Power & Water Resources Pooling Authority

Regular Meeting of the Board of Directors

9:00 A.M. Wednesday, April 3, 2024

Power and Water Resources Pooling Authority

NOTICE OF REGULAR MEETING AND AGENDA

Notice is hereby given that a Regular Meeting of the Board of Directors of the Power and Water Resources Pooling Authority (PWRPA) will be held on **April 3, 2024**, at **9:00 a.m.**, at the **Banta Carbona Irrigation District**, **3514 W. Lehman Road**, **Tracy**, **CA 95304**, and by simultaneous teleconference at the following locations:

Byron Bethany Irrigation District 7995 Bruns Rd, Byron, CA 94514

Glenn Colusa Irrigation District 344 E. Laurel St., Willows, CA 95988

James Irrigation District

8749 Ninth Street, San Joaquin, CA 93660

Lower Tule River Irrigation District

357 E. Olive Ave./Ave. 152, Tipton, CA 93272

Princeton-Cordora-Glenn ID/ Provident ID 252 Commercial Street, Princeton, CA 95970

Reclamation District 108

975 Wilson Bend Road, Grimes, CA 95950

Santa Clara Valley Water District

5750 Almaden Expressway, San Jose, CA 95118

Sonoma County Water Agency

404 Aviation Blvd., Santa Rosa, CA 95403

Westlands Water District

286 W. Cromwell Ave., Fresno, CA 93711

Zone 7 Water Agency

100 N. Canyons Pkwy, Livermore, CA 94551

Accessible Public Meetings - PWRPA shall resolve requests for reasonable modification or accommodation from individuals with disabilities, consistent with the Americans with Disabilities Act. Requests should be sent as soon as practicable via email to the attention of: ADA Request nw@cameron-daniel.com

Regular Agenda (all items below may include possible action, times are approximations)

1	Chair	Roll Call of all Directors participating							
2	Chair	latters Subsequent to Posting the Agenda							
3	Chair	Public Comment – During Agenda Item 3, any member of the public may address the Board concerning any matter on the agenda.							
4	Chair 2 Min	Consent Agenda A. Minutes of the Regular Board Meeting held on February 7, 2024. B. Add 1 Point of Delivery – AEWSD.							
5	Chair 15 Min	Buena Vista Water Storage District request for electric service Presentation by BVWSD representatives.							
6	TR 10 Min	A. Treasurer's Report - Approval of Ordering Payments of Accounts and Claims; acceptance of the Treasurer's Report and other items related to Treasurer's duties.							
7	GM OM 45 Min	 A. GM Report – Strategy Team updates; OTC and customer meetings; DOE Lab research updates; website resources. B. OM Report – Ops highlights; power & RA forecast. C. RPS compliance review and power project status through 2030. D. Consider and possibly approve Resolution 24-04-03 Annual Update of Exhibits B & C to the Joint Powers Agreement and Cap & Trade Allocations. 							

8	GM OM 10 Min	Special Projects A. Lower Tule River Success Hydro PCC 1 agreement.
9	Chair	Board Matters – Other announcements.
	Chair	Adjournment - Next Regular Meeting will be held at Cawelo Water District on Wednesday, June 5, 2024, at 9:00 A.M.

Power & Water Resources Pooling Authority

Consent Agenda • Item 4

- 1. Minutes of the February 7, 2024, Regular Board Meeting.
- 2. Add Point of Delivery AEWSD

Power and Water Resources Pooling Authority

REGULAR MEETING MINUTES FEBRUARY 7, 2024

	Directors and Alternates Present: Dave Nixon (AEWSD), David Weisenberger (BCID), Ed Pattison (BBID), Dave Ansolabehere (CWD), Louis Jarvis (GCID), Manny Amorelli (JID), Jared Shipley & Gary Enos (PPID), Jordan Navarott (RD 108), John Brosnan (SCVWD), Dale Roberts (SCWA), Bobby Pierce (WSID), Russ Freeman & Kiti Campbell (WWD), Sal Segura (Z7). Also participating: Bruce McLaughlin (GM), Cori Bradley (OM), Jennifer Montoya (WWD).						
	David Weisenberger, serving in his capacity as Chairman, opened the meeting at 9:06 A.M.						
Chair	Matters Subsequent to Posting the Agenda - None						
Chair	Public Comment – None.						
Chair	Consent Agenda						
	A. Minutes of the Regular Board Meeting held on December 7, 2023.						
	David Ansolabehere moved, Bobby Pierce seconded, and participating Directors unanimously approved the Consent Agenda.						
	Voting Shares: 92.0% Yes / 0% No / 8.0% Absent (BBID, JID)						
TR	A. Treasurer's Report - Approval of Ordering Payments of Accounts and Claims; acceptance of the Treasurer's Report and other items related to Treasurer's duties. David Ansolabehere moved, Sal Segura seconded, and participating Directors unanimously approved the Treasurer's Report including the Ordering of Accounts and Claims.						
	Voting Shares: 92.0% Yes / 0% No / 8.0% Absent (BBID, JID)						
GM OM	A. Mr. McLaughlin presented the Amended CVP Corp Membership Agreement for consideration and approval. The amended agreement primarily involved extending the terms of the existing agreement for the Displacement Program participation. Bobby Pierce moved, Kiti Campbell seconded, and participating Directors unanimously approved Resolution 24-02-01 Amended CVP Corp Membership Agreement.						
	Voting Shares: 96.0% Yes / 0% No / 4.0% Absent (JID)						
	Mr. McLaughlin described the content and purpose for amendments to the existing Load Metering Policy. This discussion involved certain matters that were discussed and formulated during closed session.						
	David Nixon moved, Sal Segura seconded, and participating Directors unanimously approved Resolution 24-02-02 Load Metering Policy Ver 3.						
	Voting Shares: 100.0% Yes / 0% No / 0% Absent						
	Chair Chair						

		 C. GM Report – Mr. McLaughlin described the purpose and procedures for the upcoming Strategy Team activities regarding financial matters and business continuity. Presuming that participation will over the prior month involving a public agency that is evaluating the benefits of becoming a PWRPA customer. Mr. McLaughlin provided an update on the Optional Training Classes that began in January 2024. D. OM Report – Ms. Bradley presented the Ops highlights for January and discussed projections for RPS compliance and REC needs by district. Emphasis was placed on net shorts in Compliance Period 5 and 6 up through 2030. Methods for allocating RECs within PWRPA were described. This discussion dovetailed with the project opportunities presented in Item 7 Special Projects.
7	GM OM	Special Projects
		Ms. Bradley and Mr. McLaughlin described current opportunities for short and long-term participation in a large utility scale project located in Nevada. The project has its first point of interconnection in the CAISO. They also described an opportunity for short-term participation in the two solar projects that will be constructed at Banta Carbona ID and West Stanislaus ID. These two short-term deals would involve PCC 1 transfers.
8	SC GC	Closed Session
		A. Conference with legal counsel – Existing litigation: PG&E WDT3 Rate Case, FERC ER22-619, ER20-2878 consolidated. Pursuant to Gov't Code section 54956.9(d)(1).
		B. Conference with legal counsel – Pending litigation: Pursuant to Gov't Code section 54956.9(d)(4).
		After returning to open session, Mr. McLaughlin reported that during closed session, the Board determined to act on certain load metering matters through an open session vote on Resolution 24-02-02. Also, during closed session, Bobby Pierce moved, David Ansolabehere seconded, and participating Directors unanimously approved settlement guidance to Special Counsel in FERC ER22-619.
		Voting Shares: 100.0% Yes / 0% No / 0% Absent
9	Chair	Board Matters – There were no other announcements.
	Chair	Adjournment – The meeting was adjourned at 11:24 A.M. The next Regular Meeting is Wednesday, April 3, 2024, at 9:00 A.M.



ARVIN-EDISON WATER STORAGE DISTRICT

March 4, 2024

Via Electronic Mail: bcm@cameron-daniel.com

DIRECTORS
Edwin A. Camp
President
Jeffrey G. Giumarra
Vice President
Dennis B. Johnston
Secretary/Treasurer
Brian S. Kirschenmann
Derek J. Yurosek
Catherine A. Fanucchi
Catalino M. Martinez
Matthew D. Vickery
Scott M. Spitzer

Bruce McLaughlin, GM
Power & Water Resources Pooling Authority
c/o Banta Carbona Irrigation District
P.O. Box 299
Tracy, CA 95304

Re: Arvin-Edison Water Storage District Request for Service to Newly Constructed Point of Delivery

STAFF

Jeevan S. Muhar
Engineer-Manager
David A. Nixon
Deputy General Manager
David A. Zaragoza
General Superintendent
Samuel C. Blue
Resource Manager
David R. Grant
Controller

Dear Bruce:

Arvin-Edison Water Storage District (AEWSD) hererby requests the Power and Water Resources Pooling Authority (PWRPA) provide service to a new groundwater well construction in AEWSD as described in the attachments.

The service to this load would be provided under the terms of the Western Area Power Administration's Wholesale Distribution Service

Agreement No. 17 (04-SNR-00789) with Pacific Gas and Electric Company. The load to be served complies with the conditions set forth in Section 10.4 and Appendix C of the aforementioned agreement.

If you have any questions, please contact me.

