



# Exceptional Dispatch Report

## Table 1: July 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 15<sup>th</sup> of each month and one originally issued on the 30<sup>th</sup> of each month. Both Table 1 and Table 2 reports will be issued on the 15<sup>th</sup> of each month due to the availability of necessary data. This report provides data on the frequency and reasons for Exceptional Dispatches issued in July 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.<sup>1</sup> A pre-day-ahead commitment is an exceptional dispatch instruction that commits a resource at or above its physical minimum operating level in the day-ahead market. A post-day-ahead market commitment is an exceptional dispatch instruction that commits a resource at or above its physical minimum operating level in the real-time market. A real-time exceptional dispatch instruction is a dispatch of a resource at or above its physical minimum operating point. 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.<sup>2</sup>

The following reason for exceptional dispatch instructions in July 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 resource has a

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<sup>1</sup> 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).

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

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 July 2020, which are self explanatory.

The data in Table 1 is based on a template specified in the September 2009 order.<sup>3</sup> Each entry in Attachment A is a summary of exceptional dispatches classified by (1) the reason for the exceptional dispatch; (2) the location of the resource by Participating Transmission Owner (“PTO”) service area; (3) the Local Reliability Area (“LRA”) where applicable; (4) the market in which the exceptional dispatch occurred (day-ahead vs. real-time); and (5) the date of the exceptional dispatch. For each classification the following 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 307 exceptional dispatches in July 2020, as compared to 224 exceptional dispatches in June 2020. Exceptional dispatches issued for the following reasons accounted for approximately 67 percent of the

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<sup>3</sup> The data in Table 1 is principally SLIC information supplemented with data from the Market Quality System (MQS). It is the most accurate currently available and it is worth noting that this data has been through the T+38B initial statement process wherein many unresolved issues are fixed. The CAISO believes that this data will correlate well with the settlements data that will be available when the CAISO files the Table 2 report for the reporting period.

total exceptional dispatches during the reporting period: 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, 7320, 7430, 7450, 7720, and 7910). Reliability Assessment is the reason as explained in the operator procedure 2330C<sup>4</sup> 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.

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

**Table 1: Exceptional Dispatches in July 2020**

**California Independent System Operator Corporation  
Exceptional Dispatch Report  
August 17, 2020**

**Chart 1: Table of Exceptional Dispatches for Period 01/July/2020 - 31/July/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	7/11/2020	50	No	INC	2	22:00	0:00
2	RT	Bridging Schedules	SCE	Big Creek-Ventura	7/12/2020	50	No	DEC	1	22:00	23:00
3	RT	Bridging Schedules	SCE	Big Creek-Ventura	7/12/2020	50	No	INC	1	23:00	0:00
4	RT	Bridging Schedules	SCE	LA Basin	7/11/2020	10 - 20	No	INC	1	23:00	0:00
5	RT	Bridging Schedules	SCE	LA Basin	7/12/2020	10	Yes	INC	1	23:00	0:00
6	RT	Bridging Schedules	SCE	LA Basin	7/18/2020	10 - 40	No	INC	1	23:00	0:00
7	RT	Bridging Schedules	SCE	LA Basin	7/29/2020	10	No	INC	1	23:00	0:00
8	RT	Bridging Schedules	SCE	LA Basin	7/30/2020	10	No	INC	4	0:00	4:00
9	RT	Fast Start Unit Management	PGAE	Bay Area	7/17/2020	0	No	INC	2	20:15	21:20
10	RT	Fast Start Unit Management	PGAE	Bay Area	7/28/2020	0	No	INC	2	0:15	1:20
11	RT	Fast Start Unit Management	PGAE	Bay Area	7/31/2020	0	No	INC	1	5:15	6:15
12	RT	Fast Start Unit Management	SCE	LA Basin	7/23/2020	0	No	INC	1	22:55	23:30
13	RT	Fast Start Unit Management	SCE	LA Basin	7/28/2020	0	No	INC	2	1:00	2:05
14	RT	Fast Start Unit Management	SCE	LA Basin	7/30/2020	0	No	DEC	1	8:05	9:00
15	RT	Fast Start Unit Management	SCE	LA Basin	7/30/2020	0	No	INC	1	23:40	0:00
16	RT	Fast Start Unit Management	SCE	LA Basin	7/31/2020	0	No	DEC	1	4:20	4:50
17	RT	Fast Start Unit Management	SCE	LA Basin	7/31/2020	0	No	INC	3	0:00	2:05
18	RT	Gas Limitations	SCE	LA Basin	7/13/2020	20	No	INC	1	23:00	0:00

