October 20, 2023

The Honorable Kimberly D. Bose
Secretary
Federal Energy Regulatory Commission
888 First Street, NE
Washington, DC 20426

Re: California Independent System Operator Corporation
Docket No. ER15-861-___
Western Energy Imbalance Market – Third Quarter 2023
Available Balancing Capacity Report

Dear Secretary Bose:

The California Independent System Operator Corporation (CAISO) hereby submits its quarterly informational report for the third quarter of 2023 (from July 1 up to and including September 30, 2023) on the Available Balancing Capacity (ABC) enhancement for the Western Energy Imbalance Market (WEIM). The purpose of the quarterly informational report is to provide the Commission with information on the performance of the ABC enhancement and to provide the same information the CAISO provides in its monthly informational reports submitted during a WEIM Entity's first six-month transition period.

Consistent with the Commission's directive in the December 17, 2015 order, the CAISO will continue to file such quarterly reports for at least the first year after implementation of the ABC enhancement, or until the Commission finds the quarterly informational reports are no longer needed.

Please contact the undersigned with any questions.

Respectfully submitted

By: *Andrew Ulmer*

Roger E. Collanton
General Counsel
Andrew Ulmer
Assistant General Counsel
John Anders
Assistant General Counsel
California Independent System Operator Corporation
250 Outcropping Way
Folsom, CA 95630
Tel: (916) 608-7209
Fax: (916) 608-7222
aulmer@caiso.com

Western Energy Imbalance Market

July 1 – September 30, 2023

Available Balancing Capacity Report

October 20, 2023

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I. Background

On December 17, 2015, the Federal Energy Regulatory Commission (Commission) approved the California Independent System Operator Corporation's (CAISO) proposed tariff revisions to comply with the Commission's July 20, 2015 order in FERC Docket No. ER15-861-006.[1] The CAISO's proposed tariff provisions enhanced the Western Energy Imbalance Market (WEIM) functionality so that the market systems automatically recognize and account for capacity a WEIM entity has available to maintain reliable operations in its own balancing authority area (BAA), but has not been bid into the WEIM.[2] This enhancement is referred to as the Available Balancing Capacity (ABC) enhancement. The CAISO implemented the ABC enhancement on March 23, 2016.

Consistent with the CAISO's commitments made in this proceeding, the Commission directed the CAISO to prepare and file with the Commission quarterly informational reports for at least the first year after implementation of the ABC enhancement, and until the Commission finds the quarterly informational reports are no longer needed.[3] The quarterly informational reports are to provide information on the performance of the ABC enhancement and to include the same information the CAISO provides in its monthly transitional period report submitted during a WEIM entity's first six-month transition period.[4] There were three WEIM entities undergoing a transition period during this quarter: Western Area Power Administration (WALC) Desert Southwest region, El Paso Electric (EPE), and Avangrid (AVRN).

1 *Cal. Indep. Sys. Operator Corp.,* 152 FERC ¶ 61,060 (2015) (July 20 Order); and *Cal. Indep. Sys. Operator Corp*., 153 FERC ¶ 61, 305 (2015) (December 17 Order).

2 December 17 Order at P 1.

3 December 17 Order at P 99

4 December 17 Order at P 39.

II. Available Balancing Capacity

A. ABC Submitted to the Market

Each WEIM entity can identify and choose the amount of Available Balancing Capacity (ABC) they will make available to the CAISO and the resources supporting this capacity through its resource plan. The WEIM entity submits this capacity to the CAISO on an hourly basis, and it is available for both the Fifteen-Minute Market (FMM) and the five-minute Real-Time Dispatch (RTD). The data in this section reflects ABC bids and dispatches in each of the WEIM BAAs for each month within the quarter.

Table 1 below summarizes the percentage of hours in which each WEIM entity submitted upward and downward ABC bids to the WEIM for each month within the quarter. Many entities submitted ABC for nearly all intervals in each month with some exceptions. AVRN, IPCO, and PSEI did not submit any ABC to the WEIM during the quarter.

