

Price Correction Report

Week of June 4 – June 8, 2018

Overview

This document is intended to meet the requirements of ISO Tariff section 35.6, and provides the Market Participants with a summary of all price corrections that occurred during the week. For example, report titled with May 5-9, 2014 will cover all corrections made during the week of May 5-9. In a normal situation, it will include trade dates that have price corrections which are due between May 5-9, 2014 based on the five business day for Real-Time market and three business day for Day-Ahead market.

The structure of the report is as follows:

- Price correction listing – this section includes a listing of all the corrections, including market intervals affected, locations, reason (which would tie back to the description of issues section), and method of price correction.
- Description of Issues – this section describes each issue which resulted in a correction in more detail.
- Price-fill report – metrics on the number of empty price intervals that were filled by adjacent interval prices, usually due to failed runs.

For the week covered by this report, **4452** intervals were corrected.

The trade dates covered by this report are:

DAM: 5/30/2018 – 6/5/2018

RTM: 5/22/2018 , 5/24/2018 , 5/25/2018 – 6/3/2018

Correction methodologies

The following are the definitions of the correction methodologies used:

Selective recalculation: The CAISO will selectively recalculate incorrect financially binding prices when the invalid prices are isolated and can be corrected such that no other financially binding prices are affected by the correction.

System recalculation: The CAISO will recalculate all prices for the invalidated market interval using corrected or recreated input data, or repaired software as applicable.

Replacement: If the above correction methods are not applicable and practicable, the CAISO shall use, in place of prices for the binding interval of an invalidated market solution, replicated prices from binding or advisory intervals from the validated market solution in which the market conditions were most similar to the market conditions in the invalidated market solution for the affected interval.

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Price Correction Listing

The following is a list of the corrections made during the week, sorted by date and time. The number to the left of the reason field corresponds to the issue number in the Description of Issues section. The count of corrected Pnode/Apnode for each corrected interval is listed left to the Affected Location field. In case of many intervals with the same correction reason, instead of providing the exact count of corrected Pnode/Apnode, the range of Pnode/Apnode affected is provided and listed in another table. Please note that there are only flex ramp prices corrections for those intervals that have the Count of Corrected Pnode/Apnode column missing.

Corrections made through selective recalculation: 4281

Date	HE	Intervals	Market	#	Reason	Number of corrected Pnodes/Apnodes	Affected Area
22May2018	15	10	RTD	3,1	Data Input Error, Software Defect	925	Local
22May2018	15	11	RTD	3,1	Data Input Error, Software Defect	944	Local
22May2018	15	12	RTD	3,1	Data Input Error, Software Defect	939	Local
22May2018	15	8-9	RTD	3,1	Data Input Error, Software Defect	919	Local
22May2018	16	8	RTD	3,1	Data Input Error, Software Defect	935	Local
22May2018	16	3-4	RTD	3,1	Data Input Error, Software Defect	927	Local
22May2018	16	5-6	RTD	3,1	Data Input Error, Software Defect	928	Local
22May2018	16	7,9	RTD	3,1	Data Input Error, Software Defect	936	Local
22May2018	17	1	RTD	3,1	Data Input Error, Software Defect	923	Local
22May2018	17	2-3	RTD	3,1	Data Input Error, Software Defect	920	Local
22May2018	18	9	RTD	5,1	Data Input Error, Software Defect	2282	Local
22May2018	19	1	RTD	5,1	Data Input Error, Software Defect	2267	Local
22May2018	19	2	RTD	5,1	Data Input Error, Software Defect	2235	Local
22May2018	19	5	RTD	5,1	Data Input Error, Software Defect	2243	Local
22May2018	19	7	RTD	5,1	Data Input Error, Software Defect	2264	Local
22May2018	19	8	RTD	5,1	Data Input Error, Software Defect	2290	Local
22May2018	19	9	RTD	5,1	Data Input Error, Software Defect	2291	Local
22May2018	19	1	RTPD	5,1	Data Input Error, Software Defect	2258	Local
22May2018	19	2	RTPD	5,1	Data Input Error, Software Defect	2260	Local
22May2018	19	3	RTPD	5,1	Data Input Error, Software Defect	2262	Local
22May2018	19	4	RTPD	5,1	Data Input Error, Software Defect	2282	Local
22May2018	21	1	RTPD	5,1	Data Input Error, Software Defect	2498	Local
22May2018	15-16	1	RTPD	9	Software Defect		Local
24May2018	1	6	RTD	8	Data Input Error	1404	Local
24May2018	1	7	RTD	8	Data Input Error	1010	Local
24May2018	1	8	RTD	8	Data Input Error	610	Local
24May2018	1	10	RTD	8	Data Input Error		Local
24May2018	12	1-3	RTD	2	Data Input Error	109	Local
24May2018	19	1,11-12	RTD	6	Software Defect		Local
24May2018	20	1-4	RTD	6	Software Defect		Local
24May2018	1	3-4	RTPD	8	Data Input Error		Local
24May2018	12	1-3	RTPD	2	Data Input Error	109	Local
27May2018	19	5	RTD	4	Software Defect	438	Local
29May2018	2	9-11	RTD	9	Software Defect		Local
29May2018	3	1,7	RTD	9	Software Defect		Local
29May2018	4	6	RTD	9	Software Defect		Local
29May2018	23	11	RTD	9	Software Defect		Local
29May2018	24	2-3,5	RTD	9	Software Defect		Local
29May2018	23	2	RTPD	9	Software Defect		Local
30May2018	3	1	RTD	9	Software Defect		Local