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	PGAE	Humboldt	7/1/2020	15	No	DEC	3	16:00	19:00
20	RT	Incomplete or Inaccurate Transmission	PGAE	Humboldt	7/1/2020	15	No	INC	16	0:00	16:00
21	RT	Incomplete or Inaccurate Transmission	PGAE	Humboldt	7/9/2020	45	No	DEC	1	19:00	20:00
22	RT	Incomplete or Inaccurate Transmission	PGAE	Humboldt	7/9/2020	15 - 45	No	INC	16	8:45	0:00
23	RT	Incomplete or Inaccurate Transmission	PGAE	Humboldt	7/10/2020	45	No	INC	1	0:00	0:30
24	RT	Intertie Emergency Assistance	Intertie	NA	7/26/2020	110	No	DEC	1	16:00	17:00
25	RT	Load Forecast Uncertainty	Intertie	NA	7/31/2020	250	No	INC	1	19:00	20:00
26	RT	Load Forecast Uncertainty	PGAE	Bay Area	7/20/2020	175	No	INC	2	18:00	20:00
27	RT	Load Forecast Uncertainty	PGAE	NA	7/31/2020	20	No	DEC	1	19:10	20:00
28	RT	Load Forecast Uncertainty	SCE	Big Creek-Ventura	7/12/2020	100	No	INC	18	6:00	0:00
29	RT	Load Forecast Uncertainty	SCE	Big Creek-Ventura	7/13/2020	50 - 100	No	INC	24	0:00	0:00
30	RT	Load Forecast Uncertainty	SCE	Big Creek-Ventura	7/18/2020	50	No	INC	9	15:00	0:00
31	RT	Load Forecast Uncertainty	SCE	Big Creek-Ventura	7/28/2020	50 - 100	No	INC	2	22:00	0:00
32	RT	Load Forecast Uncertainty	SCE	Big Creek-Ventura	7/29/2020	50 - 100	No	INC	24	0:00	0:00
33	RT	Load Forecast Uncertainty	SCE	LA Basin	7/12/2020	70 - 130	No	INC	18	6:00	0:00
34	RT	Load Forecast Uncertainty	SCE	LA Basin	7/13/2020	10 - 130	Yes	INC	24	0:00	0:00
35	RT	Load Forecast Uncertainty	SCE	LA Basin	7/14/2020	251	No	DEC	4	17:00	21:00
36	RT	Load Forecast Uncertainty	SCE	LA Basin	7/27/2020	10 - 70	No	INC	4	20:00	0:00
37	RT	Load Forecast Uncertainty	SCE	LA Basin	7/28/2020	10 - 70	No	INC	24	0:00	0:00
38	RT	Load Forecast Uncertainty	SCE	LA Basin	7/29/2020	20 - 70	No	INC	24	0:00	0:00
39	RT	Market Disruption	PGAE	Fresno	7/30/2020	83	No	DEC	4	16:20	20:00
40	RT	Market Disruption	PGAE	Fresno	7/30/2020	407	No	INC	1	15:50	16:45
41	RT	Market Disruption	SCE	LA Basin	7/30/2020	47.8 - 48.46	No	DEC	4	16:00	20:00
42	RT	Other Reliability Requirement	PGAE	Bay Area	7/30/2020	120	No	INC	2	18:40	20:00

Number	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commitment	INC_DEC	Hours	Begin Time	End Time
43	RT	Other Reliability Requirement	PGAE	Fresno	7/17/2020	83 - 144	No	INC	2	13:55	15:00
44	RT	Other Reliability Requirement	PGAE	Fresno	7/22/2020	83	No	INC	1	0:00	1:00
45	RT	Other Reliability Requirement	PGAE	Fresno	7/23/2020	83	No	DEC	1	22:40	23:00
46	RT	Other Reliability Requirement	PGAE	Fresno	7/23/2020	83	Yes	INC	1	23:00	23:45
47	RT	Other Reliability Requirement	PGAE	Fresno	7/30/2020	83	No	DEC	1	18:55	19:30
48	RT	Other Reliability Requirement	PGAE	Sierra	7/17/2020	143	No	DEC	1	14:00	14:10
49	RT	Other Reliability Requirement	PGAE	Sierra	7/17/2020	143	No	INC	1	13:55	14:00
50	RT	Other Reliability Requirement	SCE	Big Creek-Ventura	7/13/2020	401	No	DEC	2	18:00	20:00
51	RT	Other Reliability Requirement	SCE	Big Creek-Ventura	7/13/2020	401	No	INC	6	16:30	22:00
52	RT	Other Reliability Requirement	SCE	LA Basin	7/13/2020	245	No	DEC	5	16:00	21:00
53	RT	Other Reliability Requirement	SCE	LA Basin	7/13/2020	245	No	INC	7	15:20	22:00
54	RT	Other Reliability Requirement	SCE	LA Basin	7/19/2020	10	No	INC	11	0:00	11:00
55	RT	Other Reliability Requirement	SCE	LA Basin	7/30/2020	46 - 250	No	DEC	2	18:35	20:00
56	RT	Other Reliability Requirement	SCE	LA Basin	7/30/2020	250	No	INC	1	20:00	20:50
57	RT	Other Reliability Requirement	SDGE	San Diego-IV	7/30/2020	50	No	DEC	1	18:30	19:00
58	RT	Planned Transmission Outage	PGAE	Bay Area	7/21/2020	54	No	INC	1	12:00	13:00
59	RT	Planned Transmission Outage	PGAE	Humboldt	7/1/2020	15	No	DEC	1	21:00	22:00
60	RT	Planned Transmission Outage	PGAE	Humboldt	7/1/2020	15 - 60	No	INC	24	0:00	0:00
61	RT	Planned Transmission Outage	PGAE	Humboldt	7/2/2020	15 - 60	No	INC	24	0:00	0:00
62	RT	Planned Transmission Outage	PGAE	Humboldt	7/3/2020	14 - 42	No	INC	22	0:00	21:30
63	RT	Planned Transmission Outage	PGAE	Humboldt	7/10/2020	15	No	DEC	4	19:00	23:00
64	RT	Planned Transmission Outage	PGAE	Humboldt	7/10/2020	15	No	INC	1	23:00	0:00
65	RT	Planned Transmission Outage	PGAE	Humboldt	7/11/2020	15	No	DEC	24	0:00	0:00
66	RT	Planned Transmission Outage	PGAE	Humboldt	7/11/2020	15 - 42	No	INC	22	2:00	0:00
67	RT	Planned Transmission Outage	PGAE	Humboldt	7/12/2020	14 - 42	No	DEC	24	0:00	0:00
68	RT	Planned Transmission Outage	PGAE	Humboldt	7/12/2020	15 - 42	No	INC	24	0:00	0:00
69	RT	Planned Transmission Outage	PGAE	Humboldt	7/13/2020	14 - 45	No	INC	24	0:00	0:00