Table 1: Frequency of ABC Submitted to the WEIM

BAA	July 2023		August 2023		September 2023	
	Upward Capacity	Downward Capacity	Upward Capacity	Downward Capacity	Upward Capacity	Downward Capacity
AVA	100.00%	100.00%	99.73%	99.73%	100.00%	100.00%
AVRN	--	--	--	--	--	--
AZPS	98.79%	99.06%	98.79%	99.19%	99.44%	99.31%
BANC	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
BCHA	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
BPA	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
EPE	2.02%	0.00%	--	--	--	--
IPCO	--	--	--	--	--	--
LADWP	95.43%	1.88%	98.92%	0.40%	98.89%	0.00%
NEVP	98.25%	85.08%	99.60%	75.40%	99.58%	87.36%
NWMT	97.85%	99.73%	97.58%	98.52%	97.22%	96.81%
PACE	14.11%	3.36%	57.93%	0.00%	70.42%	61.81%
PACW	0.00%	5.91%	0.00%	11.16%	5.00%	5.56%
PGE	99.46%	0.00%	100.00%	0.00%	99.31%	0.00%
PNM	0.13%	95.30%	0.40%	95.30%	0.00%	59.72%
PSEI	--	--	--	--	--	--
SCL	--	--	45.70%	47.18%	--	--
SRP	99.87%	98.79%	99.46%	97.85%	100.00%	95.83%
TEP	100.00%	100.00%	100.00%	100.00%	100.00%	99.86%
TIDC	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
TPWR	100.00%	99.06%	91.94%	91.80%	99.72%	99.31%
WALC	99.73%	99.73%	98.92%	99.87%	100.00%	99.31%

Table 2 below shows the average ABC, in MW, which each WEIM entity submitted to the WEIM for each month within the quarter. BCHA consistently submitted the highest average ABC capacity to the WEIM in both the upward and downward directions.

Table 2: Average ABC Capacity Submitted to the WEIM

BAA	July 2023		August 2023		September 2023	
	Upward Capacity (MW)	Downward Capacity (MW)	Upward Capacity (MW)	Downward Capacity (MW)	Upward Capacity (MW)	Downward Capacity (MW)
AVA	20	20	20	19.99	20	20
AVRN	--	--	--	--	--	--
AZPS	19.93	19.98	20	20	20.13	20.11
BANC	13.49	17.83	14.67	20.54	12.11	22.75
BCHA	597.94	281.14	588.31	308.29	599.63	297.6
BPA	153.44	161.33	153.95	163.57	152.18	161.04
EPE	21.58	--	--	--	--	--
IPCO	--	--	--	--	--	--
LADWP	52.43	50.26	51.85	59	60	--
NEVP	27.83	39.36	36.89	44.86	35.64	42.4
NWMT	5.11	5	5	5	5	5
PACE	36.09	54.71	21.69	--	24.66	48.77
PACW	--	44.09	--	40.34	23.33	24.55
PGE	30.11	--	30	--	29.96	--
PNM	34	31.44	11.2	31.48	--	30.21
PSEI	--	--	--	--	--	--
SCL	--	--	26.19	32.61	--	--
SRP	24.38	22.26	22.2	22.7	21.39	23.57
TEP	15	23.08	16.95	33.36	13.93	31.43
TIDC	14.07	5	14.98	5	14.98	5
TPWR	1	1.57	1.23	1.37	1	1.39
WALC	17.43	17.23	17.39	17.32	17.65	17.29

Table 3 below show the maximum ABC, in MW, which each WEIM entity submitted to the WEIM for each month within the quarter. The highest ABC bid was submitted by BCHA in the upward direction for 1000 MW, which was consistent across all three months of the quarter.