Thank you,

Jeevan S. Muhar P.E. Engineer-Manager

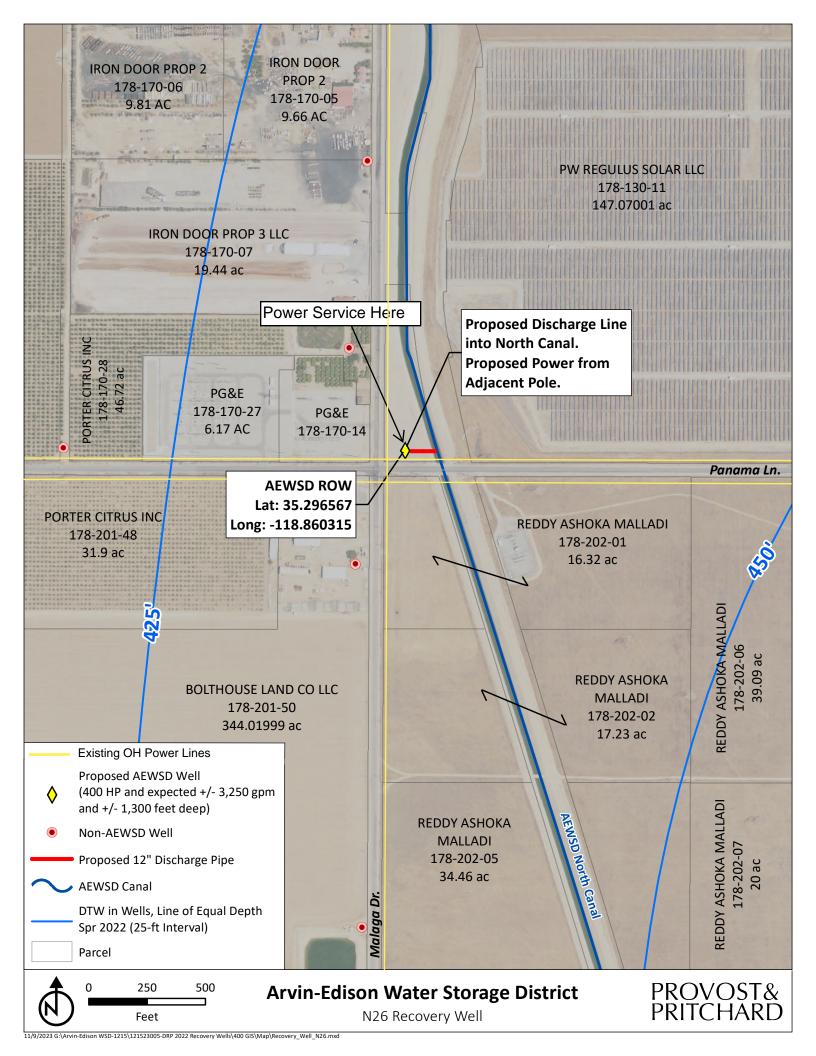
Enclosures

cc:

David Nixon, Deputy GM Mark Dawson, Engineer Cori Bradley, RBI

Richard, RBI

JSM:MD:sj\AEWSD\PWRPA\Corresp\2024\ McLaughlin.Bruce.request.new.point.of.delivery.03.24.dotx



Loads Subject to Service Request										
Feb-24										
Load Designation / Location	Assessor Parcel	Maximum Motor Input (kW)	Nominal Delivery Voltage (v)	PG&E Meter Number	PG&E Account Number	Horsepower	Facility Type	Form Type	Latitude	Longitude
N26 Well	178-130-11-00-6	310	12kV	N/A	N/A	400	GW		35.296567	-118.860315

Power & Water Resources Pooling Authority

Regular Agenda • Item 5.A

1. Buena Vista Water Storage District – Letter of Interest.



Buena Vista Water Storage District

P.O. Box 756 • 525 N. Main Street Buttonwillow, California 93206 Phone: (661) 324-1101 • (661) 764-5510 Fax: (661) 764-5053

DIRECTORS:

Terry Chicca - President John Vidovich - Vice President Julien Parsons - Secretary Craig Andrew Jeof Wyrick

STAFF:

Tim Ashlock – Engineer-Manager Marybeth Brooks - Controller Amrit Mangat – Assistant Engineer - Manager Adam Sevier – Superintendent Angela Thompson – Executive Assistant

March 25, 2024

Via Electronic Mail

Dave Weisenberger, Chair
Dave Ansolabehere, Vice-Chair
Dave Nixon, Treasurer
Bruce McLaughlin, General Manager
Power and Water Resources Pooling Authority

Subject:

Expression of Interest by the Buena Vista Water Storage District

And Request for Electric Service

Dear Messrs. Weisenberger, Ansolabehere, Nixon and McLaughlin:

I have been authorized by the Buena Vista Water Storage District's ("<u>District</u>") board of directors to request that the Power and Water Resources Pooling Authority ("<u>PWPRA</u>") consider providing electric service to designated District facilities. The District is impressed with PWRPA's operations and its construct as a publicly owned electric utility that operates under a pooling and shared-services model for the public benefit of its participating agencies. As a water agency that values cooperative efforts, the District hereby expresses its interest in exploring mutually beneficial terms by which PWRPA may provide electric service to the District. As briefly described below, the District believes that its participation with PWRPA could yield mutual benefits, including the potential to also derive benefits from the pooling of water resources.

The District diverts, stores and uses water principally for irrigation and replenishment of groundwater supplies. The District's boundaries span approximately 50,000 acres west of Bakersfield, in and around the Buttonwillow area. Supply for the District's water deliveries comes from the Kern River and the District's State Water Project allocation. The District's electric load primarily consists of pumps and related facilities necessary to pump and convey water throughout the District's boundaries.

Based on preliminary analysis, the District believes that each of its three existing and one future pumping stations could be cost-effectively served by PWRPA. The electric load associated with each of these pumping stations is in the 400-to-500-kilowatt ("kW") range. Additionally, the District would also like to receive electric service to three groundwater well meters, each with a maximum demand of approximately 125 kW. Subject to further analysis and additional discussion with PWRPA, the District may subsequently request that PWRPA consider providing electric service to additional groundwater wells – both those owned by the District and potentially also grower wells operated by and in conjunction with a District-sponsored groundwater program. However, for this initial request, the

District is limiting the scope of electric service to the four pumping stations and three groundwater well meters, totaling approximately 2,000 kWs in electric load.

I understand that PWRPA has previously considered requests for electric service by executing a letter agreement under which PWRPA has conducted analyses paid for by the requesting water agency. The District is prepared to follow a similar process. Moreover, based on its review of PWRPA's agreements with other requesting agencies, the District is generally aware of the expectations placed upon the requesting water agency to reimburse costs and provide benefit to PWRPA's existing participants.

The District is willing to contribute to PWRPA's costs and the reimbursement of past investments, and to explore additional ways by which the District may provide benefit to PWRPA's existing participants. Along these lines, in the context of the District's request for electric service from PWRPA, the District is willing to discuss ways by which PWRPA's existing participants may benefit from the pooling and cooperative use of the District's water resources. The District has the unique ability to receive Federal, State, and Kern River water through existing facilities. In addition, the District has existing groundwater banking facilities which make it a prime partner for the pooling of water resources. While I understand that PWRPA was created, in part, to explore ways to cooperatively pool water resources, arrangements to facilitate the pooling of water resources have not materialized yet.

Without limiting discussion to the following points, the District believes that the following benefits would flow to PWRPA and its participants from the provision of electric service to the District:

- Contribution to Past Costs: The District has reviewed other agreements with requesting water agencies and understands that a so-called "buy-in" cost has been included in these agreements. The District understands that this cost is intended to reflect a requesting agency's relative contribution to the cost of forming PWRPA.
- **Financial Reserves**: The District has likewise observed that other agreements have included a requirement that the requesting water agency contribute to PWRPA's financial reserves.
- Ongoing Contribution Charge: Other agreements with requesting water agencies have included a provision by which the requesting water agency pays an ongoing contribution charge calculated in relation to savings (as compared to the otherwise applicable rate from Pacific Gas and Electric Company).
- Allocated Share of Fixed Costs: The District understands that its electric rate will include
 a share of PWRPA's fixed costs. As such, the District's payment for electric service will
 reduce other participants' relative share of fixed costs.
- Consideration of Water Resource Pooling Opportunities: As noted above, the District is open to discussions with PWRPA and its participants about potential water resource pooling opportunities.

Again, the identification of potential benefits based on other agreements with requesting water agencies, above, is not intended to limit discussion. Rather, identification of these benefits is intended to communicate the District's awareness of these points and its belief that PWRPA's provision of electric service to the District will provide benefits to PWRPA's existing participants.

Thank you for your consideration of this request. To further support this request, I welcome the opportunity to make a brief statement on behalf of the District at an upcoming PWRPA board of directors' meeting, and to answer any questions you or your board members may have about the District or this request.

Respectfully,

Tim Ashlock

General Manager

Copy: BVWSD Board of Directors

Power & Water Resources Pooling Authority

Regular Agenda • Item 6.A

1. Treasurer's Report.



POWER AND WATER RESOURCES POOLING AUTHORITY

DISBURSEMENT LIST

March 2024

Check #	Vendor-name	Payment-description		eck-amount
3522	Advanced Data Storage	Document Storage - March 2024		\$ 44.50
3523	Arvin-Edison Water Storage District	Treasurer's Duties		13,387.72
3524	Banta-Carbona Irrigation District	August & December 2023 Lunch Reimbursement		853.98
3525	Barbich Hooper King	Audit Services		525.00
3526	Braun Blaising & Wynne, P.C.	Legal Services - February 2024		495.87
3527	Michael McCarty Law Office PLLC	Consultant		3,000.00
3528	Robertson Bryan Inc.	Consultant		66,269.98
3529	Central Valley Ag-Partners, LLC	REC's Purchased		25.75
3530	Johnston Farms	REC's Purchased		212.30
3531	RD 108	REC's Purchased		6,465.00
3532	Zone 7	REC's Purchased		 6,010.00
			Sub-Total	\$ 97,290.10
	Wire Transfers:			
Wire	Cameron-Daniel, P.C.	General Manager/General Council		\$ 36,778.16
Wire	Holland & Knight	FERC Wholesale Distribution Filing Legal Fees		2,757.13
			Total	\$ 136,825.39

POWER AND WATER RESOURCES POOLING AUTHORITY CASH ACTIVITY AND TREASURER'S REPORT MONTH ENDING FEBRUARY 29, 2024

CASH ACTIVITY:

BALANCE JANUARY 31, 2024			\$	20,444,271.95
Increases:				
Power Billing Invoices	\$	1,637,870.24		
NCPA - LEC CAISO		161,779.00 49,681.57		
APX - Astoria Solar		44,721.83		
TCB - Monthly Interest		18,707.86		
				1,912,760.50
Decreases: CAISO	\$	690,682.54		
WAPA - Power January 2024	·	523,653.21		
Slate Solar - January 2024 - 2022 & 2023 True up		378,970.25		
WAPA O&M		149,195.00		
Canadian Solar - Astoria Solar - January 2024		80,902.25		
PG&E - GCID, RD 108, SCVWD, Zone 7		63,112.56		
Robertson-Bryan, Inc		63,002.98		
WAPA - Restoration January 2024		48,464.34 47,408.41		
Trimark - Cell, Meter Reading and T&M January 2024 Cameron-Daniel, P.C.		37,069.60		
Aces - February 2024		32,916.67		
NextEra Whitney Point Solar - January 2024		10,611.50		
Arvin-Edison Water Storage District-Treasurer		10,214.22		
Holland and Knight		9,309.51		
Michael McCarty Law Office, PLLC		3,000.00		
G/L Renewables - January 2024		2,316.70		
White Pines Solar Santa Clara WD - January 2024		1,248.85		
Bank Fees		500.00		
Braun Blaising & Wynne, P.C.		310.07		
Advanced Data Storage		44.50		
WREGIS		10.01		2,152,943.17
BALANCE FEBRUARY 29, 2024			\$	20,204,089.28
TREASURERS REPORT:				
Operating Account:				
Tri Counties Bank - General Operating Account #1031821, yield 5.004%			\$	4,968,227.14
Local Agency Investment Fund (LAIF) - Account # 90-39007, yield 4.122%				
Reserve Funds	\$	5,639,950.45		
Cap & Trade Allowance Revenue	•	3,139,349.17		8,779,299.62
California Asset Management Program (CAMP) #6218-001, yield 5.48%				, ,
Funds on Deposit	\$	2,456,562.52		
Cap & Trade Allowance Revenue	_	4,000,000.00	_	6,456,562.52
TOTAL PWRPA FUNDS - FEBRUARY 29, 2024			\$	20,204,089.28
Public Purpose Program (P-3) Tri Counties Bank Account #1031856				3,194,932.27
TOTAL FUNDS ON DEPOSIT WITH PWRPA - FEBRUARY 29, 2024			\$	23,399,021.55
CAISO Collateral Deposit Account				2,243,458.05
Western Area Power Administration - PWRPA Trust Account				1,000.00
			_	
TOTAL FUNDS - PWRPA & OTHER AGENCIES - FEBRUARY 29, 2024				25,643,479.60
Treasurer's Notes:				

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 is 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:

Participant	Amount	Participant	Amount
Banta Carbona	\$ 22,476.04	Sonoma	704,570.48
James	43,291.60	West Stan	282,746.34
Glen-Colusa ID	118,183.47	Westlands	573,595.81
RD108	60,000.00	West Side ID	57,887.44
Santa Clara	565,798.94	Zone 7	28,012.40

Total	\$ 2,456,562.52

Power and Water Resources Pooling Authority P-3 Remaining Funds By Year as of February 29, 2024

08/01/26

						Total Available	Expendi	tures
	2020	2021	2022	2023	2024	P-3 Funds	Total to Date	February-24
Member Agency	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
Arvin-Edison WSD	\$0.00	\$0.00	\$0.00	\$363,832.60	\$11,819.90	\$375,652.50	\$5,570,834.85	\$0.00
Banta Carbona ID	28,418.11	49,489.90	69,174.18	46,980.83	1,828.90	195,891.92	404,708.20	0.00
Byron-Bethany ID	0.00	0.00	0.00	8,141.09	538.27	8,679.36	171,290.66	0.00
Cawelo WD	0.00	0.00	4,271.92	76,283.68	1,045.01	81,600.61	962,841.11	0.00
Glenn-Colusa ID	23,300.11	32,132.77	16,890.62	37,269.19	620.99	110,213.68	348,863.79	0.00
James ID	10,457.51	15,685.23	21,738.73	7,617.89	0.00	55,499.36	130,969.96	0.00
Lower Tule ID	0.00	0.00	34,283.20	40,310.59	504.25	75,098.04	331,806.44	0.00
Princeton ID	0.00	0.00	0.00	16,001.17	466.40	16,467.57	177,976.09	0.00
RD 108	13,564.87	16,362.76	12,132.54	13,840.26	5,480.77	61,381.20	213,468.71	0.00
Santa Clara Valley WD	0.00	0.00	0.00	54,969.15	7,378.57	62,347.72	901,682.87	0.00
Sonoma County WA	99,654.97	109,040.76	150,507.89	120,836.42	1,159.95	481,199.99	1,490,752.21	0.00
West Stanislaus ID	0.00	0.00	58,050.32	40,541.61	11,607.51	110,199.44	496,284.30	0.00
Westlands WD	0.00	102,451.51	1,100,668.62	243,316.28	2,200.88	1,448,637.29	5,531,125.34	0.00
Zone 7	9,318.79	25,493.12	42,082.23	35,062.39	0.00	111,956.53	71,833.02	0.00
Undesignated/Forfeited/Misc	0.00	0.00	0.00	0.00	0.00	107.06	35,133.04	0.00
_							,	
Total	\$184,714.36	\$350,656.05	\$1,509,800.25	\$1,105,003.15	\$44,651.40	\$3,194,932.27	\$16,839,570.59	\$0.00

Exclusive access Date 08/03/24 08/02/25

(h) P-3 expenditures January 2024

⁽a) Three year exclusive access to these funds by agency begins on 8/04/21 and ends 08/03/24

⁽b) Three year exclusive access to these funds by agency begins on 8/03/22 and ends 08/02/25

⁽c) Three year exclusive access to these funds by agency begins on 8/02/23 and ends 08/01/26

⁽d) 2023 P-3 collected through February 2024

⁽e) 2024 P-3 collected through February 2024

⁽f) Total available P-3 Funds

⁽g) Total P-3 expenditures since inception of program

Power and Water Resources Pooling Authority Cap and Trade Allowance Revenue Pursuant to Resolution 13-04-05 and Resolution 21-11-14 As of February 29, 2024

District	Resolutio	n 13-04-05	R	esolution 21-11	I-14			
***************************************	Allocation	Revenue	2021	2022	2023	Total Revenue	Expenditures	Balance
Arvin-Edison	37.478%	\$3,421,905.95	\$208,146.78	\$831,876.00	\$855,689.42	\$5,317,618.15	\$3,921,905.95	\$1,395,712.20
Banta-Carbona	3.115%	284,413.18	33,717.30	132,634.85	145,589.41	596,354.74	0.00	596,354.74
Byron-Bethany	0.708%	64,643.51	5,278.35	20,240.47	20,602.13	110,764.46	110,764.46	0.00
Cawelo	8.447%	771,248.19	32,760.55	115,918.41	94,183.35	1,014,110.50	1,014,110.50	0.00
Glenn-Colusa	2.849%	260,126.21	23,174.67	86,307.16	74,702.20	444,310.24	444,310.24	0.00
James	0.798%	72,860.90	5,746.23	23,359.47	28,943.78	130,910.38	0.00	130,910.38
Lower Tule	1.005%	91,760.91	20,089.23	76,569.91	67,661.73	256,081.78	256,081.78	0.00
Princeton	1.334%	121,800.06	7,684.74	25,968.74	20,055.39	175,508.93	97,711.01	77,797.92
RD 108	1.368%	124,904.41	10,013.47	35,342.29	29,148.43	199,408.60	199,408.60	0.00
Santa Clara	4.853%	443,100.21	45,211.76	169,068.24	166,942.93	824,323.14	726,222.17	
Sonoma	7.787%	710,987.29	71,470.54	275,734.34	277,421.66	1,335,613.83	196,000.00	1,139,613.83
West Stan	3.228%	294,730.57	31,345.36	119,698.69	134,401.03	580,175.65	150,789.15	429,386.50
Westlands	27.030%	2,467,957.68	202,357.42	796,569.54	1,084,844.98	4,551,729.62	1,390,020.55	3,161,709.07
Zone 7	0.000%	0.00	9,503.60	46,016.34	54,243.62	109,763.56	0.00	109,763.56
7-4-1		**********	A=00 =00 00					
Total	100.000%	\$9,130,439.07	\$706,500.00	\$2,755,304.45	\$3,054,430.06	\$15,646,673.58	\$ 8,507,324.41	\$ 7,139,349.17

⁽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

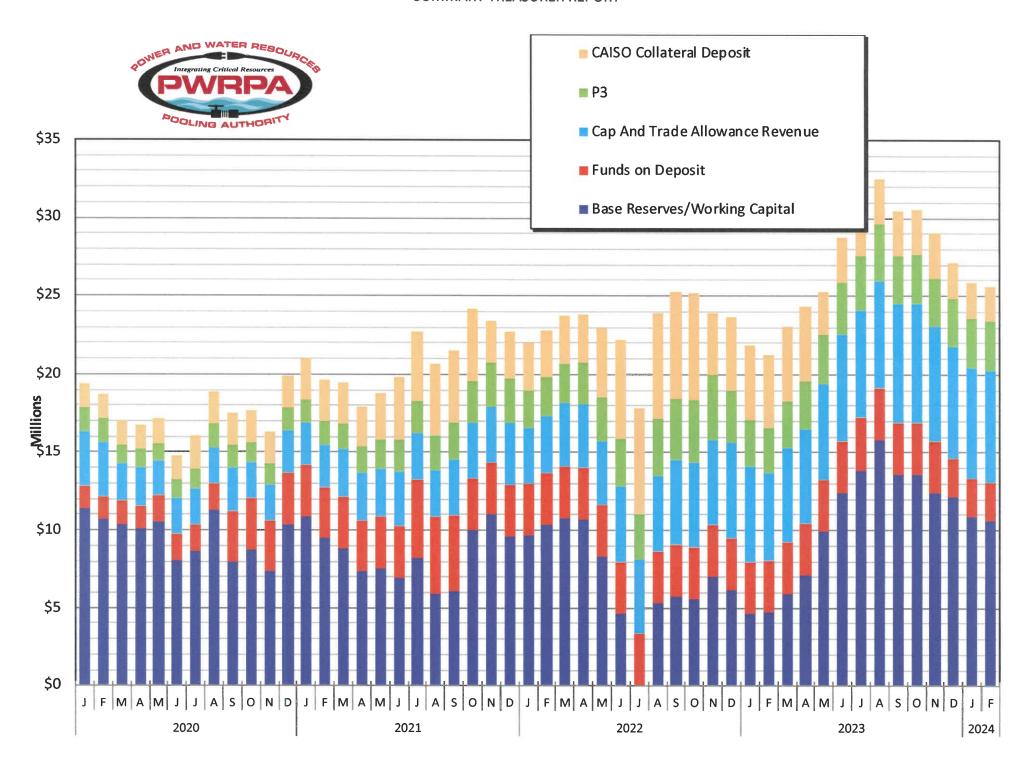
District	Exhibit B Allocation				
	2021	2022	2023		
Arvin	29.4617%	30.1918%	28.0147%		
Banta Carbona	4.7724%	4.8138%	4.7665%		
Byron Bethany	0.7471%	0.7346%	0.6745%		
Cawelo	4.6370%	4.2071%	3.0835%		
Glenn-Colusa	3.2802%	3.1324%	2.4457%		
James	0.8133%	0.8478%	0.9476%		
Lower Tule	2.8435%	2.7790%	2.2152%		
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%		
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	758,250.00	880,000.00	914,880.06	3,054,430.06
				Total	\$ 15,646,673.58

