Exceptional Dispatch Report

Table 1: September 2020

CAISO Market Quality and Renewable Integration **November 16, 2020**

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TABLE OF CONTENTS

LIST OF TABLES AND FIGURES

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 September 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 September 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 September 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 338 exceptional dispatches in September 2020, as compared to 481 exceptional dispatches in August 2020. Exceptional dispatches issued for the following reasons accounted for approximately 74 percent of the total exceptional dispatches during the reporting period: load forecast

[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.

uncertainty, planned transmission outages, reliability assement, 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 6610, 7230, 7320, 7450, and 7720). Reliability Assessment is the reason as explained in the operator procedure 2330C[4] 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 September 2020

California Independent System Operator Corporation
Exceptional Dispatch Report
November 16, 2020

Chart 1: Table of Exceptional Dispatches for Period 01/September/2020 - 30/September/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	9/4/2020	50 - 100	No	INC	2	22:00	0:00
2	RT	Bridging Schedules	SCE	Big Creek-Ventura	9/7/2020	50 - 100	No	INC	1	23:00	0:00
3	RT	Bridging Schedules	SCE	Big Creek-Ventura	9/8/2020	50 - 100	No	INC	12	0:00	12:00
4	RT	Bridging Schedules	SCE	LA Basin	9/4/2020	10	Yes	INC	1	23:00	0:00
5	RT	Bridging Schedules	SCE	LA Basin	9/5/2020	10 - 20	No	INC	1	23:00	0:00
6	RT	Bridging Schedules	SCE	LA Basin	9/6/2020	10 - 20	No	INC	1	23:00	0:00
7	RT	Bridging Schedules	SCE	LA Basin	9/7/2020	10 - 20	Yes	INC	14	0:00	14:00
8	RT	Bridging Schedules	SCE	LA Basin	9/30/2020	10	No	INC	1	23:00	0:00
9	RT	Fast Start Unit Management	PGAE	Bay Area	9/5/2020	20 - 120	No	DEC	10	12:00	21:30
10	RT	Fast Start Unit Management	PGAE	Bay Area	9/5/2020	20 - 24	No	INC	11	10:00	20:30
11	RT	Fast Start Unit Management	PGAE	Bay Area	9/11/2020	0	No	INC	2	4:15	5:20
12	RT	Fast Start Unit Management	SCE	Big Creek-Ventura	9/4/2020	0	No	INC	1	23:15	0:00
13	RT	Fast Start Unit Management	SCE	Big Creek-Ventura	9/5/2020	0	No	INC	1	0:00	0:15
14	RT	Fast Start Unit Management	SCE	Big Creek-Ventura	9/6/2020	0	No	INC	24	0:00	0:00
15	RT	Fast Start Unit Management	SCE	Big Creek-Ventura	9/7/2020	0	No	INC	1	0:00	0:30

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	9/1/2020	0	No	INC	2	7:30	8:55
17	RT	Fast Start Unit Management	SCE	LA Basin	9/6/2020	0	No	INC	24	0:00	0:00
18	RT	Fast Start Unit Management	SCE	LA Basin	9/7/2020	0	No	INC	1	0:00	0:30
19	RT	Fast Start Unit Management	SCE	LA Basin	9/8/2020	0	No	INC	1	8:00	8:30
20	RT	Fast Start Unit Management	SCE	LA Basin	9/9/2020	0	No	INC	1	6:20	7:20
21	RT	Fast Start Unit Management	SCE	LA Basin	9/11/2020	0	No	INC	4	4:30	8:00
22	RT	Fast Start Unit Management	SCE	LA Basin	9/18/2020	0	No	INC	2	3:45	4:50
23	RT	Fast Start Unit Management	SCE	LA Basin	9/20/2020	0	No	INC	3	0:15	2:20
24	RT	Fast Start Unit Management	SCE	LA Basin	9/26/2020	0	No	INC	2	5:15	6:20
25	RT	Fast Start Unit Management	SDGE	San Diego-IV	9/11/2020	0	No	INC	1	4:45	5:45
26	RT	Incomplete or Inaccurate Transmission	PGAE	Sierra	9/14/2020	20	No	INC	6	10:25	16:00
27	RT	Incomplete or Inaccurate Transmission	SCE	LA Basin	9/9/2020	300	No	DEC	2	16:00	17:15
28	RT	Incomplete or Inaccurate Transmission	SCE	LA Basin	9/9/2020	300	No	INC	2	14:25	16:00
29	RT	Incomplete or Inaccurate Transmission	SCE	NA	9/9/2020	0 - 445	No	DEC	11	9:20	19:45
30	RT	Incomplete or Inaccurate Transmission	SCE	NA	9/9/2020	300	No	INC	2	10:15	12:00
31	RT	Incomplete or Inaccurate Transmission	SDGE	San Diego-IV	9/9/2020	500	No	DEC	2	17:00	19:00
32	RT	Incomplete or Inaccurate Transmission	SDGE	San Diego-IV	9/9/2020	40 - 600	No	INC	8	11:40	18:45
33	RT	Load Forecast Uncertainty	Intertie	NA	9/6/2020	263 - 301	No	INC	3	15:00	18:00
34	RT	Load Forecast Uncertainty	Intertie	NA	9/17/2020	200 - 332	No	INC	2	17:00	19:00
35	RT	Load Forecast Uncertainty	Intertie	NA	9/21/2020	75 - 418	No	INC	2	17:00	19:00
36	RT	Load Forecast Uncertainty	PGAE	Bay Area	9/6/2020	0 - 184	No	DEC	5	15:15	20:15
37	RT	Load Forecast Uncertainty	PGAE	Bay Area	9/10/2020	175	No	INC	10	12:00	22:00
38	RT	Load Forecast Uncertainty	PGAE	Bay Area	9/12/2020	231	No	INC	22	2:30	0:00
39	RT	Load Forecast Uncertainty	PGAE	Bay Area	9/17/2020	54	No	INC	4	17:20	21:00
40	RT	Load Forecast Uncertainty	PGAE	Bay Area	9/18/2020	185	No	INC	6	16:30	22:00
41	RT	Load Forecast Uncertainty	PGAE	Fresno	9/7/2020	10 - 40	No	INC	7	14:30	21:00
42	RT	Load Forecast Uncertainty	PGAE	Sierra	9/5/2020	42	No	INC	9	15:00	0:00

