

**Power & Water Resources Pooling
Authority**

Information Packet

Wednesday, July 5, 2023

- 1. Treasurer's Report.**
- 2. Extract of the Operations Report.**
- 3. GM Comments and draft PG&E WDT rates for 2024.**

Power & Water Resources Pooling Authority

2. Treasurer's Report for Month Ending May 31, 2023.

**POWER AND WATER RESOURCES POOLING AUTHORITY
CASH ACTIVITY AND TREASURER'S REPORT
MONTH ENDING MAY 31, 2023**

CASH ACTIVITY:

BALANCE APRIL 30, 2023		\$	16,525,635.74
Increases:			
Power Billing Invoices	\$ 4,005,277.53		
CAISO - Collateral Deposit	2,000,000.00		
LEC - May 2023	207,493.00		
LAIF - Quarterly Interest	86,397.12		
APX - Astoria Solar	30,348.28		
CAISO	16,068.38		
TCB - Monthly Interest	5,701.49		
			6,351,285.80
Decreases:			
WAPA - Power April 2023	\$ 966,151.95		
CAISO	896,280.26		
WAPA O&M	670,273.00		
Canadian Solar - Slate Solar partial March and April 2023	278,903.17		
Canadian Solar - Astoria Solar - April 2023	193,003.63		
NextEra Whitney Point Solar - April 2023	168,327.31		
PG&E - GCID, RD 108, SCVWD, Zone 7	76,196.62		
Robertson-Bryan, Inc	68,829.16		
WAPA - Restoration April 2023	55,598.34		
Trimark - Cell, Meter Reading and T&M	49,556.49		
Cameron-Daniel, P.C.	39,851.50		
Aces - May 2023	25,000.00		
Barbich Hooper King - 2022 Audit	13,200.00		
Arvin-Edison Water Storage District-Treasurer	8,329.40		
Michael McCarty Law Office, PLLC	4,780.17		
White Pines Solar Santa Clara WD - April 2023	3,531.74		
Bank Fees - May 2023	500.00		
Walter Mortensen Insurance	263.00		
Braun Blaising & Wynne, P.C.	219.35		
Advanced Data Storage	44.50		
			3,518,839.59
BALANCE MAY 31, 2023		\$	<u>19,358,081.95</u>

TREASURERS REPORT:

Operating Account:			
Tri Counties Bank - General Operating Account #1031821, yield 2.75%		\$	819,214.69
Local Agency Investment Fund (LAIF) - Account # 90-39007, yield 2.993%			
Reserve Funds	\$ 9,105,619.23		
Cap & Trade Allowance Revenue	6,087,980.94		
Funds on Deposit	3,345,267.09		
Total LAIF			18,538,867.26
TOTAL PWRPA OPERATING FUNDS - MAY 31, 2023		\$	<u>19,358,081.95</u>
Public Purpose Program (P-3) Tri Counties Bank Account #1031856			3,187,743.87
TOTAL FUNDS ON DEPOSIT WITH PWRPA - MAY 31, 2023		\$	<u>22,545,825.82</u>
CAISO Collateral Deposit Account			2,766,517.39
Western Area Power Administration - PWRPA Trust Account			1,000.00
TOTAL FUNDS - PWRPA & OTHER AGENCIES - MAY 31, 2023		\$	<u>25,313,343.21</u>

Treasurer's Notes:

All investments are placed in accordance with PWRPA's Statement of Investment Policy and Guidelines. The Treasurer's Report is presented on a cash basis, effective yields are based on most recent published information. PWRPA has sufficient cash flow to meet its obligations next month. Included in the Operating Funds above is the Board approved \$10,000,000 Reserve and Funds on Deposit from the following Participants:

<i>Participant</i>	<i>Amount</i>	<i>Participant</i>	<i>Amount</i>
Banta Carbona	\$ 22,476.04	Santa Clara	570,943.29
Cawelo	851,845.46	Sonoma	753,745.63
James	43,291.60	West Stan	282,746.34
Glen-Colusa ID	118,183.47	Westlands	573,595.81
RD108	42,539.61	West Side ID	57,887.44
		Zone 7	28,012.40
		Total	\$ 3,345,267.09

Power and Water Resources Pooling Authority
P-3 Remaining Funds By Year
as of May 31, 2023

