ITEM #5.A

Approval of Minutes of the May 01, 2023 Regular Meeting

REGULAR MEETING OF THE BOARD OF DIRECTORS
DEL PASO MANOR WATER DISTRICT

DRAFT MINUTES

May 01, 2023 6:00 PM
1817 Maryal Drive, Suite 300, Sacramento 95864

1. CALL TO ORDER:

President Saunders called the meeting to order at 6:02 p.m.

2. ROLL CALL:

Directors Present:	President Ryan Saunders, Carl Dolk, Bob Matteoli, Gwynne Pratt, and David Ross	
Staff Present:	Acting General Manager	Victoria Hoppe
	Field Manager	Mike Jenner
	District Engineer	Alan Driscoll
	Consulting Engineer	Brian Gach
	Assistant Legal Counsel	Schuyler Campbell

A quorum of the Board was present.

3. ADOPTION OF AGENDA: Members may pull an item from the agenda.

Director Pratt made a motion to adopt the agenda. The motion was seconded by Director Matteoli. The agenda was adopted on a 5 Yes/0 No vote.

4. PUBLIC COMMENTS:

The Board of Directors welcomes participation at these meetings. Matters under the jurisdiction of the Board that are not posted on the agenda may be addressed by the public, California law prohibits the Board from acting on any matter which is not on the posted agenda, unless the members determines that it is an emergency or other situation specified in Government Code Section 54954.2. Public comments are limited to five (5) minutes per individual. Please make your comments directly to the DPMWD Chair. Comments will be accepted via teleconference and in writing.

(0:05 minute)

President Saunders called for public comment.

Roy Wilson spoke to the accounting system.

Trish Harrington spoke to the RPPG report and report on delinquent accounts.

Seeing no further comments, President Saunders closed public comment.

President Saunders fielded public comment inquires.

5. CONSENT CALENDAR: All items under Consent Calendar will be considered together by one action of the Board, any Member or members of the public may request that an item be removed and considered separately.

(0:08 minutes)

Item 5.A: Approval of Minutes of the March 20, 2023 Regular Meeting
Item 5.B: Approval of Warrants and Payroll

Director Pratt made a motion to adopt the Consent Calendar. The motion was seconded by Director Dolk. The Consent Calendar was adopted on a 5 Yes/0 No vote.

6. PUBLIC HEARING:

There were no Public Hearing items to consider.

7. OLD BUSINESS:

There were no Old Business items to consider.

8. NEW BUSINESS:

Item 8.A: Draft 2023/2024 Annual Budget
(0:08 minutes)

Acting General Manager Hoppe presented the staff report and fielded questions from the Board.

Present Saunders called for public comment.

Trish Harrington expressed concern of expenses being higher than income and inquired when the rate study had been approved.

Carol Rose inquired on the cost vs. value of association memberships.

Natalie Clohossey suggested having a secondary budget planned in case Prop 218 was not successful.

Seeing no further comment, President Saunders closed public comment.

President Saunders responded to inquiry from public comment.

Director Ross made a motion to adopt the 2023/2024 Budget with the change of $30,000 accounted for in income to account for expenses. The motion was seconded by Director Pratt. The 2023/2024 Budget was adopted on a 5 Yes/0 No vote.

Item 8.B: **Bartle Wells & Associates Presentation on Proposition 218 Rate Study**
(0:39 minutes)

Bartle Wells Consultants Doug Dove and David Crosse and KMTG Consultant Kaitlin Harr presented and fielded questions from the Board.

President Saunders called for public comment.

Trish Harrington provided general comments regarding the presentation.

Carol Rose provided general comments regarding the presentation.

Roy Wilson provided general comments regarding the presentation.

Natalie Clohossey provided general comments regarding the presentation.

Seeing no further comments, President Saunders closed public comment.

President Saunders fielded inquiry and comments from the public comments.

General deliberation commenced amongst the Board and direction with moving forward was provided to staff and consultants.

Director Ross made a motion directing staff to move forward with Scenario 1. The motion was seconded by Director Pratt. The motion passed on a 4 Yes/1 No (Dolk) vote.

President Saunders called a recess at 8:08 p.m. The meeting reconvened at 8:23 p.m.

Item 8.C: **Advance Engineering Payment for Well 9 Emergency Power Backup Generator Project**
(2:23 minutes)

District Engineer Driscoll presented the staff report and fielded questions from the Board.

President Saunders called for public comment.

Roy Wilson provided general comments regarding the presentation.

Seeing no further comment, President Saunders closed public comment.

Director Ross made a motion to approve payment, as recommended by staff. The motion was seconded by Director Matteoli. The motion passed on a 5 Yes/0 No vote.

Item 8.D: **Deposit for Electrical Service Upgrade for Well #2 Meter**
(2:31 minutes)

District Engineer Driscoll presented the staff report and fielded questions from the Board.

President Saunders called for public comment. Seeing no one come forward, he closed public comment.

Director Ross made a motion to approve payment, as recommended by staff. The motion was seconded by Director Matteoli. The motion passed on a 5 Yes/0 No vote.

Item 8.E: **Ad Hoc Recommendation on General Manager Recruitment**
(2:35 minutes)

Director Ross and Director Matteoli reported on their findings and recommendation and fielded questions from the Board.

President Saunders called for public comment. Seeing no one come forward, he closed public comment.

Director Dolk made a motion to accept the Ad Hoc Committee's recommendation, with a salary range of $125,000-$180,000. The motion was seconded by Director Matteoli. The motion passed on a 3 Yes/2 No (Dolk, Ross) vote.

Item 8.F: **Resolution 23-0501-01 Amending the authorized signers on the LAIF Account to Ryan Saunders (Board President), Carl Dolk (Vice President), David Ross (Director), Gwynne Pratt (Director), Robert Matteoli (Director) and Victoria Hoppe (Acting General Manager)**
(3:26 minutes)

President Saunders presented on the subject.

President Saunders called for public comment. Seeing no one come forward, he closed public comment.

Director Pratt made a motion to approve Resolution 23-0501-01. The motion was seconded by Director Ross. The motion passed on a 5 Yes/0 No vote.

9. **FIELD REPORT:** Verbal report

Item 9.A: **Field Report on Current and Upcoming Projects**
(3:31 minutes)

Field Manager Jenner summarized the staff report.

President Saunders called for public comment. Seeing no one come forward, he closed public comment.

10. **DIRECTOR REPORT ON COMMITTEE MEETINGS:** Verbal report
Each Board Member will have 5 minutes to report out on all associated committees

Item 10.A: **Director Dolk**
American Water Works Association (AWWA)
Association of California Water Agencies (ACWA)

Item 10.B: **Director Matteoli**
Association of California Water Agencies (ACWA) Agriculture
Association of California Water Agencies (ACWA) Groundwater
Sacramento Groundwater Authority (SGA)

Item 10.C: **Director Ross**
California Rural Water Authority (CRWA)
California Special Districts Association (CSDA)
Item 10.D: **Director Saunders**
Joint Powers Insurance (JPIA)
Item 10.E: **Director Pratt**
Regional Water Authority (RWA)
Water Forum
(3:35 minutes)

Directors provided brief reports on committee meetings they attended or would attend.

11. GENERAL MANAGERS COMMENTS: Verbal report

Item 11.A: RGS agreement for clerk services will expire on 06/30/2023.
Item 11.B: Reminder to check sprinklers and drip systems
(3:38 minutes)

Acting General Manager Hoppe provided a report on agenda items and an update on general District matters.

12. DIRECTORS COMMENTS: Verbal information, non-action comments.

There were no comments from Directors.

13. FUTURE AGENDA REQUESTS: Directors can suggest topics they would like on future agendas

There were no requests for future agenda items.

14. CLOSED SESSION:
(3:40 minutes)

Conference With Legal Counsel – Anticipated Litigation
Paragraph (4) of subdivision (d) of Gov. Code § 54956.9" and not "subsection (c)

President Saunders called for public comment. Seeing no one come froward, he closed public comment.

President Saunders recessed the open session and convened the closed session at 9:41 p.m. The open session reconvened at 10:17 p.m.

President Saunders reported an Ad Hoc Committee comprised of President Saunders and Director Matteolli was to be called to facilitate discussion with General Counsel.

15. ADJOURNMENT: Next Regular Board of Directors meeting is scheduled for May 15, 2023

There being no further business, the Board of Directors meeting adjourned at 10:18 p.m.

APPROVAL:

_____
Ryan Saunders, President of the Board

ATTEST:

_____
Norma I. Alley, MMC, Clerk of the Board

ITEM #5.B

Approval of Minutes of the May 15, 2023 Regular Meeting

REGULAR MEETING OF THE BOARD OF DIRECTORS
DEL PASO MANOR WATER DISTRICT

DRAFT MINUTES

May 15, 2023 6:00 PM
1817 Maryal Drive, Suite 300, Sacramento 95864

1. CALL TO ORDER:

President Saunders called the meeting to order at 6:00 p.m.

2. ROLL CALL:

Directors Present:	President Ryan Saunders, Carl Dolk, Bob Matteoli, Gwynne Pratt, and David Ross	
Staff Present:	Acting General Manager	Victoria Hoppe
	Field Manager	Mike Jenner
	Certified Public Accountant	Robert Merritt
	District Engineer	Alan Driscoll
	General Counsel	Kaitlin Harr

A quorum of the Board was present.

3. ADOPTION OF AGENDA: Members may pull an item from the agenda.

Director Dolk made a motion to adopt the agenda. The motion was seconded by Director Pratt. The agenda was adopted on a 5 Yes/0 No vote.

4. PUBLIC COMMENTS:

The Board of Directors welcomes participation at these meetings. Matters under the jurisdiction of the Board that are not posted on the agenda may be addressed by the public, California law prohibits the Board from acting on any matter which is not on the posted agenda, unless the members determines that it is an emergency or other situation specified in Government Code Section 54954.2. Public comments are limited to five (5) minutes per individual. Please make your comments directly to the DPMWD Chair. Comments will be accepted via teleconference and in writing.

(0:04 minutes)

President Saunders called for public comment.

President Saunders stated written comment was received from Roy Wilson, which was read into the record with notation comments and attachments would be entered into the record.

Roy Wilson expanded on his written comments.

Marcy spoke to increasing costs.

Seeing no further comments, President Saunders closed public comment.

5. CONSENT CALENDAR: All items under Consent Calendar will be considered together by one action of the Board, any Member or members of the public may request that an item be removed and considered separately.

A request was made for Item 5.B. to be discussed and considered separately.

Item 5.A **Approval of Minutes of the April 17, 2023 Regular Meeting**
(0:15 minutes)

President Saunders called for public comment. Seeing no one come forward, he closed public comment.

Director Pratt made a motion to approve Consent Calendar Item 5.A. The motion was seconded by Director Dolk. The motion passed on a 5 Yes/0 No vote.

Item 5.B: **Approval of Warrants and Payroll**
(0:17 minutes)

President Saunders called for public comment.

Trish Harrington inquired on the payment for a tree removal.

Seeing no further comments, President Saunders closed public comment.

Field Manager Jenner fielded the inquiry from public comment.

Director Dolk made a motion to approve Consent Calendar Item 5.B. The motion was seconded by Director Matteoli. The motion passed on a 5 Yes/0 No vote.

6. PUBLIC HEARING:

There were no Public Hearing items to consider.

7. OLD BUSINESS:

There were no Old Business items to consider.

8. NEW BUSINESS:

Item 8.A: **Budget to Actuals**
(0:18 minutes)

Certified Public Accountant Merritt presented the staff report and fielded questions from the Board.

President Saunders called for public comment.

Roy Wilson inquired regarding expenditures for Prop 218 or a merger with Sac Suburban.

Trish Harrington inquired about expenditures being charged to the CIP.

Seeing no further comment, President Saunders closed public comment.

Certified Public Accountant Merritt fielded inquires from public comment.

Item 8.B: **Renne Public Policy Group (RPPG) Grant Funding**
(0:28 minutes)

Acting General Manager Hoppe presented the staff report. Acting General Manager Hoppe, District Engineer Driscoll, and General Counsel Karr fielded questions from the Board.

President Saunders called for public comment.

Carol Rose suggested getting through the Prop 218 process first.

Trish Harrington suggested separate accounting.

Roy Wilson suggested working with RWA to seek grant funding.

Seeing no further comment, President Saunders closed public comment.

President Saunders fielded inquires from public comment.

Director Ross made a motion to approve the grant application, Resolution 23-0515-01, and submission of the application. The motion was seconded by Director Matteoli. The motion passed on a 5 Yes/0 No vote.

Item 8.C **Renne Public Policy Group (RPPG) Service Agreement**
(0:50 minutes)

Acting General Manager Hoppe presented the staff report and fielded questions from the Board.

President Saunders called for public comment.

Trish Harrington provided general comments regarding the agreement.

Carol Rose provided general comments regarding the agreement.

Roy Wilson provided general comments regarding the agreement and noted support for postponing the item.

Seeing no further comment, President Saunders closed public comment.

Acting General Manager Hoppe fielded inquires from public comment.

Director Ross made a motion to postpone to the next meeting. The motion was seconded by Director Dolk. The motion passed on a 3 Yes/2 No (Matteoli/Pratt) vote.

Item 8.D: **Review, Discuss and Potential Amendment to the Job Description for General Manager**

(1:22 minutes)

President Saunders called for public comment.

Roy Wilson provided general comments and suggestions on the qualifications of the next General Manager.

Seeing no further comment, President Saunders closed public comment.

Director Dolk made a motion to postpone the item to a date uncertain. The motion was seconded by Director Matteoli. The motion passed on a 5 Yes/0 No vote.

Item 8.E: **Correction to the 2023/2024 Approved CIP Budget Total**

(1:30 minutes)

President Saunders presented the staff report.

President Saunders called for public comment.

Trish Harrington noted capital expenditures were listed, which were not part of the CIP.

Roy Wilson suggested separating the LAIF funds and delinquent payments.

Seeing no further comment, President Saunders closed public comment.

Director Dolk suggested capital expenditures be separated from the CIP Budget.

Direction was provided to staff to categorize funding correctly and report back at a future meeting; date uncertain.

Item 8.F: **Regional Government Services (RGS) Agreement for Management and Administrative Services**

(1:41 minutes)

Acting General Manager Hoppe presented the staff report and fielded questions from the Board.

President Saunders called for public comment.

Roy Wilson expressed concern with the cost of the contract and scope of work.

Seeing no further comment, President Saunders closed public comment.

President Saunders and Acting General Manager Hoppe fielded the inquiry from public comment.

Director Ross made a motion to approve the agreement. The motion was seconded by Director Pratt. The motion passed on a 5 Yes/0 No vote.

Item 8.G: **Update From Ad Hoc Recommendation for General Manager**
(1:49 minutes)

Acting General Manager Hoppe presented the staff report.

President Saunders called for public comment. Seeing no one come forward, he closed public comment.

9. FIELD REPORT: Verbal report

May Field Report on Current and Upcoming Project will be provided at the June 05, 2023 Regular Meeting

10. DIRECTORS REPORT ON COMMITTEE MEETINGS: Verbal report

Directors Report on Committee Meetings occur on the first meeting of the month.