Number	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commitment	INC_DEC	Hours	Begin Time	End Time
43	RT	Load Forecast Uncertainty	PGAE	Sierra	9/6/2020	42	No	INC	24	0:00	0:00
44	RT	Load Forecast Uncertainty	PGAE	Stockton	9/20/2020	88.8	No	INC	4	17:00	21:00
45	RT	Load Forecast Uncertainty	SCE	Big Creek-Ventura	9/1/2020	100	No	INC	24	0:00	0:00
46	RT	Load Forecast Uncertainty	SCE	Big Creek-Ventura	9/2/2020	50 - 100	No	INC	24	0:00	0:00
47	RT	Load Forecast Uncertainty	SCE	Big Creek-Ventura	9/3/2020	50 - 100	No	INC	24	0:00	0:00
48	RT	Load Forecast Uncertainty	SCE	Big Creek-Ventura	9/5/2020	54	No	INC	4	17:00	21:00
49	RT	Load Forecast Uncertainty	SCE	Big Creek-Ventura	9/26/2020	50	No	INC	9	15:00	0:00
50	RT	Load Forecast Uncertainty	SCE	Big Creek-Ventura	9/27/2020	50 - 100	No	INC	24	0:00	0:00
51	RT	Load Forecast Uncertainty	SCE	Big Creek-Ventura	9/28/2020	50 - 100	No	DEC	11	13:00	0:00
52	RT	Load Forecast Uncertainty	SCE	Big Creek-Ventura	9/28/2020	50 - 100	No	INC	13	0:00	13:00
53	RT	Load Forecast Uncertainty	SCE	Big Creek-Ventura	9/29/2020	50 - 100	No	DEC	10	14:00	0:00
54	RT	Load Forecast Uncertainty	SCE	Big Creek-Ventura	9/29/2020	50 - 100	No	INC	24	0:00	0:00
55	RT	Load Forecast Uncertainty	SCE	Big Creek-Ventura	9/30/2020	50 - 685	No	DEC	11	13:00	0:00
56	RT	Load Forecast Uncertainty	SCE	Big Creek-Ventura	9/30/2020	50 - 750	No	INC	22	0:00	22:00
57	RT	Load Forecast Uncertainty	SCE	LA Basin	9/4/2020	70 - 130	No	INC	10	9:00	19:00
58	RT	Load Forecast Uncertainty	SCE	LA Basin	9/5/2020	47 - 460	No	INC	24	0:00	0:00
59	RT	Load Forecast Uncertainty	SCE	LA Basin	9/6/2020	-20 - 0	No	DEC	7	11:00	18:00
60	RT	Load Forecast Uncertainty	SCE	LA Basin	9/6/2020	0	No	INC	4	14:45	18:00
61	RT	Load Forecast Uncertainty	SCE	LA Basin	9/10/2020	20	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
62	RT	Load Forecast Uncertainty	SCE	LA Basin	9/13/2020	20	No	INC	14	10:00	0:00
63	RT	Load Forecast Uncertainty	SCE	LA Basin	9/14/2020	20	No	INC	14	10:00	0:00
64	RT	Load Forecast Uncertainty	SCE	LA Basin	9/25/2020	10 - 20	No	INC	12	12:00	0:00
65	RT	Load Forecast Uncertainty	SCE	LA Basin	9/26/2020	10 - 20	No	INC	24	0:00	0:00
66	RT	Load Forecast Uncertainty	SCE	LA Basin	9/27/2020	10 - 130	No	INC	24	0:00	0:00
67	RT	Load Forecast Uncertainty	SCE	LA Basin	9/28/2020	130	No	DEC	8	16:00	0:00
68	RT	Load Forecast Uncertainty	SCE	LA Basin	9/28/2020	20 - 130	No	INC	16	0:00	16:00
69	RT	Load Forecast Uncertainty	SCE	LA Basin	9/29/2020	130	No	DEC	12	12:00	0:00
70	RT	Load Forecast Uncertainty	SCE	LA Basin	9/29/2020	130	No	INC	12	0:00	12:00
71	RT	Load Forecast Uncertainty	SCE	LA Basin	9/30/2020	130	No	DEC	12	12:00	0:00
72	RT	Load Forecast Uncertainty	SCE	LA Basin	9/30/2020	110 - 140	No	INC	22	0:00	22:00
73	RT	Load Forecast Uncertainty	SCE	San Diego-IV	9/6/2020	-10 - 0	No	DEC	6	12:00	18:00
74	RT	Load Forecast Uncertainty	SCE	San Diego-IV	9/6/2020	0	No	INC	2	15:00	17:00
75	RT	Load Forecast Uncertainty	SCE	NA	9/6/2020	-12 - 0	No	DEC	5	13:30	18:00
76	RT	Load Forecast Uncertainty	SDGE	San Diego-IV	9/5/2020	320	No	DEC	5	16:30	21:00
77	RT	Load Forecast Uncertainty	SDGE	San Diego-IV	9/5/2020	320	No	INC	3	17:00	20:00
78	RT	Load Forecast Uncertainty	SDGE	San Diego-IV	9/6/2020	-229 - 0	No	DEC	7	11:00	18:00
79	RT	Load Forecast Uncertainty	SDGE	San Diego-IV	9/6/2020	-2 - 200	No	INC	6	14:00	20:00
80	RT	Load Forecast Uncertainty	SDGE	San Diego-IV	9/30/2020	24	No	DEC	11	11:00	22:00
81	RT	Load Forecast Uncertainty	SDGE	San Diego-IV	9/30/2020	24 - 125	No	INC	3	17:00	19:30
82	RT	Market Disruption	PGAE	Fresno	9/6/2020	83	No	DEC	1	19:05	19:15
83	RT	Market Disruption	PGAE	Fresno	9/24/2020	199	No	DEC	1	15:05	15:20
84	RT	Market Disruption	PGAE	NA	9/6/2020	207	No	INC	3	18:30	21:00
85	RT	Other Reliability Requirement	PGAE	Bay Area	9/11/2020	140	No	INC	1	1:15	1:45
86	RT	Other Reliability Requirement	PGAE	Fresno	9/1/2020	-305	No	DEC	2	3:55	5:15
87	RT	Other Reliability Requirement	PGAE	Fresno	9/5/2020	83	No	DEC	1	19:10	19:30
88	RT	Other Reliability Requirement	PGAE	Fresno	9/5/2020	400	No	INC	1	15:20	15:25
89	RT	Other Reliability Requirement	PGAE	Fresno	9/6/2020	14 - 407	No	INC	2	17:45	18:55