Member Agency	2019	2020	2021	2022	2023	Total Available	Expenditures	
	(a)	(b)	(c)	(d)	(e)	P-3 Funds (f)	Total to Date (g)	May-23 (h)
Arvin-Edison WSD	\$0.00	\$0.00	\$0.00	\$287,039.39	\$135,089.14	\$422,128.53	\$5,237,215.16	\$0.00
Banta Carbona ID	0.00	28,418.11	49,489.90	65,427.64	14,687.69	158,023.34	404,708.20	0.00
Cawelo WD	49,395.58	37,702.35	33,863.10	49,929.32	11,716.81	182,607.16	802,026.78	0.00
Glenn-Colusa ID	0.00	23,300.11	32,132.77	16,991.19	4,759.47	77,183.54	348,863.79	0.00
James ID	8,070.92	10,457.51	15,685.23	23,010.13	2,712.19	59,935.98	122,899.04	0.00
Lower Tule ID	0.00	0.00	0.00	32,941.76	9,436.49	42,378.25	331,806.44	0.00
Princeton ID	7,595.11	9,341.59	8,671.24	5,519.48	1,890.86	33,018.28	146,848.67	0.00
Santa Clara Valley WD	0.00	0.00	16,885.21	95,595.06	32,558.76	145,039.03	737,636.35	0.00
Sonoma County WA	84,011.90	99,654.97	109,040.76	145,540.92	28,528.14	466,776.69	1,406,740.31	0.00
West Stanislaus ID	0.00	0.00	0.00	61,317.22	6,040.35	67,357.57	496,284.30	0.00
Westlands WD (North & South)	0.00	0.00	102,451.51	1,093,235.26	138,335.28	1,334,022.05	5,531,125.34	0.00
West Side ID	5,539.13	8,928.49	9,001.39	14,164.94	2,282.12	39,916.07	129,954.40	0.00
RD 108	24,126.08	17,667.76	16,362.76	12,723.85	2,477.66	73,358.11	185,239.74	0.00
Zone 7	0.00	9,318.79	25,493.12	37,692.11	13,388.19	85,892.21	71,833.02	0.00
Undesignated/Forfeited/Misc	107.06	0.00	0.00	0.00	0.00	107.06	35,133.04	0.00
Total	\$178,845.78	\$244,789.68	\$419,076.99	\$1,941,128.27	\$403,903.15	\$3,187,743.87	\$15,988,314.58	\$0.00
Exclusive access Date	08/04/23	08/03/24	08/02/25					

- (a) Three year exclusive access to these funds by agency begins on 8/05/20 and ends 08/04/23
- (b) Three year exclusive access to these funds by agency begins on 8/04/21 and ends 08/03/24
- (c) Three year exclusive access to these funds by agency begins on 8/03/22 and ends 08/02/25
- (d) 2022 P-3 collected
- (e) 2023 P-3 collected through May 2023
- (f) Total available P-3 Funds
- (g) Total P-3 expenditures since inception of program
- (h) P-3 expenditures May 2023

Power and Water Resources Pooling Authority
 Cap and Trade Allowance Revenue
 Pursuant to Resolution 13-04-05 and Resolution 21-11-14
 As of May 31, 2023

District	Resolution 13-04-05		Resolution 21-11-14			Total Revenue	Expenditures	Balance
	Allocation	Revenue	2021	2022	2023			
Arvin	37.478%	\$3,421,905.95	\$208,146.78	\$831,876.00	\$140,437.69	\$4,602,366.42	\$3,921,905.95	\$680,460.47
Banta Carbona	3.115%	284,413.18	33,717.30	132,634.85	23,894.46	474,659.79	0.00	474,659.79
Cawelo	8.447%	771,248.19	32,760.55	115,918.41	15,457.59	935,384.74	205,787.50	729,597.24
Glenn-Colusa	2.849%	260,126.21	23,174.67	86,307.16	12,260.29	381,868.33	381,868.33	0.00
James	0.798%	72,860.90	5,746.23	23,359.47	4,750.32	106,716.92	0.00	106,716.92
Lower Tule	1.005%	91,760.91	20,089.23	76,569.91	11,104.80	199,524.85	0.00	199,524.85
Princeton	1.334%	121,800.06	7,684.74	25,968.74	3,291.54	158,745.08	47,503.21	111,241.87
RD 108	1.368%	124,904.41	10,013.47	35,342.29	4,783.91	175,044.08	175,044.08	0.00
Santa Clara	4.853%	443,100.21	45,211.76	169,068.24	27,399.05	684,779.26	443,100.21	241,679.05
Sonoma	7.787%	710,987.29	71,470.54	275,734.34	45,531.07	1,103,723.24	196,000.00	907,723.24
Byron Bethany II	0.708%	64,643.51	5,278.35	20,240.47	3,381.27	93,543.60	93,543.60	0.00
West Stan	3.228%	294,730.57	31,345.36	119,698.69	22,058.20	467,832.82	150,789.15	317,043.67
Westlands	27.030%	2,467,957.68	202,357.42	796,569.54	178,047.22	3,644,931.86	1,390,020.55	2,254,911.31
Zone 7	0.000%	0.00	9,503.60	46,016.34	8,902.59	64,422.53	0.00	64,422.53
Total	100.000%	\$9,130,439.07	\$706,500.00	\$2,755,304.45	\$501,300.00	\$13,093,543.52	\$ 7,005,562.58	\$ 6,087,980.94

(a) Transferred as a Payment to power cost to help meet RPS

(b) GCID \$65,084.88 in approved projects remaining revenue transferred as a payment to power cost to help meet RPS