Table 3: Maximum ABC Capacity Submitted to the WEIM

BAA	July 2023		August 2023		September 2023	
	Upward Capacity (MW)	Downward Capacity (MW)	Upward Capacity (MW)	Downward Capacity (MW)	Upward Capacity (MW)	Downward Capacity (MW)
AVA	20	20	20	20	20	20
AVRN	--	--	--	--	--	--
AZPS	20	20	20	20	25	25
BANC	97	74	60	205	60	70
BCHA	1000	500	1000	500	1000	500
BPA	279	311	303	311	279	327
EPE	30	--	--	--	--	--
IPCO	--	--	--	--	--	--
LADWP	60	53	75	77	60	--
NEVP	70	70	70	71	70	70
NWMT	44	5	5	5	5	5
PACE	50	90	34	--	60	90
PACW	--	50	--	75	30	30
PGE	39	--	30	--	30	--
PNM	34	70	20	78	--	67
PSEI	--	--	--	--	--	--
SCL	--	--	70	70	--	--
SRP	100	50	100	50	100	50
TEP	61	66	64	64	40.1	60
TIDC	15	5	15	5	15	5
TPWR	1	3	7	5	1	1.8
WALC	20	20	25	20	50	20

Table 4 below shows the number of different resources supporting the ABC that the WEIM entities bid into the WEIM in both the upward and downward directions, for each month within the quarter. A maximum of 26 resources supported upward ABC capacity bids submitted by SRP. Some entities used as few as one resource to support their ABC bids.

Table 4: Number of Resources Supporting ABC

BAA	July 2023		August 2023		September 2023	
	Upward Capacity	Downward Capacity	Upward Capacity	Downward Capacity	Upward Capacity	Downward Capacity
AVA	6	6	8	8	7	7
AVRN	--	--	--	--	--	--
AZPS	9	9	7	7	6	9
BANC	12	11	13	13	13	11
BCHA	2	2	2	2	2	2
BPA	3	3	3	2	3	3
EPE	3	--	--	--	--	--

BAA	July 2023		August 2023		September 2023	
	Upward Capacity	Downward Capacity	Upward Capacity	Downward Capacity	Upward Capacity	Downward Capacity
IPCO	--	--	--	--	--	--
LADWP	3	4	6	2	1	--
NEVP	12	13	12	13	12	11
NWMT	2	2	2	2	3	4
PACE	5	3	5	--	5	5
PACW	--	2	--	3	1	2
PGE	4	--	2	--	4	--
PNM	1	9	3	8	--	9
PSEI	--	--	--	--	--	--
SCL	--	--	4	3	--	--
SRP	26	22	20	20	17	16
TEP	19	18	12	15	15	14
TIDC	1	1	2	2	2	2
TPWR	4	4	4	4	4	5
WALC	3	5	2	3	3	3

B. ABC Awarded by the Market

Table 5 below shows the frequency of each WEIM entity's dispatched ABC for the FMM market, when the WEIM entities made ABC available, for each month within the quarter. Overall, the market dispatched ABC infrequently throughout the quarter. The highest frequency of ABC dispatch in FMM occurred in July 2023 for SRP's bid-in upward ABC capacity. Often, the FMM dispatched ABC around or less than 1 percent of the time during the month.

Table 5: Frequency of ABC Dispatched by WEIM in the FMM

BAA	July 2023		August 2023		September 2023	
	Upward Capacity	Downward Capacity	Upward Capacity	Downward Capacity	Upward Capacity	Downward Capacity
AVA	--	--	--	--	--	--
AVRN	--	--	--	--	--	--
AZPS	0.03%	0.27%	--	--	--	--
BANC	--	0.03%	--	0.03%	--	--
BCHA	--	--	--	--	--	--
BPA	0.61%	--	0.17%	0.03%	0.10%	--
EPE	0.10%	--	--	--	--	--
IPCO	--	--	--	--	--	--
LADWP	0.74%	--	0.30%	--	0.24%	--
NEVP	0.50%	1.48%	0.03%	0.97%	0.10%	0.35%
NWMT	0.10%	--	--	--	--	--

BAA	July 2023		August 2023		September 2023	
	Upward Capacity	Downward Capacity	Upward Capacity	Downward Capacity	Upward Capacity	Downward Capacity
PACE	--	--	--	--	--	--
PACW	--	--	--	--	--	--
PGE	--	--	0.03%	--	--	--
PNM	--	3.29%	--	3.63%	--	2.74%
PSEI	--	--	--	--	--	--
SCL	--	--	0.47%	0.10%	--	--
SRP	8.10%	1.24%	2.18%	0.10%	0.59%	0.28%
TEP	0.84%	0.20%	0.07%	--	0.10%	--
TIDC	0.13%	--	--	--	--	--
TPWR	--	--	--	--	--	--
WALC	1.18%	0.17%	0.54%	0.27%	0.10%	0.04%