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30May2018	4	2	RTD	9	Software Defect		Local
30May2018	8	9	RTD	9	Software Defect		Local
30May2018	23	2-5,7	RTD	10	Software Defect	404	Local
30May2018	18	2-3	RTPD	9	Software Defect		Local
30May2018	23	1-2	RTPD	10	Software Defect	404	Local
30May2018	24	1	RTPD	10	Software Defect	1351	Local
30May2018	24	2	RTPD	10	Software Defect		Local
31May2018	12	3	RTPD	9	Software Defect	458	Local
31May2018	12	4	RTPD	9	Software Defect		Local
31May2018	14	1-2	RTPD	9	Software Defect		Local
31May2018	16	1	RTPD	9	Software Defect	458	Local
31May2018	16	3	RTPD	7	Data Input Error	851	Local
31May2018	1,13	1	RTPD	9	Software Defect		Local
01Jun2018	5	4-5	RTD	9	Software Defect	1351	Local
01Jun2018	3	1	RTPD	9	Software Defect	1351	Local
01Jun2018	11	1-3	RTPD	9	Software Defect	458	Local
02Jun2018	1	3	RTD	9	Software Defect	1351	Local
02Jun2018	8	1-4	RTPD	7	Data Input Error	458	Local
02Jun2018	9	1-3	RTPD	7	Data Input Error	458	Local
02Jun2018	20	2	RTPD	9	Software Defect	458	Local
02Jun2018	22	1-3	RTPD	9	Software Defect	458	Local
03Jun2018	9	4-5	RTD	9	Software Defect		Local
03Jun2018	12	7	RTD	9	Software Defect		Local
03Jun2018	8,21	1	RTPD	9	Software Defect		Local

The range of corrected Pnode/APnode for the below trade days regarding correction numbers 1 is 1-55