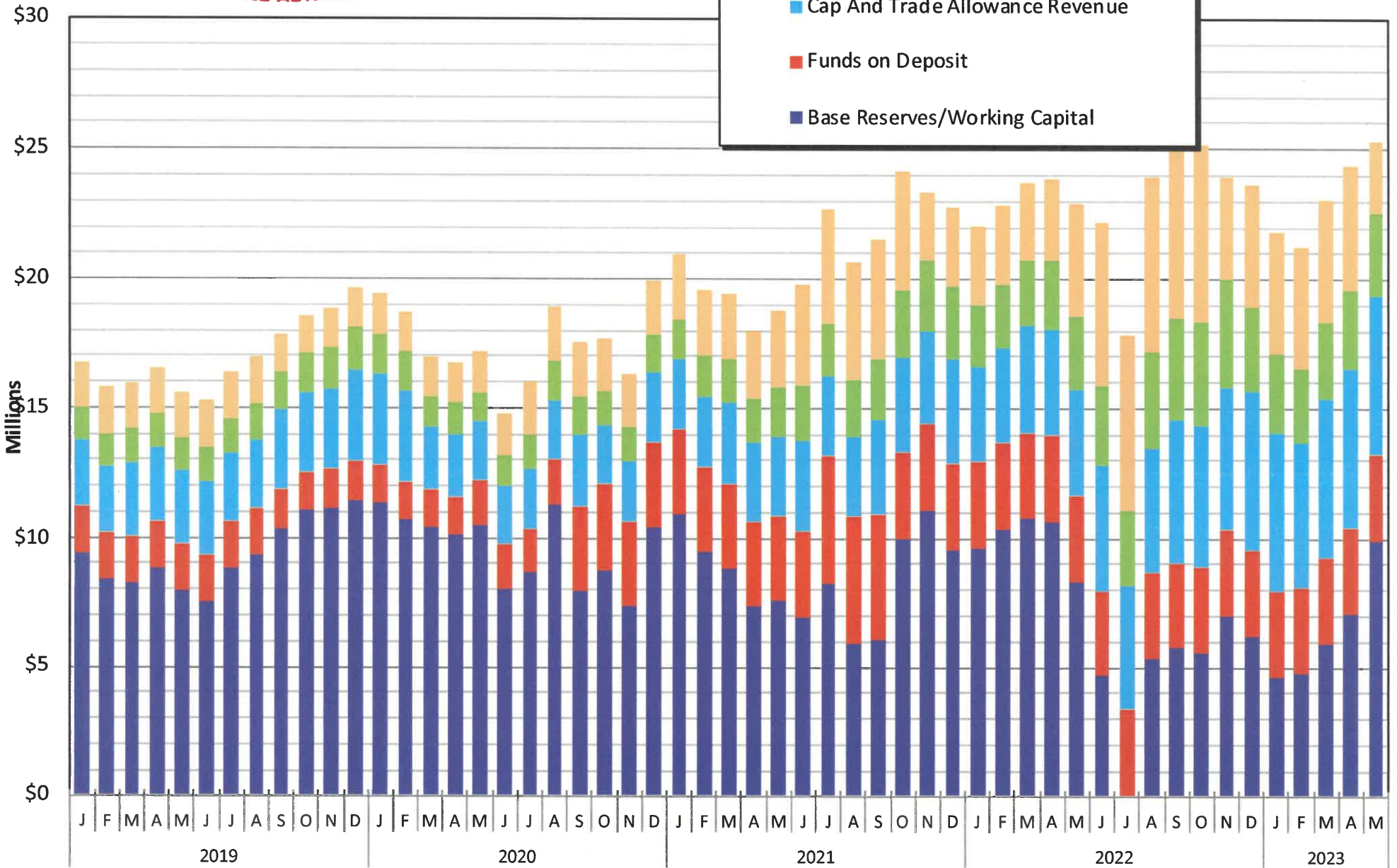
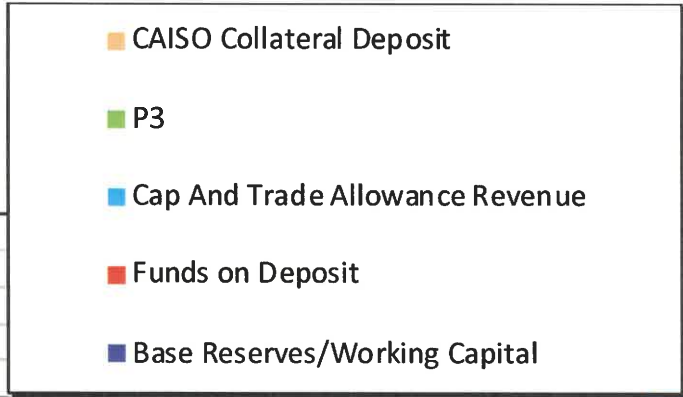
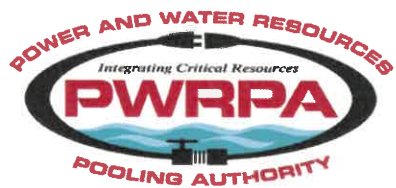
District	Exhibit B Allocation		
	2021	2022	2023
Arvin	29.4617%	30.1918%	28.0147%
Banta Carbona	4.7724%	4.8138%	4.7665%
Cawelo	4.6370%	4.2071%	3.0835%
Glenn-Colusa	3.2802%	3.1324%	2.4457%
James	0.8133%	0.8478%	0.9476%
Lower Tule	2.8435%	2.7790%	2.2152%
Princeton	1.0877%	0.9425%	0.6566%
RD 108	1.4173%	1.2827%	0.9543%
Santa Clara	6.3994%	6.1361%	5.4656%
Sonoma	10.1161%	10.0074%	9.0826%
Byron Bethany II	0.7471%	0.7346%	0.6745%
West Stan	4.4367%	4.3443%	4.4002%
Westlands	28.6422%	28.9104%	35.5171%
Zone 7	1.3452%	1.6701%	1.7759%
Total	100.0000%	100.0000%	100.0000%