11. GENERAL MANAGER'S COMMENTS: Verbal report

Item 11.A: Consumer Confidence Report (CCR)
(1:55 minutes)

Acting General Manager Hoppe provided a report on agenda items and an update on general District matters.

President Saunders called for public comment.

Trish Harrington expressed concerns with closing District offices.

Roy Wilson expressed concerns with closing District offices.

Seeing no further comments, President Saunders closed public comment.

12. CLOSED SESSION:

There were no Closed Session items to consider.

13. DIRECTORS' COMMENTS: Verbal information, non-action comments.
(2:03 minutes)

Director Dolk requested Bartle Wells change their presentation and figures to reflect the current bi-monthly billing and expressed concern with how accounts receivables were currently being handled, monitored, and deposited.

Director Pratt requested staff look into delinquent accounts.

President Saunders announced a joint meeting with Sac Suburban was to be held on Monday, July 24 at 6:00 p.m.

14. FUTURE AGENDA REQUESTS: Directors can suggest topics they would like on future agendas

(2:08 minutes)

Requests were made for presentations on delinquent accounts and analysis of the CIP and LAIF accounts. Support was provided for both matters to be on a future agenda.

15. ADJOURNMENT: Next Regular Board of Directors meeting is scheduled for June 05, 2023

There being no further business, the Board of Directors meeting adjourned at 8:09 p.m.

APPROVAL:

_____
Ryan Saunders, President of the Board

ATTEST:

_____
Norma I. Alley, MMC, Clerk of the Board

ITEM #5.C

Approval of Minutes of the August 07, 2023 Regular Meeting

REGULAR MEETING OF THE BOARD OF DIRECTORS
DEL PASO MANOR WATER DISTRICT

DRAFT MINUTES

August 07, 2023 6:00 PM
1817 Maryal Drive, Suite 300, Sacramento 95864

1. CALL TO ORDER:

President Saunders called the meeting to order at 6:00 p.m.

2. ROLL CALL:

Directors Present:	President Ryan Saunders, Carl Dolk, Bob Matteoli, Gwynne Pratt, and David Ross	
Staff Present:	General Manager	Adam Coyan
	Office Manager	Victoria Hoppe
	Field Manager	Mike Jenner
	Certified Public Accountant	Robert Merritt
	Assistant Legal Counsel	Lauren Bernadette

A quorum of the Board was present.

3. ADOPTION OF AGENDA: Members may pull an item from the agenda.

Director Ross made a motion to adopt the agenda. The motion was seconded by Director Pratt. The agenda was adopted on a 5 Yes/0 No vote.

4. PUBLIC COMMENTS:

The Board of Directors welcomes participation at these meetings. Matters under the jurisdiction of the Board that are not posted on the agenda may be addressed by the public, California law prohibits the Board from acting on any matter which is not on the posted agenda, unless the members determines that it is an emergency or other situation specified in Government Code Section 54954.2. Public comments are limited to five (5) minutes per individual. Please make your comments directly to the DPMWD Chair. Comments will be accepted via teleconference and in writing.

(6:03 pm)

President Saunders called for public comment.

Jennifer Wolfe spoke to willingness to pay increase rates for infrastructure improvements.

Seeing no further comments, President Saunders closed public comment.

5. CONSENT CALENDAR: All items under Consent Calendar will be considered together by one action of the Board, any Member or members of the public may request that an item be removed and considered separately.

(6:04 minutes)

A request was made for Item 5.D to be discussed and considered separately.

Item 5.A: Approval of Minutes of the May 17, 2023 Special Meeting
Item 5.B: Approval of Minutes of the May 22, 2023 Special Meeting
Item 5.C: Approval of Minutes of the July 17, 2023 Regular Meeting

President Saunders called for public comment. Seeing no one come forward, he closed public comment.

Director Ross made a motion to approve Consent Calendar Items 5.A, 5.B, and 5.C. The motion was seconded by Director Pratt. The motion was approved on a 5 Yes/0 No vote.

Item 5.D: Approval of Warrants and Payroll

Director Pratt asked for clarification on the payment to Tripepi Smith and Associates, Inc. Office Manager Hoppe provided clarification.

President Saunders called for public comment. Seeing no one come forward, he closed public comment.

Director Pratt made a motion to approve Consent Calendar Item 5.D. The motion was seconded by Director Dolk. The motion was approved on a 5 Yes/0 No vote.

6. PUBLIC HEARING:

There were no Public Hearing items to consider.

7. OLD BUSINESS:

There were no Old Business items to consider.

8. NEW BUSINESS:

Item 8.A: 2021/2022 Final Audit
(6:08 pm)

Richardson & Company Auditor Ingrid Sheipline presented the audit and fielded questions from the Board.

Director Dolk provided suggested changes to the audit.

President Saunders called for public comment. Seeing no one come forward, he closed public comment.

Director Dolk made a motion to approve the audit, as amended. The motion was seconded by Director Pratt. The motion was approved on a 5 Yes/0 No vote.

Item 8.B: Water Forum Presentation

This item was heard out of order.

Item 8.C: Ballot Box
(6:18 pm)

This item was heard out of order.

General Manager Adam Coyan presented the staff report and fielded questions from the Board.

President Saunders called for public comment.

Carol Rose provided general comments regarding the presentation.

Seeing no further comments, President Saunders closed the public comment.

Item 8.B: Water Forum Presentation
(6:22 pm)

This item was heard out of order.

Water Forum Executive Director Jessica Law presented and fielded questions from the Board.

President Saunders called for a break at 6:48 p.m. due to a power outage at the District Offices. He reconvened the meeting at 7:05 p.m.

President Saunders announced the remaining items on the agenda would be postponed and heard at the Tuesday, September 5, 2023, Board Meeting, and the meeting was to be adjourned.

9. FIELD REPORT: Verbal report

Item 9.A: Field Report on Current and Upcoming Projects

10. DIRECTOR REPORT ON COMMITTEE MEETINGS: Verbal report
Each Board Member will have 5 minutes to report out on all associated committees

Item 10.A: Director Dolk
American Water Works Association (AWWA)
Association of California Water Agencies (ACWA)

Item 10.B: Director Matteoli
Association of California Water Agencies (ACWA) Agriculture
Association of California Water Agencies (ACWA) Groundwater
Sacramento Groundwater Authority (SGA)

Item 10.C: Director Ross
California Rural Water Authority (CRWA)
California Special Districts Association (CSDA)

Item 10.D: **Director Saunders**
Joint Powers Insurance (JPIA)

Item 10.E: **Director Pratt**
Regional Water Authority (RWA)
Water Forum

11. GENERAL MANAGERS COMMENTS: Verbal report

12. CLOSED SESSION:

13. DIRECTORS COMMENTS: Verbal information, non-action comments.

14. FUTURE AGENDA REQUESTS: Directors can suggest topics they would like on future agendas

15. ADJOURNMENT: Next Regular Board of Directors meeting is scheduled for August 21, 2023

There being no further business, the Board of Directors meeting adjourned at 7:05 p.m.

APPROVAL:

_____
Ryan Saunders, President of the Board

ATTEST:

_____
Norma I. Alley, MMC, Clerk of the Board

ITEM #5.D

Approval of Warrants and Payroll

Del Paso Manor Water District
VENDORS PAID / APPROVED - AUGUST 2023

VENDORS NAME	DESCRIPTION	CIP	AMOUNT	CHECK #
ACWA JPIA	Health		$477.04	10734
ACWA JPIA	Property Insurance (07/01/2023 - 06/30/2024)		$4,584.73	10735
ACWA JPIA	Cyber Liability Program (07/01/2023 - 06/30-2024)		$446.00	10736
ADP	Payroll		$22,835.15	EFT
ADP Taxes	Payroll Taxes		11,622.59	EFT
Appletree Answers	Answering service		$481.86	CC
AT&T	Internet; Phone/Fax		$85.60	CC
AT&T	Phone		$343.41	CC
AT&T	Phone		$211.33	CC
AT&T Mobility	Cell Phones; iPads		$441.28	CC
BSK	Labs		$5,174.00	10737
CalPers	GASB-68 Report Fees - Misc. First Level & Misc. Pepra New Members		$700.00	EFT
CalPers	Employee Contribution - Classic		$2,190.30	EFT
CalPers	Employee Contribution - Pepra		$3,014.34	EFT
CalPers	Health		$10,494.70	EFT
CalPers	Unfunded Liability - Classic		$5,958.92	EFT
City of Sacramento - Revenue Division	Diversion Billing (January - June 2023)		$3,343.59	10738
DEX.YP	Yellow Pages		$15.50	CC
Doumit Construction, Inc.	Refund for Hydrant Use Permit/Fees		$857.70	10739
Emigh Hardware	Material/Supplies		$408.61	10749
Employment Development Department	Employment Tax		$4,050.00	10751
Forsgren Associates, Inc.	Services Rendered Thru 06/25/2023 (Prop 218 Support)		$2,018.75	10740
Forsgren Associates, Inc.	Services Rendered Thru 06/25/2023 (Well 2 Engineering)		$3,949.50	10740
Forsgren Associates, Inc.	Services Rendered Thru 06/25/2023 (Well 9 Engineering)		$9,532.75	10740
Forsgren Associates, Inc.	Services Rendered Thru 06/25/2023 (Well 6B Modifications)		$4,994.42	10740
Forsgren Associates, Inc.	Services Rendered Thru 07/25/2023 (Well 2 Engineering)		$2,296.82	10752
Forsgren Associates, Inc.	Services Rendered Thru 07/25/2023 (Well 9 Engineering)		$2,735.12	10752
Forsgren Associates, Inc.	Services Rendered Thru 07/25/2023 (Well 6B Modifications)		$4,749.56	10752
Forsgren Associates, Inc.	Services Rendered Thru 07/25/2023 (On Call Services)		$1,556.25	10752
Forsgren Associates, Inc.	Services Rendered Thru 07/25/2023 (Well 7 Support)		$6,838.75	10752
Legacy Cleaning Services	Maryal office		$160.00	CC
MailRite	Billing Mailhouse (2022 CCR)		$3,207.96	10741

Del Paso Manor Water District
VENDORS PAID / APPROVED - AUGUST 2023

Mozingo Construction, Inc.	Refund for Hydrant Use Permit/Fees		$857.70	10753
Munibilling	Heartland Return Fee (July 2023)		$10.00	10754
Nick Weddle	Annual Reimbursement for District Uniform Requirements		$404.92	10755
PG&E	Gas		$9.44	EFT
Regional Government Services (RGS)	June 2023 Clerk Services		$929.40	10742
Robert Merritt	CPA - Services Rendered Through July 2023		$1,235.00	10756
Sacramento County Utilities	Utilities		$236.81	EFT
San Juan Unified School District	218 Workshop & Protest Hearing Venue		$594.00	10757
Sierra Chemical Company	Chemicals		$483.00	10743
Sierra Chemical Company	Chemicals		$378.00	10743
Sierra Chemical Company	Chemicals		$462.00	10743
Sierra Chemical Company	Chemicals		$336.00	10758
Smud	Account# 7000000179		$11,520.10	10744
Streamline	Website		$249.00	CC
TAK Communications, CA, Inc.	2511 Cathay Court		$3,029.26	10745
Terrapin Technology Group	Software / Computers		$287.05	10759
Tripepi Smith & Associates, Inc.	General Account Support		$2,550.92	10760
Uinta Holdings, LLC	September 2023 Rent		$2,570.00	10761
Umpqua Bank	District Credit Card		$3,994.05	10746
Underground Service Alert of Northern CA & NV	CA State Fee Regulatory Costs (07/2023 - 06/2024)		$478.07	10747
VOYA	July 2023 Employee Contribution		$500.00	10748
Wex Bank	Gas		$385.26	EFT
Wizix Technology Group, Inc.	Photocopy Machine		$97.45	CC
MONTHLY TOTAL---------->		**$0.00**	**$139,751.37**	

Approved at 08/07/2023 Regular Meeting
Approved at 08/21/2023 Regular Meeting
TOTAL CHECKS ISSUED: 27
PAID VIA CREDIT CARD (CC): 19
PAID VIA ELECTRONIC FUNDS TRANSFER (EFT): 10
*** DISTRICT FILES INCLUDES INVOICES BEHIND CREDIT CARD BILL WHICH ARE AVAILABLE FOR REVIEW AT THE DISTRICT OFFICE**

Del Paso Manor Water District
VENDORS PAID / APPROVED - AUGUST 2023

UMPQUA DISTRICT CREDIT CARD - CHARGED IN AUGUST 2023			
VENDORS NAME	**DESCRIPTION**	**AMOUN**	**PAID DATE**
Zoom	Cloud Recording	40.00	8/3/2023
Amazon	Office Supplies	13.77	8/4/2023
Appletree	Answering Service	481.86	8/8/2023
Streamline	Website	249.00	8/8/2023
Dex YP	Yellow Pages	15.50	8/8/2023
Legacy Cleaning	Maryal office	160.00	8/8/2023
AT&T	Phone	343.41	8/8/2023
AT&T	Phone	211.33	8/8/2023
Wizix	Photocopy Machine	97.45	8/8/2023
Go Daddy	Web Domain	66.32	8/9/2023
Amazon	Office Supplies	569.21	8/9/2023
Amazon	Office Supplies	90.38	8/17/2023
Amazon	Office Supplies	31.05	8/17/2023
Mod Pizza	Staff Lunch	48.66	8/18/2023
Smart & Final	Public Workshop/218 Supplies	100.63	8/18/2023
Jiffy Lube	Fleet Oil Change	149.21	8/18/2023
AT&T	Internet; Phone/Fax	85.60	8/22/2023
AT&T	Cell Phones; iPads	441.28	8/22/2023
Nextdoor Ad	218 Ad	10.00	8/22/2023
		3,204.66	

Del Paso Manor Water District

SEPTEMBER 2023 VENDORS FOR APPROVAL

VENDORS NAME	DESCRIPTION	CIP	AMOUNT	CHECK #
AT&T	Phone		$343.59	
CalPers	Employee Contribution - Classic		$2,190.30	
CalPers	Employee Contribution - Pepra		$3,184.55	
CalPers	Health		$10,494.70	
CalPers	Unfunded Liability - Classic		$5,958.92	
DEX.YP	Yellow Pages		$15.50	
Flowline Contractors, Inc.	Annette Leak Repair		$10,489.00	
Kronick, Moskovitz, Tiedemann & Girard	Services Rendered Through July 2023		$22,394.08	
Leaf	Photocopy Machine Lease		$172.92	
Legacy Cleaning Services	Maryal Office		$160.00	
Loewen Pump Maintenance	Well 9 Seal		$1,402.87	
Mailrite Print and Mail, Inc	Flat Rate Billing (July/August 2023)		$1,916.36	
Mailrite Print and Mail, Inc	218 Rate Increase Postcard #1		$1,997.11	
PG&E	Gas		$8.04	
Regional Government Services (RGS)	July 2023 Clerk Services		$974.60	
Richardson & Company	21/22 Annual Audit		$10,700.00	
Sacramento Sububan Water District (SSWD)	Mutual Aid Agreement (07/01/2023 - 07/31/2023)		$483.00	
Sierra Chemical Company	Chemicals		$588.00	
Smud	Account# 7000000179		$13,691.74	
Stacey Shorey	Reimbursement for COE		$112.98	
Streamline	Website		$249.00	
Uinta Holdings, LLC	October 2023 Rent		$2,750.00	
Umpqua Bank	District Credit Card		$3,204.66	
USA BlueBook	4268 Stock		$240.74	
VOYA	August 2023 Employee Contribution		$500.00	
Wex Bank	Gas		$462.43	
Wizix Technology Group, Inc.	Photocopy Machine		$238.98	
MONTHLY TOTAL----------->		**$0.00**	**$94,924.07**	