Date	HE	Intervals	Market	#	Reason	Affected Area
22May2018	15	1-7	RTD	1	Software Defect	Local
22May2018	16	1-2,10-12	RTD	1	Software Defect	Local
22May2018	17	4-12	RTD	1	Software Defect	Local
22May2018	18	1-3	RTD	1	Software Defect	Local
22May2018	23	10-12	RTD	1	Software Defect	Local
22May2018	1-14,24	1-12	RTD	1	Software Defect	Local
22May2018	18	1	RTPD	1	Software Defect	Local
22May2018	24	2-4	RTPD	1	Software Defect	Local
22May2018	1-17	1-4	RTPD	1	Software Defect	Local
24May2018	1	1-5,10-12	RTD	1	Software Defect	Local
24May2018	8	4-8	RTD	1	Software Defect	Local
24May2018	10	4-6	RTD	1	Software Defect	Local
24May2018	11	10-12	RTD	1	Software Defect	Local
24May2018	21	4-11	RTD	1	Software Defect	Local
24May2018	22	7-9,11	RTD	1	Software Defect	Local
24May2018	2-7,24	1-12	RTD	1	Software Defect	Local
24May2018	9,16,23	1-6	RTD	1	Software Defect	Local
24May2018	13	1	RTPD	1	Software Defect	Local
24May2018	14	2-3	RTPD	1	Software Defect	Local
24May2018	18	3-4	RTPD	1	Software Defect	Local
24May2018	1,11,22	1-2	RTPD	1	Software Defect	Local
24May2018	20-21,23	2-4	RTPD	1	Software Defect	Local
24May2018	2-10,24	1-4	RTPD	1	Software Defect	Local
25May2018	8	1-11	RTD	1	Software Defect	Local
25May2018	9	1	RTD	1	Software Defect	Local
25May2018	14	12	RTD	1	Software Defect	Local
25May2018	15	7-8	RTD	1	Software Defect	Local
25May2018	16	9-12	RTD	1	Software Defect	Local
25May2018	17	1-3,7-12	RTD	1	Software Defect	Local
25May2018	19	1-3	RTD	1	Software Defect	Local

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25May2018	20	4-12	RTD	1	Software Defect	Local
25May2018	1-7,21-24	1-12	RTD	1	Software Defect	Local
25May2018	15	2,4	RTPD	1	Software Defect	Local
25May2018	18	1,3	RTPD	1	Software Defect	Local
25May2018	1-8,20-24	1-4	RTPD	1	Software Defect	Local
25May2018	17,19	1-2,4	RTPD	1	Software Defect	Local
26May2018	7	1-7,10-12	RTD	1	Software Defect	Local
26May2018	8	1-5,7-12	RTD	1	Software Defect	Local
26May2018	9	1-2,4-12	RTD	1	Software Defect	Local
26May2018	17	1-8	RTD	1	Software Defect	Local
26May2018	18	1-11	RTD	1	Software Defect	Local
26May2018	19	1-6,9-12	RTD	1	Software Defect	Local
26May2018	1-6,10-16,20-24	1-12	RTD	1	Software Defect	Local
26May2018	7	1-2	RTPD	1	Software Defect	Local
26May2018	8	1,3-4	RTPD	1	Software Defect	Local
26May2018	17	1-2,4	RTPD	1	Software Defect	Local
26May2018	10,18	3-4	RTPD	1	Software Defect	Local
26May2018	1-6,9,11-16,19-24	1-4	RTPD	1	Software Defect	Local
27May2018	8	1-3,5-12	RTD	1	Software Defect	Local
27May2018	11	2-12	RTD	1	Software Defect	Local
27May2018	13	1-9,11-12	RTD	1	Software Defect	Local
27May2018	18	1-6	RTD	1	Software Defect	Local
27May2018	19	5-12	RTD	1	Software Defect	Local
27May2018	1-6,9,12,14-17,20-24	1-12	RTD	1	Software Defect	Local
27May2018	7,10	1-11	RTD	1	Software Defect	Local
27May2018	19	2-4	RTPD	1	Software Defect	Local
27May2018	1-18,20-24	1-4	RTPD	1	Software Defect	Local
28May2018	9	1-7,9,11-12	RTD	1	Software Defect	Local
28May2018	10	1-3,5-12	RTD	1	Software Defect	Local
28May2018	1-8,11-24	1-12	RTD	1	Software Defect	Local
28May2018	1-24	1-4	RTPD	1	Software Defect	Local
29May2018	22	6-12	RTD	1	Software Defect	Local
29May2018	1-21,23-24	1-12	RTD	1	Software Defect	Local
29May2018	22	1,4	RTPD	1	Software Defect	Local
29May2018	1-21,23-24	1-4	RTPD	1	Software Defect	Local
30May2018	18	1-2,4-12	RTD	1	Software Defect	Local
30May2018	22	1-10	RTD	1	Software Defect	Local
30May2018	1-17,19-21,23-24	1-12	RTD	1	Software Defect	Local
30May2018	22	2-3	RTPD	1	Software Defect	Local
30May2018	1-21,23-24	1-4	RTPD	1	Software Defect	Local
31May2018	12	1-2,4-11	RTD	1	Software Defect	Local
31May2018	16	1-6,8-10,12	RTD	1	Software Defect	Local
31May2018	17	1-9,12	RTD	1	Software Defect	Local
31May2018	18	1-3,5-12	RTD	1	Software Defect	Local
31May2018	24	1-8,11	RTD	1	Software Defect	Local
31May2018	1-11,13-15,19-23	1-12	RTD	1	Software Defect	Local
31May2018	13	1-3	RTPD	1	Software Defect	Local
31May2018	1-12,14-24	1-4	RTPD	1	Software Defect	Local
01Jun2018	2	3-9	RTD	1	Software Defect	Local
01Jun2018	4	1-10	RTD	1	Software Defect	Local
01Jun2018	5	7-12	RTD	1	Software Defect	Local
01Jun2018	6	5-12	RTD	1	Software Defect	Local
01Jun2018	11	1-9,11-12	RTD	1	Software Defect	Local
01Jun2018	14	1-3,7-12	RTD	1	Software Defect	Local
01Jun2018	1,3,7-10,12-13,15-24	1-12	RTD	1	Software Defect	Local
01Jun2018	2	1	RTPD	1	Software Defect	Local
01Jun2018	9	1,4	RTPD	1	Software Defect	Local
01Jun2018	1,3-8,10-24	1-4	RTPD	1	Software Defect	Local
02Jun2018	9	1-2,11-12	RTD	1	Software Defect	Local