Sale of Freely Allocated Allowances

Year	March	June	September	December	Total
2012				\$ 216,935.00	\$ 216,935.00
2013	136,200.00			370,080.76	506,280.76
2014		379,500.00	184,000.00	192,511.00	756,011.00
2015	195,360.00	196,640.00	200,320.00	212,934.71	805,254.71
2016	212,158.18	89,530.09	249,317.05	296,303.48	847,308.80
2017	115,168.59	371,399.40	265,500.00	260,748.84	1,012,816.83
2018	262,980.00	263,700.00	258,408.50	264,250.60	1,049,339.10
2019	283,140.00		446,160.00	461,227.00	1,190,527.00
2020	321,660.00		500,400.00	415,783.87	1,237,843.87
2021	445,000.00	480,622.00	582,500.00	706,500.00	2,214,622.00
2022	583,000.00	827,304.45	675,000.00	670,000.00	2,755,304.45
2023	501,300.00				501,300.00
				Total	\$13,093,543.52

Resolution 13-04-05	\$9,130,439.07
Resolution 21-11-14	3,963,104.45
	<u>\$13,093,543.52</u>

SUMMARY TREASURER REPORT

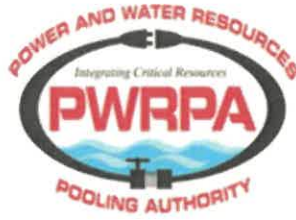


POWER & WATER RESOURCES POOLING AUTHORITY

WIRE TRANSFERS

May 1 - 31, 2023

Transaction Number	Beneficiary Name	Credit Amount	Value Date
177172	CAISO Market Clearing	\$71,980.35	5/2/2023
177173	Pacific Gas and Electric	\$1,805.51	5/2/2023
177174	ACES Power Marketing	\$25,000.00	5/2/2023
177333	Cameron-Daniel, P.C.	\$39,851.50	5/3/2023
177764	LAIF	\$2,000,000.00	5/5/2023
177949	CAISO Market Clearing	\$22,702.99	5/8/2023
178846	WAPA O M	\$670,273.00	5/15/2023
178847	Pacific Gas and Electric	\$74,391.11	5/15/2023
178848	Western Area Power Administration	\$55,598.34	5/15/2023
178849	CAISO Market Clearing	\$97,832.96	5/15/2023
178850	Garlock Energy, LLC	\$3,531.74	5/15/2023
179715	CAISO Market Clearing	\$703,763.96	5/22/2023
179716	Slate 1 (Canadian Solar)	\$21,516.16	5/22/2023
179723	LAIF	\$3,000,000.00	5/22/2023
180221	Whitney Point Solar LLC	\$168,327.31	5/25/2023
180222	LAIF	\$1,000,000.00	5/25/2023
180381	Western Area Power Administration	\$966,151.95	5/26/2023
180382	Trimark Associates, Inc.	\$49,556.49	5/26/2023
180383	Astoria 2 Operating	\$187,031.65	5/26/2023
180393	APX Inc.	\$5,971.98	5/26/2023
180394	Slate 1 (Canadian Solar)	\$98,600.53	5/26/2023
180395	Slate 1 (Canadian Solar)	\$158,786.48	5/26/2023
Total		9,422,674.01	



POWER AND WATER RESOURCES POOLING AUTHORITY

DISBURSEMENT LIST

June 2023

Check #	Vendor-name	Payment-description	Check-amount
3364	Advanced Data Storage	Document Storage - June 2023	\$ 44.50
3365	Arvin-Edison Water Storage District	Treasurer's Duties	6,942.71
3366	Barbich Hooper King	Audit Services	12,700.00
3367	Braun Blaising & Wynne, P.C.	Legal Services - May 2023	525.45
3368	Michael McCarty Law Office PLLC	Consultant	5,310.00
3369	Robertson Bryan Inc.	Consultant	82,823.39
3370	Reclamation District 108	Approved P-3 Project	5,750.63
		Sub-Total	<u>\$ 114,096.68</u>
Wire Transfers:			
Wire	Cameron-Daniel, P.C.	General Manager/General Council	\$ 38,395.95
Wire	Holland & Knight	FERC Wholesale Distribution Filing Legal Fees	5,774.68
		Total	<u><u>\$ 158,267.31</u></u>

Power & Water Resources Pooling Authority

3. Operations Report - July 2023 update.

Power and Water Resources Pooling Authority
July 2023 Update
Operations Manager Report

Possible Action

n/a

Operations Staff Overview

1. July planned activity
 - a) Slate: data comms with MCG, invoice resolution, deemed energy protocol
 - b) 2022 Reconciliation
 - c) LTRID Hydro implementation
 - d) DSGS participation?
2. June recap
 - a) Slate coord: data flows, deemed energy discussions, PV/BESS internal cost allocation.
 - b) Various coordination w/ Solar developers on Districts request
 - c) CEC CP3 RPS report, 2022 annual
 - d) LTRID hydro interconnection coord.

