

Price Correction Report

Week of December 4 – December 8, 2017

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, **2604** intervals were corrected.

The trade dates covered by this report are:

DAM: 11/29/2017 – 12/5/2017

RTM: 11/27/2017 – 12/3/2017

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: 2604

Date	HE	Intervals	Market	#	Reason	Number of corrected Pnodes/Apnodes	Affected Area
27Nov2017	8	10	RTD	3,1	Software Defect	4896	Local
27Nov2017	8	11	RTD	3,1	Software Defect	3357	Local
27Nov2017	8	12	RTD	3,1	Software Defect	3356	Local
27Nov2017	8	5-6	RTD	3,1	Software Defect	3343	Local
27Nov2017	8	7	RTD	3,1	Software Defect	4883	Local
27Nov2017	8	8	RTD	3,1	Software Defect	3344	Local
27Nov2017	8	9	RTD	3,1	Software Defect	4677	Local
27Nov2017	9	1,3	RTD	3,1	Software Defect	4190	Local
27Nov2017	9	2	RTD	3,1	Software Defect	3363	Local
27Nov2017	9	4-5	RTD	3,1	Software Defect	3366	Local
27Nov2017	9	6	RTD	3,1	Software Defect	3365	Local
27Nov2017	9	7-8	RTD	3,1	Software Defect	3361	Local
27Nov2017	1	2	RTPD	2	Software Defect	26	Local
28Nov2017	1	2	RTPD	2	Software Defect	25	Local
29Nov2017	1	2	RTPD	2	Software Defect	25	Local
30Nov2017	7	1	RTPD	5,1	Data Input Error, Software Defect	866	Local
01Dec2017	8	10	RTD	5,1	Data Input Error, Software Defect	1390	Local
01Dec2017	8	11	RTD	5,1	Data Input Error, Software Defect	489	Local
01Dec2017	8	12	RTD	5,1	Data Input Error, Software Defect	540	Local
01Dec2017	8	8-9	RTD	5,1	Data Input Error, Software Defect	9135	Local
01Dec2017	9	1-4	RTD	5,1	Data Input Error, Software Defect	1390	Local
01Dec2017	9	8-12	RTD	5	Data Input Error		Local
01Dec2017	9	10-11	RTD	5,1	Data Input Error, Software Defect	557	Local
01Dec2017	9	5,7-8	RTD	5,1	Data Input Error, Software Defect	489	Local
01Dec2017	9	6,9,12	RTD	5,1	Data Input Error, Software Defect	1391	Local
01Dec2017	10	5	RTD	5,1	Data Input Error, Software Defect	541	Local
01Dec2017	10	8	RTD	5,1	Data Input Error, Software Defect	559	Local
01Dec2017	10	1-2	RTD	5,1	Data Input Error, Software Defect	558	Local
01Dec2017	10	1-11	RTD	5	Data Input Error		Local
01Dec2017	10	10-12	RTD	5,1	Data Input Error, Software Defect	490	Local
01Dec2017	10	3-4,6	RTD	5,1	Data Input Error, Software Defect	1391	Local
01Dec2017	10	7,9	RTD	5,1	Data Input Error, Software Defect	1392	Local
01Dec2017	11	5	RTD	5,1	Data Input Error, Software Defect	562	Local
01Dec2017	11	10	RTD	5,1	Data Input Error, Software Defect	609	Local
01Dec2017	11	11	RTD	5,1	Data Input Error, Software Defect	610	Local
01Dec2017	11	12	RTD	5,1	Data Input Error, Software Defect	608	Local
01Dec2017	11	2-12	RTD	5	Data Input Error		Local
01Dec2017	11	1,3	RTD	5,1	Data Input Error, Software Defect	492	Local
01Dec2017	11	2,7-9	RTD	5,1	Data Input Error, Software Defect	491	Local
01Dec2017	11	4,6	RTD	5,1	Data Input Error, Software Defect	1395	Local
01Dec2017	12	1	RTD	5,1	Data Input Error, Software Defect	492	Local

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01Dec2017	12	4	RTD	5,1	Data Input Error, Software Defect	557	Local
01Dec2017	12	5	RTD	5,1	Data Input Error, Software Defect	491	Local
01Dec2017	12	6	RTD	5,1	Data Input Error, Software Defect	490	Local
01Dec2017	12	2-3	RTD	5,1	Data Input Error, Software Defect	558	Local
01Dec2017	12	1-2,4-6	RTD	5	Data Input Error		Local
01Dec2017	9	3	RTPD	5,1	Data Input Error, Software Defect	489	Local
01Dec2017	9	4	RTPD	5,1	Data Input Error, Software Defect	488	Local
01Dec2017	9	3-4	RTPD	5	Data Input Error		Local
01Dec2017	10	1	RTPD	5,1	Data Input Error, Software Defect	1391	Local
01Dec2017	10	2	RTPD	5	Data Input Error		Local
01Dec2017	10	3	RTPD	5,1	Data Input Error, Software Defect	490	Local
01Dec2017	10	2,4	RTPD	5,1	Data Input Error, Software Defect	489	Local
01Dec2017	11	1	RTPD	5,1	Data Input Error, Software Defect	491	Local
01Dec2017	11	2	RTPD	5,1	Data Input Error, Software Defect	878	Local
01Dec2017	11	3	RTPD	5,1	Data Input Error, Software Defect	1392	Local
01Dec2017	11	4	RTPD	5,1	Data Input Error, Software Defect	901	Local
01Dec2017	12	1	RTPD	5,1	Data Input Error, Software Defect	880	Local
01Dec2017	12	3	RTPD	5,1	Data Input Error, Software Defect	492	Local
01Dec2017	12	4	RTPD	5	Data Input Error		Local
01Dec2017	12	2,4	RTPD	5,1	Data Input Error, Software Defect	491	Local
02Dec2017	1	2	RTD	4,1	Software Defect	104	Local
02Dec2017	1	4	RTD	4,1	Software Defect	2301	Local
02Dec2017	1	5	RTD	4,1	Software Defect	138	Local
02Dec2017	1	6	RTD	4,1	Software Defect	139	Local
02Dec2017	1	7	RTD	4,1	Software Defect	2300	Local
02Dec2017	1	8-9,11-12	RTD	4,1	Software Defect	132	Local
02Dec2017	2	7	RTD	4,1	Software Defect	1389	Local
02Dec2017	2	8	RTD	4,1	Software Defect	137	Local
02Dec2017	2	11	RTD	4,1	Software Defect	132	Local
02Dec2017	2	5-6,12	RTD	4,1	Software Defect	133	Local
02Dec2017	3	1	RTD	4,1	Software Defect	132	Local
02Dec2017	3	2	RTD	4,1	Software Defect	133	Local
02Dec2017	1,3	3	RTD	4,1	Software Defect	1390	Local
02Dec2017	1	1	RTPD	5	Data Input Error		Local
02Dec2017	1	1	RTPD	5,1	Data Input Error, Software Defect	428	Local