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	7/14/2020	30	No	DEC	4	17:00	21:00
71	RT	Planned Transmission Outage	PGAE	Humboldt	7/14/2020	30	No	INC	24	0:00	0:00
72	RT	Planned Transmission Outage	PGAE	Humboldt	7/15/2020	15	No	DEC	5	14:00	18:40
73	RT	Planned Transmission Outage	PGAE	Humboldt	7/15/2020	15 - 45	No	INC	24	0:00	0:00
74	RT	Planned Transmission Outage	PGAE	Humboldt	7/16/2020	15	No	DEC	5	3:30	8:00
75	RT	Planned Transmission Outage	PGAE	Humboldt	7/16/2020	15 - 75	No	INC	24	0:00	0:00
76	RT	Planned Transmission Outage	PGAE	Humboldt	7/17/2020	15	No	DEC	1	2:00	2:45
77	RT	Planned Transmission Outage	PGAE	Humboldt	7/17/2020	30 - 60	No	INC	24	0:00	0:00
78	RT	Planned Transmission Outage	PGAE	Humboldt	7/18/2020	15	No	DEC	2	0:00	2:00
79	RT	Planned Transmission Outage	PGAE	Humboldt	7/19/2020	0	No	INC	1	20:20	21:20
80	RT	Planned Transmission Outage	PGAE	Humboldt	7/22/2020	45 - 60	No	INC	18	5:00	23:00
81	RT	Planned Transmission Outage	PGAE	Humboldt	7/23/2020	30 - 45	No	INC	19	5:30	0:00
82	RT	Planned Transmission Outage	PGAE	Humboldt	7/24/2020	15 - 45	No	INC	20	0:00	19:45
83	RT	Planned Transmission Outage	PGAE	Humboldt	7/27/2020	45	No	DEC	3	17:00	20:00
84	RT	Planned Transmission Outage	PGAE	Humboldt	7/27/2020	32 - 45	No	INC	10	14:00	0:00
85	RT	Planned Transmission Outage	PGAE	Humboldt	7/28/2020	15	No	DEC	1	6:45	7:00
86	RT	Planned Transmission Outage	PGAE	Humboldt	7/28/2020	32 - 45	No	INC	20	0:00	20:00
87	RT	Planned Transmission Outage	PGAE	Humboldt	7/29/2020	28	No	DEC	6	16:00	22:00
88	RT	Planned Transmission Outage	PGAE	Humboldt	7/29/2020	28 - 45	No	INC	22	2:45	0:00
89	RT	Planned Transmission Outage	PGAE	Humboldt	7/30/2020	15 - 45	No	DEC	17	5:15	22:00
90	RT	Planned Transmission Outage	PGAE	Humboldt	7/30/2020	28 - 48	No	INC	24	0:00	0:00
91	RT	Planned Transmission Outage	PGAE	Humboldt	7/31/2020	14 - 32	No	DEC	21	3:00	0:00
92	RT	Planned Transmission Outage	PGAE	Humboldt	7/31/2020	15 - 56	No	INC	24	0:00	0:00
93	RT	Planned Transmission Outage	PGAE	NCNB	7/22/2020	50 - 55	No	INC	3	21:35	0:00
94	RT	Planned Transmission Outage	PGAE	NCNB	7/23/2020	50 - 55	No	DEC	8	5:00	13:00
95	RT	Planned Transmission Outage	PGAE	NCNB	7/23/2020	50 - 55	No	INC	10	0:00	10:00
96	RT	Planned Transmission Outage	PGAE	Stockton	7/31/2020	145	No	DEC	12	11:00	22:45
97	RT	Ramping Capacity	SCE	Big Creek-Ventura	7/11/2020	401	No	DEC	1	19:00	20:00