Table 6 below shows the frequency of each WEIM entity's dispatched ABC for the RTD market, when the WEIM entities made ABC available, for each month within the quarter. Overall, the market dispatched ABC infrequently throughout the quarter. The highest frequency of ABC dispatch in RTD occurred in July 2023 on SRP's bid-in upward ABC capacity. Often, the RTD dispatched ABC less than or around 1 percent of the time during the month.

Table 6: Frequency of ABC Dispatched by WEIM in the RTD

BAA	July 2023		August 2023		September 2023	
	Upward Capacity	Downward Capacity	Upward Capacity	Downward Capacity	Upward Capacity	Downward Capacity
AVA	0.01%	--	0.02%	0.07%	0.06%	--
AVRN	--	--	--	--	--	--
AZPS	0.34%	--	0.03%	--	0.12%	--
BANC	--	0.02%	0.69%	--	0.13%	--
BCHA	--	1.77%	--	1.59%	0.02%	4.66%
BPA	0.24%	--	0.09%	--	--	--
EPE	0.11%	--	--	--	--	--
IPCO	--	--	--	--	--	--
LADWP	1.02%	--	0.54%	--	0.57%	--
NEVP	0.73%	0.50%	0.37%	0.30%	0.06%	0.32%
NWMT	0.11%	--	0.09%	0.06%	0.04%	--
PACE	--	0.02%	0.06%	--	0.01%	--
PACW	--	--	--	--	--	--
PGE	0.01%	--	0.11%	--	--	--
PNM	--	2.18%	--	2.88%	--	1.70%
PSEI	--	--	--	--	--	--
SCL	--	--	0.16%	0.24%	--	--
SRP	8.30%	3.28%	2.64%	0.17%	0.43%	1.89%

BAA	July 2023		August 2023		September 2023	
	Upward Capacity	Downward Capacity	Upward Capacity	Downward Capacity	Upward Capacity	Downward Capacity
TEP	1.46%	0.21%	0.73%	--	0.20%	0.07%
TIDC	0.12%	--	--	--	--	--
TPWR	--	0.02%	--	--	--	--
WALC	1.10%	--	0.58%	0.17%	0.36%	0.08%

C. ABC and Power Balance Constraint Infeasibilities

The purpose of the ABC enhancement is to make capacity available that otherwise would not be visible to the WEIM. The primary objective in making such capacity available is that the WEIM can recognize and access that capacity when the conditions warrant its use, namely when the WEIM is running out of capacity made available through economic bids. The ABC is capacity stacked above economic bids, but below the power balance constraint relaxation penalty price. When the market is tight in supply and it has exhausted all effective economic bids, the market clearing process will access the ABC. If there is sufficient ABC, the WEIM will relax the power balance constraint to clear the market. As such, the market clearing process uses the ABC to resolve the power balance infeasibility. If ABC is not sufficient to cure the infeasibility, the market may exhaust ABC and still relax the power balance constraint in order to clear the WEIM.

Table 7 below shows the frequency of FMM intervals in which the WEIM entities did not make any ABC available to the WEIM, when there was a power balance infeasibility for each month within the quarter. Specifically, the data in the table below provides the percentage amount of over-supply infeasibilities where downward ABC was needed, and under-supply infeasibilities where upward ABC was needed. A blank entry in the table indicates that there were no infeasibilities during the relevant period. A metric of 0 percent indicates that in all intervals when there was an infeasibility observed, the WEIM entity submitted ABC to the WEIM. A metric of 100 percent indicates that in all intervals when there was an infeasibility observed, the WEIM entity did not submit any ABC to the WEIM.

These instances occurred infrequently throughout the quarter, indicating that the WEIM entities typically had submitted ABC bids during instances when infeasibilities occurred.

