
187	RT	Ramping Capacity	SCE	Big Creek-Ventura	10/14/2020	401	No	DEC	4	16:00	20:00
188	RT	Ramping Capacity	SCE	Big Creek-Ventura	10/14/2020	401	No	INC	8	13:30	21:00
189	RT	Ramping Capacity	SCE	Big Creek-Ventura	10/15/2020	401 - 700	No	INC	8	13:30	21:00
190	RT	Ramping Capacity	SCE	Big Creek-Ventura	10/16/2020	549.9 - 649.9	No	DEC	4	16:00	20:00
191	RT	Ramping Capacity	SCE	Big Creek-Ventura	10/16/2020	401 - 649.9	No	INC	8	13:30	21:00
192	RT	Ramping Capacity	SCE	Big Creek-Ventura	10/17/2020	401 - 700	No	INC	8	13:30	21:00
193	RT	Ramping Capacity	SCE	Big Creek-Ventura	10/18/2020	401	No	INC	5	15:00	20:00
194	RT	Ramping Capacity	SCE	Big Creek-Ventura	10/19/2020	405	No	DEC	1	18:00	19:00
195	RT	Ramping Capacity	SCE	Big Creek-Ventura	10/19/2020	405	No	INC	6	16:05	22:00
196	RT	Ramping Capacity	SCE	Big Creek-Ventura	10/20/2020	405	No	INC	4	17:00	21:00
197	RT	Ramping Capacity	SCE	Big Creek-Ventura	10/21/2020	400.1	No	INC	4	16:35	20:00
198	RT	Ramping Capacity	SCE	LA Basin	10/1/2020	230.1 - 240.1	No	DEC	2	15:00	17:00
199	RT	Ramping Capacity	SCE	LA Basin	10/1/2020	190 - 194	No	INC	1	15:00	16:00
200	RT	Ramping Capacity	SCE	LA Basin	10/2/2020	240	No	DEC	4	16:00	19:45
201	RT	Ramping Capacity	SCE	LA Basin	10/2/2020	190 - 240	No	INC	4	16:00	19:45

Number	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commitment	INC_DEC	Hours	Begin Time	End Time
202	RT	Ramping Capacity	SCE	LA Basin	10/3/2020	190 - 240	No	INC	8	14:30	21:45
203	RT	Ramping Capacity	SCE	LA Basin	10/4/2020	135 - 194	No	INC	6	16:30	22:00
204	RT	Ramping Capacity	SCE	LA Basin	10/5/2020	109 - 241	No	INC	6	15:30	21:00
205	RT	Ramping Capacity	SCE	LA Basin	10/12/2020	191 - 195	No	INC	7	14:40	21:30
206	RT	Ramping Capacity	SCE	LA Basin	10/13/2020	190 - 241	No	DEC	5	16:00	21:00
207	RT	Ramping Capacity	SCE	LA Basin	10/13/2020	190 - 241	No	INC	8	13:30	21:00
208	RT	Ramping Capacity	SCE	LA Basin	10/14/2020	190 - 241	No	DEC	4	16:00	20:00
209	RT	Ramping Capacity	SCE	LA Basin	10/14/2020	190 - 241	No	INC	1	20:00	21:00
210	RT	Ramping Capacity	SCE	LA Basin	10/15/2020	65 - 335	No	DEC	6	14:00	20:00
211	RT	Ramping Capacity	SCE	LA Basin	10/15/2020	65 - 480	No	INC	9	12:45	21:45
212	RT	Ramping Capacity	SCE	LA Basin	10/16/2020	65 - 479.9	No	DEC	5	15:00	20:00
213	RT	Ramping Capacity	SCE	LA Basin	10/16/2020	65 - 474.9	No	INC	8	13:30	21:00
214	RT	Ramping Capacity	SCE	LA Basin	10/17/2020	65 - 480	No	INC	8	13:30	21:00
215	RT	Ramping Capacity	SCE	LA Basin	10/18/2020	194	No	INC	5	15:00	20:00
216	RT	Ramping Capacity	SDGE	San Diego-IV	10/15/2020	0	No	INC	3	13:30	16:30
217	RT	Ramping Capacity	SDGE	San Diego-IV	10/16/2020	0	No	INC	5	12:00	16:30
218	RT	Ramping Capacity	SDGE	San Diego-IV	10/17/2020	0	No	INC	6	11:15	16:30
219	RT	Reliability Assessment	PGAE	Bay Area	10/1/2020	400 - 500	No	DEC	3	12:00	15:00
220	RT	Reliability Assessment	PGAE	Bay Area	10/1/2020	450	No	INC	1	11:35	12:00
221	RT	Reliability Assessment	PGAE	Bay Area	10/4/2020	46 - 95	No	INC	3	9:45	12:00