Number	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commitment	INC_DEC	Hours	Begin Time	End Time
98	RT	Ramping Capacity	SCE	Big Creek-Ventura	7/11/2020	401	No	INC	9	13:00	22:00
99	RT	Ramping Capacity	SCE	Big Creek-Ventura	7/12/2020	401	No	DEC	3	18:00	21:00
100	RT	Ramping Capacity	SCE	Big Creek-Ventura	7/12/2020	401	No	INC	9	13:00	22:00
101	RT	Ramping Capacity	SCE	Big Creek-Ventura	7/13/2020	401	No	DEC	2	18:00	20:00
102	RT	Ramping Capacity	SCE	Big Creek-Ventura	7/13/2020	401	No	INC	6	16:30	22:00
103	RT	Ramping Capacity	SCE	Big Creek-Ventura	7/14/2020	401	No	INC	6	16:00	22:00
104	RT	Ramping Capacity	SCE	Big Creek-Ventura	7/18/2020	401	No	INC	3	19:30	22:00
105	RT	Ramping Capacity	SCE	Big Creek-Ventura	7/27/2020	400	No	INC	6	15:00	21:00
106	RT	Ramping Capacity	SCE	Big Creek-Ventura	7/28/2020	410	No	INC	5	16:00	21:00
107	RT	Ramping Capacity	SCE	Big Creek-Ventura	7/29/2020	410	No	INC	4	16:30	20:00
108	RT	Ramping Capacity	SCE	Big Creek-Ventura	7/31/2020	401	No	DEC	4	17:00	21:00
109	RT	Ramping Capacity	SCE	Big Creek-Ventura	7/31/2020	401	No	INC	7	16:00	23:00
110	RT	Ramping Capacity	SCE	LA Basin	7/10/2020	190	No	INC	3	19:00	22:00
111	RT	Ramping Capacity	SCE	LA Basin	7/11/2020	65 - 190	No	DEC	4	17:00	21:00
112	RT	Ramping Capacity	SCE	LA Basin	7/11/2020	65 - 190	No	INC	8	14:00	22:00
113	RT	Ramping Capacity	SCE	LA Basin	7/12/2020	65 - 190	No	DEC	6	16:00	22:00
114	RT	Ramping Capacity	SCE	LA Basin	7/12/2020	190 - 241	No	INC	14	7:30	21:30
115	RT	Ramping Capacity	SCE	LA Basin	7/13/2020	245	No	INC	1	15:35	15:40
116	RT	Ramping Capacity	SCE	LA Basin	7/14/2020	190	No	INC	6	16:30	22:00

Number	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commitment	INC_DEC	Hours	Begin Time	End Time
117	RT	Ramping Capacity	SCE	LA Basin	7/18/2020	190	No	INC	2	20:40	22:30
118	RT	Ramping Capacity	SCE	LA Basin	7/19/2020	190 - 240	No	INC	4	18:50	22:00
119	RT	Ramping Capacity	SCE	LA Basin	7/21/2020	190	No	INC	5	17:50	22:00
120	RT	Ramping Capacity	SCE	LA Basin	7/26/2020	190	No	INC	8	14:25	22:00
121	RT	Ramping Capacity	SCE	LA Basin	7/27/2020	65 - 190	No	INC	8	13:55	21:00
122	RT	Ramping Capacity	SCE	LA Basin	7/28/2020	65 - 240	No	INC	9	12:55	21:00
123	RT	Ramping Capacity	SCE	LA Basin	7/29/2020	240	No	INC	4	16:00	20:00
124	RT	Ramping Capacity	SCE	LA Basin	7/31/2020	190 - 240	No	DEC	7	15:00	22:00
125	RT	Ramping Capacity	SCE	LA Basin	7/31/2020	190 - 240	No	INC	10	13:45	23:00
126	RT	Reliability Assessment	PGAE	Fresno	7/6/2020	83	No	DEC	1	20:55	21:00
127	RT	Reliability Assessment	PGAE	Fresno	7/6/2020	83	No	INC	1	21:00	21:30
128	RT	Reliability Assessment	PGAE	Fresno	7/9/2020	70 - 75	No	DEC	5	19:25	0:00
129	RT	Reliability Assessment	PGAE	Fresno	7/9/2020	75	No	INC	1	21:00	21:30
130	RT	Reliability Assessment	PGAE	Fresno	7/10/2020	4 - 70	No	DEC	8	10:40	18:00
131	RT	Reliability Assessment	PGAE	Fresno	7/10/2020	4 - 70	No	INC	19	0:00	19:00
132	RT	Reliability Assessment	PGAE	Fresno	7/11/2020	65 - 70	No	DEC	7	15:00	22:00
133	RT	Reliability Assessment	PGAE	Fresno	7/11/2020	70 - 80	No	INC	23	1:10	0:00
134	RT	Reliability Assessment	PGAE	Fresno	7/12/2020	70	No	DEC	5	17:00	21:25
135	RT	Reliability Assessment	PGAE	Fresno	7/12/2020	70 - 82	No	INC	24	0:00	0:00
136	RT	Reliability Assessment	PGAE	Fresno	7/13/2020	78 - 82	No	INC	22	0:00	22:00
137	RT	Reliability Assessment	PGAE	Fresno	7/14/2020	77 - 80	No	INC	24	0:25	0:00
138	RT	Reliability Assessment	PGAE	Fresno	7/15/2020	70	No	DEC	2	17:00	18:30
139	RT	Reliability Assessment	PGAE	Fresno	7/15/2020	70 - 78	No	INC	24	0:00	0:00
140	RT	Reliability Assessment	PGAE	Fresno	7/16/2020	78	No	INC	8	0:00	8:00
141	RT	Reliability Assessment	PGAE	Fresno	7/18/2020	80	No	INC	2	21:10	22:30
142	RT	Reliability Assessment	PGAE	Fresno	7/22/2020	74	No	INC	13	10:30	23:00