Table 7: Frequency of Power Balance Infeasibilities When ABC was not Submitted in FMM

BAA	July 2023		August 2023		September 2023	
	Over-supply	Under-supply	Over-supply	Under-supply	Over-supply	Under-supply
AVA	--	--	--	--	--	--
AVRN	--	--	--	--	--	--
AZPS	--	--	--	0.00%	--	--
BANC	--	--	--	0.00%	--	--
BCHA	--	--	--	--	--	--
BPA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
EPE	100.00%	100.00%	--	100.00%	--	100.00%
IPCO	--	--	--	100.00%	--	--
LADWP	100.00%	--	--	--	--	--
NEVP	--	--	--	0.00%	--	--
NWMT	--	57.14%	--	--	--	--
PACE	--	--	--	100.00%	--	--
PACW	--	--	--	100.00%	100.00%	--
PGE	--	--	--	0.00%	--	--
PNM	--	100.00%	100.00%	100.00%	--	100.00%
PSEI	--	100.00%	--	100.00%	--	--
SCL	100.00%	--	100.00%	50.00%	100.00%	100.00%
SRP	0.00%	0.00%	--	14.29%	50.00%	0.00%
TEP	--	0.00%	--	0.00%	--	--
TIDC	--	--	--	--	--	--
TPWR	--	--	--	--	--	--
WALC	--	0.00%	--	0.00%	100.00%	--

Table 8 below shows the frequency of RTD intervals in which the WEIM entities did not make any ABC available to the WEIM, when there was a power balance infeasibility for each month within the quarter. Instances of observed infeasibilities with no submitted ABC occurred more frequently in RTD than FMM.

Table 8: Frequency of Power Balance Infeasibilities When ABC was not Submitted in RTD

BAA	July 2023		August 2023		September 2023	
	Over-supply	Under-supply	Over-supply	Under-supply	Over-supply	Under-supply
AVA	--	0.00%	--	0.00%	--	0.00%
AVRN	--	--	--	--	--	100.00%
AZPS	--	40.00%	--	0.00%	--	0.00%
BANC	--	--	--	--	--	0.00%
BCHA	--	--	0.00%	--	--	--
BPA	0.00%	0.00%	0.00%	0.00%	0.00%	--

BAA	July 2023		August 2023		September 2023	
	Over-supply	Under-supply	Over-supply	Under-supply	Over-supply	Under-supply
EPE	100.00%	100.00%	--	100.00%	--	100.00%
IPCO	--	--	--	--	--	--
LADWP	--	0.00%	--	0.00%	--	0.00%
NEVP	0.00%	0.00%	--	0.00%	--	--
NWMT	--	35.71%	--	0.00%	--	0.00%
PACE	--	100.00%	--	20.00%	--	100.00%
PACW	--	100.00%	--	--	--	--
PGE	--	0.00%	--	0.00%	--	--
PNM	--	100.00%	100.00%	100.00%	100.00%	100.00%
PSEI	--	100.00%	--	100.00%	--	100.00%
SCL	100.00%	--	73.08%	28.57%	100.00%	100.00%
SRP	0.00%	0.00%	--	5.66%	28.36%	0.00%
TEP	0.00%	0.00%	--	0.00%	--	0.00%
TIDC	--	--	--	--	--	--
TPWR	--	--	--	--	--	--
WALC	--	0.00%	0.00%	0.00%	100.00%	0.00%

III. WEIM Performance

This section provides the information the CAISO previously provided in its monthly transition period report submitted during a WEIM entity's first six-month transition period.

A. ELAP Prices

The figures in this section show the WEIM load aggregation point (ELAP) prices[5] for the FMM and RTD in each WEIM BAA. Table 9 below shows the average ELAP prices for all WEIM entities for each month within the quarter. Prices stayed within stable ranges throughout the summer months.