Operations Report:

1. Pre-Reconciliation
 - a) Actual data for January – partial June, June - December estimates.
 - b) BR estimates as of June 1 WAPA forecast makes the rate \$32/MWH (down from \$54 in the Dry budget). BR energy reduced in the June forecast.
 - c) May and June power prices dropped dramatically (\$17-25 average). We still have conservatively high prices for July – September in the estimates.
 - d) June 1 changes in invoicing rates are included.

Table 1: 2023 Pre-Reconciliation

Table 1: Revenue and Expense: January - December 2023								
Participant	Revenue		Expenses			Balance	Summary	
	Power Invoice	Power & Ops Costs	P3	Direct Consulting	Prior Period	Over/(Under) Funded	Total Costs	Composite Rate (¢/ kWh)
Arvin-Edison	\$ 18,292,588	\$ 16,020,486	\$ 456,584	\$ 122	\$ 34,615	\$ 1,780,781	\$ 16,511,807	\$ 13.40
Banta-Carbona	\$ 2,192,856	\$ 2,067,671	\$ 58,929	\$ -	\$ 7,692	\$ 58,564	\$ 2,134,292	\$ 13.99
Cawelo	\$ 2,311,181	\$ 2,054,291	\$ 58,547	\$ -	\$ 15,962	\$ 182,381	\$ 2,128,800	\$ 13.90
Glenn-Colusa	\$ 1,636,064	\$ 1,416,631	\$ 40,374	\$ -	\$ 2,885	\$ 176,175	\$ 1,459,889	\$ 13.16
James	\$ 528,613	\$ 458,345	\$ 13,063	\$ -	\$ 962	\$ 56,243	\$ 472,370	\$ 21.83
Lower Tule	\$ 1,696,954	\$ 1,421,069	\$ 40,500	\$ -	\$ -	\$ 235,385	\$ 1,461,569	\$ 15.80
Princeton	\$ 566,506	\$ 531,323	\$ 15,143	\$ -	\$ 962	\$ 19,079	\$ 547,427	\$ 13.15
RD108	\$ 522,428	\$ 420,376	\$ 11,981	\$ 1,847	\$ 1,154	\$ 87,070	\$ 435,358	\$ 22.45
Santa Clara	\$ 3,675,754	\$ 3,738,058	\$ 106,535	\$ 1,082	\$ 5,769	\$ (175,690)	\$ 3,851,444	\$ 18.50
Sonoma	\$ 4,968,849	\$ 4,947,554	\$ 141,005	\$ 54	\$ 3,846	\$ (123,610)	\$ 5,092,459	\$ 15.32
West Stan	\$ 1,806,632	\$ 1,448,827	\$ 41,292	\$ -	\$ 7,692	\$ 308,822	\$ 1,497,811	\$ 12.62
Westlands	\$ 12,097,262	\$ 11,208,876	\$ 319,453	\$ -	\$ 15,385	\$ 553,549	\$ 11,543,713	\$ 31.06
Westside	\$ 416,818	\$ 367,225	\$ 10,466	\$ -	\$ 1,154	\$ 37,973	\$ 378,845	\$ 15.33
Zone 7	\$ 1,490,309	\$ 1,444,921	\$ 41,180	\$ -	\$ 1,923	\$ 2,285	\$ 1,488,024	\$ 21.20
PWRPA	\$ 52,202,815	\$ 47,545,652	\$ 1,355,051	\$ 3,105	\$ 100,000	\$ 3,199,007	\$ 49,003,808	\$ 16.61

Power and Water Resources Pooling Authority

July 2023 Update

Operations Manager Report

2. May operations
 - a) Energy is 51% under budget for the month, 37% for the year
 - b) Load averaged 44 MW (14 MW higher than last month)
 - c) Average schedule deviation of 5.5 MW for an estimated benefit of 22,500.
3. Pricing
 - a) Average monthly prices. May saw a large amount of low and negative pricing. The very low Revenue rate for the solar resources show that. Slate is higher and shows the value of the battery being able to charge during negative pricing.

Table 2: Average monthly cost and ISO revenue rates

	Cost	Revenue
BR	\$ 32.71	\$ (18.89)
Displacement	\$ 32.71	\$ (12.64)
WWD BOR	\$ -	\$ (18.41)
Whitney Point	\$ 58.75	\$ (26.03)
Astoria	\$ 63.00	\$ (1.83)
Slate	\$ 26.81	\$ (7.60)
*Lodi	\$ 993.68	\$ (131.76)
Market		

Generator Reports

1. Astoria Solar
 - a) Generation
 - o 3,120 MWh, 42% capacity
 - o Net cost \$61,000 or \$20 /MWh
 - b) Negative Pricing review (wet year)