Del Paso Manor Water District
BOD Compensation Expense Summary
AUGUST 2023

AUGUST 2023 MEETINGS		DOLK	MATTEOLI	PRATT	ROSS	SAUNDERS
	Board Meetings					
8/7/2023	DPMWD - Regular Board Meeting	1	1	1	1	1
8/21/2023	DPMWD - Regular Board Meeting	1	1	1	1	1
	DPMWD - Special Board Meeting					
	DPMWD - Emergency Board Meeting					
	ADHOC Committee Meetings					
	Director Compensation Committee Meeting					
	Finance Standing Committee Meeting					
	General Counsel Review Committee					
	General Manager Evaluation Committee					
	LAFCo 2x2 Meeting					
	SSWD / DPMWD 2X2 Committee					
	Succession Planning Committee					
	Other Meetings					
	American Water Works Association (AWWA) *(Dolk)*					
	Association of California Water Agencies (ACWA) *(Dolk)*					
	Association of California Water Agencies (ACWA) Agriculture *(Matteoli)*					
	Association of California Water Agencies (ACWA) Groundwater *(Matteoli)*					
	California Rural Water Authority (CRWA) *(Ross)*					
	California Special Districts Association (CSDA) *(Ross)*					
	Ethics Training (AB1234)					
	Joint Powers Insurance (JPIA) *(Saunders)*					
	Legal Councel Meeting					
	Regional Water Authority (RWA) *(Pratt)*					
	Sacramento Groundwater Authority (SGA) *(Matteoli / Pratt)*					
	Sacramento Suburban Water District (SSWD)					
	Sexual Harassment Prevention Training (AB1825)					
07/28/2023 & 08/24/2023	Water Forum *(Pratt)*			2		
	August Monthly Meeting Totals					
	TOTAL MEETINGS	2	2	4	2	2
	TOTAL COMPENSATED MEETINGS	2	2	4	2	2
	TOTAL COMPENSATION	$200	$200	$400	$200	$200

ITEM #8.A

Budget to Actuals

Del Paso Manor Water District
Expense Budget To Actual Comparison
July 1, 2023 to August 31, 2023

	Year to Date July 1, 2023 to August 31, 2023	Budget	Percent of Budget	Notes
Revenues				
Water Sales	262,992	1,358,847	19.35%	
C.I.P. Revenue	99,485	598,811	16.61%	
Other water sales	71	-	Not budgeted	
Other customer charges	60	-	Not budgeted	
Interest income	-	30,000	0.00%	
Misc. income	-	-	Not budgeted	
Total Revenues	362,608	1,987,658	18.24%	
Employee Related				
Management Salaries	22,499	160,000	14.06%	
Staff Salaries	44,401	328,051	13.53%	
Director Fees	2,400	22,000	10.91%	
Payroll Taxes	5,302	41,000	12.93%	
PERS Retirement	17,809	100,500	17.72%	
Health	11,604	90,000	12.89%	
Retiree Health Benefits & OPEB	10,723	80,000	13.40%	
Total Employee Related	**114,738**	**821,551**	13.97%	
Administration				
Insurance	13,906	59,500	23.37%	
Office Expense	15,814	91,500	17.28%	
Audit Fees	-	12,000	0.00%	
Legal Fees	-	200,000	0.00%	
Election Related	-	3,000	0.00%	
Miscellaneous	10,036	5,000	200.72%	1
Professional Administration Fees	7,303	131,700	5.55%	
Bank Charges	220	2,000	11.00%	
Professional Dues	36,098	58,500	61.71%	
Professional Meetings	-	10,000	0.00%	
Cert/Continuing Education	-	5,000	0.00%	
Total Administration	**83,377**	**578,200**	14.42%	
Operations				
Conservation	-	3,400	0.00%	
Power	9	112,000	0.01%	
Repairs & Maintenance	6,869	216,000	3.18%	
Lab Fees	5,174	7,000	73.91%	
Backflow Program	-	2,000	0.00%	
Engineering	18,177	250,000	7.27%	
City Water	-	7,000	0.00%	
Capital/Equipment Expenditures	-	60,000	0.00%	
Total Operating	**30,229**	**657,400**	4.60%	
Total Employee Related, Administration and Operating Expenses	**228,344**	**2,057,151**	11.10%	
C.I.P.				
New Pipeline	-	50,000	0.00%	
Well #2	-	950,000	0.00%	
Well # 6B	-	50,000	0.00%	
Well #9	-	360,000	0.00%	
Interest Expense & Principal Debt Payment	-	325,000	0.00%	
Total C.I.P.	-	1,735,000	0.00%	

Amounts above are not audited

Notes

1 Misc. expenses include employee relocation and operating interest expenses

	August 2023	Budget	Percentage of Budget
Employee Related			
5102.10 · Management salaries	22,499.00	160,000.00	14.06%
5102.15 · Field salaries	31,542.00	250,000.00	12.62%
5102.20 · Office manager salary	12,859.00	78,051.00	16.48%
5102.05 · Director fees	2,400.00	22,000.00	10.91%
5102.30 · Payroll taxes	5,302.00	41,000.00	12.93%
6451.00 · PERS/retirement	17,809.00	100,500.00	17.72%
6501.00 · Employee healthcare (CalPers)	11,604.00	90,000.00	12.89%
6502.00 · Retiree health benefits	10,723.00	80,000.00	13.40%
Administration			
5251.00 · Insurance			
5251.05 · Liability	9,322.00	40,000.00	23.31%
5251.10 · Property	4,585.00	4,500.00	101.89%
5251.15 Workers Compensation	0.00	15,000.00	0.00%
6151.00 · Office expense			
6151.05 · District office lease	7,710.00	32,000.00	24.09%
6151.10 · Phone service	595.00	4,500.00	13.22%
6151.15 · Internet provider	840.00	5,000.00	16.80%
6151.20 · Sewer & garbage (Lusk)	237.00	2,000.00	11.85%
6151.21 · Miscellaneous (office other)	0.00	0.00	N/A
6151.25 · Postage	3,332.00	20,000.00	16.66%
6151.30 · Printing	0.00	1,000.00	0.00%
6151.35 · Computers & supplies	0.00	3,500.00	0.00%
6151.40 · Office supplies	1,511.00	7,500.00	20.15%
6151.45 · Answering service	979.00	5,500.00	17.80%
6151.50 · Office furniture	0.00	2,000.00	0.00%
6151.55 · Payroll preparation	138.00	2,000.00	6.90%
6151.60 · GASB 75 valuation	0.00	2,000.00	0.00%
6151.70 · Janitorial	320.00	2,500.00	12.80%
Office expense - other	153.00	0.00	N/A
6251.00 · Audit	0.00	12,000.00	0.00%
6255.00 Election related	0.00	3,000.00	N/A
6301.00 · Legal	0.00	200,000.00	0.00%
6401.00 · Misc	10,036.00	5,000.00	200.72%
6601.00 · Professional Admin fees			
6601.05 · SWRCB annual fees	0.00	16,000.00	0.00%
6601.10 · NDPES permit	0.00	1,500.00	0.00%
6601.15 · Cal Pers actuarial reports	700.00	700.00	100.00%
6601.25 · Air Quality permits	0.00	5,000.00	0.00%
6601.30 · Encroachment permits	0.00	500.00	0.00%
6601.35 · CPA fees	1,235.00	18,000.00	6.86%
6601.00 · Professional admin fees - other	5,368.00	60,000.00	8.95%
6601.50 · Public relations	0.00	30,000.00	0.00%
6171.00 · Bank fees	220.00	2,000.00	11.00%

6561.00 · Professional dues			
6561.05 · ACWA	4,867.00	11,000.00	44.25%
6561.10 · AWWA	244.00	700.00	34.86%
6561.15 · CSDA	4,093.00	8,300.00	49.31%
6561.20 · CRWA	750.00	1,000.00	75.00%
6561.25 · RWA	4,423.00	9,500.00	46.56%
6561.30 · SGA	21,243.00	25,000.00	84.97%
6561.35 · SAWWA	0.00	1,000.00	0.00%
6561.00 · Professional dues - other	478.00	2,000.00	23.90%
6551.00 · Professional meetings	0.00	10,000.00	0.00%
6610.00 Certification/continuing education	0.00	5,000.00	0.00%
Operations			
5151.00 · Power			
5151.05 · PG&E	9.00	2,000.00	0.45%
5151.10 · SMUD	0.00	110,000.00	0.00%
5201.00 · R & M			
5201.05 · Leak repairs	3,029.00	104,000.00	2.91%
5201.10 Field Equipment	0.00	2,000.00	0.00%
5201.15 · Field supplies	814.00	35,000.00	2.33%
5201.20 · Fuel for vehicles	385.00	9,000.00	4.28%
5201.25 Vehicle repair and maintenance	0.00	3,000.00	0.00%
5201.35 · Chlorine	1,659.00	11,000.00	15.08%
5201.45 · Well repair & maintenance	0.00	6,000.00	0.00%
5201.55 · Field staff cellular service	982.00	6,000.00	16.37%
5201.00 R & M other	0.00	0.00	N/A
5201.70 SSWD Mutual Aide Field Staff	0.00	40,000.00	0.00%
5301.00 · Lab fees (H2O testing)	5,174.00	7,000.00	73.91%
5451.00 City water	0.00	7,000.00	0.00%
5452.00 Backflow program	0.00	2,000.00	0.00%
5351.00 Engineering	18,177.00	250,000.00	7.27%

ITEM #8.B

Water Forum Presentation

DEL PASO MANOR WATER DISTRICT

BOARD MEETING

DATE: September 05, 2023 **AGENDA ITEM NO. 8.B**

SUBJECT: Water Forum Presentation

STAFF CONTACT:
Adam Coyan, General Manager

BACKGROUND:

The Water Forum is a diverse group of business and agricultural leaders, citizen groups, environmentalists, water managers, and local governments working together to balance coequal objectives: Provide a reliable and safe water supply for the region's economic health and planned development through to the year 2030; and preserve the fishery, wildlife, recreational, and aesthetic values of the lower American River.

RECOMMENDATION:
Receive the information from the presentation.

ATTACHMENTS:
Water Forum Presentation Slides

ENVIRONMENTAL IMPACT:
This item is not a project under Section 21065 of the California Public Resources Code, as it could not have any direct or indirect impact on the environment.

FINANCIAL IMPACT:
This item will not have any direct or indirect financial impact on the district.

WATER FORUM 2.0 UPDATE

Approach and Process for Collaborative Negotiations

August 7, 2023

Jessica Law, Executive Director

THE WATER FORUM

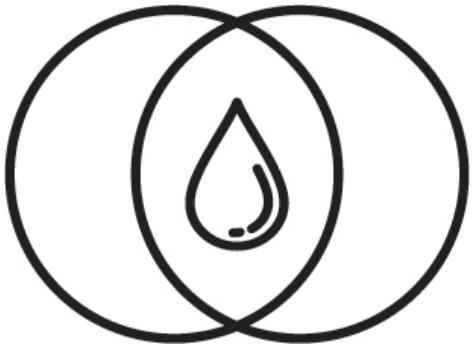
Coequal objectives:

Provide a reliable and safe water supply for the Sacramento region's long-term growth and economic health

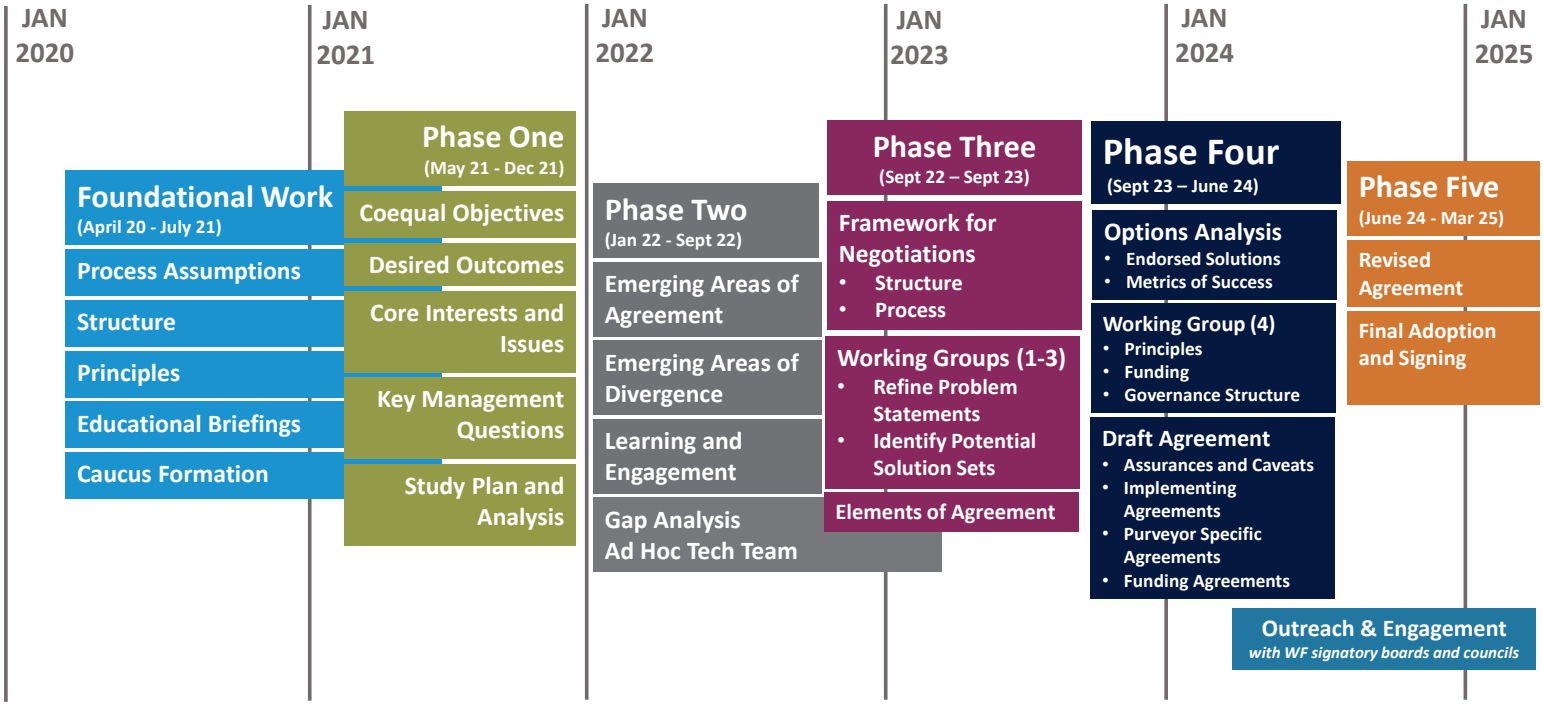
Preserve the fishery, wildlife, recreational, and aesthetic values of the Lower American River

THE WATER FORUM PROCESS IS UNIQUE!