Resolution 13-04-05 Resolution 21-11-14 \$9,130,439.07 6,516,234.51 \$15,646,673.58

SUMMARY TREASURER REPORT



POWER & WATER RESOURCES POOLING AUTHORITY WIRE TRANSFERS

February 1 - 29, 2024

Transaction Number	Beneficiary Name	Credit Amount	Value Date
213624	ACES Power Marketing	\$32,916.67	2/5/2024
213625	CAISO Market Clearing	\$494,920.28	2/5/2024
214471	Cameron-Daniel, P.C.	\$37,069.60	2/12/2024
214472	Holland & Knight	\$9,309.51	2/12/2024
214473	Pacific Gas and Electric	\$61,307.05	2/12/2024
214474	CAISO Market Clearing	\$35,516.46	2/12/2024
214475	Western Area Power Administration	\$48,464.34	2/12/2024
214476	WAPA O M	\$149,195.00	2/12/2024
214477	Pacific Gas and Electric	\$1,805.51	2/12/2024
214478	WREGIS	\$10.01	2/12/2024
215346	CAISO Market Clearing	\$160,245.80	2/20/2024
215347	Garlock Energy, LLC	\$1,248.85	2/20/2024
215348	GL Renewables, LLC	\$2,316.70	2/20/2024
215349	Slate 1 (Canadian Solar)	\$135,356.59	2/20/2024
216092	Slate 1 (Canadian Solar)	\$243,613.66	2/26/2024
216093	Western Area Power Administration	\$523,653.21	2/26/2024
216094	Trimark Associates, Inc.	\$47,408.41	2/26/2024
216095	Whitney Point Solar LLC	\$10,611.50	2/26/2024
216096	Astoria 2 Operating	\$80,902.25	2/26/2024
	Total	2,075,871.40	

Power & Water Resources Pooling Authority

Regular Agenda • Item 7.A

1. General Manager's Report.

Power and Water Resources Pooling Authority April 3, 2024 Board Packet General Manager's Report

PPA with LTRID Success hydroelectric facility for Bucket 1 RECs

PWRPA executed a PPA with Lower Tule River Irrigation District (LTRID) in September 2023 for the output of the Success Power Plant, a 1.4 MW hydroelectric generator located in Tulare County, California. The PPA is for an initial 8-month Delivery Term and may be extended pending an evaluation by LTRID and PWRPA of the cost-effectiveness. Unfortunately, despite its diligent efforts, LTRID has had trouble updating the interconnection agreement with Southern California Edison (SCE). Only now is LTRID seeing light at the end of the tunnel and may begin generating within a few weeks. The current market price for Bucket 1 RECs has changed significantly from the market price during our PPA negotiations with LTRID. This matter will be discussed in this month's Agenda Item 8.A.

PWRPA submits a new application to collaborate with two National Labs on pumped storage research.

An application for research collaboration (with no cost share requirement) was submitted for review on March 28, 2024. The application for research assistance is as follows:

Insufficient energy storage and transmission in California are resulting in the curtailment of renewable generation. In particular, this adversely impacts solar generation within the San Joaquin Valley. The Central Valley Project (CVP) and State Water Project (SWP) are uniquely situated to alleviate this problem. These projects pump significant quantities of water out of the Sacramento-San Joaquin Delta through the California Aqueduct and the Delta-Mendota Canal. The modification of operations and addition of short and long duration energy storage within the CVP and SWP will have a significant impact on reducing renewable curtailments in the Balancing Authority of Northern California (BANC) and California Independent System Operator (CAISO) balancing authority.

The Power and Water Pooling Authority (PWRPA) operates as a publicly-owned electric utility and purchases CVP power marketed by the Western Area Power Administration (WAPA). PWRPA is the retail electricity provider to fifteen publicly-owned water utility customers of which the vast majority are agricultural water districts located in the San Joaquin Valley. Although, there is recent ongoing work to evaluate energy storage opportunities at the San Luis Reservoir through the Gianelli Powerhouse, additional unexamined opportunities exist within the CVP and SWP to increase energy storage (separate and in addition to the San Luis Reservoir). These consist of, but are not limited to:

- 1) Evaluation of Project Use schedules south of the Delta (Tracy, Banks, Dos Amigos, and others)
- 2) Identification of the value of pumped storage south of Dos Amigos pumping station
- 3) Identification of other constraints limiting the more economic scheduling of Project Use
- 4) Feasibility of using the Delta Mendota Canal, i.e., existing infrastructure, as the waterway or upper reservoir of a pumped storage system
- 5) Other potential pump storage opportunities (in addition to San Luis) south of the Delta

PWRPA is seeking technical assistance to evaluate five additional opportunities listed above, which are outside of the current San Luis Energy Storage project, for energy storage on the CVP and SWP south of the Sacramento-San Joaquin Delta. This work will be complementary to the ongoing analysis at San Luis Reservoir, however, it also involves a separate analysis addressing a distinctive problem that requires special attention.

Strategy Team meetings in March

The Minutes from the two Strategy Team meetings held in March are included in the following pages.

Strategy Team 1 Financial Matters

ST1.2: Issue Identification (March 14, 2024)

- 1. Review the Reconciled Rate sheet provided for this meeting.
- 2. Consider the Rates bar graph and the Standard Deviation bar graph.
 - a. The last set of Standard Deviation bars include 2019, 2020, 2021 and 2023 only. This is an interesting set since, arguably, 2022 was an outlier year for <u>power</u> prices as described in last year's PWRPA audit.
 - b. If the 2022 power spike was an outlier, does the data show that delivery costs are the single greatest cause for rate variability. Are there other conclusions to make?
- 3. Is this rate variability an acceptable risk? Does it impact your district's ratemaking, budget setting or operations?
- 4. Can this variability be measured, estimated or mitigated? Is this important enough to spend effort on this matter?
 - a. If so, what are your ideas?
 - b. If not, identify the significant financial risks in the next 1-5+ years (2025-2030) that you consider worthy of our efforts.

Meeting Minutes

Participants:

David Weisenberger, Kelly Wright La-Force (BCID); Louis Jarvis (GCID); Dale Roberts (SCWA); Bobby Pierce (WSID); James Carney (Z7); Cori Bradley (RBI); Bruce McLaughlin (CD).

Discussion:

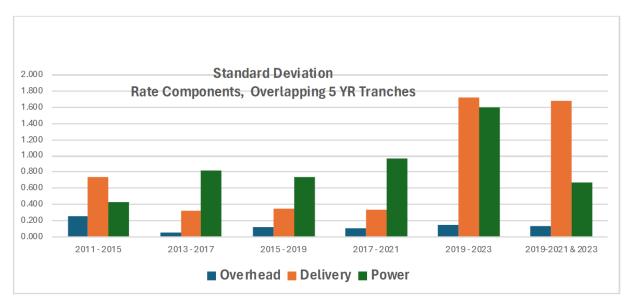
We discussed the need for a change strategy, which is a plan to move from the current state to the future state to achieve the desired objectives. The strategy analysis generally consists of four steps that roughly follow this model: (1) analyze the current state; (2) define the future state; (3) assess risks; and (4) define the change strategy which is a set of transitional steps.



We reviewed the Reconciled Rate sheet for 2011 through 2023 and bar graphs of the standard deviation for overlapping 5-year tranches for overhead, power and delivery. A separate graph was a 4-year tranche from 2019-2023 sans 2022. 2022 was a significant outlier year for power costs as described in PWRPA's 2022 Annual Audit. Therefore, it is argued that 2022 data improperly skews the standard deviation graphs.

Strategy Team 1 Financial Matters

By comparing the first 5-year tranches with the 4-year tranche, the data indicates that: (a) overhead costs are very stable; (b) power costs are variable but more stable in the latest tranche and always less than unity in all cases; and (c) delivery cost variability quadrupled in the last tranche as compared to the prior 10 years. Therefore, the ST1 agreed that a deeper analysis of the delivery costs is warranted. This should include breaking out the component costs (WDT, TAC, etc.) and beginning to identify the root causes as well as considering different forecasting tools.



2011 - 2015 2013 - 2017 2015 - 2019 2017 - 2021 2019 - 20 2019-2021 & 2023

Composite	0.816	0.695	0.783	1.193	2.884	1.934
ОН	0.255	0.056	0.123	0.104	0.141	0.136
Delivery	0.734	0.323	0.345	0.333	1.724	1.676
Power	0.435	0.818	0.738	0.963	1.605	0.675

Note: After the ST1 meeting, the GM & OM discussed the mandatory regulatory deadlines for eligible renewable power procurement (60% of retail sales by 2030) and carbon-free electricity (100% by 2045). Since both regulatory requirements will have financial impacts on certain PWRPA customers within the next 5 years, the scope of the ST1 efforts will be expanded to include power cost forecasting.

Task Requests: (1) STD DEV charts for power and delivery for PWRPA and all districts without 2022.

- (2) Breakout of delivery charges into WDT, TAC and other costs.
- (3) Identify cost drivers and consider whether forecasting methods are viable
- (3) Initial power resource projections.

Next Meeting: Thursday, April 11 at 10 A.M.