Table 9: Average FMM and RTD ELAP Prices

BAA	July 2023		August 2023		September 2023	
	FMM ($/MWh)	RTD ($/MWh)	FMM ($/MWh)	RTD ($/MWh)	FMM ($/MWh)	RTD ($/MWh)
AVA	49.39	51.47	38.93	44.32	34.48	36.9
AVRN	49.34	50.99	39.79	44	37.52	37.65
AZPS	63.32	59.58	41.32	45.1	29.88	32.29
BANC	55.7	53.76	54.13	53.24	42	42.09
BCHA	93.77	86.54	98.52	93.52	83.14	77.5
BPA	55.3	53.26	48.89	48.5	37.62	36.91
EPE	48.46	46.78	37.13	39.91	28.53	29.99

[5] The ELAP provides aggregate prices that are representative of pricing in the overall BAA.

IPCO	51.76	52.52	39.23	44.05	33.34	35.19
LADWP	66.75	62.46	50.08	55.12	35.53	36.87
NEVP	59.29	56.43	40.31	44.83	32.52	33.96
NWMT	52.9	54.53	39.45	45.54	34.12	36.52
PACE	52.86	52.23	38.42	43.06	30.98	33.54
PACW	48.3	50.35	38.57	42.38	35.45	36.67
PGE	50.17	50.05	43.4	45.16	37.21	36.78
PNM	59.19	56.33	40.08	43.72	30.2	33.28
PSEI	59.45	60.66	44.21	46.52	37.48	37.54
SCL	50.48	50.3	44.83	45.62	36.98	36.76
SRP	62.32	60.97	45.55	47.68	28.08	27.23
TEP	58.31	57.72	38.46	44	29.58	31.14
TIDC	55.88	53.83	53.69	53.05	42.75	42.52
TPWR	49.78	49.66	43	44.61	36.97	36.78
WALC	61.55	57.97	41.19	44.54	30.4	32.86

B. Balancing Test Failures

The CAISO performs the balancing test pursuant to Section 29.34(k) of the CAISO tariff. Powerex (BCHA) is not subject to the balancing test.

Table 10 below shows the frequency that each WEIM entity passed the balancing test, as well as what percentage of balancing test failures were due to under-scheduling and over-scheduling, for each month within the quarter. Overall, WEIM entities passed the balancing test in the overwhelming majority of intervals.

Table 10: Frequency of Passing Balancing Test

BAA	July 2023	August 2023	September 2023
AVA	99.33%	99.19%	99.72%
AVRN	99.06%	99.06%	97.91%
AZPS	97.31%	96.91%	98.61%
BANC	98.79%	99.33%	99.44%
BCHA	--	--	--
BPA	97.44%	99.06%	98.47%
EPE	99.19%	99.60%	99.72%
IPCO	98.92%	99.87%	99.86%
LADWP	98.92%	99.73%	99.03%
NEVP	94.89%	95.56%	97.22%
NWMT	98.66%	99.19%	99.30%
PACE	97.85%	97.04%	97.36%
PACW	98.12%	98.66%	98.19%
PGE	98.79%	98.79%	99.30%
PNM	93.68%	91.67%	91.93%

BAA	July 2023	August 2023	September 2023
PSEI	95.83%	96.77%	98.47%
SCL	99.73%	99.87%	99.72%
SRP	93.26%	92.61%	95.27%
TEP	98.25%	99.60%	99.44%
TIDC	99.73%	99.87%	99.86%
TPWR	100.00%	99.73%	100.00%
WALC	98.66%	99.06%	99.30%

Table 11 below shows the frequency of balancing test failures due to over-scheduling and under-scheduling respectively, for each month of the quarter.

Table 11: Frequency of Balancing Test Failures due to Over-Scheduling and Under-Scheduling