- Members are engaged in a collaborative negotiation process that emphasizes mutual gains for all parties
- While disagreements are inevitable, the parties strive to understand and address concerns as they arise
- The parties take steps to build trust and practice use of "disclosures" to maintain open communication and transparency
- This is not strategic planning – the process requires patience and diligence as we move through the phases



Water Forum 2.0 | Schedule



FOUNDATIONAL WORK: Initiating the Negotiation Process

Major Accomplishments

- 6 educational briefings
- Public Caucus: reinvigorated and broadened
- Foundational reference documents
- Process kickstarted during a global pandemic!

Foundational Reference Documents

- Terms of Reference
- Past, Present, Future Document
- Negotiating Structure
- Roles and Responsibilities

Educational Briefings

- Water Forum 101
- Climate Change
- Fisheries
- Groundwater
- Water Efficiency Regulatory Update
- Flow Management Standard

PHASE 1: Identifying Areas of Alignment

Coequal Objectives
Climate Change Resiliency
Integrated Long-Range Planning
Water Conservation and Efficiency
Regional Conjunctive Use
In-River Salmonid Habitat
American River Parkway

PHASE 2: Identifying Gaps in Water Supply

From Demand and Climate Change

Multi-year droughts are expected to become more frequent and more severe increasing from 1-in-100 year to 1-in-10-year events

Future regional surface water diversions are expected to increase by 100 TAF/year due to growth, but climate scenarios reduce surface water availability and create greater variability between hydrologic year types

Reductions in storage from climate change are predicted due to be considerable

Increases in expected river temperature make survival of future salmonid populations challenging

PHASE 3: Working Group Deliberations

Core Problem Statements, Potential Solution Sets

American River Flows and Operations

1.1 Flow Management Standard

1.2 Temperature Management Infrastructure

1.3 Coordination with CVP, Reclamation

American River Corridor Health

2.1 Fish, Wildlife, Recreational & Aesthetics Resources

2.2 Functional Flows

2.3 Science, Monitoring, & Decision Support

2.4 Hatchery and Fishery Management

Water Supply Sustainability

3.1 Regional Groundwater Coordination

3.2 Surface Water Diversions

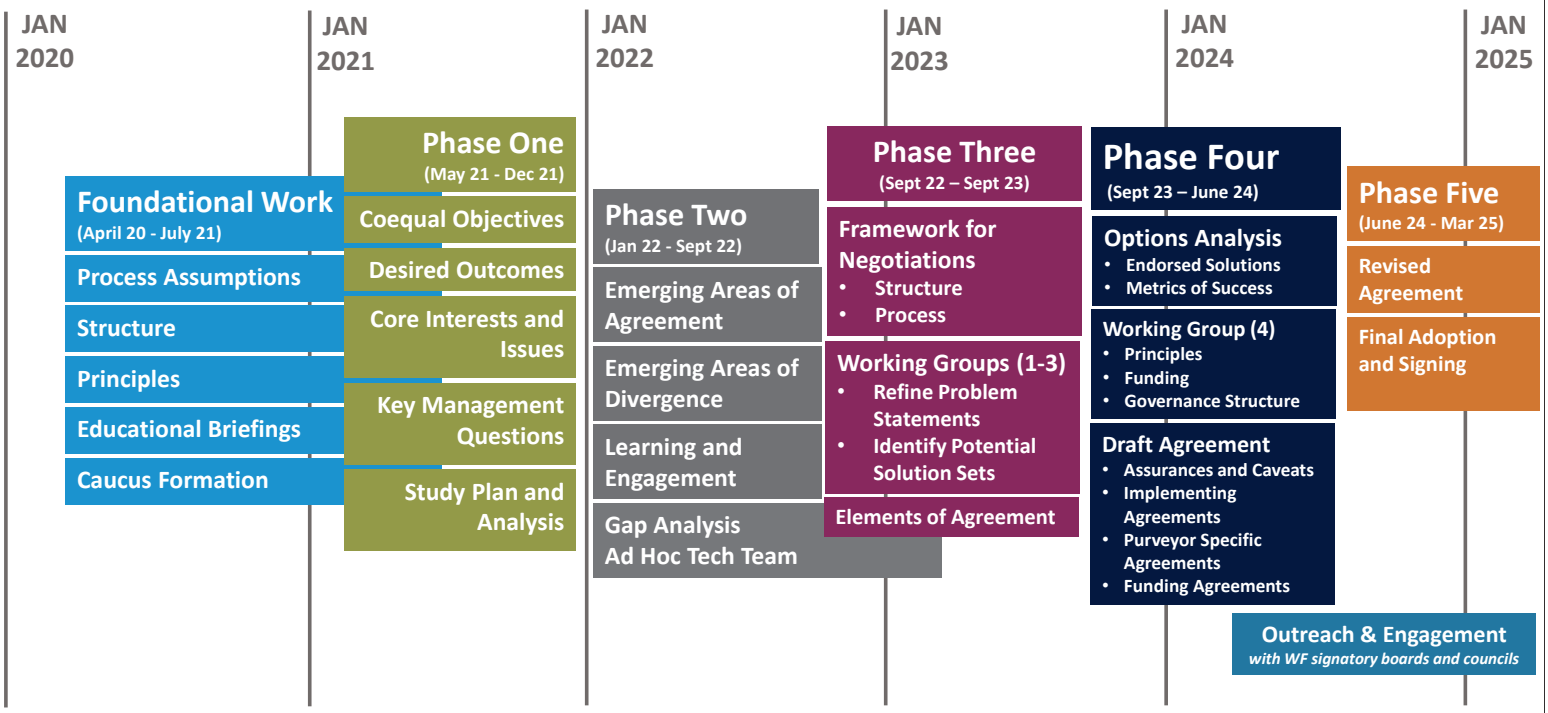
3.3 Dry Year Actions

3.4 Demand Management

Governance, Funding & Administration

Details Pending Additional Discussion

Water Forum 2.0 | Schedule



NEXT STEPS

Water Forum members move to invest over $1 million in additional funding to support next two years of process

New funding partners join the effort: East Bay Municipal District, Sacramento Area Flood Control District

Water Forum members working on identifying potential solution sets

Negotiations on the major elements of the agreement will resume in working groups late Summer/early Fall

Commitment to complete process by March 2025

WATER FORUM

QUESTIONS?

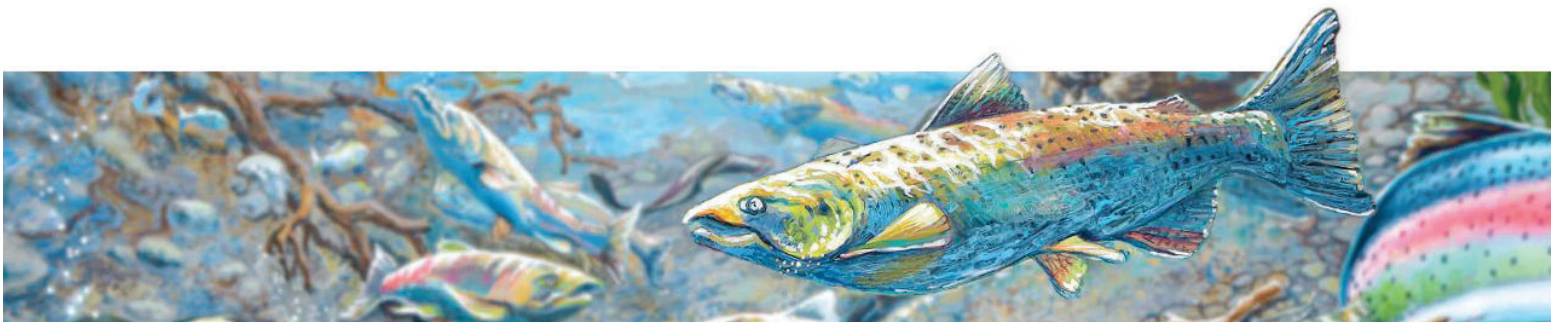


Table 1. Water Forum 2.0 Project Contributions By Agency Per Fiscal Year			
Agency	**Amount**		
	FY 23-24	**FY 24-25**	**Total**
California-American Water Company	$58,100	$58,100	$116,200
Carmichael Water District	$16,530	$16,530	$33,060
Citrus Heights Water District[2]	$28,629	$28,629	$57,258
City of Folsom	$32,124	$32,124	$64,248
City of Folsom (Ashland)[2]	$1,455	$1,455	$2,910
City of Roseville	$52,208	$52,208	$104,415
City of Sacramento, Department of Utilities	$86,571	$86,571	$173,141
Del Paso Manor Water District	$2,441	$2,441	$4,881
East Bay Municipal District (EBMUD)[1]	$12,000	$12,000	$24,000
El Dorado County Water Agency (EDCWA)	$5,705	$5,705	$11,410
El Dorado Irrigation District	$50,506	$50,506	$101,013
Fair Oaks Water District[2]	$20,289	$20,289	$40,578
Golden State Water Company	$24,217	$24,217	$48,434
Orange Vale Water Company[2]	$6,124	$6,124	$12,248
Placer County Water Agency	$16,324	$16,324	$32,649
Sacramento Area Flood Control District (SAFCA)[1]	$20,000	$20,000	$40,000
Sacramento County Water Agency	$58,333	$58,333	$116,666
Sacramento Municipal Utilities District (SMUD)	$12,000	$12,000	$24,000
Sacramento Suburban Water District	$51,699	$51,699	$103,398
San Juan Water District (in Sacramento County)[2]	$15,246	$15,246	$30,491
Total	**$570,500**	**$570,500**	**$1,141,000**

[1]EBMUD and SAFCA are not parties to this agreement. Funding will be provided under a separate agreement. Please see **Section III** for additional information.
[2]The parties have committed to fund the Water Forum 2.0 Project for FY 23-24 only and will consider FY 24-25 funding in June 2024 consistent with **Table 1.**

ITEM #8.C

Request for Proposal (RFP) for Well #9 Backup Generator

DEL PASO MANOR WATER DISTRICT

BOARD MEETING

DATE: September 05, 2023 **AGENDA ITEM NO. 8.C**

SUBJECT: Request for Proposal (RFP) for Well #9 Backup Generator

---

STAFF CONTACT:
Adam Coyan, General Manager

BACKGROUND:
The Grand Jury report released October 28th, 2021 highlighted the need to invest money in the infrastructure, capital improvement, operations, and maintenance to continue to provide a reliable and safe supply of drinking water to the rate payers.

Del Paso Manor Water District's mission is to provide safe drinking water in accordance with California and federal regulations and to maintain a reliable water supply for water consumption and fire protection.

Currently the District only has one backup generator at Well #6. Even though the District has interties with Sacramento Suburban Water District (SSWD) it is imperative that the district has a redundant system in place to accomplish its mission of supplying a reliable supply of water and fire protection.

RECOMMENDATION:
Approve the release for request for proposals for backup generator at Well #9.

ATTACHMENTS:
Request for Proposals

ENVIRONMENTAL IMPACT:
This item is an update to an existing structure and does not need a CEQA review.

FINANCIAL IMPACT:
This item is in the current budget and the project has been approved.

REQUEST FOR PROPOSAL

NATURAL GAS GENERATOR

FOR THE

WELL 9 EMERGENCY BACKUP GENERATOR PROJECT

DEL PASO MANOR WATER DISTRICT

SACRAMENTO, CA

AUGUST 2023

FORSGREN Associates Inc.

REQUEST FOR PROPOSAL

NATURAL GAS GENERATOR
FOR THE
WELL 9 EMERGENCY BACKUP GENERATOR PROJECT

AUGUST 2023

OWNER

Del Paso Manor Water District
1817 Maryal Dr #300
Sacramento, CA, 95864

ENGINEER

Forsgren Associates, Inc.
3110 Gold Canal Drive, Ste. C
Rancho Cordova, CA 95670

TABLE OF CONTENTS

NOTICE INVITING PROPOSALS
NATURAL GAS GENERATOR
WELL 9 EMERGENCY BACKUP GENERATOR PROJECT
DEL PASO MANOR WATER DISTRICT

NOTICE IS HEREBY GIVEN that Del Paso Manor Water District (DPMWD) will receive sealed proposals for the Supply of a Natural Gas Generator as described in the specifications. The equipment is intended for the project entitled "DEL PASO MANOR WATER DISTRICT WELL 9 EMERGENCY BACKUP GENERATOR PROJECT" in the DPMWD located in Sacramento, California. The equipment will be furnished and delivered by the equipment supplier to the Owner's construction contractor (not yet selected) at the Well 9 site in Sacramento, California. DPMWD intends to begin construction on the Site around January 2024.

PROPOSALS WILL BE RECEIVED by Forsgren Associates,Inc (Engineer) until the hour of **4:00 p.m.** local time on **September 12, 2023**. All proposals must be submitted via email to **bgach@forsgren.com**, with the subject line of "Proposal for EMERGENCY BACKUP GENERATOR for Del Paso Manor Water District Well 9".

SPECIFICATIONS may be obtained from the Engineer beginning **August 8, 2023**. All questions relative to this project shall be directed to the Engineer:

Forsgren Associates, Inc
3110 Gold Canal Drive, Ste. C
Rancho Cordova, CA 95670

ATTN: Brian Gach
bgach@forsgren.com
775-399-0024

It shall be understood, however, that no interpretations of the specifications, or approval of "or equal" products will be made by telephone.

DPMWD reserves the right to reject any and/or all proposals, and to waive any informality or minor defect.

BY ORDER OF THE GENERAL MANAGER OF DEL PASO MANOR WATER DISTRICT SACRAMENTO, CALIFORNIA.
ADAM COYAN, GENERAL MANAGER.

INSTRUCTIONS TO PROPOSERS

FORM OF PROPOSALS: Proposals shall be made on the proposal Bid Form included herein. The Bid Form, along with the requested supporting information, shall be prepared in a neat, organized fashion and enclosed in a single PDF file. The proposal shall contain the following information:

- Company Information
- Bid Form
- Equipment
    - Description of Equipment
    - List of Equipment to be Supplied
    - General Arrangement Drawings and Equipment Cut Sheets
    - Electrical Information
- Operations & Maintenance
    - Description of Maintenance Needs
    - Recommended Spare Parts
    - Description of Repair/Replacement
    - Anticipated O&M Costs, Including cost to Owner for all wear items
- Experience and References
- Statement of conformance with specifications
- Statement of Warranty

Additional sections may be added at the discretion of the Proposer.

DELIVERY OF PROPOSALS: One digital copy (PDF format) of the proposal shall be delivered by the time and to the place stipulated in the **Notice Inviting Proposals**. It is the proposer's sole responsibility to see that their proposal is received in proper time.