Astoria	Month	Total MWh	Total MWh @ <-\$25 RT LMP	Total MWh @ <-\$15 RT LMP	Total MWh @ <-\$0 RT LMP	Neg %
	1	1,262	-	-	38	3%
2	1,651	-	-	335	20%	
3	2,021	121	283	808	40%	
4	2,969	184	486	1,465	49%	
5	3,120	107	352	1,392	45%	
6	3,140	289	670	1,150	37%	

2. Whitney Point Solar
 - a) Generation
 - o 3,160 MWh, 39% capacity factor
 - o Net credit \$9,700, or \$3 /MWh (due to \$40 REC market)
 - b) Negative Pricing review (wet year)

Power and Water Resources Pooling Authority

July 2023 Update

Operations Manager Report

	Month	Total MWh	Total MWh @ < -\$25 RT LMP	Total MWh @ < -\$15 RT LMP	Total MWh @ < -\$0 RT LMP	Neg %
	Whitney	1	1,047	5	10	72
2		1,518	21	64	352	23%
3		1,639	28	76	433	26%
4		2,511	254	950	1,771	71%
5		3,160	69	593	1,281	41%
6		3,193	74	647	1,310	41%

3. Slate Solar + Battery

a) Generation

- 6,704 MWh, 35% capacity factor
- Net value \$440,600, or \$65 /MWh

b) Staff work

- ACES & MCG to setup data flows: working through data translations.
- Deemed Energy issues still outstanding
- Storage Loss Factor, Lost RECs resolved
- Negative Pricing review (wet year)

	Month	Total MWh	Total MWh @ < -\$25 RT LMP	Total MWh @ < -\$15 RT LMP	Total MWh @ < -\$0 RT LMP	Neg %
	Slate	1	1,976	54	82	189
2		3,225	2	10	419	13%
3		3,570	34	263	1,111	31%
4		5,818	63	906	3,201	55%
5		6,704	25	721	2,640	39%
6		7,110	12	746	2,230	31%

4. Lodi Energy Center

○ May Operations:

- Minimal run time; 60 MWh, or 1% capacity factor due to economics
- 35 days uneconomic, 2 days forced outage
- 7 starts in the month.
- FX Hardware – Advanced Efficiencies Package - \$300,000 to study
 - Increase output by 15MW, improve heatrate by 350 btu
 - Not approved, more info next meeting
- Q4-2023 CPUC decision expected on Gas rate case w/ PGE.
- Special meeting to authorize unit to run abnormally to make 100 hours run time to test gear box before Summer season.

Power Planning & Regulatory

1. Power Net Short

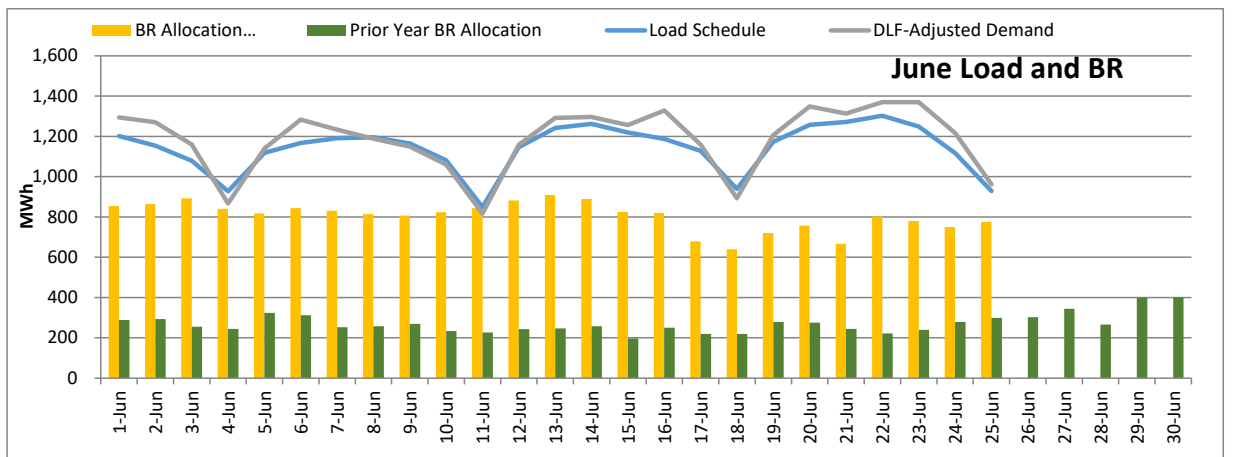
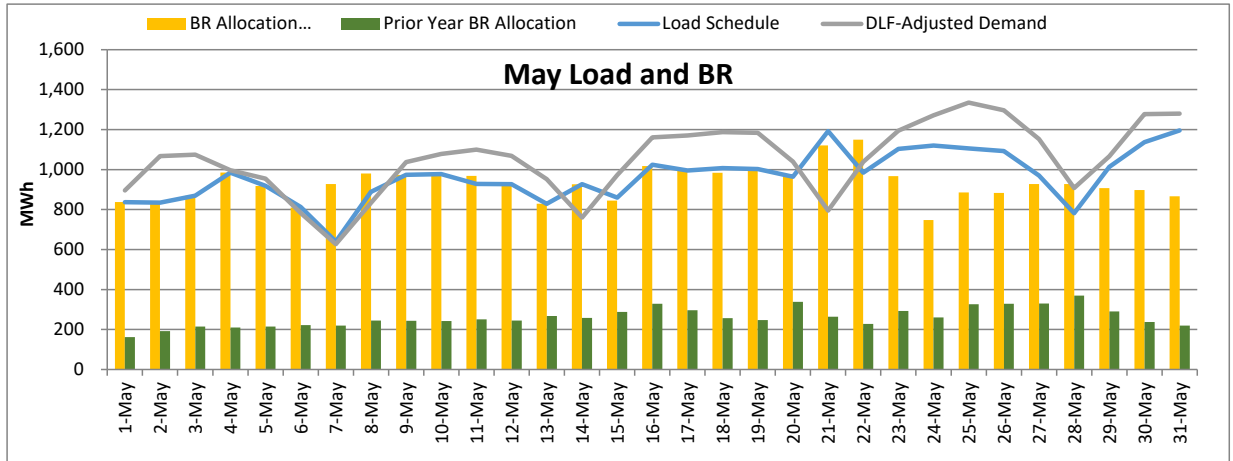
- a) 2023 – Tracking a wet year, WAPA’s current forecast is June 1, 2023.
 - a. No shortage for wet year, forecast came down from the May forecast.
 1. Central Sierra: 336%
 2. Southern Sierra 402%