Strategy Team 2 Business Continuity

ST2.2: Business Needs and Current State (March 14, 2024)

- 1. In 2014, "the primary premise being used by the Task Force Committee is that PWRPA's organizational goal is to provide electric power to its customers at a reasonable cost consistent with good business practices, reliability, safety, and efficiency." Is this still true?
- 2. What are PWRPA's business needs, i.e., the problems or opportunities of *strategic importance* faced by PWRPA in the next 1-5 years? The next 5-20 years?
- 3. Are these different than any individual customer's needs?
- 4. Can PWRPA's current state (organizational & operational) address these needs without being altered? The starting point for any change is an understanding of why the change is needed.
- 5. Define the deliverables for the next meeting (that will include further efforts on the SOPs and process mapping).

Meeting Minutes

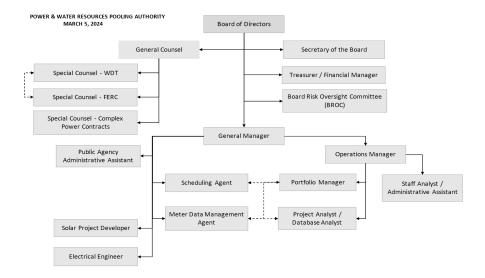
Participants:

David Weisenberger, Kelly Wright La-Force (BCID); Louis Jarvis (GCID); Dale Roberts (SCWA); Jenny Montoya (WWD); (Sal Segura (Z7); Cori Bradley (RBI); Bruce McLaughlin (CD); John Michael Domondon.

Discussion:

ST2, like the ST1, should develop a change strategy. The ST2 is informally using the *Guide* to the Business Analysis Body of Knowledge (BABOK ver3) developed by the International Institute of Business Analysis. The strategy analysis generally consists of four steps that roughly follow this model: (1) analyze the current state; (2) define the future state; (3) assess risks; and (4) define the change strategy which is a set of transitional steps.

The ST2 reviewed new materials including the Participant/Vendor Listing (PVL) and the Org Chart. The PVL shows several key vendors with contract terms that are either annual or with termination dates in late 2025. This includes the auditors, ACES, Special Counsel for WAPA matters, General Counsel and General Manager. Although not listed yet, there are several key Directors that may be retiring within 2-5 years.



Strategy Team 2 Business Continuity

During discussion, the ST2 did not specifically identify any Participant needs that would conflict with PWRPA's needs in the aggregate. The ST2 also commented that any future state should include no less than the current state service level provided by existing vendors. The ST2 expressed an interest in power cost matters, particularly regarding developing hedging strategies. Subsequent to the meeting, the GM & OM discussed the mandatory regulatory deadlines for eligible renewable power procurement (60% of retail sales by 2030) and carbon-free electricity (100% by 2045). Since both regulatory requirements will have financial impacts on certain PWRPA customers within the next 5 years, the scope of the Strategy Team 1 efforts will be expanded to include power cost forecasting and hedging strategies.

The GM stated that developing the work product and recommendations for ST2 is largely the responsibility of the GM, with assistance from the OM. The ST2 meetings are primarily to review the work product and collect customer input.

Task Requests: (1) Continue work on the Org Chart including the names of personnel and/or vendors.

- (2) Continue to work on the PVL including job descriptions for key vendors, identifying vulnerabilities if a vendor is lost and principles for replacing the vendor that may be used by the Board of Directors.
- (3) Continue to develop a list identifying essential services.

Next Meeting: Thursday, April 11 at 2 P.M.

Power & Water Resources Pooling Authority

Regular Agenda • Item 7.B

1. Operations Manager Report.

Possible Action

n/a

Operations Staff Overview

- 1. April planned activity
 - a) LTRID Hydro: go live!!
 - b) Task team participation
 - c) REC purchase/selling
 - d) 2024 audit/reconciliation prep
 - e) DSGS 2024 setup
- 2. March recap
 - a) LTRID Hydro onboarding
 - b) LEC Hydrogen research
 - c) 2024 Budget and rates implementation
 - d) Strategic Team coordination

Operations Report:

- 1. Pre-Reconciliation
 - a) Actual data for Jan-Feb, Mar-December estimates.
 - b) Underfunding is due to increase in REC procurement due to increased load forecasts, increased prices of RECs, and BR forecast not taking into account latest month of storm activity. Its too early to evaluate rate efficiency for the year.

Table 1: 2023 Cash Flow

Cashflow Summ	Cashflow Summary: January - December 2024													
Participant		Power Invoice		Power & Ops Costs		P3		Direct Consulting + Prior Period	Res	Change in serve Estimate		Total Costs	0\	er/(Under) Funded
Arvin-Edison	\$	14,589,765	\$	14,721,738	\$	419,570	\$	-	\$	193,044	\$	15,334,351	\$	(744,586)
Banta-Carbona	\$	1,721,244	\$	1,939,679	\$	55,281	\$	-	\$	(35,203)	\$	1,959,757	\$	(238,513)
Byron-Bethany	\$	376,352	\$	403,366	\$	11,496	\$	-	\$	478	\$	415,340	\$	(38,988)
Cawelo	\$	2,267,779	\$	2,431,055	\$	69,285	\$	-	\$	42,943	\$	2,543,283	\$	(275,504)
Glenn-Colusa	\$	1,217,553	\$	1,265,750	\$	36,074	\$	-	\$	243	\$	1,302,068	\$	(84,515)
James	\$	465,611	\$	446,885	\$	12,736	\$	-	\$	(12,350)	\$	447,271	\$	18,340
Lower Tule	\$	1,197,476	\$	1,210,887	\$	34,510	\$	-	\$	13,922	\$	1,259,320	\$	(61,843)
Princeton	\$	521,685	\$	548,751	\$	15,639	\$	-	\$	2,973	\$	567,363	\$	(45,679)
RD108	\$	485,361	\$	488,710	\$	13,928	\$	52	\$	(7,244)	\$	495,447	\$	(10,086)
Santa Clara	\$	2,745,479	\$	2,673,410	\$	76,192	\$	3,376	\$	17,547	\$	2,770,525	\$	(25,047)
Sonoma	\$	4,129,925	\$	3,829,173	\$	109,131	\$	-	\$	4,905	\$	3,943,209	\$	186,715
West Stan	\$	1,530,316	\$	1,519,986	\$	43,320	\$	-	\$	(12,823)	\$	1,550,482	\$	(20,166)
Westlands	\$	11,463,598	\$	11,035,433	\$	314,510	\$	-	\$	(220,142)	\$	11,129,800	\$	333,797
Zone 7	\$	1,055,077	\$	954,594	\$	27,206	\$	-	\$	11,706	\$	993,506	\$	61,571
PWRPA	\$	43,767,219	\$	43,469,417	\$	1,238,878	\$	3,428	\$	(0)	\$	44,711,723	\$	(944,504)

^{**} Some districts transfer C&T revenue to help meet power & RPS needs, those funds are not reflected in this table.

Table 2: 2023 Cost of Service

Cost of Service	ce Summary: J	lan	uary - Dece	ember 2024		
Participant	Metered Energy (kWh)		Power & Ops Costs	Cap & Trade Revenue	Net Cost of Service	mposite Rate, cent/kWh)
Arvin-Edison	131,717,265	\$	14,721,738		\$ 14,721,738	\$ 11.18
Banta-Carbona	16,393,081	\$	1,939,679		\$ 1,939,679	\$ 11.83
Byron-Bethany	2,577,792	\$	403,366		\$ 403,366	\$ 15.65
Cawelo	19,598,709	\$	2,431,055		\$ 2,431,055	\$ 12.40
Glenn-Colusa	11,270,687	\$	1,265,750		\$ 1,265,750	\$ 11.23
James	3,305,392	\$	446,885		\$ 446,885	\$ 13.52
Lower Tule	10,053,164	\$	1,210,887		\$ 1,210,887	\$ 12.04
Princeton	4,186,863	\$	548,751		\$ 548,751	\$ 13.11
RD108	3,217,557	\$	488,710		\$ 488,710	\$ 15.19
Santa Clara	20,415,519	\$	2,673,410		\$ 2,673,410	\$ 13.09
Sonoma	34,298,198	\$	3,829,173		\$ 3,829,173	\$ 11.16
West Stan	14,669,737	\$	1,519,986		\$ 1,519,986	\$ 10.36
Westlands	72,545,401	\$	11,035,433		\$ 11,035,433	\$ 15.21
Zone 7	6,543,335	\$	954,594		\$ 954,594	\$ 14.59
TOTAL	350,792,699	\$	43,469,417	\$ -	\$ 43,469,417	\$ 12.39

2. February operations

- a) Energy is half of budget
- b) Load averaged 12MW, same as last month
- c) Average schedule deviation of 3MW for an estimated cost of 7,600.

3. Pricing

a) Average monthly prices:

Table 3: Average monthly cost and ISO revenue rates

	Cost	F	Revenue
BR	\$ 22.96	\$	(40.10)
Displacement	\$ -	\$	-
WWD BOR	\$ -	\$	(40.59)
Whitney Point	\$ 58.75	\$	(21.86)
Astoria	\$ 63.00	\$	(7.45)
Slate	\$ 26.81	\$	(35.20)
*Lodi	\$ 56.89	\$	(50.29)
Market			

^{*}Lodi is energy only (no debt)

Generator Reports

- 1. Astoria Solar
 - a) Generation
 - o 1,158 MWh, 16% capacity factor
 - o Net credit \$2,000 or \$1.5 /MWh
 - o Higher negative pricing than last year:

Table 4: Astoria pricing summary

February 2024 - Pricing A	Analysis, Rates in \$/MW	2024	2023
	Count	1,188	577
Negatively Priced	Total MWh	598	377
Intervals (5min) w/	Average LMP	\$ (22.29)	\$ (5.42)
Generation	Maximum LMP	\$ (0.00)	\$ (0.00)
	Minimum LMP	\$ (65.75)	\$ (16.66)
	Count	2,093	2,974
Positively Priced	Total MWh	560	1,274
Intervals (5min) w/	Average LMP	\$ 31.23	\$ 51.79
Generation	Maximum LMP	\$ 456.00	\$ 510.54
	Minimum LMP	\$ 0.00	\$ 0.00

- 2. Whitney Point Solar
 - a) Generation
 - o 1,123 MWh, 14% capacity factor
 - o Net credit \$25,000, or \$20 /MWh
 - o Negative Pricing:

Table 5: Whitney Point pricing summary

February 2024 - Pricing A	Analysis, Rates in \$	2024	2023
	Count	1,137	825
Negatively Priced	Total MWh	429	338
Intervals (5min) w/	Average LMP	\$ (27.88)	\$ (17.15)
Generation	Maximum LMP	\$ (0.01)	\$ (0.01)
	Minimum LMP	\$ (56.51)	\$ (66.82)
	Count	2,539	2,708
Positively Priced	Total MWh	789	1,181
Intervals (5min) w/	Average LMP	\$ 41.12	\$ 63.57
Generation	Maximum LMP	\$ 154.18	\$ 489.52
	Minimum LMP	\$ 0.01	\$ 0.01

- 3. Slate Solar + Battery
 - a) Generation
 - o 3,152 MWh, 16% capacity factor
 - o Net value \$52,000, or \$20 /MWh
 - o Pricing review:

Table 6: Slate pricing summary

February 2024 - Pricing Ana	lysis, Rates in \$/N	2024	2023
	Count	1,081	809
Nameticals Daised Internals	Total MWh	675	561
Negatively Priced Intervals	Average LMP	\$ (27.84)	\$ (8.70)
(5min) w/ Generation	Maximum LMP	\$ (0.10)	\$ (0.01)
	Minimum LMP	\$ (57.30)	\$ (65.01)
	Count	3,052	3,573
Positively Priced Intervals	Total MWh	1,869	2,663
•	Average LMP	\$ 41.64	\$ 61.06
(5min) w/ Generation	Maximum LMP	\$ 285.20	\$ 501.02
	Minimum LMP	\$ 0.50	\$ 0.01

4. Lodi Energy Center

- o Operations:
 - 308 MWh, or 5% capacity factor
 - Ran 12 of 29 days, 17 days uneconomic
 - \$2,000 net credit, \$1 befit (includes debt)
- o Hydrogen decisions delayed:
 - Grant funding uncertain and could delay until after the November election.

Power Planning & Regulatory

1. Power Net Short

- a) WAPA's current forecast is March 1, 2024. We expect further improvements on the April forecast even though that one will not have the March storm activity in it yet.
- b) Staff looking at the reduction of forward power prices and could consider purchasing off-peak power for 2025.

Table 7: On- and Off-peak Power Net Short

								On	Peak								
	D	emand, MV	/	Re	sources, M	W	Net L	ong/(Short)	, MW		Net (Short)/Long base	d on RMP	3/4	1/2024	Change	e from
ON-PEAK	Wet	Average	Dry	Wet	Average	Dry	Wet	Average	Dry	RMP	Wet	Average	Dry	Forw	ard Mkt	last	NSP
3/1/2024	23.3	19.8	40.2	45.0	63.2	34.3	21.7	43.4	(5.9)	100%	21.7	43.4	(5.9)	\$	38.37	\$	(10.45
4/1/2024	35.1	51.6	62.6	59.3	62.8	57.4	24.1	11.2	(5.2)	100%	24.1	11.2	(5.2)	\$	36.10	\$	(9.15
5/1/2024	49.4	73.5	91.0	75.3	72.7	71.7	25.9	(0.8)	(19.4)	90%	30.8	6.5	(10.3)	\$	31.28	\$	(8.15
6/1/2024	65.1	78.8	95.2	84.5	74.3	78.8	19.4	(4.5)	(16.4)	90%	25.9	3.4	(6.9)	\$	39.55	\$	(17.13
7/1/2024	61.9	74.9	83.9	85.7	80.1	82.8	23.8	5.2	(1.1)	70%	42.3	27.7	24.1	\$	64.98	\$	(22.80
8/1/2024	53.8	65.2	71.8	84.1	66.7	67.3	30.2	1.5	(4.5)	70%	46.4	21.1	17.0	\$	85.20	\$	(22.10
9/1/2024	39.7	52.6	55.1	66.2	52.4	51.7	26.5	(0.2)	(3.4)	70%	38.4	15.6	13.1	\$	77.65	\$	(15.85
10/1/2024	31.1	44.7	48.3	48.4	36.3	34.5	17.3	(8.3)	(13.9)	50%	32.8	14.0	10.3	\$	59.95	\$	(7.00
11/1/2024	19.7	26.7	25.1	35.3	17.5	17.5	15.6	(9.2)	(7.6)	50%	25.4	4.1	5.0	\$	62.68	\$	(8.83
12/1/2024	13.4	13.6	16.1	24.4	20.7	18.1	11.0	7.0	2.0	50%	17.7	13.8	10.1	\$	90.28	\$	(14.70
1/1/2025	16.4	16.5	17.5	39.3	22.1	20.4	22.9	5.6	2.9	50%	31.1	13.8	11.7	\$	92.53	\$	(12.13
2/1/2025	18.7	29.5	32.5	40.6	78.8	82.4	21.9	49.3	49.9	50%	31.2	64.1	66.2	\$	62.68	\$	(14.40
3/1/2025	23.8	31.9	41.4	54.6	69.6	47.7	30.8	37.7	6.3	50%	42.7	53.7	27.0	\$	47.48	\$	(10.30
4/1/2025	35.7	53.7	67.3	63.2	68.5	59.6	27.5	14.8	(7.6)	50%	45.3	41.6	26.0	\$	39.70	\$	(6.00
5/1/2025	50.0	79.9	100.1	79.4	83.9	71.8	29.4	4.0	(28.3)	50%	54.4	43.9	21.7	\$	40.18	\$	0.22
6/1/2025	63.3	87.6	106.3	89.7	95.2	92.1	26.4	7.6	(14.3)	50%	58.1	51.4	38.9	\$	48.82	\$	(13.08
7/1/2025	60.2	79.8	96.7	87.2	91.4	91.1	27.0	11.5	(5.6)	30%	69.2	67.4	62.1	\$	75.74	\$	(10.11
8/1/2025	51.5	67.3	81.3	87.1	87.0	84.3	35.6	19.7	3.0	30%	71.6	66.8	59.9	\$	93.80	\$	(10.90
9/1/2025	38.0	51.1	64.4	74.4	70.1	55.2	36.4	19.0	(9.2)	30%	63.0	54.8	35.9	\$	81.64	\$	(5.91
10/1/2025	30.8	43.2	55.4	51.9	44.9	40.7	21.1	1.8	(14.7)	30%	42.6	32.0	24.1	\$	56.81	\$	(2.04
11/1/2025	19.2	23.3	25.8	38.9	33.7	32.1	19.7	10.4	6.3	30%	33.1	26.7	24.4	\$	61.84	\$	(5.26
12/1/2025	12.2	14.0	16.2	26.8	32.9	17.9	14.6	19.0	1.7	30%	23.2	28.8	13.0	\$	95.07	s i	(10.78

								Off	Peak								
	D	emand, MW	/	Re	sources, M	W	Net Lo	ng/(Short)	, MW		Net (Short	t)/Long base	d on RMP	3/4	4/2024	Change fro	om
Off-Peak	Wet	Average	Dry	Wet	Average	Dry	Wet	Average	Dry	RMP	RMP Wet		Average Dry		vard Mkt	last NSP	
3/1/2024	22.1	18.4	37.5	27.0	15.3	9.8	4.9	(3.0)	(27.7)	100%	4.9	(3.0)	(27.7)	\$	32.55	\$ (17.	.97)
4/1/2024	31.4	46.2	56.8	34.4	26.5	23.7	2.9	(19.7)	(33.1)	100%	2.9	(19.7)	(33.1)	\$	37.53	\$ (10.	.80)
5/1/2024	38.7	56.5	69.0	43.8	43.3	42.5	5.1	(13.1)	(26.5)	90%	9.0	(7.5)	(19.6)	\$	32.83	\$ (7.	.40)
6/1/2024	54.4	65.2	78.2	45.7	37.4	40.4	(8.7)	(27.9)	(37.8)	90%	(3.2)	(21.3)	(30.0)	\$	37.70	\$ (13.	.10)
7/1/2024	55.2	65.9	72.7	48.8	41.0	42.8	(6.4)	(24.9)	(29.9)	70%	10.2	(5.1)	(8.1)	\$	51.63	\$ (8.	.80)
8/1/2024	47.6	56.7	61.5	37.9	32.0	32.4	(9.7)	(24.7)	(29.2)	70%	4.6	(7.7)	(10.7)	\$	59.78	\$ (8.	.78)
9/1/2024	35.1	45.2	46.6	33.5	21.7	21.4	(1.6)	(23.5)	(25.2)	70%	9.0	(9.9)	(11.3)	\$	60.35	\$ (8.	.18)
10/1/2024	25.8	35.4	36.9	26.7	11.8	11.0	0.9	(23.6)	(25.9)	50%	13.8	(5.9)	(7.4)	\$	55.90	\$ (6.	.30)
11/1/2024	17.2	22.6	20.6	17.1	4.7	4.7	(0.1)	(17.9)	(15.9)	50%	8.5	(6.6)	(5.6)	\$	63.00	\$ (6.	.72)
12/1/2024	13.2	13.5	15.8	9.8	4.6	4.6	(3.4)	(8.9)	(11.2)	50%	3.2	(2.2)	(3.3)	\$	82.20	\$ (5.	.48)
1/1/2025	14.0	14.1	14.9	27.2	16.7	9.3	13.2	2.6	(5.7)	50%	20.2	9.6	1.8	\$	86.48	\$ (14.	.38)
2/1/2025	16.3	26.1	29.3	23.0	23.5	24.4	6.7	(2.6)	(4.9)	50%	14.8	10.5	9.8	\$	70.35	\$ (7.	.48)
3/1/2025	22.7	29.9	38.5	31.8	20.9	15.9	9.1	(9.1)	(22.6)	50%	20.5	5.9	(3.4)	\$	50.88	\$ (6.	.45)
4/1/2025	32.1	48.8	61.2	36.2	27.1	22.9	4.1	(21.7)	(38.3)	50%	20.1	2.7	(7.7)	\$	47.98	\$ (3.	.38)
5/1/2025	39.5	61.2	75.7	47.9	44.6	37.0	8.4	(16.5)	(38.7)	50%	28.1	14.1	(0.9)	\$	39.53	\$ (0.	.87)
6/1/2025	53.2	72.4	87.1	50.4	32.5	31.5	(2.8)	(39.8)	(55.6)	50%	23.8	(3.7)	(12.0)	\$	50.80	\$ (3.	.30)
7/1/2025	54.0	69.9	83.6	51.7	48.6	48.4	(2.3)	(21.3)	(35.1)	30%	35.5	27.6	23.4	\$	64.07	\$ (3.	.33)
8/1/2025	45.9	58.4	69.5	44.9	27.9	27.2	(0.9)	(30.5)	(42.3)	30%	31.2	10.4	6.4	\$	71.57	\$ (11.	.08)
9/1/2025	33.9	43.9	54.2	36.7	21.7	17.6	2.8	(22.2)	(36.6)	30%	26.5	8.5	1.3	\$	69.40	\$ (1.	.05)
10/1/2025	25.6	33.7	41.7	30.3	15.9	14.6	4.6	(17.7)	(27.1)	30%	22.6	5.8	2.1	\$	57.83	\$ (5.	.07)
11/1/2025	17.1	19.7	21.2	19.2	9.9	9.5	2.1	(9.8)	(11.6)	30%	14.1	4.0	3.2	\$	67.64	\$ (0.	.91)