Number	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commitment	INC_DEC	Hours	Begin Time	End Time
90	RT	Other Reliability Requirement	PGAE	NA	9/6/2020	5.6	No	DEC	1	19:10	19:55
91	RT	Other Reliability Requirement	SCE	Big Creek-Ventura	9/1/2020	500	No	DEC	1	3:50	4:05
92	RT	Other Reliability Requirement	SCE	Big Creek-Ventura	9/6/2020	29 - 47.1	No	INC	1	17:45	18:05
93	RT	Other Reliability Requirement	SCE	LA Basin	9/6/2020	-9	No	DEC	1	10:45	11:00
94	RT	Other Reliability Requirement	SCE	LA Basin	9/6/2020	5 - 48.69	No	INC	2	17:45	19:45
95	RT	Other Reliability Requirement	SCE	LA Basin	9/28/2020	190 - 194	No	INC	5	16:00	21:00
96	RT	Other Reliability Requirement	SCE	LA Basin	9/30/2020	-20	No	DEC	2	15:30	17:30
97	RT	Other Reliability Requirement	SCE	LA Basin	9/30/2020	15.95	No	INC	5	16:30	21:00
98	RT	Other Reliability Requirement	SDGE	San Diego-IV	9/30/2020	-250	No	DEC	1	16:30	17:30
99	RT	Planned Transmission Outage	PGAE	Humboldt	9/1/2020	15 - 32	No	DEC	24	0:00	0:00
100	RT	Planned Transmission Outage	PGAE	Humboldt	9/1/2020	32 - 60	No	INC	24	0:00	0:00
101	RT	Planned Transmission Outage	PGAE	Humboldt	9/2/2020	16	No	DEC	19	5:00	0:00
102	RT	Planned Transmission Outage	PGAE	Humboldt	9/2/2020	16 - 60	No	INC	24	0:00	0:00
103	RT	Planned Transmission Outage	PGAE	Humboldt	9/3/2020	16	No	DEC	24	0:00	0:00
104	RT	Planned Transmission Outage	PGAE	Humboldt	9/3/2020	45 - 80	No	INC	24	0:00	0:00
105	RT	Planned Transmission Outage	PGAE	Humboldt	9/4/2020	16 - 42	No	DEC	22	0:00	22:00
106	RT	Planned Transmission Outage	PGAE	Humboldt	9/4/2020	28 - 65	No	INC	24	0:00	0:00
107	RT	Planned Transmission Outage	PGAE	Humboldt	9/5/2020	15 - 70	No	DEC	24	0:30	0:00
108	RT	Planned Transmission Outage	PGAE	Humboldt	9/5/2020	28 - 70	No	INC	24	0:00	0:00
109	RT	Planned Transmission Outage	PGAE	Humboldt	9/6/2020	15 - 56	No	DEC	24	0:00	0:00
110	RT	Planned Transmission Outage	PGAE	Humboldt	9/6/2020	56 - 70	No	INC	10	0:00	10:00
111	RT	Planned Transmission Outage	PGAE	Humboldt	9/7/2020	15 - 56	No	DEC	5	11:00	15:45
112	RT	Planned Transmission Outage	PGAE	Humboldt	9/7/2020	15 - 56	No	INC	13	0:00	13:00
113	RT	Planned Transmission Outage	PGAE	Humboldt	9/14/2020	28	No	INC	6	18:25	0:00
114	RT	Planned Transmission Outage	PGAE	Humboldt	9/15/2020	14	No	DEC	4	1:40	5:20
115	RT	Planned Transmission Outage	PGAE	Humboldt	9/15/2020	28 - 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
116	RT	Planned Transmission Outage	PGAE	Humboldt	9/16/2020	30	No	DEC	4	17:00	21:00
117	RT	Planned Transmission Outage	PGAE	Humboldt	9/16/2020	15 - 60	No	INC	24	0:00	0:00
118	RT	Planned Transmission Outage	PGAE	Humboldt	9/17/2020	30 - 45	No	INC	24	0:00	0:00
119	RT	Planned Transmission Outage	PGAE	Humboldt	9/18/2020	46	No	DEC	1	18:00	19:00
120	RT	Planned Transmission Outage	PGAE	Humboldt	9/18/2020	32 - 46	No	INC	24	0:00	0:00
121	RT	Planned Transmission Outage	PGAE	Humboldt	9/19/2020	28 - 46	No	INC	24	0:00	0:00
122	RT	Planned Transmission Outage	PGAE	Humboldt	9/20/2020	14 - 30	No	DEC	5	16:00	21:00
123	RT	Planned Transmission Outage	PGAE	Humboldt	9/20/2020	14 - 46	No	INC	24	0:00	0:00
124	RT	Planned Transmission Outage	PGAE	Humboldt	9/21/2020	30	No	DEC	5	17:00	22:00
125	RT	Planned Transmission Outage	PGAE	Humboldt	9/21/2020	30 - 48	No	INC	24	0:00	0:00
126	RT	Planned Transmission Outage	PGAE	Humboldt	9/22/2020	30 - 45	No	INC	24	0:00	0:00
127	RT	Planned Transmission Outage	PGAE	Humboldt	9/23/2020	30	No	DEC	3	17:00	20:00
128	RT	Planned Transmission Outage	PGAE	Humboldt	9/23/2020	30 - 45	No	INC	24	0:00	0:00
129	RT	Planned Transmission Outage	PGAE	Humboldt	9/24/2020	30	No	INC	24	0:00	0:00
130	RT	Planned Transmission Outage	PGAE	Humboldt	9/25/2020	14 - 30	No	INC	24	0:00	0:00
131	RT	Planned Transmission Outage	PGAE	Humboldt	9/26/2020	14 - 28	No	INC	24	0:00	0:00
132	RT	Planned Transmission Outage	PGAE	Humboldt	9/27/2020	14 - 42	No	INC	24	0:00	0:00
133	RT	Planned Transmission Outage	PGAE	Humboldt	9/28/2020	42 - 48	No	DEC	8	14:00	22:00
134	RT	Planned Transmission Outage	PGAE	Humboldt	9/28/2020	28 - 47	No	INC	24	0:00	0:00
135	RT	Planned Transmission Outage	PGAE	Humboldt	9/29/2020	30 - 48	No	DEC	10	12:00	22:00
136	RT	Planned Transmission Outage	PGAE	Humboldt	9/29/2020	28 - 48	No	INC	24	0:00	0:00
137	RT	Planned Transmission Outage	PGAE	Humboldt	9/30/2020	30 - 64	No	DEC	12	11:00	23:00
138	RT	Planned Transmission Outage	PGAE	Humboldt	9/30/2020	30 - 64	No	INC	24	0:00	0:00
139	RT	Planned Transmission Outage	PGAE	NCNB	9/16/2020	50	No	DEC	2	14:00	16:00
140	RT	Planned Transmission Outage	PGAE	NCNB	9/16/2020	50	No	INC	10	4:10	14:00
141	RT	Planned Transmission Outage	PGAE	NA	9/21/2020	19	No	DEC	7	6:00	13:00
142	RT	Planned Transmission Outage	PGAE	NA	9/21/2020	19	No	INC	2	4:45	6:00
143	RT	Planned Transmission Outage	SCE	LA Basin	9/22/2020	25	No	INC	1	13:00	14:00
144	RT	Planned Transmission Outage	SDGE	San Diego-IV	9/3/2020	36.88	No	INC	5	11:00	16:00