The range of corrected Pnode/APnode for the below trade days regarding correction number 1 is 1-29

Date	HE	Intervals	Market	#	Reason	Affected Area
27Nov2017	7	7-12	RTD	1	Software Defect	Local
27Nov2017	8	1-4	RTD	1	Software Defect	Local
27Nov2017	9	9-11	RTD	1	Software Defect	Local
27Nov2017	10	1-3,5-12	RTD	1	Software Defect	Local
27Nov2017	17	1-6	RTD	1	Software Defect	Local
27Nov2017	18	4-12	RTD	1	Software Defect	Local
27Nov2017	1-6,11-16,19-24	1-12	RTD	1	Software Defect	Local
27Nov2017	7	1,4	RTPD	1	Software Defect	Local
27Nov2017	17	1-3	RTPD	1	Software Defect	Local
27Nov2017	18	2-4	RTPD	1	Software Defect	Local
27Nov2017	1-6,8-16,19-24	1-4	RTPD	1	Software Defect	Local
28Nov2017	1-16,18-24	1-12	RTD	1	Software Defect	Local
28Nov2017	17	1-6,10	RTD	1	Software Defect	Local
28Nov2017	1-24	1-4	RTPD	1	Software Defect	Local
29Nov2017	1-24	1-12	RTD	1	Software Defect	Local
29Nov2017	1-24	1-4	RTPD	1	Software Defect	Local
30Nov2017	1-11,13-24	1-12	RTD	1	Software Defect	Local
30Nov2017	12	7-12	RTD	1	Software Defect	Local
30Nov2017	1-6,8-11,13-24	1-4	RTPD	1	Software Defect	Local
30Nov2017	12	3-4	RTPD	1	Software Defect	Local
30Nov2017	7	2-4	RTPD	1	Software Defect	Local

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01Dec2017	1-7,13-24	1-12	RTD	1	Software Defect	Local
01Dec2017	12	7-12	RTD	1	Software Defect	Local
01Dec2017	8	1-7	RTD	1	Software Defect	Local
01Dec2017	1-8,13-24	1-4	RTPD	1	Software Defect	Local
01Dec2017	9	1-2	RTPD	1	Software Defect	Local
02Dec2017	1	1,10	RTD	1	Software Defect	Local
02Dec2017	2	1-4,9-10	RTD	1	Software Defect	Local
02Dec2017	3	4-12	RTD	1	Software Defect	Local
02Dec2017	23	1-8	RTD	1	Software Defect	Local
02Dec2017	4-22,24	1-12	RTD	1	Software Defect	Local
02Dec2017	1	2-4	RTPD	1	Software Defect	Local
02Dec2017	2-24	1-4	RTPD	1	Software Defect	Local
03Dec2017	6	4-12	RTD	1	Software Defect	Local
03Dec2017	7	1-9	RTD	1	Software Defect	Local
03Dec2017	8	7-12	RTD	1	Software Defect	Local
03Dec2017	11	1,3-12	RTD	1	Software Defect	Local
03Dec2017	12	1-6,10-11	RTD	1	Software Defect	Local
03Dec2017	19	1-3,7-12	RTD	1	Software Defect	Local
03Dec2017	1-4,9-10,13-18,20-24	1-12	RTD	1	Software Defect	Local
03Dec2017	7	1-2	RTPD	1	Software Defect	Local
03Dec2017	8	4	RTPD	1	Software Defect	Local
03Dec2017	19	1-2,4	RTPD	1	Software Defect	Local
03Dec2017	1-4,9-17,20-24	1-4	RTPD	1	Software Defect	Local
03Dec2017	6,18	3-4	RTPD	1	Software Defect	Local

Corrections made through interval replacement: 0

Corrections made through market rerun: 0

Description of Issues:

1. Software Defect:

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

Prices were corrected by selective recalculation.

2. Software Defect:

- Missing DGAP and DGAP SP-Tie prices due to a software defect.

Prices were corrected by selective recalculation.

3. Software Defect:

- Invalid congestion on a nomogram due to a software defect affecting nomogram enforcement.

Prices were corrected by selective recalculation.

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4. Software Defect:

- Invalid congestion on rate of change constraint due to software defect impacting a resource dispatch.

Prices were corrected by selective recalculation.

5. Data Input Error:

- Invalid prices in EIM area due to a data input error affecting resource dispatch.

Prices were corrected by selective recalculation.

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: 2

Date	HE	Interval	Market
29-Nov-17	4	3	RTD
3-Dec-17	4	3	RTD

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