WITHDRAWAL OF PROPOSALS: Proposals shall be unconditionally accepted without alteration or correction, excepting that proposer may by means of written request, signed by the proposer or his properly authorized representative withdraw his proposal. Such written request must be delivered to the place stipulated in the **Notice Inviting Proposals** for receipt of proposals prior to the date and time specified for receipt of proposals as stipulated in the **Notice Inviting Proposals**.

MODIFICATIONS AND ALTERNATIVE PROPOSALS: Unauthorized conditions, limitations, or provisions attached to a proposal may render it non-responsive and may cause its rejection.

DISCREPANCIES IN PROPOSALS: In the event there is more than one proposal item in a proposal schedule, the proposer shall furnish a price for all proposal items in the schedule; failure to do so may render the proposal non-responsive and subject to rejection. In the event there are unit price proposal items in a proposal schedule and the "amount" indicated for a unit price proposal item does not equal the product of the unit price and quantity, the unit price shall govern and the "amount" will be corrected accordingly, and the Supplier shall be bound by said correction. In the event there is more than one proposal item in a proposal schedule and the total indicated for the schedule does not agree with the sum of the prices proposed on the individual items, the prices proposed on the individual items shall govern and the total for the schedule will be corrected accordingly, and the supplier shall be bound by said correction.

PROPOSAL SECURITY: NOT REQUIRED

PROPOSER'S EXAMINATION OF PROPOSAL DOCUMENTS: It is the responsibility of each Proposer before submitting a Proposal, to:

A. Examine the Proposal Documents thoroughly.
B. Consider federal, state and local laws and regulations that may affect cost, progress, performance or furnishing of the work.
C. Study and carefully correlate the Proposer's observations with the Proposal Documents.
D. Notify the Owner of all conflicts, errors or discrepancies in the Proposal Documents.

SUPPORTING INFORMATION: Equipment suppliers desiring to have their equipment considered for this project shall submit complete specifications and descriptive literature with their Proposal. The Proposer shall include with their Proposal, technical information verifying conformance with Technical Specifications contained herein with respect to each and every item, or feature, of equipment specified. The information shall be sufficiently detailed to allow thorough review and evaluation of the proposed equipment, and shall serve as one of the criteria for evaluation of the Proposal. Failure to comply with this requirement may render the Proposal non-responsive and subject to rejection.

SUBSTITUTE OR "OR EQUAL" MATERIALS AND EQUIPMENT: Equipment selection will be on the basis of materials and equipment specified or described in the Specifications, "or-equal" materials and equipment, or those substitute materials and equipment approved by the Engineer and identified by Addendum. The materials and equipment described in the specifications establish a standard of required type, function and quality to be met by any proposed substitute or "or-equal" item. No item of material or equipment will be considered by Engineer as a substitute unless written request for approval has been submitted by Bidder and has been received by Engineer at least 10 days prior to the date for receipt of Proposals. The burden of proof of the merit of the proposed item is upon the Proposer. Engineer's decision of approval or disapproval of a proposed item will be final. If Engineer approves any proposed substitute item, such approval will be set forth in an Addendum issued to all prospective Bidders. Bidders shall not rely upon approvals made in any other manner.

PROPOSAL EVALUATION: Proposals will be evaluated on the basis of the following criteria:

1. Total Bid Price.
2. Performance and characteristics of equipment under the specified operating conditions.
3. Delivery time.
4. Completeness of required submittal material.
5. Quality and content of equipment warranty. As a minimum, the Supplier shall warrant materials and workmanship to be in all respects satisfactory for the service required, and guarantee the satisfactory performance of the equipment and materials under operating conditions for a period of one year after acceptance by the Owner. Acceptance will be defined as when the units have been operational and performing satisfactorily.

COMPETENCY OF PROPOSER: No purchase order award will be made to a Proposer or

Supplier who has not been in the manufacture of generators for the last five years. Proposals received from Proposers who have previously failed to complete work within the time required, or who have previously performed similar work in an unsatisfactory manner, may be rejected.

PATENTS AND COPYRIGHTS: The Proposer/Supplier shall indemnify and save harmless the Owner, Engineer, and their officers, agents, and employees, against all claims or liability arising from the use of any patented or copyrighted design, device, material, or process by the Supplier or any subcontractors in the performance of the work.

DISQUALIFICATION OF PROPOSERS: If there is reason for believing that collusion exists among the Proposers, all proposals will be rejected.

AWARD OF PURCHASE ORDER: Award of this Contract, if it be awarded, will be based primarily on the greatest overall value to the Owner, and with the other criteria listed under "Proposal Evaluation," and will be made to a responsive and responsible Proposer (Supplier) whose proposal complies with all the requirements prescribed. Any such award will be made by written notice and within 30 calendar days.

PERFORMANCE AND PAYMENT BONDS: The selected Supplied shall procure, execute, and deliver to the Owner, and maintain at his own cost and expense, a performance bond and payment bond within 10 days after award of purchase order. The bonds shall be in form attached, and shall be of a surety company approved by the State of California as a Surety. The performance bond shall be for 100% of the proposal price amount as security for the faithful performance of the work. The performance bond shall have no expiration date. The payment bond shall be for 100% of the proposal price amount as security for the payment of all persons performing labor and furnishing material in connection with the work. The payment bond must be valid until 1 year after the final payment of the Supplier. All bonds signed by an agent must be accompanied by a certified copy of the authority to act. If the Surety on any bond furnished is declared bankrupt, or becomes insolvent, or its right to do business in the State of California is revoked, the Supplier shall within 5 days thereafter substitute another bond or Surety, both of which shall be acceptable to the Owner.

GENERAL INDEMNIFICATION: The Supplier shall, to the maximum extent permitted by law, release, defend, indemnify, and hold harmless the Owner and its agents and the Owners Engineer and its agents from and against any and all suits, actions, legal or administrative proceedings, claims, demands, actual damages, fines, punitive damages, losses, economic loss, costs liabilities, interest, attorney's fees resulting from, arising out of, or in any way connected with injury to or the death of any person or physical damage to property of any kind wherever located and by whomever owned, arising out of or any way connected with the Supplier's performance on the project or any sub-contractor's performance of the whole or any part of the project. This indemnification will survive the completion of the project or the termination of the purchase order for whatever reason. Claims may only be brought if the Supplier is proven to be responsible for actions which reflect gross negligence or willful misconduct. Claims shall be limited to 100% of the purchase order price, and no claims shall be brought beyond the end of warranty period.

INSURANCE REQUIREMENTS: The Supplier shall maintain and require its subcontractors to maintain insurance from companies lawfully authorized to do business in the jurisdiction in which the project is located. Supplier shall furnish certificates evidencing such insurance, and which expressly provide that no expiration, termination, or modification will take place without 30 days prior written notice to the Owner, and which expressly provide that the Owner and its agents are additional insured under the policies. Certificates of insurance shall be signed by an authorized representative of the insurance company. The following types of coverage shall be provided, at

the Supplier's expense for the life of the purchase order: (1) public liability and property damage insurance, including contractual liability (both general and vehicle) in amounts sufficient to cover the indemnity obligations of this contract, and (2) worker's compensation and employer's liability insurance covering all employees engaged in the performance of this contract for claims arising under applicable worker's compensation and occupation disease acts.

SHOP DRAWING SUBMITTALS AFTER PURCHASE ORDER: The Supplier shall provide full shop drawings pursuant to the requirements of these documents within 30 days after receipt of the purchase order.

EQUIPMENT FABRICATION AND DELIVERY: The selected Supplier shall begin the fabrication process of the equipment provided under this Contract immediately following award of the purchase order, and shall be able to deliver the equipment within the time period indicated in the Proposal. The Supplier shall then properly store the equipment at their facility until the expected delivery date, on or about December 2023; all equipment shall be placed in covered storage and shall have all space heaters, etc. connected to electrical service as required. All storage costs (including appropriate insurance coverage) for this time period shall be included in the proposal cost, and shall include a daily deduction/addition cost of storage in the event the delivery date is changed from that indicated above. The Supplier shall also include all freight and shipping costs to the project site in the bid price.

ASSIGNMENT OF EQUIPMENT INSTALLATION: The Owner will assign the installation for the equipment to the Construction Contractor (not yet selected) for installation of the generator and construction of the associated facilities, who will assume all rights and obligations of the Owner pertaining to the installation. This assignment will be made under general construction contract bid in December of 2023. Prior to this assignment, the equipment Supplier shall coordinate all work directly with the Engineer. The Owner will notify the Supplier, with the appropriate lead time stated in the proposal, of the desired delivery date required by the Contractor for the equipment. The Supplier will be charged for storage costs incurred by the Owner for equipment delivered to the jobsite prior to the delivery date.

PAYMENT TO PROPOSER: Progress payments will be made to the Supplier by the Owner, and the Supplier shall submit all applications for payment to the Owner. Payment will be made to the Proposer (Supplier) as follows:

1. Thirty (30) days after the complete set of shop drawings, acceptable to the Engineer, have been returned to the Supplier, 30 percent of the purchase order amount may be paid to the Supplier.

2. Within 30 days after completion of fabrication of specified equipment, 60 percent of the purchase order amount may be paid to the Supplier. The Supplier shall prove to the Owner that the equipment is fabricated to the extent required for Contractor installation, and that the equipment is properly stored at an acceptable facility.

3. The remaining 10 percent of the purchase order amount plus all interest may be paid within 30 days of the date that Supplier has fulfilled all contractual obligations concerning startup services and training of the Owner's personnel (described in Technical Specifications Sections of these Proposal Documents). Payments will be made based upon satisfactory progress of these Special Services, retaining at all times an amount sufficient to cover the estimated costs of these Special Services still to be completed. Full payment of the remaining 20 percent will require a favorable report from the final inspection.

LIQUIDATED DAMAGES: Provisions for liquidated damages are set forth in this Proposal.

RETURN OF PROPOSAL GUARANTEE: Within 10 calendar days after award of the contract, the Owner will return the proposal guarantees accompanying such of the proposals as are not considered in making the award. All other proposal guarantees will be held until the Contract has been finally executed. They will then be returned to the respective Proposers whose proposals they accompany.

PROPOSAL

PROPOSAL TO: Del Paso Manor Water District

The undersigned Proposer hereby proposes to furnish all machinery, labor, services, materials, equipment, tools, supplies, transportation, utilities, and all other items and facilities necessary to perform all work required for the project entitled "Well 9 Emergency Backup Generator Project", located in Sacramento, California in accordance with the intent of the Proposal Documents, including the specifications, drawings and all addenda issued by said Owner prior to opening of the proposals.

The undersigned proposer acknowledges receipt of the following addenda:

No.	Date Received	No.	Date Received

Proposal Price:
Proposer shall provide all equipment and services described in these documents as indicated below:

Total Equipment Supply Contract Price:

Item	Description	Amount ($)
1	Natural Gas Generator	
2	Automatic Transfer Switch	
3	TOTAL EQUIPMENT PRICE	

Bid prices shall be good for 90 days from bid opening date.

PROPOSAL

OWNER'S RIGHTS RESERVED: The undersigned Proposer understands that the Owner reserves the right to reject any or all proposals or waive any informality or technicality in any proposal in the interest of the Owner.

THE ABOVE PROPOSAL IS SUBMITTED BY:

PROPOSER: _____

BY: _____

SIGNATURE: _____

TITLE: _____

TECHNICAL SPECIFICATIONS

SECTION 01 01 00
SUMMARY OF WORK

PART 1 - GENERAL

1.1 DESCRIPTION OF WORK

A. The Supplier shall furnish a complete generator package as described in these documents.

B. The Emergency Power system manufacturers shall build up generator and automatic transfer switch as identified in these specifications. The generator and automatic transfer switch shall provide as a minimum all devices, controls, panels, breakers, etc. Required for complete system.

C. The systems shall include but not be limited to the following:

1. Natural gas fueled engine generator as specified in Section 26 32 13

2. 400A Automatic Transfer Switch as specified in Section 26 36 23

3. All transportation, start-up, programming, owner personnel training, and warranty of all equipment.

1.2 SITE OF WORK

A. The equipment supplied under this specification is for the Del Paso Manor Water District Well 9, located in Sacramento, California.

1.3 WORK DONE BY OTHERS

A. The equipment specified in this document will be purchased by the OWNER, and will be installed by the Construction Contractor (not yet selected).

1.4 SCHEDULED DELIVERY

A. The Supplier shall coordinate with the OWNER and Contractor when they are selected to arrange the delivery period desired.

1.5 DESIGN DRAWINGS

A. Supplier shall prepare final equipment layout drawings for use by the Engineer in preparation of the Final Design drawings.

1.6 TRANSPORTATION AND DELIVERY

A. The Supplier shall deliver all equipment specified in these documents to the project site and shall include all related costs for delivery in their proposal.

END OF SECTION

SECTION 26 32 13
ENGINE GENERATOR

PART 1 GENERAL

1.1 SUMMARY

A This section includes the following items from a single supplier:

1. Engine Generator Set.
2. Enclosure
3. Related Accessories as specified

B Related Requirements

1. It is the intent of this specification to secure an engine-driven generator set that has been prototype tested, factory built, production-tested, and site-tested together with all accessories necessary for a complete installation as shown on the plans and drawings and specified herein.
2. Any exceptions to the published specifications shall be subject to the approval of the engineer and submitted minimum 10 days prior to the closing of the bid with a line by line summary description of all the items of compliance, any items that have been are omitted or have been taken exception to, and a complete description of all deviations.
3. It is the intent of this specification to secure a generator set system that has been tested during design verification, in production, and at the final job site. The generator set will be a commercial design and will be complete with all necessary accessories for complete installation as shown on the plans, drawings, and specifications herein. The equipment supplied shall meet the requirements of the National Electrical Code and applicable local codes and regulations.
4. All equipment shall be new and of current production by an international, power system manufacturer of generators, transfer switches, and paralleling switchgear. The manufacturer shall be a supplier of a complete and coordinated system. There will be single-source responsibility for warranty, parts, and service through a factory-authorized representative with factory-trained technicians.

1.2 DESCRIPTION OF WORK

A Work included: Provide standby engine driven generator set as referenced in this specification and as specified.

1.3 REFERENCES

A Equipment shall comply with the applicable sections of the latest edition of the following:

1. NFPA 70 - National Electrical Code (NEC).
2. NFPA 37 - Standard for the Installation and Use of Stationary Combustion Engines and Gas Turbines.
3. NFPA 110 - Emergency and Standby Power Systems.
4. IEEE 446 - Recommended Practice for Emergency and Standby Power Systems.
5. NEMA MG1 - Motors and Generators.
6. TCEQ Requirements (EPA Tier Levels for Non-Road Engines) - Latest effective requirements

1.4 SUBMITTALS

A Action Submittals

1. Product Data

a The submittal shall include prototype test certification and specification sheets showing all standard and optional accessories to be supplied; schematic wiring diagrams, dimension drawings, and interconnection diagrams identifying by terminal number each required interconnection between the generator set, the transfer switch, and the remote annunciator panel if it is included elsewhere in these specifications.