Number	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commitment	INC_DEC	Hours	Begin Time	End Time
145	RT	Planned Transmission Outage	SDGE	San Diego-IV	9/6/2020	290	No	INC	12	1:00	13:00
146	RT	Planned Transmission Outage	SDGE	San Diego-IV	9/7/2020	290	No	INC	13	1:00	14:00
147	RT	Planned Transmission Outage	SDGE	San Diego-IV	9/15/2020	0 - 37	No	INC	11	7:55	18:30
148	RT	Planned Transmission Outage	SDGE	San Diego-IV	9/18/2020	0	No	DEC	3	16:45	19:00
149	RT	Planned Transmission Outage	SDGE	San Diego-IV	9/18/2020	0	No	INC	7	15:55	22:00
150	RT	Ramping Capacity	SCE	Big Creek-Ventura	9/1/2020	400.1	No	INC	5	17:30	22:00
151	RT	Ramping Capacity	SCE	Big Creek-Ventura	9/2/2020	400.1	No	INC	5	17:00	22:00
152	RT	Ramping Capacity	SCE	Big Creek-Ventura	9/5/2020	401 - 700	No	INC	11	11:00	22:00
153	RT	Ramping Capacity	SCE	Big Creek-Ventura	9/6/2020	401 - 700	No	INC	11	11:00	22:00
154	RT	Ramping Capacity	SCE	Big Creek-Ventura	9/7/2020	401 - 700	No	INC	10	12:00	22:00
155	RT	Ramping Capacity	SCE	Big Creek-Ventura	9/8/2020	401	No	INC	9	12:00	21:00
156	RT	Ramping Capacity	SCE	Big Creek-Ventura	9/9/2020	401	No	INC	6	15:30	21:00
157	RT	Ramping Capacity	SCE	Big Creek-Ventura	9/29/2020	400.1	No	DEC	3	17:00	20:00
158	RT	Ramping Capacity	SCE	Big Creek-Ventura	9/29/2020	400.1	No	INC	6	15:00	21:00
159	RT	Ramping Capacity	SCE	LA Basin	9/5/2020	190 - 241	No	DEC	7	14:00	21:00
160	RT	Ramping Capacity	SCE	LA Basin	9/5/2020	190 - 241	No	INC	10	12:00	22:00
161	RT	Ramping Capacity	SCE	LA Basin	9/6/2020	79.9 - 439.9	No	DEC	5	15:00	20:00
162	RT	Ramping Capacity	SCE	LA Basin	9/6/2020	65 - 473	No	INC	12	10:50	22:00
163	RT	Ramping Capacity	SCE	LA Basin	9/7/2020	190 - 241	No	DEC	6	15:00	21:00