Number	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commitment	INC_DEC	Hours	Begin Time	End Time
222	RT	Reliability Assessment	PGAE	Fresno	10/2/2020	83	No	DEC	1	14:15	15:00
223	RT	Reliability Assessment	PGAE	Fresno	10/2/2020	400	No	INC	1	13:30	14:15
224	RT	Reliability Assessment	PGAE	Fresno	10/3/2020	77 - 80	No	DEC	1	22:20	23:00
225	RT	Reliability Assessment	PGAE	Fresno	10/3/2020	35 - 77	No	INC	4	20:25	0:00
226	RT	Reliability Assessment	PGAE	Fresno	10/4/2020	0 - 77	No	DEC	12	0:00	11:15
227	RT	Reliability Assessment	PGAE	Fresno	10/4/2020	74	No	INC	3	2:00	5:00
228	RT	Reliability Assessment	PGAE	Humboldt	10/15/2020	56	No	DEC	3	17:45	20:00
229	RT	Reliability Assessment	PGAE	Humboldt	10/15/2020	56	No	INC	1	20:05	20:45
230	RT	Reliability Assessment	PGAE	Humboldt	10/19/2020	16 - 28	No	DEC	6	17:50	23:00
231	RT	Reliability Assessment	PGAE	Humboldt	10/19/2020	16 - 28	No	INC	4	20:00	0:00
232	RT	Reliability Assessment	PGAE	Humboldt	10/20/2020	14 - 28	No	DEC	21	3:30	0:00
233	RT	Reliability Assessment	PGAE	Humboldt	10/20/2020	14 - 28	No	INC	24	0:00	0:00
234	RT	Reliability Assessment	PGAE	Humboldt	10/21/2020	14 - 30	No	DEC	22	0:00	21:50
235	RT	Reliability Assessment	PGAE	Humboldt	10/21/2020	14 - 45	No	INC	24	0:00	0:00
236	RT	Reliability Assessment	PGAE	Humboldt	10/22/2020	30 - 45	No	INC	24	0:00	0:00
237	RT	Reliability Assessment	PGAE	Humboldt	10/23/2020	30 - 60	No	INC	24	0:00	0:00
238	RT	Reliability Assessment	PGAE	Humboldt	10/24/2020	30	No	INC	24	0:00	0:00
239	RT	Reliability Assessment	PGAE	Humboldt	10/25/2020	30	No	INC	11	0:00	11:00
240	RT	Reliability Assessment	PGAE	Humboldt	10/26/2020	28	No	INC	8	16:50	0:00
241	RT	Reliability Assessment	PGAE	Humboldt	10/27/2020	15 - 30	No	INC	24	0:00	0:00
242	RT	Reliability Assessment	PGAE	Humboldt	10/28/2020	15	No	DEC	4	1:45	5:00
243	RT	Reliability Assessment	PGAE	Humboldt	10/28/2020	15 - 30	No	INC	2	0:00	1:45
244	RT	Reliability Assessment	PGAE	Humboldt	10/29/2020	30	No	DEC	3	17:40	20:00
245	RT	Reliability Assessment	PGAE	Humboldt	10/29/2020	30 - 45	No	INC	7	17:45	0:00
246	RT	Reliability Assessment	PGAE	Humboldt	10/30/2020	15 - 30	No	INC	7	0:00	7:00
247	RT	Reliability Assessment	PGAE	NA	10/20/2020	27	No	DEC	2	14:40	16:00
248	RT	Reliability Assessment	PGAE	NA	10/20/2020	27	No	INC	2	16:00	18:00
249	RT	Reliability Assessment	PGAE	NCNB	10/15/2020	62 - 65	No	DEC	5	19:15	0:00
250	RT	Reliability Assessment	PGAE	NCNB	10/16/2020	65 - 77	No	DEC	5	0:00	5:00