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02Jun2018	12	4-12	RTD	1	Software Defect	Local
02Jun2018	1-8,10-11,13-24	1-12	RTD	1	Software Defect	Local
02Jun2018	1-24	1-4	RTPD	1	Software Defect	Local
03Jun2018	9	1-7,9-12	RTD	1	Software Defect	Local
03Jun2018	16	1-6,8-12	RTD	1	Software Defect	Local
03Jun2018	1-8,10-15,17-24	1-12	RTD	1	Software Defect	Local
03Jun2018	1-24	1-4	RTPD	1	Software Defect	Local

Corrections made through interval replacement: 171

Date	HE	Intervals	Market	#	Reason	Affected Area
22May2018	18	4-8,10-12	RTD	5,1	Data Input Error, Software Defect	System
22May2018	19	3-4,6,10-12	RTD	5,1	Data Input Error, Software Defect	System
22May2018	20-22	1-12	RTD	5,1	Data Input Error, Software Defect	System
22May2018	23	1-9	RTD	5,1	Data Input Error, Software Defect	System
22May2018	18,21	2-4	RTPD	5,1	Data Input Error, Software Defect	System
22May2018	20,22-23	1-4	RTPD	5,1	Data Input Error, Software Defect	System
22May2018	24	1	RTPD	5,1	Data Input Error, Software Defect	System
24May2018	19	10	RTD	6	Software Defect	System
25May2018	8	12	RTD	8,1	Data Input Error, Software Defect	System
25May2018	9	2-12	RTD	8,1	Data Input Error, Software Defect	System
25May2018	10,13	1-12	RTD	8,1	Data Input Error, Software Defect	System
25May2018	11	1-11	RTD	8,1	Data Input Error, Software Defect	System
25May2018	12	1-6,10-12	RTD	8,1	Data Input Error, Software Defect	System
25May2018	14	1-3,7-11	RTD	8,1	Data Input Error, Software Defect	System
25May2018	15	1-3	RTD	8,1	Data Input Error, Software Defect	System
25May2018	14	1-2,4	RTPD	8,1	Data Input Error, Software Defect	System
25May2018	15	1,3	RTPD	8,1	Data Input Error, Software Defect	System
25May2018	9-13	1-4	RTPD	8,1	Data Input Error, Software Defect	System