Number	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commitment	INC_DEC	Hours	Begin Time	End Time
164	RT	Ramping Capacity	SCE	LA Basin	9/7/2020	80 - 241	No	INC	10	12:00	22:00
165	RT	Ramping Capacity	SCE	LA Basin	9/8/2020	190 - 241	No	INC	5	12:00	17:00
166	RT	Ramping Capacity	SCE	LA Basin	9/9/2020	241	No	INC	6	16:00	22:00
167	RT	Ramping Capacity	SCE	LA Basin	9/13/2020	194	No	INC	4	17:30	21:00
168	RT	Ramping Capacity	SCE	LA Basin	9/15/2020	194 - 241	No	INC	6	15:15	21:00
169	RT	Ramping Capacity	SCE	LA Basin	9/17/2020	65 - 194	No	INC	6	15:30	21:00
170	RT	Ramping Capacity	SCE	LA Basin	9/18/2020	190 - 194	No	INC	7	15:30	22:00
171	RT	Ramping Capacity	SCE	LA Basin	9/29/2020	194 - 240.1	No	DEC	6	15:00	21:00
172	RT	Ramping Capacity	SCE	LA Basin	9/29/2020	190 - 194	No	INC	6	15:00	21:00
173	RT	Ramping Capacity	SCE	LA Basin	9/30/2020	240.1	No	DEC	6	15:00	21:00
174	RT	Ramping Capacity	SCE	LA Basin	9/30/2020	190 - 240.1	No	INC	7	15:00	22:00
175	RT	Ramping Capacity	SDGE	San Diego-IV	9/7/2020	24	No	DEC	7	14:40	21:00
176	RT	Reliability Assessment	PGAE	Bay Area	9/29/2020	0	No	INC	1	23:50	0:00
177	RT	Reliability Assessment	PGAE	Bay Area	9/30/2020	0	No	INC	2	0:00	1:20
178	RT	Reliability Assessment	PGAE	Fresno	9/6/2020	50	No	DEC	3	19:40	22:00
179	RT	Reliability Assessment	PGAE	Fresno	9/23/2020	5.6	No	DEC	1	22:00	23:00
180	RT	Reliability Assessment	PGAE	Fresno	9/29/2020	0	No	INC	1	23:50	0:00
181	RT	Reliability Assessment	PGAE	Fresno	9/30/2020	0	No	INC	1	0:00	1:00
182	RT	Reliability Assessment	PGAE	Humboldt	9/10/2020	28 - 64	No	DEC	7	14:00	21:00
183	RT	Reliability Assessment	PGAE	Humboldt	9/10/2020	28 - 70	No	INC	12	12:55	0:00
184	RT	Reliability Assessment	PGAE	Humboldt	9/11/2020	45	No	DEC	4	18:00	22:00
185	RT	Reliability Assessment	PGAE	Humboldt	9/11/2020	14 - 45	No	INC	24	0:00	0:00
186	RT	Reliability Assessment	PGAE	Humboldt	9/12/2020	14 - 60	No	INC	24	0:00	0:00
187	RT	Reliability Assessment	PGAE	Humboldt	9/13/2020	14	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
188	RT	Reliability Assessment	PGAE	Humboldt	9/13/2020	45 - 60	No	INC	24	0:00	0:00
189	RT	Reliability Assessment	PGAE	Humboldt	9/14/2020	14 - 60	No	INC	24	0:00	0:00
190	RT	Reliability Assessment	PGAE	Humboldt	9/15/2020	14	No	DEC	4	2:00	5:45
191	RT	Reliability Assessment	PGAE	Humboldt	9/15/2020	28	No	INC	8	0:00	7:30
192	RT	Reliability Assessment	PGAE	Kern	9/1/2020	32	No	INC	6	17:15	23:00
193	RT	Reliability Assessment	PGAE	Kern	9/2/2020	32	No	INC	7	15:35	22:00
194	RT	Reliability Assessment	PGAE	NCNB	9/27/2020	25 - 40	No	DEC	1	23:50	0:00
195	RT	Reliability Assessment	PGAE	NCNB	9/28/2020	25 - 75	No	DEC	17	0:00	16:45
196	RT	Reliability Assessment	PGAE	NCNB	9/28/2020	35 - 70	No	INC	7	0:00	7:00
197	RT	Reliability Assessment	PGAE	Sierra	9/1/2020	20	No	DEC	2	18:00	20:00
198	RT	Reliability Assessment	PGAE	Sierra	9/1/2020	20 - 40	No	INC	9	13:40	22:00
199	RT	Reliability Assessment	PGAE	Sierra	9/3/2020	20	No	DEC	2	18:00	20:00
200	RT	Reliability Assessment	PGAE	Sierra	9/3/2020	20	No	INC	5	17:40	22:00
201	RT	Reliability Assessment	PGAE	Sierra	9/4/2020	20	No	DEC	3	17:00	20:00
202	RT	Reliability Assessment	PGAE	Sierra	9/4/2020	20 - 40	No	INC	9	15:40	0:00
203	RT	Reliability Assessment	PGAE	Sierra	9/5/2020	20	No	DEC	7	15:00	22:00
204	RT	Reliability Assessment	PGAE	Sierra	9/5/2020	20 - 40	No	INC	15	0:00	15:00
205	RT	Reliability Assessment	PGAE	Sierra	9/6/2020	20	No	DEC	8	14:00	22:00
206	RT	Reliability Assessment	PGAE	Sierra	9/6/2020	20	No	INC	12	12:45	0:00
207	RT	Reliability Assessment	PGAE	Sierra	9/7/2020	20 - 42	No	INC	24	0:00	0:00
208	RT	Reliability Assessment	PGAE	Sierra	9/8/2020	20 - 42	No	INC	22	0:00	22:00
209	RT	Reliability Assessment	PGAE	Sierra	9/14/2020	20	No	INC	2	22:05	0:00
210	RT	Reliability Assessment	PGAE	Sierra	9/15/2020	45	No	DEC	2	18:50	20:00
211	RT	Reliability Assessment	PGAE	Sierra	9/15/2020	40 - 45	No	INC	7	16:50	23:15
212	RT	Reliability Assessment	PGAE	Sierra	9/16/2020	20	No	DEC	2	18:15	20:00
213	RT	Reliability Assessment	PGAE	Sierra	9/16/2020	20 - 40	No	INC	4	20:00	0:00
214	RT	Reliability Assessment	PGAE	Sierra	9/17/2020	20	No	DEC	3	17:00	20:00
215	RT	Reliability Assessment	PGAE	Sierra	9/17/2020	20 - 47	Yes	INC	24	0:00	0:00
216	RT	Reliability Assessment	PGAE	Sierra	9/18/2020	40	Yes	INC	2	0:00	2:00