Number	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commitment	INC_DEC	Hours	Begin Time	End Time
143	RT	Reliability Assessment	PGAE	Fresno	7/31/2020	40 - 200	No	DEC	5	19:15	0:00
144	RT	Reliability Assessment	PGAE	Fresno	7/31/2020	70 - 400	No	INC	3	19:50	22:30
145	RT	Reliability Assessment	PGAE	Humboldt	7/3/2020	14	No	DEC	3	21:40	0:00
146	RT	Reliability Assessment	PGAE	Humboldt	7/3/2020	14	No	INC	5	19:25	0:00
147	RT	Reliability Assessment	PGAE	Humboldt	7/4/2020	14 - 15	No	DEC	24	0:00	0:00
148	RT	Reliability Assessment	PGAE	Humboldt	7/4/2020	14	No	INC	9	0:00	8:15
149	RT	Reliability Assessment	PGAE	Humboldt	7/5/2020	15	No	DEC	22	0:00	21:25
150	RT	Reliability Assessment	PGAE	Humboldt	7/5/2020	15 - 30	No	INC	17	7:00	0:00
151	RT	Reliability Assessment	PGAE	Humboldt	7/6/2020	14	No	DEC	14	10:00	0:00
152	RT	Reliability Assessment	PGAE	Humboldt	7/6/2020	14 - 56	No	INC	24	0:00	0:00
153	RT	Reliability Assessment	PGAE	Humboldt	7/7/2020	14	No	DEC	8	15:00	23:00
154	RT	Reliability Assessment	PGAE	Humboldt	7/7/2020	14 - 56	No	INC	24	0:00	0:00
155	RT	Reliability Assessment	PGAE	Humboldt	7/8/2020	14	No	DEC	15	5:00	20:00
156	RT	Reliability Assessment	PGAE	Humboldt	7/8/2020	14 - 64	No	INC	24	0:00	0:00
157	RT	Reliability Assessment	PGAE	Humboldt	7/9/2020	30 - 64	No	INC	8	0:00	8:00
158	RT	Reliability Assessment	PGAE	Humboldt	7/10/2020	15	No	DEC	23	0:45	23:00
159	RT	Reliability Assessment	PGAE	Humboldt	7/10/2020	15 - 56	No	INC	24	0:15	0:00
160	RT	Reliability Assessment	PGAE	Humboldt	7/11/2020	15	No	DEC	2	0:00	2:00
161	RT	Reliability Assessment	PGAE	Humboldt	7/11/2020	15 - 56	No	INC	7	0:00	6:50
162	RT	Reliability Assessment	PGAE	Humboldt	7/13/2020	32	No	INC	1	1:45	2:00
163	RT	Reliability Assessment	PGAE	Humboldt	7/18/2020	60 - 75	No	INC	17	7:50	0:00
164	RT	Reliability Assessment	PGAE	Humboldt	7/19/2020	45 - 76	No	INC	24	0:00	0:00
165	RT	Reliability Assessment	PGAE	Humboldt	7/20/2020	14	No	DEC	1	20:05	21:00
166	RT	Reliability Assessment	PGAE	Humboldt	7/20/2020	14 - 45	No	INC	24	0:00	0:00
167	RT	Reliability Assessment	PGAE	Humboldt	7/21/2020	30 - 45	No	INC	24	0:00	0:00
168	RT	Reliability Assessment	PGAE	Humboldt	7/22/2020	30 - 32	No	INC	24	0:00	0:00
169	RT	Reliability Assessment	PGAE	Humboldt	7/23/2020	30	No	INC	6	0:00	5:30
170	RT	Reliability Assessment	PGAE	Humboldt	7/24/2020	30	No	INC	4	20:40	0:00
171	RT	Reliability Assessment	PGAE	Humboldt	7/25/2020	15 - 45	No	INC	24	0:00	0:00