Number	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commitment	INC_DEC	Hours	Begin Time	End Time
251	RT	Reliability Assessment	PGAE	NCNB	10/16/2020	65 - 77	No	INC	6	0:00	5:15
252	RT	Reliability Assessment	PGAE	NCNB	10/27/2020	40 - 70	No	DEC	9	10:35	19:30
253	RT	Reliability Assessment	PGAE	Sierra	10/1/2020	42	No	INC	2	0:05	2:00
254	RT	Reliability Assessment	PGAE	Sierra	10/16/2020	20	No	DEC	2	18:30	20:00
255	RT	Reliability Assessment	PGAE	Sierra	10/16/2020	20	No	INC	3	20:00	22:45
256	RT	Reliability Assessment	PGAE	Sierra	10/19/2020	20 - 40	No	DEC	2	17:00	19:00
257	RT	Reliability Assessment	PGAE	Sierra	10/19/2020	40	No	INC	8	15:25	23:00
258	RT	Reliability Assessment	PGAE	Sierra	10/20/2020	20 - 40	No	DEC	3	17:00	20:00
259	RT	Reliability Assessment	PGAE	Sierra	10/20/2020	20 - 40	No	INC	7	16:30	23:00
260	RT	Reliability Assessment	PGAE	Sierra	10/21/2020	20	No	DEC	1	17:00	17:30
261	RT	Reliability Assessment	PGAE	Sierra	10/21/2020	20	No	INC	1	16:05	17:00
262	RT	Reliability Assessment	PGAE	Sierra	10/27/2020	45	No	INC	3	19:30	21:45
263	RT	Reliability Assessment	SCE	LA Basin	10/26/2020	615	No	DEC	1	8:40	9:00
264	RT	Reliability Assessment	SCE	LA Basin	10/26/2020	615	No	INC	3	9:00	11:45
265	RT	Reliability Assessment	SCE	NA	10/1/2020	440 - 475	No	INC	4	14:05	17:25
266	RT	Reliability Assessment	SCE	NA	10/2/2020	440	No	DEC	15	6:00	21:00
267	RT	Reliability Assessment	SCE	NA	10/2/2020	440	No	INC	24	0:00	0:00
268	RT	Reliability Assessment	SCE	NA	10/3/2020	330 - 440	No	DEC	20	0:00	20:00
269	RT	Reliability Assessment	SCE	NA	10/3/2020	440	No	INC	4	6:00	9:30
270	RT	Reliability Assessment	SCE	NA	10/24/2020	470	No	DEC	7	17:00	0:00
271	RT	Reliability Assessment	SCE	NA	10/24/2020	470	No	INC	2	21:00	23:00
272	RT	Reliability Assessment	SCE	NA	10/25/2020	470	No	DEC	6	18:00	0:00
273	RT	Reliability Assessment	SCE	NA	10/25/2020	470	No	INC	18	0:00	18:00
274	RT	Reliability Assessment	SCE	NA	10/26/2020	470	No	DEC	24	0:00	0:00
275	RT	Reliability Assessment	SCE	NA	10/26/2020	470 - 505	No	INC	18	3:00	21:00

Number	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commitment	INC_DEC	Hours	Begin Time	End Time
276	RT	Reliability Assessment	SCE	NA	10/27/2020	450 - 470	No	DEC	24	0:00	0:00
277	RT	Reliability Assessment	SCE	NA	10/27/2020	470	No	INC	17	1:00	18:00
278	RT	Reliability Assessment	SCE	NA	10/28/2020	450 - 460	No	DEC	24	0:00	0:00
279	RT	Reliability Assessment	SCE	NA	10/28/2020	450	No	INC	15	3:00	18:00
280	RT	Reliability Assessment	SCE	NA	10/29/2020	460 - 470	No	DEC	24	0:00	0:00
281	RT	Reliability Assessment	SCE	NA	10/29/2020	470 - 475	No	INC	16	3:00	18:30
282	RT	Reliability Assessment	SCE	NA	10/30/2020	460 - 475	No	DEC	24	0:00	0:00
283	RT	Reliability Assessment	SCE	NA	10/30/2020	460	No	INC	7	3:00	10:00
284	RT	Reliability Assessment	SCE	NA	10/31/2020	474 - 475	No	DEC	24	0:00	0:00
285	RT	Reliability Assessment	SCE	NA	10/31/2020	474 - 475	No	INC	15	3:00	18:00
286	RT	Reliability Assessment	SDGE	San Diego-IV	10/19/2020	44	No	DEC	2	17:00	19:00
287	RT	Reliability Assessment	SDGE	San Diego-IV	10/19/2020	21 - 44	No	INC	15	7:50	22:30
288	RT	Reliability Assessment	SDGE	San Diego-IV	10/20/2020	21	No	DEC	1	18:45	19:00
289	RT	Reliability Assessment	SDGE	San Diego-IV	10/20/2020	21	No	INC	3	19:00	22:00
290	RT	Software Limitation	PGAE	Bay Area	10/30/2020	240	No	DEC	1	23:00	0:00
291	RT	Software Limitation	PGAE	Bay Area	10/30/2020	54	No	INC	1	17:20	18:00
292	RT	Software Limitation	PGAE	Bay Area	10/31/2020	0	No	INC	4	0:00	4:00
293	RT	Software Limitation	SCE	LA Basin	10/1/2020	0	No	INC	2	21:25	22:35
294	RT	Software Limitation	SCE	LA Basin	10/11/2020	147	No	DEC	2	18:30	20:00
295	RT	Software Limitation	SCE	LA Basin	10/16/2020	0	No	INC	2	3:10	4:15
296	RT	Software Limitation	SCE	LA Basin	10/17/2020	0	No	INC	2	6:00	7:05
297	RT	Software Limitation	SDGE	San Diego-IV	10/14/2020	0	No	INC	1	2:00	3:00
298	RT	Software Limitation	SDGE	San Diego-IV	10/21/2020	24	No	DEC	7	13:00	20:00