Number	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commitment	INC_DEC	Hours	Begin Time	End Time
217	RT	Reliability Assessment	PGAE	Sierra	9/22/2020	20	No	INC	6	17:25	23:00
218	RT	Reliability Assessment	PGAE	Sierra	9/23/2020	20	No	INC	5	19:40	0:00
219	RT	Reliability Assessment	PGAE	Sierra	9/24/2020	20	Yes	INC	1	0:00	1:00
220	RT	Reliability Assessment	PGAE	Sierra	9/27/2020	20	No	INC	7	16:40	23:00
221	RT	Reliability Assessment	PGAE	Sierra	9/28/2020	20	No	DEC	1	19:25	20:00
222	RT	Reliability Assessment	PGAE	Sierra	9/28/2020	20 - 42	No	INC	8	16:00	0:00
223	RT	Reliability Assessment	PGAE	Sierra	9/29/2020	20	No	DEC	1	19:15	20:00
224	RT	Reliability Assessment	PGAE	Sierra	9/29/2020	20 - 42	No	INC	24	0:00	0:00
225	RT	Reliability Assessment	PGAE	Sierra	9/30/2020	20 - 42	No	DEC	4	17:00	21:00
226	RT	Reliability Assessment	PGAE	Sierra	9/30/2020	0 - 42	No	INC	24	0:00	0:00
227	RT	Reliability Assessment	PGAE	Stockton	9/15/2020	110 - 236	No	DEC	7	15:00	22:00
228	RT	Reliability Assessment	PGAE	Stockton	9/15/2020	89 - 192	No	INC	4	12:30	16:00
229	RT	Reliability Assessment	PGAE	NA	9/30/2020	0	No	INC	1	0:00	1:00
230	RT	Reliability Assessment	SCE	LA Basin	9/11/2020	0	No	INC	5	12:30	17:00
231	RT	Reliability Assessment	SCE	LA Basin	9/15/2020	0	No	INC	1	4:35	5:00
232	RT	Reliability Assessment	SCE	LA Basin	9/18/2020	46	No	INC	3	20:00	22:15
233	RT	Reliability Assessment	SCE	LA Basin	9/19/2020	147.1	No	INC	4	18:15	21:45
234	RT	Reliability Assessment	SCE	LA Basin	9/30/2020	0	No	INC	1	0:15	1:15
235	RT	Reliability Assessment	SCE	NA	9/1/2020	425 - 440	No	DEC	18	6:00	0:00
236	RT	Reliability Assessment	SCE	NA	9/1/2020	425 - 440	No	INC	14	0:00	14:00
237	RT	Reliability Assessment	SCE	NA	9/2/2020	425	No	DEC	24	0:00	0:00
238	RT	Reliability Assessment	SCE	NA	9/2/2020	425	No	INC	11	2:00	13:00
239	RT	Reliability Assessment	SCE	NA	9/3/2020	425	No	DEC	23	0:00	23:00
240	RT	Reliability Assessment	SCE	NA	9/3/2020	425	No	INC	22	2:00	0:00
241	RT	Reliability Assessment	SCE	NA	9/4/2020	425 - 435	No	DEC	11	12:00	23:00