Number	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commitment	INC_DEC	Hours	Begin Time	End Time
172	RT	Reliability Assessment	PGAE	Humboldt	7/26/2020	15 - 16	No	DEC	22	2:30	0:00
173	RT	Reliability Assessment	PGAE	Humboldt	7/26/2020	16 - 30	No	INC	24	0:00	23:30
174	RT	Reliability Assessment	PGAE	Humboldt	7/27/2020	15	No	DEC	15	0:00	14:30
175	RT	Reliability Assessment	PGAE	Humboldt	7/28/2020	28	No	INC	3	21:20	0:00
176	RT	Reliability Assessment	PGAE	Humboldt	7/29/2020	14	No	DEC	1	1:30	2:00
177	RT	Reliability Assessment	PGAE	Humboldt	7/29/2020	14 - 28	No	INC	4	0:00	3:45
178	RT	Reliability Assessment	PGAE	Kern	7/10/2020	32	No	INC	5	17:00	22:00
179	RT	Reliability Assessment	PGAE	Kern	7/15/2020	32	No	INC	6	16:00	22:00
180	RT	Reliability Assessment	PGAE	Kern	7/16/2020	32	No	INC	7	15:20	22:00
181	RT	Reliability Assessment	PGAE	Kern	7/17/2020	32	No	INC	9	15:20	0:00
182	RT	Reliability Assessment	PGAE	Kern	7/20/2020	32	No	DEC	1	17:00	18:00
183	RT	Reliability Assessment	PGAE	Kern	7/20/2020	0 - 32	No	INC	24	0:40	0:00
184	RT	Reliability Assessment	PGAE	Kern	7/21/2020	32	No	DEC	1	21:55	22:00
185	RT	Reliability Assessment	PGAE	Kern	7/21/2020	32	No	INC	9	15:30	0:00
186	RT	Reliability Assessment	PGAE	Kern	7/22/2020	32	No	DEC	1	17:00	18:00
187	RT	Reliability Assessment	PGAE	Kern	7/22/2020	32	No	INC	24	0:00	0:00
188	RT	Reliability Assessment	PGAE	Kern	7/23/2020	32	No	INC	24	0:00	0:00
189	RT	Reliability Assessment	PGAE	Kern	7/24/2020	32	Yes	INC	1	0:00	0:45
190	RT	Reliability Assessment	PGAE	NCNB	7/29/2020	55 - 65	No	DEC	8	12:15	20:00
191	RT	Reliability Assessment	PGAE	NCNB	7/29/2020	13 - 55	No	INC	8	12:15	20:00
192	RT	Reliability Assessment	PGAE	Sierra	7/1/2020	40 - 45	No	INC	2	0:00	2:00
193	RT	Reliability Assessment	PGAE	Sierra	7/2/2020	20 - 40	No	INC	7	17:40	0:00
194	RT	Reliability Assessment	PGAE	Sierra	7/4/2020	20	No	DEC	3	18:00	21:00
195	RT	Reliability Assessment	PGAE	Sierra	7/4/2020	20	No	INC	2	16:55	18:00
196	RT	Reliability Assessment	PGAE	Sierra	7/5/2020	20	No	DEC	1	19:00	20:00
197	RT	Reliability Assessment	PGAE	Sierra	7/5/2020	20	No	INC	9	15:50	0:00
198	RT	Reliability Assessment	PGAE	Sierra	7/7/2020	20	No	DEC	1	19:00	20:00
199	RT	Reliability Assessment	PGAE	Sierra	7/7/2020	20	No	INC	9	14:45	23:30
200	RT	Reliability Assessment	PGAE	Sierra	7/8/2020	10	No	DEC	1	21:25	22:00

Number	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commitment	INC_DEC	Hours	Begin Time	End Time
201	RT	Reliability Assessment	PGAE	Sierra	7/8/2020	20 - 40	No	INC	8	15:05	23:00
202	RT	Reliability Assessment	PGAE	Sierra	7/9/2020	20 - 44	No	DEC	5	16:00	21:00
203	RT	Reliability Assessment	PGAE	Sierra	7/9/2020	20 - 44	No	INC	18	6:45	0:00
204	RT	Reliability Assessment	PGAE	Sierra	7/10/2020	20 - 47	No	DEC	5	16:00	21:00
205	RT	Reliability Assessment	PGAE	Sierra	7/10/2020	5 - 47	No	INC	24	0:00	0:00
206	RT	Reliability Assessment	PGAE	Sierra	7/11/2020	20 - 43	No	DEC	6	16:00	22:00
207	RT	Reliability Assessment	PGAE	Sierra	7/11/2020	0 - 60	No	INC	24	0:00	0:00
208	RT	Reliability Assessment	PGAE	Sierra	7/12/2020	20	No	DEC	5	16:00	21:00
209	RT	Reliability Assessment	PGAE	Sierra	7/12/2020	0 - 42	No	INC	24	0:00	0:00
210	RT	Reliability Assessment	PGAE	Sierra	7/13/2020	20	No	DEC	3	17:00	20:00
211	RT	Reliability Assessment	PGAE	Sierra	7/13/2020	8 - 42	Yes	INC	24	0:00	0:00
212	RT	Reliability Assessment	PGAE	Sierra	7/14/2020	4 - 42	No	INC	24	0:00	0:00
213	RT	Reliability Assessment	PGAE	Sierra	7/15/2020	4 - 47	No	INC	24	0:00	0:00
214	RT	Reliability Assessment	PGAE	Sierra	7/16/2020	10 - 45	No	DEC	2	19:40	21:00
215	RT	Reliability Assessment	PGAE	Sierra	7/16/2020	10 - 47	No	INC	24	0:00	0:00
216	RT	Reliability Assessment	PGAE	Sierra	7/17/2020	7 - 20	Yes	INC	24	0:00	0:00
217	RT	Reliability Assessment	PGAE	Sierra	7/18/2020	20	No	DEC	1	19:55	20:00
218	RT	Reliability Assessment	PGAE	Sierra	7/18/2020	20 - 45	No	INC	4	20:00	0:00
219	RT	Reliability Assessment	PGAE	Sierra	7/19/2020	20	No	DEC	3	17:00	20:00
220	RT	Reliability Assessment	PGAE	Sierra	7/19/2020	20	Yes	INC	24	0:00	0:00
221	RT	Reliability Assessment	PGAE	Sierra	7/20/2020	20 - 40	Yes	INC	24	0:00	0:00
222	RT	Reliability Assessment	PGAE	Sierra	7/21/2020	20 - 40	No	INC	11	13:45	0:00
223	RT	Reliability Assessment	PGAE	Sierra	7/22/2020	20 - 45	Yes	INC	23	0:00	23:00
224	RT	Reliability Assessment	PGAE	Sierra	7/23/2020	20	No	INC	9	15:40	0:00
225	RT	Reliability Assessment	PGAE	Sierra	7/24/2020	5 - 26	No	DEC	4	18:50	22:45
226	RT	Reliability Assessment	PGAE	Sierra	7/24/2020	10 - 44	Yes	INC	24	0:00	0:00
227	RT	Reliability Assessment	PGAE	Sierra	7/25/2020	20 - 40	No	DEC	3	17:00	20:00
228	RT	Reliability Assessment	PGAE	Sierra	7/25/2020	12 - 40	No	INC	9	15:30	0:00
229	RT	Reliability Assessment	PGAE	Sierra	7/26/2020	10 - 32	No	DEC	3	18:00	21:00