2. Shop Drawings: Provide shop drawings for Engineer review and approval.

B Informational Submittal

1. Certificates

a The generator set shall be listed to UL 2200 or submitted to an independent third party certification process to verify compliance as installed.

b The generator set shall be IBC Certified as meeting the required maximum seismic design acceleration level per the International Building Code 2000/2003 or 2006 for the specific job site. The generator shall be analyzed or shake tested by a third party, accompanied by a Certificate of Compliance, and include a seismic label on the generator set (per Section 1702 of the IBC Code). Seismic certified generators shall be installed per the specific seismic instructions provided by the manufacturer.

2. Test and Evaluation Reports
3. Manufacturer's Instruction
4. Source Quality Control Submittals
5. Manufacturer's Report
6. Qualification Statement

C Closeout Submittal

1. Maintenance Contracts
2. Operation And Maintenance Data
3. Bonds
4. Warranty Documentation
5. Record Documentation
6. Software

D Maintenance Material Submittals

1.5 QUALITY ASSURANCE

A Regulatory Agency

1. The generator set shall conform to the requirements of the following codes and standards:

a CSA C22.2, No. 14-M91 Industrial Control Equipment.

b EN50082-2, Electromagnetic Compatibility-Generic Immunity Requirements, Part 2: Industrial.

c EN55011, Limits and Methods of Measurement of Radio Interference Characteristics of Industrial, Scientific and Medical Equipment.

d IEC8528 part 4, Control Systems for Generator Sets.

e IEC Std 61000-2 and 61000-3 for susceptibility, 61000-6 radiated and conducted electromagnetic emissions.

f IEEE446 Recommended Practice for Emergency and Standby Power Systems for Commercial and Industrial Applications.

g NFPA 70, National Electrical Code, Equipment shall be suitable for use in systems in compliance to Article 700, 701, and 702.

h NFPA 110, Emergency and Standby Power Systems. The generator set shall meet all requirements for Level 1 systems. Level 1 prototype tests required by this standard shall have been performed on a complete and functional unit. Component level type tests will not substitute for this requirement.

2. Qualifications

a The equipment shall be produced by a manufacturer who is ISO 9001 certified for the design, development, production and service of its complete product line.

b The power system shall be produced by a manufacturer who has produced this type of equipment for a period of at least 10 years and who maintains a service organization available twenty-four hours a day throughout the year.

B Emissions Compliance: The generator set engine shall comply with all applicable Sacramento Metro Air Quality Management District (SMAQMD) Regulations and Requirements for Sacramento and shall comply with all applicable EPA Tier Levels for Non-Road Engines currently in effect for the Sacramento area.

C Manufacturers: Provide products complying with these specifications and produced by one of the following:

1. Kohler Company
2. Cummins Power Generation/Onan Corporation
3. Caterpillar.

1.6 STORAGE AND HANDLING

A The standby generator set shall be stored at the factory until it must be shipped to the job site to prevent building construction delay.

B The standby generator set shall be crated and covered to protect it from damage during shipment and subsequent storage at the job site.

1.7 WARRANTY OR BOND

A Manufacturer’s Warranty

1. The generator set shall include a standard warranty covering one (1) year or 2000 hours, whichever occurs first, to guarantee against defective material and workmanship in accordance with the manufacturer's published warranty from the date of initial startup.
2. The generator set manufacturer and its distributor shall maintain a 24-hour parts and service organization. This organization shall regularly engage in maintenance contract programs to perform preventive maintenance and service on equipment similar to that specified. A service agreement shall be available and shall include system operation under simulated operating conditions; adjustment to the generator set, transfer switch, and switchgear controls as required, and certification in the owner's maintenance log of repairs made and functional tests performed on all systems.

PART 2 PRODUCTS

2.1 Equipment

A Equipment

1. The generator set shall be a Kohler model 250REZXB with a 4UA10 alternator. It shall provide 212.50 kVA and 170.00 kW when operating at 277/480 volts, 60 Hz, 0.80 power factor. The generator set shall be capable of a 130°C Standby @40C rating while operating in an ambient condition of less than or equal to 95 °F and a maximum elevation of 500 ft above sea level. The standby rating shall be available for the duration of the outage.

B Engine

1. The minimum 14.6 liter displacement engine shall deliver a minimum of 402 HP at a governed engine speed of 1800 rpm, and shall be equipped with the following:
   a. Electronic isochronous governor capable of 0.5% steady-state frequency regulation
   b. 24-volt positive-engagement solenoid shift-starting motor
   c. 45-ampere automatic battery charging alternator with a solid-state voltage regulation
   d. Positive displacement, full-pressure lubrication oil pump, cartridge oil filters, dipstick, and oil drain
   e. Dry-type replaceable air cleaner elements for normal applications
   f. The engine shall be turbocharged and fueled by LP vapor
   g. The engine shall have a minimum of 8 cylinders and be liquid-cooled
2. The engine shall be EPA certified from the factory
3. The generator must accept rated load in one-step.

C Cooling System

1. The engine shall be liquid-cooled by a closed loop, unit mounted radiator rated to operate the generator set at full load at an ambient temperature of 50 degrees C (122 degrees F). The radiator fan and other rotating engine parts shall be guarded against accidental contact.

D Standard Air Cleaner

1. The air cleaner shall provide engine air filtration which meets the engine manufacturer's specifications under typical operating conditions.

E Battery

1. Each genset requires a BCI group 31 batteries which must meet the engine manufactures' specifications for the ambient conditions specified in Part 1 Project Conditions and shall comply with the NFPA requirements for engine cranking cycles. Each battery shall be rated according to SAE Standards J-537 with a minimum cold cranking amp of 950 amps and a minimum reserve capacity of 185 Minutes at 80F. The battery plates shall be constructed of a Calcium-Lead alloy to provide long waterless operation and extended battery life. The battery elements must be anchor-locked with full-frame grids and tight-packed commercial plates to resist the effects of vibration. The battery must contain a handle to aid in lifting and the case must be constructed of polypropylene to resist breakage and extend service life. Removable cell covers shall be provided to allow for checking of electrolyte specific gravity.
2. Battery rack and battery cables capable of holding the manufacturer's recommended batteries shall be supplied.

F Housing

1. Level 2 Sound Attenuated Enclosure

a The generator set shall be supplied with a Level 2 Sound Attenuated Enclosure that is UL2200 listed, providing a sound level of 69.9 dB(A) while the generator is operating at 100% load at 7 meters (23 feet) using acoustic insulation and acoustic-lined inlet hoods, and constructed from high strength, low alloy 14 gauge galvanized steel. The acoustic insulation used shall meet UL

94 HF1 flammability classification. The enclosure shall be manufactured from bolted panels to facilitate service, future modifications, or field replacement. The enclosure shall use a vertically louvered air inlet and outlet hood with 90-degree angle to discharge air up and reduce noise. The enclosure shall have an integral rodent guard and skid end caps. The snow load rating shall be 70 lbs./ sq. ft. or greater.

b The enclosure components and skid shall be cleaned with a two-stage alkaline cleaning process to remove grease, grit, and grime from parts. Components shall then be subjected to a Zirconium-based conversion coating process to prepare the metal for electrocoat (e-coat) adhesion. All enclosure parts shall receive an 100% epoxy primer electrocoat (e-coat) with high-edge protection. Following the e-coat process, the parts shall be finish coated with powder baked paint for superior finish, durability, and appearance with a Power ArmorTM industrial finish that provides heavy duty durability in harsh conditions, and is fade-, scratch- and corrosion-resistant.

c The enclosure must surpass a 3,000 hour salt spray corrosion test per ASTM B-1117.

d Enclosures will be finished in the manufacturer's standard color.

e The enclosures shall allow the generator set to operate at full load based on the cooling capability of the genset. The enclosure will account for no more than a 5°C derating of the ambient cooling capability of the generator.

f Enclosures shall be equipped with sufficient side and end doors to allow access for operation, inspection, and service of the unit and all options. Minimum requirements are two doors per side. When the generator set controller faces the rear of the generator set, an additional rear facing door is required. Access to the controller and main line circuit breaker shall meet the requirements of the National Electric Code.

g The enclosure shall be furnished with stainless steel latches, hinges and hardware on the external panels of the enclosure. Access doors shall be rubber sealed to prevent water intrusion and to minimize noise.

h Doors shall be equipped with lockable latches. Locks shall be keyed alike. Door locks shall be recessed to minimize potential of damage to door/enclosure.

i A duct between the radiator and air outlet shall be provided to prevent re-circulation of hot air.

j The complete exhaust system shall be internal to the enclosure.

k The critical silencer shall be fitted with a tailpipe and rain cap.

G Controller

1. Advanced Power Management 603 (APM603) Generator Set Controller

    a. The generator set controller shall be a microprocessor-based control system that will provide automatic starting, system monitoring, and protection.
    b. The controller shall be mounted on the generator set and shall have integral vibration isolation. The controller shall be prototype and reliability tested to ensure operation in the conditions encountered.

2. Codes and Standards

    a. The generator set controller shall meet NFPA 110 Level 1 requirements and shall include an integral alarm horn as required by NFPA.
    b. The controller shall meet NFPA 99 and NEC requirements.
    c. The controller shall be UL 6200 recognized.
    d. The controller shall meet ASTM B117 (salt spray test).

3. Applicability

    a. The controller shall be a standard offering in the manufacturer's controller product line.
    b. The controller's environmental specification shall be: -40°C to 70°C operating temperature range and 5-95% humidity, non-condensing.
    c. The controller front face shall meet an environmental rating of IP65 when mounted properly on the generator.

4. Controller Buttons, Display, and Components
    a. The generator set controller shall include the following features and functions:
        i. Master Control Push Buttons – the buttons shall be tactile-feel membrane with an indicator light to initiate the following functions:
            1. Run Mode – when in Run mode the generator set shall start.
            2. Off/Reset Mode – when in Off/Reset mode, the generator set shall not accept any remote start commands and shall be capable of resetting all faults, allowing for the restarting of the generator set after a shutdown.
            3. Auto Mode – when in Auto mode, the generator set shall be ready to accept a signal from a remote device.
        ii. Control Panel shall include:
            1. Emergency Stop Switch – the latch type stop switch shall be red in color with a "mushroom" type head. Depressing the stop button will immediately stop the generator set and lockout the generator set for any automatic remote starting.
            2. Alarm Horn – the horn sounds when any faults or warnings are present. The horn shall also sound when the controller in not in the Auto mode.
        iii. Display – the display shall be a 7" TFT color touchscreen.
        iv. Fault Light – the controller shall have an annunciator fault light that glows red for faults and yellow for warnings. The warning light will also illuminate when not in Auto.
        v. Alarm Silence/Lamp Test Button – when this button is held, it shall test all controller lamps. This button will also silence the alarm horn when the unit is not Auto or has a fault.
        vi. USB Connection – the controller shall have a USB connection port for a storage device that is accessible on the front of the control panel without having to open any electrical enclosure panels on the generator. This connection shall allow for updating of all software and firmware. This connection shall allow for downloading of controller parameter settings and the event log. This connection shall allow for data logging storage. This connection shall allow the ability to capture screenshots.
        vii. Mini-USB Connection – the controller shall have a mini-USB connection port for a PC connection that is accessible on the front of the control panel without having to open any electrical enclosure panels on the generator. This connection shall allow a certified technician to service the generator controller using a dedicated PC program. The program shall allow for servicing of generator set parameters, faults diagnostics and viewing of controller information. The program shall allow for uploading of software and firmware as well as downloading of parameter settings and the event log.
5. The controller shall have three user level access
    a. User Level – no password required, and user can view all metered values and settings
    b. Operator Level – password required to adjust settings that do not impact the generator
    c. Technician Level – password required to adjust all settings

6. Overview and Favorites
    a. Overview – User shall be able to customize up to 16 gauges for a personalized Home screen that will allow for immediate access to site specific critical data.
    b. Favorites – User shall be able to create their own menu set up with parameters for easy viewing.
7. Load Management
    a. Programmable outputs included to command the connect and disconnect of loads based on generator or paralleling system state:
        i. Loads connected based on available capacity
        ii. Loads disconnected at system startup
        iii. Loads disconnected based on a maximum kW setting or under frequency setting
    b. Supports up to 16 prioritize load steps per system
        i. Can be used on a single generator system
        ii. Can be combined in a paralleling system for a total system load control capability
    c. Simplified load management system view from any generator controller in the system
8. Controller Engine Control Features and Functions
    a. User-programmable time delay for engine start.
    b. User-programmable time delay engine cool down.
    c. Capability to start and run at user-adjustable idle speed during warm-up for a selectable time-period until engine reaches preprogrammed temperature.
    d. The idle function including engine cooldown at idle speed.
    e. Real-time clock and calendar for time stamping of events.
    f. Output with adjustable timer for an ether injection starting system.
    g. Programmable cyclic cranking that can adjust on time, off time, and number of cycles.
9. Controller Alternator Control Features and Functions
    a. Patented High-speed RMS Digital Voltage Regulation – the system shall have integral microprocessor-based voltage regulator system that provides + 0.25% voltage regulation no-load to full load with three phase sensing. A separate voltage regulator is not acceptable. The digital voltage regulator shall be applicable to single- or three-phase systems. The system shall be prototype tested and control variation of voltage to frequency. The voltage regulator shall be adjustable at the controller with maximum + 10% adjustable of nominal voltage.
    b. Alternator Thermal Overload Protection – the system shall have integral alternator overload and short circuit protection matched to each alternator for the particular voltage and phase configuration.
    c. Overcurrent Protective Device– the system shall have a thermal trip, instantaneous trip and maintenance mode per NEC240.87.
10. Other Control Features and Functions
    a. Event Logging – the controller keeps a record of up to 10,000 events with date and time locally for warning and shutdown faults. This event log can be downloaded onto a USB storage device or onto a PC through the service program.
        i. Event Snapshot – the control system shall capture 15 seconds of critical data around the time a fault or warning. This data shall be viewable on the controller and downloadable.
    b. Data Logging – the controller shall allow customized parameters to be logged based on a start trigger from the controller interface.
        i. The parameters are selectable from all monitored parameters.
        ii. The sample period shall be configurable from 1 second to 1 day.

iii. The collected data shall be stored on a USB storage device plugged into the control panel.