Number	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commitment	INC_DEC	Hours	Begin Time	End Time
299	RT	Unit Testing	Intertie	NA	10/27/2020	0 - 54	No	INC	24	0:00	0:00
300	RT	Unit Testing	Intertie	NA	10/28/2020	2 - 46	No	INC	16	8:00	0:00
301	RT	Unit Testing	Intertie	NA	10/29/2020	4 - 21	No	INC	16	8:00	0:00
302	RT	Unit Testing	Intertie	NA	10/30/2020	4 - 21	No	INC	16	8:00	23:05
303	RT	Unit Testing	Intertie	NA	10/31/2020	12 - 23	No	INC	13	11:00	0:00
304	RT	Unit Testing	PGAE	Bay Area	10/8/2020	2	No	INC	1	8:25	8:50
305	RT	Unit Testing	PGAE	Bay Area	10/10/2020	246	No	INC	1	6:35	7:00
306	RT	Unit Testing	PGAE	Fresno	10/2/2020	0 - 105	No	INC	2	16:30	18:30
307	RT	Unit Testing	PGAE	Fresno	10/10/2020	21.41 - 45	No	INC	5	16:25	21:00
308	RT	Unit Testing	PGAE	Fresno	10/29/2020	77	No	INC	1	21:15	21:20
309	RT	Unit Testing	PGAE	NA	10/27/2020	42 - 600	No	INC	12	7:05	18:45
310	RT	Unit Testing	SCE	Big Creek-Ventura	10/9/2020	47.1	No	INC	1	0:20	1:20
311	RT	Unit Testing	SCE	Big Creek-Ventura	10/31/2020	42	No	INC	1	19:00	19:45
312	RT	Unit Testing	SCE	LA Basin	10/6/2020	91.84	No	INC	1	17:10	17:45
313	RT	Unit Testing	SCE	LA Basin	10/9/2020	40.78	No	INC	1	0:15	1:15
314	RT	Unit Testing	SCE	LA Basin	10/10/2020	92	No	INC	1	7:30	7:45
315	RT	Unit Testing	SCE	LA Basin	10/20/2020	44	No	INC	1	4:30	5:00
316	RT	Unit Testing	SCE	LA Basin	10/27/2020	65 - 75	No	INC	1	19:25	19:35
317	RT	Unit Testing	SCE	NA	10/10/2020	100	No	INC	5	12:15	17:00
318	RT	Unit Testing	SDGE	San Diego-IV	10/7/2020	510	No	DEC	1	17:05	17:35
319	RT	Voltage Support	PGAE	Fresno	10/23/2020	83	Yes	INC	2	4:30	6:00
320	RT	Voltage Support	PGAE	Fresno	10/25/2020	-308	No	DEC	23	1:00	0:00
321	RT	Voltage Support	PGAE	Fresno	10/26/2020	-308	No	DEC	7	0:00	6:45
322	RT	Voltage Support	PGAE	Fresno	10/26/2020	83	Yes	INC	2	7:00	9:00
323	RT	Voltage Support	PGAE	Sierra	10/25/2020	20	No	INC	11	13:30	0:00
324	RT	Voltage Support	PGAE	Sierra	10/26/2020	20	No	DEC	13	7:00	20:00

Number	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commitment	INC_DEC	Hours	Begin Time	End Time
325	RT	Voltage Support	PGAE	Sierra	10/26/2020	20	No	INC	21	0:00	21:00

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