Number	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commitment	INC_DEC	Hours	Begin Time	End Time
242	RT	Reliability Assessment	SCE	NA	9/4/2020	425 - 435	No	INC	24	0:00	0:00
243	RT	Reliability Assessment	SCE	NA	9/5/2020	425	No	DEC	10	13:00	23:00
244	RT	Reliability Assessment	SCE	NA	9/5/2020	425 - 435	No	INC	24	0:00	0:00
245	RT	Reliability Assessment	SCE	NA	9/6/2020	425 - 445	No	DEC	10	13:00	23:00
246	RT	Reliability Assessment	SCE	NA	9/6/2020	425 - 445	No	INC	24	0:00	0:00
247	RT	Reliability Assessment	SCE	NA	9/7/2020	445	No	DEC	10	13:00	23:00
248	RT	Reliability Assessment	SCE	NA	9/7/2020	445	No	INC	24	0:00	0:00
249	RT	Reliability Assessment	SCE	NA	9/8/2020	450	No	DEC	5	18:10	23:00
250	RT	Reliability Assessment	SCE	NA	9/9/2020	435 - 445	No	DEC	7	17:35	0:00
251	RT	Reliability Assessment	SCE	NA	9/10/2020	440 - 476	No	DEC	23	0:00	23:00
252	RT	Reliability Assessment	SCE	NA	9/10/2020	440 - 476	No	INC	22	2:00	0:00
253	RT	Reliability Assessment	SCE	NA	9/11/2020	420 - 440	No	DEC	8	16:00	0:00
254	RT	Reliability Assessment	SCE	NA	9/11/2020	470 - 476	No	INC	16	0:00	16:00
255	RT	Reliability Assessment	SCE	NA	9/12/2020	420 - 440	No	DEC	24	0:00	0:00
256	RT	Reliability Assessment	SCE	NA	9/12/2020	440	No	INC	6	8:00	14:00
257	RT	Reliability Assessment	SCE	NA	9/13/2020	425	No	DEC	24	0:00	0:00
258	RT	Reliability Assessment	SCE	NA	9/13/2020	425	No	INC	6	8:00	14:00
259	RT	Reliability Assessment	SCE	NA	9/14/2020	425	No	DEC	19	5:00	0:00
260	RT	Reliability Assessment	SCE	NA	9/14/2020	425	No	INC	16	0:00	16:00
261	RT	Reliability Assessment	SCE	NA	9/15/2020	425 - 440	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
262	RT	Reliability Assessment	SCE	NA	9/15/2020	440	No	INC	11	2:00	13:00
263	RT	Reliability Assessment	SCE	NA	9/16/2020	440	No	DEC	24	0:00	0:00
264	RT	Reliability Assessment	SCE	NA	9/16/2020	440	No	INC	6	8:00	14:00
265	RT	Reliability Assessment	SCE	NA	9/17/2020	440 - 450	No	DEC	24	0:00	0:00
266	RT	Reliability Assessment	SCE	NA	9/17/2020	440	No	INC	6	7:00	13:00
267	RT	Reliability Assessment	SCE	NA	9/18/2020	440 - 450	No	DEC	23	0:00	23:00
268	RT	Reliability Assessment	SCE	NA	9/18/2020	450	No	INC	10	2:00	12:00
269	RT	Reliability Assessment	SCE	NA	9/19/2020	440	No	DEC	9	15:25	0:00
270	RT	Reliability Assessment	SCE	NA	9/20/2020	440	No	DEC	24	0:00	0:00
271	RT	Reliability Assessment	SCE	NA	9/20/2020	440	No	INC	4	8:00	12:00
272	RT	Reliability Assessment	SCE	NA	9/21/2020	440	No	DEC	24	0:00	0:00
273	RT	Reliability Assessment	SCE	NA	9/21/2020	440	No	INC	4	8:00	12:00
274	RT	Reliability Assessment	SCE	NA	9/22/2020	435 - 440	No	DEC	24	0:00	0:00
275	RT	Reliability Assessment	SCE	NA	9/22/2020	440	No	INC	7	7:00	14:00
276	RT	Reliability Assessment	SCE	NA	9/23/2020	435 - 450	No	DEC	24	0:00	0:00
277	RT	Reliability Assessment	SCE	NA	9/23/2020	440	No	INC	5	8:00	13:00
278	RT	Reliability Assessment	SCE	NA	9/24/2020	450	No	DEC	24	0:00	0:00
279	RT	Reliability Assessment	SCE	NA	9/24/2020	450	No	INC	12	1:00	13:00
280	RT	Reliability Assessment	SCE	NA	9/25/2020	450	No	DEC	18	6:00	0:00
281	RT	Reliability Assessment	SCE	NA	9/25/2020	450	No	INC	10	0:00	10:00
282	RT	Reliability Assessment	SCE	NA	9/26/2020	450	No	DEC	19	5:00	0:00
283	RT	Reliability Assessment	SCE	NA	9/26/2020	450	No	INC	16	0:00	16:00
284	RT	Reliability Assessment	SCE	NA	9/27/2020	450	No	DEC	21	3:00	0:00
285	RT	Reliability Assessment	SCE	NA	9/27/2020	450	No	INC	15	0:00	15:00
286	RT	Reliability Assessment	SCE	NA	9/28/2020	440 - 450	No	DEC	19	5:00	0:00