11. Control Monitoring Requirements

a. The generator set shall have alarms and status indication lamps that show non-automatic status, warning, and shutdown conditions. The controller shall indicate with a warning lamp and or alarm and on the digital display screen any shutdown, warning, or engine fault condition that exists in the generator set system. The following alarms and shutdowns shall exist as a minimum:

i. All monitored functions must be viewable on the control panel display

ii. The following generator set functions shall be monitored:

1. All output voltages - single phase, three phase, line to line, and line to neutral, 0.25% accuracy
2. All single phase and three phase currents, 0.25% accuracy
3. Output frequency, 0.25% accuracy
4. Power factor by phase with leading/lagging indication
5. Total instantaneous kilowatt loading and kilowatts per phase, 0.5% accuracy
6. kVARS total and per phase, 0.5% accuracy
7. kVA total and per phase, 0.5% accuracy
8. kW hours
9. A display of percent generator set duty level (actual kW loading divided by the kW rating)

iii. Engine parameters listed below shall be monitored: (*are adjustable)

1. Engine Speed*
2. Oil Pressure
3. Oil Temperature
4. Ambient Temperature
5. Coolant Temperature
6. Runtime Hours
7. Intake Air Pressure
8. Intake Air Temperature
9. Intercooler Temperature
10. Fuel Pressure
11. Mechanical Engine Load

iv. Operational records shall be stored in the control beginning at system startup

1. Total Run Time Hours
2. Total Loaded Hours
3. Total Unloaded Hours
4. Total kW Hours
5. Controller Hours
6. Controller Run Time Hours
7. ECM Run Time Hours
8. Number of Starts
9. Number of Crank Attempts
10. Last Crank Duration
11. Last Start Runtime Duration
12. Last Start Time of Day
13. Last Start Date (Day)
14. Last Start Date (Month)
15. Last Start Date (Year)
16. Last Stop Time of Day
17. Last Stop Date (Day)
18. Last Stop Date (Month)

19. Last Stop Date (Year)

v. The following operational records shall be resettable for maintenance purposes:
    1. Total Run Time Since Maintenance
    2. Loaded Hours Since Maintenance
    3. Unloaded Hours Since Maintenance
    4. kW Hours Since Maintenance
    5. Reset Maintenance Records

vi. For maintenance and service purposes, the controller shall store and display on demand the information:
    1. Generator Model
    2. Generator Serial Number
    3. ECM Serial Number
    4. Alternator Part Number
    5. Engine Model Number
    6. Engine Serial Number
    7. Controller Serial Number
    8. Firmware Version

vii. The controller shall support a variety of maintenance parameters including:
    1. Last Start Time of Day
    2. ECM Runtime Hours
    3. Controller Runtime Hours
    4. Last Stop Date (Month)
    5. Last Start Time of Day
    6. Last Stop Date (Day)
    7. Last Start Date (Day)
    8. Number of Starts
    9. Last Stop Time of Day
    10. Last Stop Time of Day
    11. Controller Hours
    12. Number of Crank Attempts
    13. Last Crank Duration
    14. Last Start Runtime Duration
    15. Last Start Time of Day
    16. Last Start Time of Day
    17. Last Start Date (Month)
    18. Last Start Date (Year)
    19. Last Stop Time of Day
    20. Last Stop Time of Day
    21. Last Stop Date (Year)

12. Generator Set Warning, Shutdown Alarm and Status

    a. The generator set shall have alarms and status indication lamps that show Non-Automatic Status, Warning, and Shutdown conditions. The controller shall indicate with a warning lamp and/or alarm, and on the digital display screen any shutdown, warning, or engine fault condition that exists in the generator set system. The following alarms and shutdowns shall exist as a minimum:
        i. OverCrank Shutdown
        ii. UnderFrequency Shutdown
        iii. OverFrequency Shutdown
        iv. OverPower Shutdown
        v. Low Oil Pressure Shutdown
        vi. High Coolant Temperature Shutdown
        vii. Local Emergency Stop Shutdown

viii. Remote Emergency Stop Shutdown
ix. OverSpeed Shutdown
x. ECM DTCs
xi. Loss ECM Comms Shutdown
xii. ECM Mismatch Shutdown
xiii. High Oil Temperature Shutdown
xiv. Alternator Protection Shutdown
xv. Protective Relay Shutdown OverPower
xvi. Protective Relay Shutdown OverCurrent
xvii. Protective Relay Shutdown Reverse VAR
xviii. Protective Relay Shutdown ReversePower
xix. UnderVoltage Shutdown (L-L, L-N, each phase)
xx. OverVoltage Shutdown (L-L, L-N, each phase)
xxi. OverCurrent Shutdown
xxii. Excitation Overvoltage Shutdown
xxiii. Low Fuel Pressure Shutdown
xxiv. Low Coolant Level Shutdown
xxv. Generator Over Power Shutdown

b. Conditions resulting in generator warning (generator will continue to operate):
i. UnderFrequency Warning
ii. OverFrequency Warning
iii. OverPower Warning
iv. Low Oil Pressure Warning
v. Low Coolant Temperature Warning
vi. High Coolant Temperature Warning
vii. Low Battery Voltage Warning
viii. High Battery Voltage Warning
ix. Battery Charger Fault Warning
x. High Oil Temperature Warning
xi. GFCI Warning
xii. UnderVoltage Warning (L-L, L-N, each phase)
xiii. OverVoltage Warning (L-L, L-N, each phase)
xiv. OverCurrent Warning
xv. Generator Over Power Warning
xvi. ECM DTCs

13. Inputs and Outputs

a. Standard Dedicated User Inputs – the controller shall have dedicated inputs for:
i. Two-Wire Input
1. Remote Engine Start
ii. Digital Input
1. Auxiliary Fault (Shutdown)
2. Auxiliary Warning
3. Battery Charger Fault
4. Breaker Close
5. Breaker Trip
6. Excitation Over Voltage
7. Fuel Type
8. Low Fuel Pressure
9. Ground Fault Relay
10. Remote Emergency Stop
11. Local Emergency Stop

iii. Analog Voltage Input – Scalable Up To ± 10 VDC
1. Speed Bias
2. Voltage Bias

b. Standard Dedicated User Outputs – the controller shall have dedicated outputs for:
i. Relay Driver Output
1. Run
2. Crank
3. Horn
4. High Coolant Temperature
5. Common Warning
6. Common Failure
7. Close Breaker
8. Trip Breaker

c. Optional Configurable User Inputs and Outputs
i. User Configurable Inputs
1. 2 Analog, 0-5 VDC
2. 4 Dry Contact Digital
ii. User Configurable Relay Outputs
1. 14 NO/NC Relays
2. 1 Common Fault Relay

d. PLC-like capability for applying logic to customize generator system behavior.

14. Communications

a. CAN
i. If the generator set engine is equipped with an ECM, the controller shall communicate with the ECM for control, monitoring, diagnosis, and meet SAE J1939 standards.

b. Modbus®
i. Non-isolated for RSA III
ii. Isolated for Modbus devices
iii. Isolated for paralleling communication
iv. RJ45 for Modbus TCP, SNMP, and BACnet

c. Simple Network Management Protocol (SNMP)
i. Industry standard SNMP communication shall be available.
ii. The controller shall support SNMP communication via an RJ-45 Ethernet connection.

d. BACnet®
i. Industry standard BACnet® communication shall be available.
ii. The controller shall support BACnet® communication via an RJ-45 Ethernet connection.

e. Communication Connections
i. All communication connections shall be accessible in a dedicated customer connection area that is separated from factory wiring into the controller to prevent field connections from interfering with factory wiring.
ii. The controller shall not require any additional hardware to support Modbus®, SNMP or BACnet® communication.

15. Generator Management

a. Allows the start and stop of generators based on load demand or state of other generators including:
i. Start Power
ii. Stop Power
iii. Start Accumulator
iv. Stop Accumulator

v. Total Online Capacity
vi. Total Available Capacity
vii. Total Bus Power
viii. Total Bus Capacity
ix. Negotiated Order
x. Stopped by Gen Management
xi. Start Command

b. The generator management can be configured to operate based on:
i. Engine Run Time
ii. Fuel Level
iii. Manual Order

c. The controller shall have a programmable disconnect point (kW) below which point the controller shall automatically trip the generator circuit breaker.

16. Protective Relays

a. The controller shall provide a standard set of protective relay functions with programmable limits and time delays
i. Over Voltage (59)
1. User adjustable range – 100% to 130%
2. User adjustable range time delay – 0 to 120 seconds
ii. Under Voltage (27)
1. User adjustable range – 70% to 100%
2. User adjustable time delay – 0 to 120 seconds
iii. Over Frequency (81O)
1. User adjustable range – 100% to 140%
2. User adjustable time delay – 0 to 120 seconds
iv. Reverse Power (32R)
1. User adjustable range – 0% to 50%
2. User adjustable time delay – 0 to 120 seconds
v. Over Power (32O)
1. User adjustable range – 90% to 150%
2. User adjustable time delay – 0 to 120 seconds
vi. Loss of Field (40 Reverse VARS)
1. User adjustable range – 10% to 100%
2. User adjustable time delays – 0 to 120 seconds
vii. Over Current with Voltage Range
1. User adjustable range – 100% to 200%
2. User adjustable time delay – 0 to 120 seconds

17. Generator Overcurrent and Fault Protection

a. The generator shall be provided with a factory installed, 100% rated line circuit breaker rated at 400.00 amperes that is UL489 listed. Line circuit breakers shall be sized for the rated ampacity of the loads served by the breaker per the NEC.
b. The circuit breaker(s) shall incorporate an electronic trip device with the following characteristics:
c. Adjustable long time delay
d. Adjustable short time delay [As applicable]
e. Instantaneous
f. Load side lugs shall be provided from the factory. The line circuit breaker shall include auxiliary contacts, shunt trip, undervoltage trip, alarm switch, and overcurrent switch functionality. Load side breaker connections made at the factory shall be separated from field connections.

g. The shunt trip device shall be connected to trip the generator breaker when the generator-set is shut down by other protective devices.
h. When GFI is required per the NEC, additional neutrals shall be factory installed, and the alarm indication shall be integrated with the generator-set alarms.
i. Barriers to provide segregation of wiring from an emergency source to emergency loads from all other wiring and equipment, if required by the NEC, shall be provided.

H Alternator

1. The alternator shall be salient-pole, brushless, 2/3-pitch, with 4 bus bar provision for external connections, self-ventilated, with drip-proof construction and amortisseur rotor windings, and skewed for smooth voltage waveform. The ratings shall meet the NEMA standard (MG1-32.40) temperature rise limits. The insulation shall be class H per UL1446 and the varnish shall be a vacuum pressure impregnated, fungus resistant epoxy. Temperature rise of the rotor and stator shall be limited to 130°C Standby @40C. The PMG based excitation system shall be of brushless construction controlled by a digital, three phase sensing, solid- state, voltage regulator. The AVR shall be capable of proper operation under severe nonlinear loads and provide individual adjustments for voltage range, stability and volts-per-hertz operations. The AVR shall be protected from the environment by conformal coating. The waveform harmonic distortion shall not exceed 5% total RMS measured line-to-line at full rated load. The TIF factor shall not exceed 50.
2. The alternator shall have a maintenance-free bearing, designed for 40000 hour B10 life. The alternator shall be directly connected to the flywheel housing with a semi-flexible coupling between the rotor and the flywheel.
3. The generator shall be inherently capable of sustaining at least 300% of rated current for at least 10 seconds under a 3-phase symmetrical short circuit without the addition of separate current-support devices.
4. Motor starting performance and voltage dip determinations shall be based on the complete generator set. The generator set shall be capable of supplying 785.00 LRKVA for starting motor loads with a maximum instantaneous voltage dip of 35%, as measured by a digital RMS transient recorder in accordance with IEEE Standard 115. Motor starting performance and voltage dip determination that does not account for all components affecting total voltage dip, i.e., engine, alternator, voltage regulator, and governor will not be acceptable. As such, the generator set shall be prototype tested to optimize and determine performance as a generator set system.

I Vibration Isolation

1. Vibration isolators shall be provided between the engine-alternator and heavy-duty steel base.

2.2 ACCESSORIES

A. The generator set shall be supplied with a 10-ampere automatic float/equalize battery charger capable of charging both lead-acid and ni-cad type batteries, with the following features:
   i. Automatic 3-stage float to equalization charge
   ii. Voltage regulation of 1% from no to full load over 10% AC input line voltage variations
   iii. Battery charging current Ammeter and battery voltage voltmeter with 5% full-scale accuracy
   iv. LED lamp for power ON indication
   v. Current limited during engine cranking, short circuit, and reverse polarity conditions
   vi. Temperature compensated for ambient temperatures for -40°C to 60°C
   vii. UL 1012 Listed
   viii. CSA Certified
B. Battery rack and battery cables capable of holding the manufacturer's recommended batteries shall be supplied.
C. The air cleaner restriction indicator shall indicate the need for maintenance of the air cleaners.

D. Enclosure shall have an external emergency stop button that is recessed in the enclosure panel for protection.
E. Remote annunciator panel – The remote annunciator shall meet NFPA 110, Level 1 requirements and enable remote viewing of the generator status. The panel shall be connected to the generator controller via either network communication wires or via hard wired connections. Options shall be available to provide ATS source availability, contactor position, and loaded or unloaded test for up to four transfer switches. The panel shall have the capability to be either flush- mounted or surface-mounted. The annunciator shall meet UL508 requirements.
F. Block Heater - The block heater shall be thermostatically controlled, 6,000 watt, with isolating valves, to maintain manufacturers recommended engine coolant temperature to meet the start-up requirements of NFPA 99 and NFPA 110, Level 1.
G. The generator set shall be supplied with a common failure relay to provide means of signaling fault and/or shutdown conditions.
    i. The common failure relay shall remotely signal auxiliary faults, emergency stop, high engine temperature, low oil pressure, overcrank, and over speed via one single-pole, double-throw relay with 10 amps at 120 VAC contacts.
    ii. The relay contacts shall be gold flashed to allow use of low current draw devices (100ma @ 28VDC min.).
    iii. Once energized the relay shall remain latched until the system is reset by the main controller switch.
H. The generator set shall be provided with a run relay which shall provide a three-pole, double-throw relay with 10-amp/ 250 VAC contacts to indicate that the generator is running. The run relay dry contacts can be used for energizing or de-energizing customer devices while the generator is running (e.g. louvers, indicator lamps, etc.)

2.3 SOURCE QUALITY CONTROL

A. Non-Conforming Work
    1. To ensure that the equipment has been designed and built to the highest reliability and quality standards, the manufacturer and/or local representative shall be responsible for three separate tests: design prototype tests, final production tests, and site tests.
    a. **Design Prototype Tests.** Components of the emergency system, such as the engine/generator set, transfer switch, and accessories, shall not be subjected to prototype tests because the tests are potentially damaging. Rather, similar design prototypes and preproduction models shall be subject to the following tests:
        i. Maximum power (kW)
        ii. Maximum motor starting (kVA) at 35% instantaneous voltage dip.
        iii. Alternator temperature rise by embedded thermocouple and/or by resistance method per NEMA MG1-32.6.
        iv. Governor speed regulation under steady-state and transient conditions.
        v. Voltage regulation and generator transient response.
        vi. Harmonic analysis, voltage waveform deviation, and telephone influence factor.
        vii. Three-phase short circuit tests.
        viii. Alternator cooling air flow.
        ix. Torsional analysis to verify that the generator set is free of harmful torsional stresses.
        x. Endurance testing.

    b. **Final Production Tests.** Each generator set shall be tested under varying loads with guards and exhaust system in place. Tests shall include:
        i. Single-step load pickup
        ii. Safety shutdown device testing
        iii. Rated Power @ 0.8 PF
        iv. Maximum power

v. Upon request, a witness test, or a certified test record sent prior to shipment.

c. **Site Tests.** The manufacturer's distribution representative shall perform an installation check, startup, and building load test. The engineer, regular operators, and the maintenance staff shall be notified of the time and date of the site test. The tests shall include:

i. Fuel, lubricating oil, and antifreeze shall be checked for conformity to the manufacturer's recommendations, under the environmental conditions present and expected.

ii. Accessories that normally function while the set is standing by shall be checked prior to cranking the engine. These shall include: block heaters, battery chargers, alternator strip heaters, remote annunciators, etc.

iii. Generator set startup under test mode to check for exhaust leaks, path of exhaust gases outside the building, cooling air flow, movement during starting and stopping, vibration during operation, normal and emergency line-to-line voltage and frequency, and phase rotation.

iv. Automatic start by means of a simulated power outage to test remote-automatic starting, transfer of the load, and automatic shutdown. Prior to this test, all transfer switch timers shall be adjusted for proper system coordination. Engine coolant temperature, oil pressure, and battery charge level along with generator set voltage, amperes, and frequency shall be monitored throughout the test.