Power and Water Resources Pooling Authority

July 2023 Update

Operations Manager Report

2. BR output:
 - a. Covers 70% of load for April and 96% of May so far.



3. Regulatory
 - a) Resource Adequacy:
 - o No shortfall capacity calls from the CAISO so far in 2023
 - b) RPS: Compliance snapshot:
 - o PWRPA staff working with solar developers on various District project solicitations
 - o 2023 REC purchase is included in the budget, however, we'll reevaluate the volumes late Summer when we have a better feel for the loads/hydro year estimates as well as new project start dates.

Power and Water Resources Pooling Authority
July 2023 Update
Operations Manager Report

Table 3: Current Renewable Compliance Period Exposure Summary

Allocation of Portfolio	Net Short		Procurement		
	PCC1	PCC3	\$ 30	\$ 6	\$ 4
Compliance Period 4			PCC1	PCC3	PCC3 Sale
AEWSD	-	8,229	\$ -	\$ 49,372	\$ -
BCID	8,462	2,787	\$ 253,872	\$ 16,724	\$ -
CWD	-	-	\$ -	\$ -	\$ (30,605)
GCID	857	1,618	\$ 25,705	\$ 9,705	\$ -
JID	856	568	\$ 25,679	\$ 3,410	\$ -
LTRID		1,390	\$ -	\$ 8,341	\$ -
PPCGID	-	498	\$ -	\$ 2,988	\$ -
RD 108	-	-	\$ -	\$ -	\$ (8,110)
SCVWD	3,717	3,472	\$ 111,505	\$ 20,833	\$ -
SCWA	-	4,070	\$ -	\$ 24,422	\$ -
TWID	609	387	\$ 18,271	\$ 2,320	\$ -
WSID	2,993	2,445	\$ 89,786	\$ 14,671	\$ -
WWD	32,086	17,530	\$ 962,582	\$ 105,178	\$ -
Z7	1,102	-	\$ 33,063	\$ -	\$ (10,080)
PWRPA	50,682	42,994	\$ 1,520,462	\$ 257,967	\$ (48,795)

- CEC is near completion of the CP3 validation. Staff working on final validation and acceptance.
- PWRPA staff working to add LTRID Hydro into PWRPA’s portfolio, those REC estimates are not include in the data yet.
- PWRPA forward look:

Table 4: RPS requirements summarized by Compliance Period

		MWh/RECs			
Compliance Period		Retail Sales	RPS Req	RPS%	LT Req
2021-2024	CP4	1,485,909	591,161	40%	65%
2025-2027	CP5	1,252,529	618,200	49%	65%
2028-2030	CP6	1,222,602	705,420	58%	65%

Table 5: PCC1/PCC2 REC Summary

	PCC1/2 Req	In Portfolio	Coverage	LT RECs	LT%
CP4	518,442	554,423	107%	479,537	81%
CP5	548,280	461,545	84%	461,545	75%
CP6	626,778	462,958	74%	471,958	67%

Table 6: PCC3 REC Summary

	PCC3	In Portfolio	Coverage	LT RECs	LT%
CP4	57,605	32,830	57%	32,830	6%
CP5	60,920	39,510	65%	39,510	6%
CP6	69,642	39,483	57%	39,483	6%

Power & Water Resources Pooling Authority

4. GM Comments.

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WDT3 Draft Annual Update for Rate Year 2024

On July 1, PG&E posted for informational purposes, its Draft Annual Update to the Formula Rate Model of PG&E’s Wholesale Distribution Tariff. The Formula Rate Model contains the proposed update of the Wholesale Distribution Revenue Requirement (DRR), Distribution Rates, Cost of Ownership rates, and Customer Service Charges for the 2024 Rate Year. The 2024 Annual Update represents significant decreases from 2022 due to the Annual True-up Adjustment (“ATA”) calculation in which both WAPA and PWRPA had lower load ratio shares. The table below summarizes the differences between the current rates and the projected 2024 rates.