2. BR output:

a. Covered 133% of load for February and 105% of March so far

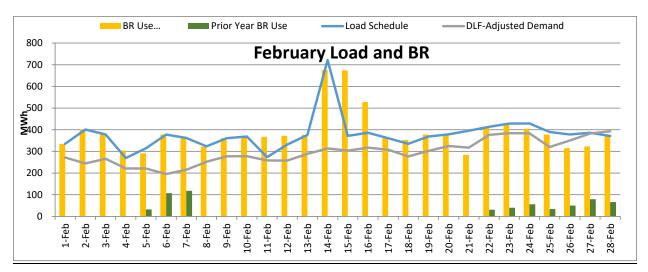
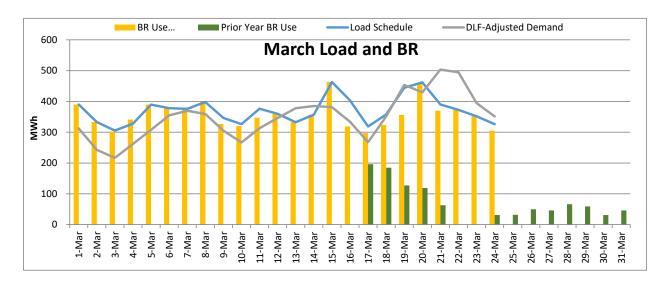


Figure 1: Monthly BR and Load

Power and Water Resources Pooling Authority April 2024 Update

Operations Manager Report



3. Regulatory Items

- a. Resource Adequacy:
 - i. No updates from last month
- b. Renewable Energy Certificates
 - i. Current Compliance Period CP4 (2021-2024):
 - ii. PCC1 (bundled product):
 - 1. The long Districts met and negotiated a price of \$36.50 for approximately 20,000 RECs (2023). Load updates (increases) for two of the offering Districts makes their excess half of original expectations. Therefore, 10,000 from SCWA is transferred and those funds are accounted for in the 2023 reconciliation.
 - 2. Staff is still working with LTRID to get the hydro facility online. The facility is expectted to come online in April and generate approximately 800 MWh.
 - 3. All portfolio generation estimates are reduced due to earlier starting of negative pricing. Staff will discuss if a PCC1 3rd party procurement is purdent.

iii. PCC3 RECs:

- 1. CWD solar (PGE load) online, PWRPA is buying the RECs and we just got our first transfer of the RECs to our account.
- 2. 20,000 bought from market in 2023 at \$6.30/REC. Staff will procure roughly another 10,000 by Q1 2024. Current prices are \$4-5/REC.
- 3. Staff is reseraching use of PCC3s for low carbon feul standard and the price arbitrage is \$8/REC. We are near completion of the first transaction.

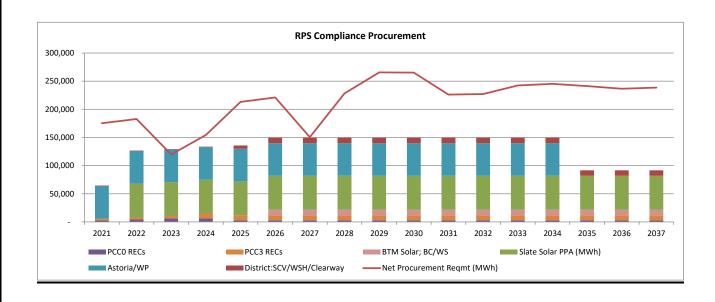
Table 8: Current Renewable Net Long/(Short)

Ne	et Lo	ong/(Short)	
Compliance			
Period 4		PCC1/2	PCC3
AEWSD		673	(3,018)
BCID		(5,166)	(1,113)
BBID		(769)	(156)
CWD/LTRID		1,655	3,308
GCID		(1,940)	(747)
JID		35	(183)
PPID		(840)	(285)
RD108		289	1,120
SCV		(2,791)	(1,045)
SCWA		18,975	(1,361)
WSID		(1,766)	(875)
WWD		(608)	(5,598)
Z 7		(477)	1,656
PWRPA		7,269	(8,296)
Short Totals		(14,358)	(14,380)
Market \$/REC	\$	70	\$ 5
Cost:	\$	1,005,030	\$ 71,902

Table 9: Forward Compliance Period Review

					Annaul Net	Avg Solar MW				
District	CP4: 2021-	CP5: 2025-	CP6: 2028-	*CP7: 2030-	Short/(Long)	to cure				
	2024	2027	2030	2033	2030+	deficiency				
AEWSD	673	(43,848)	(34,230)	(42,938)	(14,313)	(5.1)				
BCID	(5,166)	18,075	17,918	16,715	5,572	2.0				
BBID	(769)	(2,363)	(3,653)	(4,081)	(1,360)	(0.5)				
CWD/LTRID	1,655	4,655	11,263	9,907	3,302	1.2				
GCID	(1,940)	(3,787)	(3,407)	(4,160)	(1,387)	(0.5)				
JID	35	(700)	(1,632)	(1,873)	(624)	(0.2)				
PPCGID	(840)	(682)	41	(161)	(54)	(0.0)				
RD 108	289	331	1,425	1,270	423	0.2				
SCVWD	(2,791)	(8,336)	(6,182)	(7,701)	(2,567)	(0.9)				
SCWA	18,975	(2,106)	786	(1,736)	(579)	(0.2)				
WSID	(1,766)	18,549	17,374	16,204	5,401	1.9				
WWD	(608)	(52,772)	(68,256)	(76,818)	(25,606)	(9.1)				
Z 7	(477)	(3,279)	(3,476)	(3,975)	(1,325)	(0.5)				
Total	7,270	(76,263)	(72,030)	(99,348)	(33,116)	(11.8)				
Total Short:					(47,815)					
Average Annual	1,818	(25,421)	(24,010)	(33,116)	(15,938)					
Solar Need			(2.9)	(3.9)	(5.7)					
*CP7: represents	s all future CI	s at the 60%	RPS target							
*each CP stands	on its own (does not ass	ume carryov	er of excess)						
* includes BCID, WSID, and WWD Clearway projects										

Figure 2: Portfolio Contents and outlook



Power & Water Resources Pooling Authority

Regular Agenda • Item 7.D

1. Resolution 24-04-03 Annual Update of Exhibit B & C.

Power and Water Resources Pooling Authority April 3, 2024 Regular Board Meeting Agenda Item 7.D JPA Exhibits B & C

Action Requested

Approve Resolution 24-04-03 as presented.

Issue Description

Annual energy use and voting share determination as required by JPA Sections 1.3, 3.8 and 8.10. This also is used to calculate the annual percentages used for the Cap & Trade Allocation in accordance with Resolution 21-11-14.

Discussion

Annual Energy

The relevant sections of the PWRPA Joint Powers Agreement are as follows:

- 1.3 Annual Energy Use: [is] the five-year average electricity usage, expressed in kilowatt hours ("kWhs"), associated with the electricity accounts that an individual Party or Stakeholder has the Authority manage on its behalf through Project Agreements. The initial values for Annual Energy Use are designated in Exhibit B, and shall be adjusted annually as soon as reasonably practicable after January 1, but no later than March 1, in accordance with Section 8.10.
- 3.8.2 Unless otherwise stated herein, voting rights shall be determined as follows: (1) an equal number of voting shares for each Board member in accordance with the formula detailed in Section 3.8.2.1, below; and (2) an additional number of voting shares in accordance with the formula detailed in Section 3.8.2.2, below. The total voting shares for each Board member shall equal the sum of (1) and (2) for that member.
- 3.8.2.1 Each Board member shall have an equal voting share as determined by the following formula: (1/(total number of Board members)) multiplied by fifty.
- 3.8.2.2 Each Board member shall have a voting share based upon its Annual Energy Use as determined by the following formula: (Annual Energy Use/Total Annual Energy) multiplied by fifty. This voting share shall be annually recalculated as described in Section 1.3.
- 3.8.2.3 The voting shares are set forth in Exhibit C.
- 8.10 Approval and Revision of Exhibits: . . . The exhibits may be revised upon the review and approval of the Board. The Authority shall provide notice to Parties and Stakeholders of the revision of any exhibit.

Power and Water Resources Pooling Authority April 3, 2024 Regular Board Meeting Agenda Item 7.D JPA Exhibits B & C

Annual adjustment to Cap & Trade allocation tracking sheet

The current Cap & Trade allocation policy was adopted in November 2021 through Resolution 21-11-14. The first two resolving paragraphs outline the procedure as presented here:

- 1. [The Board] Determines that PWRPA's ratepayer pro rata cost burden resulting from the ARB Cap-and-Trade Program may be accurately forecast by the 5-Year Average Retail Sales shown in Exhibit B to the Joint Powers Agreement, as amended annually.
- 2. [The Board] Determines for the purpose of allocating the allowance revenue received in each calendar year, the Exhibit B approved in that calendar year shall be effective January 1 of that same calendar year.