BAA	July 2023		August 2023		September 2023	
	Over-scheduling	Under-Scheduling	Over-scheduling	Under-Scheduling	Over-scheduling	Under-Scheduling
AVA	20.00%	80.00%	50.00%	50.00%	100.00%	0.00%
AVRN	85.71%	14.29%	14.29%	85.71%	40.00%	60.00%
AZPS	15.00%	85.00%	26.09%	73.91%	70.00%	30.00%
BANC	44.44%	55.56%	20.00%	80.00%	0.00%	100.00%
BCHA	--	--	--	--	--	--
BPA	52.63%	47.37%	57.14%	42.86%	72.73%	27.27%
EPE	14.29%	85.71%	66.67%	33.33%	50.00%	50.00%
IPCO	50.00%	50.00%	0.00%	100.00%	0.00%	100.00%
LADWP	87.50%	12.50%	50.00%	50.00%	71.43%	28.57%
NEVP	57.89%	42.11%	42.42%	57.58%	50.00%	50.00%
NWMT	30.00%	70.00%	33.33%	66.67%	60.00%	40.00%
PACE	43.75%	56.25%	13.64%	86.36%	36.84%	63.16%
PACW	21.43%	78.57%	30.00%	70.00%	23.08%	76.92%
PGE	33.33%	66.67%	55.56%	44.44%	40.00%	60.00%
PNM	23.40%	76.60%	56.45%	43.55%	43.10%	56.90%
PSEI	19.35%	80.65%	50.00%	50.00%	27.27%	72.73%
SCL	50.00%	50.00%	100.00%	0.00%	50.00%	50.00%
SRP	84.00%	16.00%	50.91%	49.09%	35.29%	64.71%
TEP	38.46%	61.54%	33.33%	66.67%	75.00%	25.00%
TIDC	50.00%	50.00%	0.00%	100.00%	0.00%	100.00%
TPWR	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%
WALC	18.18%	81.82%	62.50%	37.50%	20.00%	80.00%

C. Flexible Ramp Sufficiency Test Failures

Table 12 below shows the frequency that each WEIM entity passed the flexible ramping sufficiency test in the upward and downward directions, for each month within the quarter. Generally, the entities passed the flexible ramp sufficiency test in the overwhelming majority of intervals.

Table 12: Frequency of Passing Flexible Ramping Sufficiency Test

BAA	July 2023		August 2023		September 2023	
	Upward Direction	Downward Direction	Upward Direction	Downward Direction	Upward Direction	Downward Direction
AVA	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
AVRN	99.76%	100.00%	99.97%	100.00%	99.10%	99.90%
AZPS	100.00%	100.00%	99.97%	100.00%	100.00%	100.00%
BANC	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
BCHA	100.00%	99.97%	99.87%	100.00%	100.00%	99.76%
BPA	98.22%	99.53%	99.66%	100.00%	99.86%	99.97%
EPE	97.95%	99.50%	99.49%	100.00%	99.41%	99.65%
IPCO	100.00%	100.00%	100.00%	100.00%	100.00%	99.97%
LADWP	99.97%	100.00%	99.97%	100.00%	99.97%	100.00%
NEVP	99.93%	99.87%	99.83%	99.93%	99.93%	99.97%
NWMT	99.03%	100.00%	99.63%	99.90%	99.83%	99.97%
PACE	99.80%	100.00%	100.00%	100.00%	100.00%	99.97%
PACW	99.80%	100.00%	100.00%	100.00%	100.00%	98.85%
PGE	99.93%	100.00%	100.00%	100.00%	100.00%	100.00%
PNM	99.53%	99.93%	99.63%	99.59%	99.69%	98.85%
PSEI	97.45%	100.00%	98.65%	100.00%	99.79%	100.00%
SCL	100.00%	99.60%	99.53%	98.89%	99.97%	99.83%
SRP	96.33%	99.93%	98.92%	100.00%	99.65%	100.00%
TEP	99.76%	100.00%	99.66%	100.00%	100.00%	100.00%
TIDC	99.87%	100.00%	100.00%	100.00%	100.00%	100.00%
TPWR	100.00%	99.97%	100.00%	100.00%	100.00%	99.93%
WALC	99.66%	99.90%	99.39%	99.76%	99.83%	99.41%

CERTIFICATE OF SERVICE

I hereby certify that I have served the foregoing document upon the parties listed on the official service list in the above-referenced proceeding, in accordance with the requirements of Rule 2010 of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2010).

Dated at Folsom, California, this 20th day of October 2023.

/s/ Ariana Rebancos

Ariana Rebancos