Number	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commitment	INC_DEC	Hours	Begin Time	End Time
230	RT	Reliability Assessment	PGAE	Sierra	7/26/2020	8 - 40	No	INC	24	0:00	0:00
231	RT	Reliability Assessment	PGAE	Sierra	7/27/2020	20 - 40	No	INC	24	0:00	0:00
232	RT	Reliability Assessment	PGAE	Sierra	7/28/2020	47	No	DEC	4	17:25	21:00
233	RT	Reliability Assessment	PGAE	Sierra	7/28/2020	20 - 47	Yes	INC	23	0:00	22:15
234	RT	Reliability Assessment	PGAE	Sierra	7/29/2020	20 - 47	No	DEC	3	17:00	20:00
235	RT	Reliability Assessment	PGAE	Sierra	7/29/2020	10 - 60	No	INC	20	4:30	0:00
236	RT	Reliability Assessment	PGAE	Sierra	7/30/2020	20 - 42	Yes	INC	24	0:00	0:00
237	RT	Reliability Assessment	PGAE	Sierra	7/31/2020	20 - 45	No	INC	24	0:00	0:00
238	RT	Reliability Assessment	PGAE	Stockton	7/15/2020	89	No	DEC	1	13:00	14:00
239	RT	Reliability Assessment	PGAE	Stockton	7/15/2020	89 - 112	No	INC	6	7:45	13:00
240	RT	Reliability Assessment	PGAE	Stockton	7/29/2020	90 - 112	No	DEC	8	16:30	0:00
241	RT	Reliability Assessment	PGAE	Stockton	7/30/2020	90 - 230	No	DEC	9	15:35	0:00
242	RT	Reliability Assessment	PGAE	Stockton	7/31/2020	90	No	DEC	1	0:00	0:10
243	RT	Reliability Assessment	SCE	NA	7/5/2020	470	No	INC	4	18:45	22:00
244	RT	Reliability Assessment	SCE	NA	7/9/2020	480	No	DEC	6	16:00	22:00
245	RT	Reliability Assessment	SCE	NA	7/9/2020	480	No	INC	2	22:00	0:00
246	RT	Reliability Assessment	SCE	NA	7/10/2020	480	No	INC	3	0:00	3:00
247	RT	Reliability Assessment	SCE	NA	7/11/2020	480	No	DEC	4	18:05	22:00
248	RT	Reliability Assessment	SCE	NA	7/11/2020	480	No	INC	2	22:00	0:00
249	RT	Reliability Assessment	SCE	NA	7/12/2020	480	No	INC	8	0:00	8:00
250	RT	Reliability Assessment	SCE	NA	7/14/2020	480	No	DEC	3	18:00	21:00
251	RT	Reliability Assessment	SCE	NA	7/14/2020	480	No	INC	7	17:55	0:00
252	RT	Reliability Assessment	SCE	NA	7/15/2020	480	No	INC	3	0:00	2:30
253	RT	Reliability Assessment	SCE	NA	7/25/2020	480	No	DEC	4	18:45	22:00
254	RT	Reliability Assessment	SCE	NA	7/25/2020	476 - 480	No	INC	2	22:00	0:00
255	RT	Reliability Assessment	SCE	NA	7/26/2020	476	No	INC	2	0:00	2:00
256	RT	Reliability Assessment	SCE	NA	7/28/2020	60	No	DEC	2	17:20	19:00
257	RT	Reliability Assessment	SCE	NA	7/28/2020	60	No	INC	1	19:00	20:00