Corrections made through market rerun: 0

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Description of Issues:

1. Software Defect:

- Invalid prices due to a software defect impacting pricing node LMPs.

Prices were corrected by selective recalculation and interval replacement.

2. Data Input Error:

- Invalid congestion on 24153_VESTAL _230_24235_RECTOR _230_BR_1 _1 due to a data input error impacting a transmission constraint.

Prices were corrected by selective recalculation.

3. Data Input Error:

- Invalid EIM prices due to a data input error impacting resource dispatch.

Prices were corrected by selective recalculation.

4. Software Defect:

- Invalid flex up and energy prices due to a software defect impacting flex ramp pricing.

Prices were corrected by selective recalculation.

5. Data Input Error:

- Invalid prices due to a data input error impacting a transmission constraint.

Prices were corrected by selective recalculation and interval replacement.

6. Software Defect:

- Invalid prices due to a software issue impacting resource dispatch.

Prices were corrected by selective recalculation and interval replacement.

7. Data Input Error:

- Invalid prices due to a data input error related to load forecast.

Prices were corrected by selective recalculation.

8. Data Input Error:

- Invalid prices due to a data input error related to the DB model promotion.

Prices were corrected by selective recalculation and interval replacement.

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9. Software Defect:

- Invalid prices due to a software defect impacting flexible ramping product and energy prices.

Prices were corrected by selective recalculation.

10. Software Defect:

- Invalid prices due to a software defect impacting resource dispatch.

Prices were corrected by selective recalculation.

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Price Fill Report

A price fill occurs whenever a market run failed to publish to the Settlement system. This usually occurs whenever a market run failed, for example when a market fails to come to a solution. It could also occur when an operator decides that a market is not to be run, for example during a contingency event. Automatic price fills also occur in real-time when an operator chooses to utilize the previous interval's solution for the current interval.

Prices are filled according to the rules in CAISO Tariff section 7.7.9 which states that administrative pricing applies to intervals where we have had a market disruption, and requires the prices to be set differently depending on the number of consecutive market disruptions.

The number of prices which were adjusted by the fill process is as follows.

Total number of filled price intervals: 82

Date	HE	Interval	Market
22-May-18	4	3	RTD
22-May-18	11	11-12	RTD
22-May-18	12	1-3	RTD
22-May-18	12	2-3	RTPD
22-May-18	23	1	RTPD
24-May-18	1	1-5	RTD
24-May-18	15	6-12	RTD
24-May-18	16	1-6,11-12	RTD
24-May-18	17	1-8,10-12	RTD
24-May-18	18	1-8,10-12	RTD
24-May-18	19	2-9	RTD
24-May-18	1	1-2	RTPD
24-May-18	16	1-2,4	RTPD
24-May-18	17	2,4	RTPD
24-May-18	18	1-2,4	RTPD
24-May-18	19	2,4	RTPD
24-May-18	20	1	RTPD
31-May-18	15	11-12	RTD
31-May-18	16	1-6	RTD
31-May-18	16	2	RTPD
2-Jun-18	2	5	RTD

Total number of filled intervals due to EIM BAA market separation: 52

Date	HE	Interval	Market	Separated EIM BAA
30-May-18	10	10-12	RTD	AZPS
30-May-18	11-13	1-12	RTD	AZPS
30-May-18	10	4	RTPD	AZPS
30-May-18	11-13	1-4	RTPD	AZPS

Note: Intervals filled are subject to subsequent price corrections where applicable.