	Actual RY 2023	Draft RY 2024
WAPA Primary Rate	\$16.051	\$11.478
WAPA Secondary Rate	\$30.003	\$15.055
PRWPA SA 56 Rate (Prim.)	\$25.505	\$13.265
WAPA Primary LRS	.006947	.006119
WAPA Secondary LRS	.001631	.001443
PWRPA SA 56 LRS (Prim.)	.000191	.000139

Shown below is an extract from PG&E’s Summary.

PG&E’s Model provides a Distribution Revenue Requirement (DRR) for RY2024 which is allocated to each affected WDT Customer based on each Customer’s Load Ratio Share. A Customer-specific Annual True-up Adjustment (ATA) is added to each Customer’s allocated DRR. The Prior Year DRR represents the distribution costs that PG&E incurred in the previous calendar year, in this instance calendar year 2022 (PY2022). The ATA compares PG&E’s costs in the Prior Year that were allocated to each WDT customer with wholesale distribution revenues collected from each WDT customer in the Prior Year.

PG&E’s draft proposed total DRR used to calculate Distribution Service Rates for RY2024 is \$6,938 million, an increase of \$99.9 million or 1.46% over the RY2023 DRR of \$6,838 million. This draft proposed total DRR is the sum of the primary DRR, \$4,194 million, and secondary DRR, \$2,743 million. For RY2024, the proposed allocated DRR for primary service to be recovered from wholesale customers through Distribution Rates is \$43.3 million and the proposed allocated DRR for secondary service to be recovered from wholesale customers through Distribution Rates is \$30.9 million for a total allocation of \$74.2 million.

As reflected in the draft Model, some of the largest increases in the Prior Year DRR for RY2024 in comparison to the RY2023 DRR (based on a Prior Year of 2021) are: (1) \$186 million increase to return on capital; (2) \$82 million increase to depreciation expense; and (3) \$37 million increase to A&G expense. As reflected in the draft Model, the largest decrease in the Prior Year DRR is a \$318 million decrease to O&M expense. The details of the calculations of all components of the DRR are included in the draft Model and supporting Workpapers.

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LTRID hydro Bucket 1 RECs only

Lower Tule River Irrigation District (LTRID) owns and operates the Success Power Plant, a 1.4 MW hydroelectric generator located in Tulare County, California. PWRPA is working with LTRID to finalize an interconnection agreement with Southern California Edison. PWRPA and LTRID have negotiated a Bucket 1 purchase agreement that will become effective once the hydro facility is connected to the grid.

The 2019 P3 funds tranche deadline is August 4, 2023

All customers should check the P3 page of this month's Treasurer's Report to determine whether you have P3 funds on deposit that must be used prior to August 4, 2023. The Report is dated as of May 31 and may not reflect P3 requests that were sent to PWRPA in June, so please contact me if you have questions.

The PWRPA collaboration with the Pacific Northwest National Lab (PNNL) received grant funding through the DOE HydroWIREs (Water Innovation for a Resilient Electricity System) Initiative.

This Initiative was established to understand, enable, and improve hydropower's contributions to reliability, resilience, and integration in the rapidly evolving U.S. electricity system.

- PWRPA has no cost-share requirements. The PNNL proposal that was approved for the grant is described here: San Luis Reservoir is an off-stream storage reservoir in California. The San Luis Pump-Generating Plant is owned by the U.S. Bureau of Reclamation and operated by the California Department of Water Resources. Water is stored off stream for delivery down the California Aqueduct and Delta-Mendota Canal. San Luis Reservoir has a lower forebay making in it an ideal location for pump storage hydropower. The generation from the San Luis Joint-Use Facilities is split between the State (about 52 percent) and Federal (about 48 percent). The State only generates 1/3 of the power they consume within their system. On the other hand, WAPA, who markets the Federal share, sells 2/3 of their generation while consuming 1/3 of its generation. Although the reservoir is currently operated to the extent possible as pumped storage hydropower, there are significant infrastructure limitations. The limitations include no throttling capability with fixed amperage and 63 percent round-trip efficiency. Throttling currently causes stress to the pumps with overheating increasing the need for early repair. Retrofitting of the existing infrastructure, a 424 MW (total installed capacity) facility with 290 feet of gross head, will reduce the limitations of the pumped storage hydropower by allowing throttling and improved round-trip efficiency. The facility currently sells its energy to the California Independent System Operator (CAISO) and is accounted separate from WAPA's power customers. With the retrofit, the facility will be able to potentially provide other services to the CAISO including energy arbitrage, ramping capacity, regulation up and down, and stability services. Although the monetary benefits may not go directly to WAPA customers, the benefits may include indirect benefits to their power customers. The value of the additional pumped storage hydropower is of particular interest as it informs the feasibility of any potential retrofitting. The potential added values need to be evaluated with regards to the requirements to meet water supply requirements. WAPA would like to form an interdisciplinary team including DOE's National Labs to evaluate the current limitations on pump storage hydropower at San Luis Reservoir and explore the value of expanding some of those limitations. This study would have the potential to inform future cost benefit analysis of available retrofit options.