Number	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commitment	INC_DEC	Hours	Begin Time	End Time
258	RT	Reliability Assessment	SDGE	San Diego-IV	7/14/2020	21	No	DEC	2	18:00	20:00
259	RT	Reliability Assessment	SDGE	San Diego-IV	7/14/2020	21 - 45	No	INC	9	9:15	18:00
260	RT	Reliability Assessment	SDGE	San Diego-IV	7/24/2020	155	No	INC	7	7:15	14:00
261	RT	Software Limitation	PGAE	Bay Area	7/2/2020	290	No	DEC	3	20:25	23:00
262	RT	Software Limitation	PGAE	Bay Area	7/17/2020	120	No	INC	1	13:45	14:40
263	RT	Software Limitation	PGAE	Bay Area	7/27/2020	120	No	INC	1	14:25	15:15
264	RT	Software Limitation	PGAE	Bay Area	7/30/2020	120	No	INC	1	17:50	18:40
265	RT	Software Limitation	PGAE	Fresno	7/6/2020	0	No	INC	1	21:45	22:45
266	RT	Software Limitation	PGAE	Fresno	7/17/2020	0 - 404	No	INC	4	13:45	17:30
267	RT	Software Limitation	PGAE	Fresno	7/27/2020	14 - 35	No	INC	1	14:25	15:15
268	RT	Software Limitation	PGAE	Fresno	7/30/2020	14 - 35	No	INC	1	17:50	18:40
269	RT	Software Limitation	PGAE	Sierra	7/1/2020	1	No	DEC	9	15:00	0:00
270	RT	Software Limitation	PGAE	Sierra	7/1/2020	1	No	INC	4	11:10	15:00
271	RT	Software Limitation	PGAE	Sierra	7/12/2020	0	No	INC	2	22:30	0:00
272	RT	Software Limitation	PGAE	Sierra	7/13/2020	0	No	INC	5	0:00	4:30
273	RT	Software Limitation	PGAE	NA	7/29/2020	200	No	DEC	5	18:00	23:00
274	RT	Software Limitation	SCE	Big Creek-Ventura	7/1/2020	300	No	INC	1	11:00	12:00
275	RT	Software Limitation	SCE	Big Creek-Ventura	7/17/2020	0 - 33	No	INC	4	13:45	16:55
276	RT	Software Limitation	SCE	Big Creek-Ventura	7/27/2020	47.1	No	INC	1	14:25	15:15
277	RT	Software Limitation	SCE	Big Creek-Ventura	7/30/2020	401	No	DEC	4	17:00	21:00
278	RT	Software Limitation	SCE	Big Creek-Ventura	7/30/2020	401	No	INC	3	14:00	17:00
279	RT	Software Limitation	SCE	LA Basin	7/1/2020	0	No	INC	1	5:00	6:00
280	RT	Software Limitation	SCE	LA Basin	7/17/2020	0 - 58.38	No	INC	4	13:45	17:05
281	RT	Software Limitation	SCE	LA Basin	7/22/2020	0	No	INC	1	23:55	0:00
282	RT	Software Limitation	SCE	LA Basin	7/23/2020	0	No	INC	1	0:00	0:50

Number	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commitment	INC_DEC	Hours	Begin Time	End Time
283	RT	Software Limitation	SCE	LA Basin	7/26/2020	0	No	INC	1	22:45	23:45
284	RT	Software Limitation	SCE	LA Basin	7/27/2020	0 - 58.38	No	INC	12	3:15	15:15
285	RT	Software Limitation	SCE	LA Basin	7/28/2020	0	No	DEC	3	14:25	17:00
286	RT	Software Limitation	SCE	LA Basin	7/29/2020	0	No	DEC	1	8:05	9:00
287	RT	Software Limitation	SCE	LA Basin	7/30/2020	15.35 - 241	No	DEC	5	16:00	21:00
288	RT	Software Limitation	SCE	LA Basin	7/30/2020	0 - 58.38	No	INC	6	17:50	23:45
289	RT	Software Limitation	SDGE	San Diego-IV	7/17/2020	0 - 38.38	No	INC	4	13:45	17:00
290	RT	Software Limitation	SDGE	San Diego-IV	7/27/2020	30	No	INC	1	14:25	15:15
291	RT	Software Limitation	SDGE	San Diego-IV	7/30/2020	30	No	INC	1	17:50	18:40
292	RT	Unit Testing	PGAE	Bay Area	7/1/2020	26	No	INC	1	21:30	22:30
293	RT	Unit Testing	PGAE	Bay Area	7/8/2020	150	No	INC	2	18:50	20:00
294	RT	Unit Testing	PGAE	Bay Area	7/16/2020	163.02	No	DEC	1	1:00	1:35
295	RT	Unit Testing	PGAE	Bay Area	7/24/2020	225.82	No	DEC	1	15:00	15:15
296	RT	Unit Testing	PGAE	Bay Area	7/24/2020	225.82	No	INC	1	14:25	15:00
297	RT	Unit Testing	PGAE	Fresno	7/8/2020	44	No	INC	1	19:30	20:00
298	RT	Unit Testing	SCE	Big Creek-Ventura	7/11/2020	70.76	No	INC	1	21:30	21:55
299	RT	Unit Testing	SCE	LA Basin	7/21/2020	41	No	INC	1	4:35	5:20
300	RT	Unit Testing	SDGE	San Diego-IV	7/9/2020	68.52	No	INC	1	21:30	22:00
301	RT	Unit Testing	SDGE	San Diego-IV	7/11/2020	45	No	INC	1	21:30	22:00
302	RT	Unit Testing	SDGE	San Diego-IV	7/24/2020	105.5	No	INC	1	20:15	20:35
303	RT	Voltage Support	PGAE	Fresno	7/13/2020	10	No	DEC	2	18:00	20:00
304	RT	Voltage Support	PGAE	Fresno	7/13/2020	10 - 83	No	INC	2	16:45	18:00
305	RT	Voltage Support	PGAE	Sierra	7/11/2020	20 - 43	No	DEC	6	16:00	22:00
306	RT	Voltage Support	PGAE	Sierra	7/11/2020	20	No	INC	18	6:15	23:45
307	RT	Voltage Support	PGAE	Sierra	7/17/2020	20	No	INC	5	17:00	22:00

## 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