Accordingly, the allocation percentages to be effective January 1, 2024, have been updated by using the new Exhibit B 5-Year Average Retail Sales values.

SUPPORT FOR EXHIBIT B and C DETERMINATION OF ANNUAL ENERGY USE

									2024	Previous	Increase or
Party/Stakeholder	2019	2020	2021	2022	2023	Ex. B Avg.	3.8.2.1	3.8.2.2	Ex. C Share	Ex. C Share	(Decrease)
Arvin-Edison WSD	91,838,576	116,229,180	140,237,455	117,771,840	120,896,655	117,394,741	3.5714	15.0257	18.5972	17.5789	1.0183
Banta-Carbona ID	14,339,393	17,166,278	20,309,827	20,218,615	14,043,272	17,215,477	3.5714	2.2035	5.7749	5.9547	(0.1798)
Byron-Bethany ID	2,406,123	2,750,658	2,644,862	2,634,241	2,834,234	2,654,024	3.5714	0.3397	3.9111	3.9087	0.0024
Cawelo WD	20,232,549	11,561,093	8,094,054	9,975,987	18,889,969	13,750,730	3.5714	1.7600	5.3314	5.1132	0.2182
Glenn-Colusa ID	11,386,589	11,552,532	10,788,057	2,901,236	11,578,618	9,641,406	3.5714	1.2340	4.8055	4.7943	0.0112
James ID	1,987,097	3,386,124	4,849,822	5,020,842	884,083	3,225,594	3.5714	0.4129	3.9843	4.0452	(0.0609)
Lower Tule River ID	11,077,326	9,662,829	8,530,372	6,775,462	9,809,970	9,171,192	3.5714	1.1738	4.7453	4.6790	0.0663
Provident/Princeton	3,469,281	3,277,199	2,134,654	94,481	4,446,932	2,684,509	3.5714	0.3436	3.9150	3.8997	0.0153
Reclamation District 108	6,031,506	4,054,673	3,052,268	1,779,121	2,360,513	3,455,616	3.5714	0.4423	4.0137	4.0486	(0.0349)
Santa Clara Valley WD	21,801,083	24,635,649	21,147,433	21,314,566	21,293,343	22,038,415	3.5714	2.8208	6.3922	6.3042	0.0880
Sonoma County WA	34,841,846	38,920,405	35,865,391	34,678,888	33,793,023	35,619,911	3.5714	4.5591	8.1305	8.1127	0.0178
West Stanislaus ID	14,589,025	18,364,508	18,797,720	20,291,277	10,919,050	16,592,316	3.5714	2.1237	5.6951	5.7715	(0.0764)
Westlands WD	36,936,956	150,211,208	206,014,809	222,688,266	33,337,317	129,837,711	3.5714	16.6183	20.1898	21.3299	(1.1401)
Zone 7 WA	6,954,917	7,970,423	8,037,861	8,633,638	5,225,975	7,364,563	3.5714	0.9426	4.5140	4.4594	0.0546
Totals	277,892,266	419,742,760	490,504,585	474,778,459	290,312,954	390,646,205	50.0000	50.0000	100.0000	100.0000	0.0000

Notes:

Energy data rounded to the nearest whole number SCWA energy data includes solar offsets 3.8.2.1 and 3.8.2.2 shown to four decimal places for presentation only

Non-DLF metered data

As reflected in Minute Order 11-04-02 from the March 4, 2009 PWRPA Board meeting, the Board determined that load of new Designated Accounts for existing Project Participants should be reflected in the 5-year average on a prospective, incremental basis (namely, only actual load served by PWRPA will be included in the 5-year average). Pursuant to this same minute order, the Board further determined that RD 108's actual load should be divided by five for purposes of the 5-year average. The Board further determined that this treatment may not be appropriate for a "new" Project Participant.

As reflected in Minute Order 11-04-03 from the April 6, 2011 PWRPA Board meeting, the Board determined that past year's corrected meter data will be incorporated into the 5-year average in the year in which such meter data has been discovered and corrected. The 5-year average for the 2011 determination is the first 5-year average in which past year's corrected meter data has been incorporated.

As of Dec 1, 2011 CWD's energy is without Pump C and LTRID's energy is Pump C only (transferred PP2 back to PGE).

Power & Water Resources Pooling Authority Resolution 24-04-03

ANNUAL UPDATE OF EXHIBITS B AND C TO THE JOINT POWERS AGREEMENT AND CAP AND TRADE ALLOCATION PERCENTAGES

WHEREAS, the Power and Water Resources Pooling Authority ("PWRPA") was formed by a joint powers agreement ("JPA") by and between various Irrigation Districts; and

WHEREAS, Sections 1.3 and 3.8.2.2 of the JPA provide that Appendix B (Annual Energy Use) and Exhibit C (Voting Shares) shall be adjusted annually as soon as reasonably practicable after January 1, in accordance with 8.10 of the JPA; and

WHEREAS, pursuant to Resolution 21-11-14, PWRPA's ratepayer pro rata cost burden resulting from the ARB Cap-and-Trade Program may be accurately forecast by the 5-Year Average Retail Sales shown in Exhibit B to the Joint Powers Agreement, as amended annually.

NOW, THEREFORE, BE IT RESOLVED that the Pooling Authority Board of Directors hereby:

- 1. Determines that the support and calculations for Exhibits B and C, attached hereto as Attachment A, is consistent with Section 3.8.2 of the Joint Powers Agreement.
- 2. Authorizes the General Counsel to prepare final versions of Exhibits B and C and provide notice to Parties and Stakeholders.
- 3. Authorizes these Exhibits to be effective April 1, 2024, for the purpose of voting rights for Board actions as provided in Section 3.8 of the Joint Powers Agreement.
- 4. Authorizes these Exhibits to be effective January 1, 2024, for the purpose of the 2023 Annual Reconciliation as provided in Exhibit E of the Aggregation Services Agreement.
- 5. Authorizes these Exhibits to be effective January 1, 2024, for the purpose of the 2024 Cap and Trade Allocation Policy as provided in Resolution 21-11-14.

/	′/
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Resolution 24-04-03

PASSED AND ADOPTED by the Pooling Authority Board of Directors this $3^{\rm rd}$ day of April 2024, by the following vote on roll call:

AYES	· · · · · · · · · · · · · · · · · · ·	er Tule River ID, Princeton/Provident ID, Sonoma County WA, West Stanislaus ID,						
NOES								
ABSENT								
David Weise Chairman	enberger	Attest by: Bruce McLaughlin Secretary						

Exhibit B To the Joint Powers Agreement

- Annual Energy Use -

This Exhibit B is effective as of **April 1, 2024** and applicable to the period from April 1, 2024 until the date it is amended.

Party/Stakeholder	kWh (5 Year Average)
Arvin-Edison Water Storage District	117,394,741
Banta-Carbona Irrigation District	17,215,477
Byron Bethany Irrigation District	2,654,024
Cawelo Water District	13,750,730
Glenn-Colusa Irrigation District	9,641,406
James Irrigation District	3,225,594
Lower Tule River Irrigation District	9,171,192
Princeton/Provident Irrigation Dist.	2,684,509
Reclamation District 108	3,455,616
Santa Clara Valley Water District	22,038,415
Sonoma County Water Agency	35,619,911
West Stanislaus Irrigation District	16,592,316
Westlands Water District	129,837,711
Zone 7 Water Agency	7,364,563
Authority (Total Energy Use)	390,646,205

Exhibit C
To the
Joint Powers Agreement

- Voting Shares -

This Exhibit C is effective as of **April 1, 2024** and applicable to the period from April 1, 2024 until the date it is amended.

Party/Stakeholder	kWh (5 Year Average)	JPA Section 3.8.2.1	JPA Section 3.8.2.2	Voting Share
Arvin-Edison Water Storage District	117,394,741	3.5714	15.0257	18.5972
Banta-Carbona Irrigation District	17,215,477	3.5714	2.2035	5.7749
Byron Bethany Irrigation District	2,654,024	3.5714	0.3397	3.9111
Cawelo Water District	13,750,730	3.5714	1.7600	5.3314
Glenn-Colusa Irrigation District	9,641,406	3.5714	1.2340	4.8055
James Irrigation District	3,225,594	3.5714	0.4129	3.9843
Lower Tule River Irrigation District	9,171,192	3.5714	1.1738	4.7453
Princeton/Provident Irrigation District	2,684,509	3.5714	0.3436	3.9150
Reclamation District 108	3,455,616	3.5714	0.4423	4.0137
Santa Clara Valley Water District	22,038,415	3.5714	2.8208	6.3922
Sonoma County Water Agency	35,619,911	3.5714	4.5591	8.1305
West Stanislaus Irrigation District	16,592,316	3.5714	2.1237	5.6951
Westlands Water District	129,837,711	3.5714	16.6183	20.1898
Zone 7 Water Agency	7,364,563	3.5714	0.9426	4.5140
	390,646,205	50.0000	50.0000	100.0000

Voting Shares – Section 3.8.2.3 Only

This Table 2 is effective as of January 1, 2016.

Number of Parties	Number of Stakeholders	Total	Voting Share for each Party / Stakeholder
7	7	14	7.143

Power & Water Resources Pooling Authority

Regular Agenda • Item 8.A

1. LTRID REC Purchase Agreement.

Basis for LTRID REC Rate:

	2019	2020		2021		2022		2023		2024		S-the-S	
Q1	\$ 15.00	\$	16.00	\$	15.00	\$ 15.00	\$	45.00	\$	68.00			
Q2	\$ 19.00	\$	16.00	\$	15.00	\$ 16.00	\$	40.00			\$	45.78	
Q3	\$ 18.00	\$	16.00	\$	12.00	\$ 15.00	\$	65.00					
Q4	\$ 17.00	\$	16.00	\$	15.00	\$ 15.00	\$	70.00					
Annual Average RFC Price	\$ 17.25	\$	16.00	\$	14.25	\$ 15.25	\$	55.00	\$	68.00	\$	45.78	

Current Market REC Price as of 3/15/24: \$ 68.00 A

Baseline (Average REC Price 2019-2023): \$ 23.55 B

Current Market Premium (= A - B): \$ 44.45 C

Split the Savings (= C/2): \$ 22.23 D

Transfer Rate Formula (= B + D): \$ 45.78