Number	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commitment	INC_DEC	Hours	Begin Time	End Time
287	RT	Reliability Assessment	SCE	NA	9/28/2020	450	No	INC	13	0:00	13:00
288	RT	Reliability Assessment	SCE	NA	9/29/2020	430 - 440	No	DEC	24	0:00	0:00
289	RT	Reliability Assessment	SCE	NA	9/29/2020	440	No	INC	6	7:00	13:00
290	RT	Reliability Assessment	SCE	NA	9/30/2020	430	No	DEC	22	0:00	22:00
291	RT	Reliability Assessment	SCE	NA	9/30/2020	430	No	INC	10	3:00	13:00
292	RT	Reliability Assessment	SDGE	San Diego-IV	9/5/2020	24.87	No	DEC	5	15:00	20:00
293	RT	Reliability Assessment	SDGE	San Diego-IV	9/5/2020	24.87	No	INC	1	14:20	15:00
294	RT	Reliability Assessment	SDGE	San Diego-IV	9/6/2020	30	No	INC	6	15:55	21:30
295	RT	Reliability Assessment	SDGE	San Diego-IV	9/15/2020	37	No	INC	2	8:15	10:00
296	RT	Reliability Assessment	SDGE	San Diego-IV	9/18/2020	281	No	INC	4	19:10	22:15
297	RT	Reliability Assessment	SDGE	San Diego-IV	9/30/2020	25	No	DEC	4	14:15	18:00
298	RT	Reliability Assessment	SDGE	San Diego-IV	9/30/2020	0 - 25	No	INC	22	0:00	22:00
299	RT	Software Limitation	PGAE	Bay Area	9/1/2020	120	No	INC	1	3:40	4:30
300	RT	Software Limitation	PGAE	Bay Area	9/5/2020	120	No	INC	1	15:05	15:55
301	RT	Software Limitation	PGAE	Bay Area	9/6/2020	298	No	DEC	6	18:15	0:00
302	RT	Software Limitation	PGAE	Bay Area	9/8/2020	120	No	INC	1	2:20	3:10
303	RT	Software Limitation	PGAE	Bay Area	9/11/2020	120	No	INC	1	0:45	1:40
304	RT	Software Limitation	PGAE	Bay Area	9/24/2020	20	No	INC	2	15:25	17:00
305	RT	Software Limitation	PGAE	Bay Area	9/26/2020	175	No	INC	1	7:05	8:00
306	RT	Software Limitation	PGAE	Fresno	9/5/2020	14 - 35	No	INC	1	15:05	15:55
307	RT	Software Limitation	PGAE	Fresno	9/6/2020	14 - 35	No	INC	1	18:05	18:40
308	RT	Software Limitation	PGAE	Fresno	9/14/2020	-303.51	No	DEC	1	0:00	1:00
309	RT	Software Limitation	PGAE	Stockton	9/15/2020	112	No	INC	1	13:45	14:15
310	RT	Software Limitation	PGAE	NA	9/6/2020	8.4	No	DEC	1	18:50	19:10
311	RT	Software Limitation	SCE	Big Creek-Ventura	9/1/2020	16 - 33	No	INC	1	3:40	4:30
312	RT	Software Limitation	SCE	Big Creek-Ventura	9/5/2020	16 - 47.1	No	INC	1	15:05	15:55

Number	Market Type	Reason	Location	Local Reliability Area	Trade Date	MW	Commitment	INC_DEC	Hours	Begin Time	End Time
313	RT	Software Limitation	SCE	Big Creek-Ventura	9/6/2020	16 - 250	No	INC	14	4:55	18:40
314	RT	Software Limitation	SCE	Big Creek-Ventura	9/8/2020	16 - 47.1	No	INC	1	2:20	3:10
315	RT	Software Limitation	SCE	LA Basin	9/1/2020	5 - 58.38	No	INC	1	3:40	4:30
316	RT	Software Limitation	SCE	LA Basin	9/5/2020	5 - 58.38	No	INC	1	15:05	15:55
317	RT	Software Limitation	SCE	LA Basin	9/6/2020	5 - 44.89	No	INC	2	18:05	19:10
318	RT	Software Limitation	SCE	LA Basin	9/7/2020	0	No	INC	1	8:05	8:35
319	RT	Software Limitation	SCE	LA Basin	9/8/2020	0 - 147	No	INC	4	2:20	5:25
320	RT	Software Limitation	SCE	LA Basin	9/11/2020	5 - 147	No	INC	3	0:45	3:05
321	RT	Software Limitation	SCE	LA Basin	9/23/2020	0	No	INC	3	3:30	6:00
322	RT	Software Limitation	SDGE	San Diego-IV	9/5/2020	30	No	INC	1	15:05	15:55
323	RT	Unit Testing	PGAE	Bay Area	9/2/2020	190.2	No	INC	1	15:25	16:00
324	RT	Unit Testing	PGAE	Bay Area	9/15/2020	47.5	No	INC	1	19:05	20:00
325	RT	Unit Testing	PGAE	Bay Area	9/22/2020	185	No	DEC	1	16:05	16:25
326	RT	Unit Testing	PGAE	Bay Area	9/22/2020	500	No	INC	1	16:25	17:00
327	RT	Unit Testing	SCE	LA Basin	9/15/2020	40 - 96	No	INC	21	2:25	23:05
328	RT	Unit Testing	SCE	LA Basin	9/17/2020	46.9 - 47	No	INC	14	0:00	13:20
329	RT	Unit Testing	SCE	LA Basin	9/26/2020	84.53	No	INC	1	4:10	5:00
330	RT	Unit Testing	SCE	LA Basin	9/30/2020	22.07	No	INC	1	15:30	16:30
331	RT	Unit Testing	SDGE	San Diego-IV	9/22/2020	354	No	INC	1	19:35	19:45
332	RT	Unplanned Outage	PGAE	Fresno	9/5/2020	83	No	DEC	1	15:25	15:55
333	RT	Voltage Support	PGAE	Sierra	9/5/2020	20	No	INC	6	2:30	8:00
334	RT	Voltage Support	PGAE	Sierra	9/6/2020	42	No	INC	5	1:00	5:45
335	RT	Voltage Support	PGAE	Sierra	9/13/2020	20	No	INC	7	8:30	15:00
336	RT	Voltage Support	PGAE	Sierra	9/18/2020	20	No	INC	11	12:55	23:00
337	RT	Voltage Support	PGAE	Sierra	9/21/2020	45	No	INC	6	16:00	22:00
338	RT	Voltage Support	PGAE	Sierra	9/22/2020	20	No	INC	6	16:00	21:30

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