PART 3 EXECUTION

3.1 Installation

A General: Install generator sets where indicated by Owner, in accordance with the equipment manufacturer's written instructions and recognized industry practices, to ensure that the sets comply with the specified requirements and serve the intended purposes.

B Standards: Comply with NEMA standards, requirements of the NEC and applicable portions of NECA's "Standard of Installation" pertaining to installation of engine-driven generator sets and accessories.

C Vibration Mounts: Install units on properly sized base with spring type vibration mounts and ribbed neoprene vibration isolators; comply with manufacturer's indicated installation method as applicable.

D Concrete Pad: Mount the generator on a spring isolated 12 inch thick concrete base. The concrete pouring frame shall consist of 12 inch deep perimeter steel members with a pan base and reinforcing bars, generator skid mounting bolts and isolator mounting recesses welded in place. The concrete base shall be designed to properly support the generator using spring isolators recessed into the perimeter of the base and shall extend a minimum of 4 inches past the generator mounting skids. Isolators shall be adjustable spring mounting selected for 3 inches deflection and having telescoping top and bottom sections separated by resilient elastomeric inserts to limit horizontal motion. Cast iron housings may be used if they are hot-dip galvanized after fabrication. The isolator shall be designed for a minimum kx/ky (horizontal-to-vertical spring rate) of 1.2 times the static deflection (in inches) divided by the working height (in inches). An elastomeric pad having a minimum thickness of ¼ inch and sized for a maximum load of 60 psi with a rating of 40 durometers shall be bonded to the base plate. Nuts, adjusting bolts and washers shall be zinc-electroplated to prevent corrosion.

E Wiring: All feeders/conduits for generator and emergency power feeders shall be installed as follows:

1. Horizontal feeder/conduits shall be installed below grade, below a slab on grade, be enclosed in an approved 2 hour enclosure or utilize UL listed 2 hour rated conductors. Where a 2 hour enclosure is required, coordinate enclosure with the Contractor.

2. Vertical feeders/conduits shall be installed in a 2 hour rated chase or room, be enclosed in an approved 2 hour enclosure or utilize UL listed 2 hour rated conductors.. Where a 2 hour enclosure is required, coordinate enclosure with the Contractor.

3.2 GROUNDING**:**

A General: Install the generator as a separately derived system. The generator neutral shall not be grounded to the generator frame. Ground the generator frame through the feeder grounding conductor.

3.3 CONTROL WIRING

A General: Provide generator start-up control wiring from Automatic Transfer Switch to standby generator set.

B Annunciators: Provide control wiring to remote generator annunciators in locations specified**.**

3.4 INITIAL START-UP AMD SYSTEM CHECKOUT

A A complete installation shall be initially inspected, adjusted and started and checked out for operational compliance by representatives of the manufacturer. All start-up documentation shall be turned over to the Owner.

B The engine lubrication oil and antifreeze shall be provided by the supplier of the electric set for operation under environmental conditions as recommended by the manufacturer.

3.5 TESTING

A General: Upon completion of installation of engine-driven generator set(s), transfer switch and after building circuitry has been energized with normal power source, test emergency power system to demonstrate standby capability and compliance with specified requirements, including automatic start-up, controls, and full load acceptance. Tests shall include operation of standby power system with voltage check while the system is loaded to ensure proper operation of the emergency generator, transfer switches, and other system components. Operation of the system shall simulate standby power conditions, that is, loss of main electrical power to the building. Test period shall be a minimum of TWO hours continuous trouble-free operation with at least four automatic transfer switch operations for each switch within the period of operation.

B Test Readings: The voltage, current and frequency readings shall be recorded at 15 minute intervals throughout the test. Each Automatic Transfer Switch shall automatically operate a minimum of four times during the test. There shall be a 15 minute unloaded run at the conclusion of the test to allow engine to cool before shutdown. The Contractor shall make all necessary hook-ups to facilitate field-test and shall furnish all fuel necessary for field-testing. Owner must be present during load testing.

3.6 OPERATOR TRAINING

A The manufacturer's start-up representative shall provide a minimum of 4 hours of operating and maintenance training to the Owner's maintenance personnel. Training shall be provided at times convenient to the Owner. Approved Operating and Maintenance Manuals shall be available to the Owner prior to the training session. Training shall be specific to the unit that is purchased.

B Instructions and Drawings: Complete instructions, consisting of operating and maintenance manuals, parts book, dimensional drawings, separate unit wiring diagrams and schematics and interconnecting wiring diagrams shall be provided as part of the Project operating and maintenance manuals.

END OF SECTION

SECTION 26 36 23
AUTOMATIC TRANSFER SWITCH

PART 1 GENERAL

1.1 SUMMARY

A This section includes the following items from a single supplier:

1. Automatic transfer switch
2. Related Accessories as specified

B Related Requirements

1. It is the intent of this specification to secure an automatic transfer switch that has been prototype tested, factory built, production-tested, and site-tested together with all accessories necessary for a complete installation as shown on the plans and drawings and specified herein.
2. Any exceptions to the published specifications shall be subject to the approval of the engineer and submitted minimum 10 days prior to the closing of the bid with a line by line summary description of all the items of compliance, any items that have been are omitted or have been taken exception to, and a complete description of all deviations.
3. It is the intent of this specification to secure an automatic transfer switch that has been tested during design verification, in production, and at the final job site. The automatic transfer switch will be a commercial design and will be complete with all of the necessary accessories for complete installation as shown on the plans, drawings, and specifications herein. The equipment supplied shall meet the requirements of the California Electrical Code, Sacramento Metro Air Quality Management District, California Air Resources Board and applicable local codes and regulations.
4. All equipment shall be new and of current production by an international, power system manufacturer of generators, transfer switches, and paralleling switchgear. The manufacturer shall be a supplier of a complete and coordinated system. There will be single-source responsibility for warranty, parts, and service through a factory-authorized representative with factory-trained technicians.

1.2 DESCRIPTION OF WORK

A Work Included: Provide automatic transfer switch work as shown, scheduled, indicated, and as specified

B Equipment shall comply with the following standards:

1. UL 1008 Latest Edition.
2. NFPA - National Electrical Code.
3. NFPA 110 - Standard for Standby Power Systems.
4. NFPA 101 - Life Safety Code.
5. ANSI/IEEE C37.90a - Surge Voltage Withstand.
6. NEMA Standard ICS-109.21 - Impulse Withstand Voltage Test

1.3 QUALITY ASSURANCE

A. Manufacturers: Provide products complying with these specifications and produced by one of the following:

1. ASCO; Schneider Electric.
2. Kohler.
3. Cummins; Onan.

4. Russelectric, Inc.; Siemens
5. Zenith Controls, Inc.; ABB
6. CAT

B. NEC and NFPA Compliance: Comply with applicable portions of the NEC (NFPA 70) including, but not limited to, emergency and standby power system.

C. Standards: The Automatic Transfer Switches shall conform to the requirements of NEMA Standard ICS 2-447 and Underwriters' Laboratories UL-1008 and shall be UL-listed as follows:

1. For use in emergency and stand-by systems in accordance with Articles 517, 700, 701 and 702 of the National Electric Code.
2. Rated in amperes for total system transfer including control of motors, electric discharge lamps, electric heating, and tungsten filament lamp loads as referred to in Paragraph 1.7 and 1.9 of UL-1008.

D. Factory-Testing: All production units shall be subjected to the following factory tests:

1. The complete automatic transfer switch shall be tested to ensure proper operation of the individual components and correct overall sequence of operation and to ensure that the operating transfer time, voltage, frequency and time delay settings are in compliance with the specification requirements.
2. Each switch shall be subjected to a dielectric strength test per NEMA Standard ICS 1-109.21.
3. The control panel shall meet or exceed the voltage surge withstand capability in accordance with IEEE Standard 472 (ANSI C37.90a) and the impulse withstand voltage test in accordance with the proposed NEMA Standard ICS 1-109.

E. Performance Tests: Certified independent laboratory test data on a switch of the same design and rating shall be provided to confirm the following switching abilities:

1. Overload and endurance at 480 volts AC per Tables 25.1, 25.2, 27.1 and 27.2 of UL-1008 when enclosed according to NEMA Standard ICS 2-447 and UL 1008.
2. Temperature rise tests after the overload and endurance tests to confirm the ability of the transfer switches to carry their rated current within the allowable temperature limits of the insulation in contact with current carrying parts.
3. Withstand current tests per Paragraph 31 of UL-1008 for 200,000 amperes rms symmetrical when protected by fuses and at fault currents per UL-1008 when protected by circuit breakers, at 480 volts and X/R ratio of 6.6.
4. No welding of contacts. Transfer switch must be operable to alternate source after the withstand current tests.
5. Dielectric tests at 1960 volts, RMS, minimum after the withstand current test.

F. Warranty: The automatic transfer switches shall be warranted for a period of 5 years from the date of Substantial Completion

1.4 SUBMITTALS

A Action Submittals

1. Product Data
   a The submittal shall include specification sheets showing all standard and optional accessories to be supplied; schematic wiring diagrams, dimension drawings, and

interconnection diagrams identifying by terminal number each required interconnection between the generator set and the transfer switch

b Interconnecting wiring diagrams to indicate all external interlock control wiring terminal connections.

c Complete bill of material for all equipment.

1.5 QUALITY ASSURANCE

A Regulatory Agency

1. The automatic transfer switch shall conform to the requirements of the following codes and standards:
   a UL 1008 - Standard for Transfer Switch Equipment
   b IEC 947-6-1 Low-voltage Switchgear and Control gear; Multifunction equipment; Automatic Transfer Switching EquipmentEN55011, Limits and Methods of Measurement of Radio Interference Characteristics of Industrial, Scientific and Medical Equipment.
   c NFPA 70 - National Electrical Code
   d NFPA 110 - Emergency and Standby Power Systems
   e IEEE Standard 446 - IEEE Recommended Practice for Emergency and Standby Power Systems for Commercial and Industrial Applications
   f NEMA Standard ICS 10-2005, Electromechanical AC Transfer Switch Equipment.
   g EN61000-4-4 Fast Transient Immunity Severity Level 4
   h EN61000-4-5 Surge Immunity Class 4 (voltage sensing and programmable inputs only)
   i IEEE 472 (ANSI C37.90A) Ring Wave Test
   j CSA C22.2 No. 178 certification
2. Qualifications
   a The automatic transfer switch shall be produced by a manufacturer who is ISO 9001 certified for the design, development, production and service of its complete product line.
   b A manufacturer who has produced this type of equipment for a period of at least 10 years and who maintains a service organization available twenty-four hour a day throughout the year shall produce the automatic transfer switch.
3. Manufacturers
   a The automatic transfer switch shall be furnished by a single manufacturer who shall be responsible for the design, coordination, and testing of the complete system. The entire system shall be installed as shown on the plans, drawings, and specifications herein.
   b The manufacturer shall maintain a national service organization of employing personnel located throughout the contiguous United States. The Service center's personnel must be factory trained and must be on call 24 hours a day, 365 days a year.
   c The manufacturer shall maintain records of each switch, by serial number, for a minimum of 20 years.

1.6 STORAGE AND HANDLING

A Deliver automatic transfer switches in factory-fabricated water-resistant wrapping.

B Handle transfer switches carefully to avoid damage to material component, enclosure, and finish.

C Store transfer switches in a clean, dry space and protect from weather.

D Provide temporary heater so as to prevent moisture and condensation to internal equipment

1.7 Field Conditions

A Ambient Conditions

1. Automatic transfer switch shall operate in the following conditions without any damage to the unit or its loads.
   a Ambient Temperature: -4 to 158 Degrees F
   b Relative Humidity: 5% to 95% noncondensing

B Existing Conditions

1.8 Warranty or Bond

A Manufacturer's Warranty

1. The ATS shall include a standard warranty covering one (1) year to guarantee against defective material and workmanship in accordance with the manufacturer's published warranty from the date of initial startup.
2. The ATS manufacturer and its distributor shall maintain a 24-hour parts and service organization. This organization shall regularly engage in maintenance contract programs to perform preventive maintenance and service on equipment similar to that specified. A service agreement shall be available and shall include system operation under simulated operating conditions; adjustment to the generator set, transfer switch, and switchgear controls as required, and certification in the owner's maintenance log of repairs made and functional tests performed on all systems.

PART 2 PRODUCTS

2.1 EQUIPMENT

A Equipment

1. Furnish and install an automatic transfer switches system(s) with 3-Pole / 4-Wire, Solid Neutral, 400 Amps, 480V/60Hz. Each automatic transfer shall consist of an inherently double throw power transfer switch mechanism and a microprocessor controller to provide automatic operation. All transfer switches and controllers shall be the products of the same manufacturer.

B Manufacturer

1. Automatic transfer switches shall be Kohler Closed Transition (KCS)/KCS-AMTA-0400S. Any alternate shall be submitted for approval to the engineer at least 10 days prior to bid date. Alternate bids shall include a line-by-line clarification of the specification marked with "D" for deviation; "E" for exception, and "C" for comply.

C Construction

1. The transfer switch shall be electrically operated and mechanically held with double throw construction, and operated by a momentarily energized solenoid-driven mechanism.
2. Transfer switch shall use only one type of main operator for ease of maintenance and commonality of parts.
3. The switch shall be positively locked and unaffected by momentarily outages, so that contact pressure is maintained at a constant value and contact temperature rise is minimized for maximum reliability and operating life.
4. All main contacts shall be silver composition. Switches rated 600 amperes and above shall have segmented, blow-on construction for high withstand and close-on capability and be protected by separate arcing contacts.

5. Inspection of all contacts shall be possible from the front of the switch without disassembly of operating linkages and without disconnection of power conductors. Switches rated 800 amperes and higher shall have front removable and replaceable contacts. All stationary and moveable contacts shall be replaceable without removing power conductors and/or bus bars.
6. Designs utilizing components of molded-case circuit breakers, contactors, relays or parts thereof, which are not intended for continuous duty, repetitive switching or transfer between two active power sources, are not acceptable.
7. For two and three pole switches, where neutral conductors are to be solidly connected as shown on the plans, a neutral conductor plate with fully rated AL-CU pressure connectors shall be provided.
8. For four pole switches with a switching neutral, where neutral conductors must be switched as shown on the plans, the contactor shall be provided with fully rated switched neutral transfer contacts. Overlapping neutral contacts may be used as an alternative.

D Enclosure

1. The ATS shall be furnished in a NEMA 1 enclosure.
2. All standard door mounted switches and indicating LEDs shall be integrated into a flush-mounted, interface membrane or equivalent in the enclosure door for easy viewing & replacement. The panel shall be capable of having a manual locking feature to allow the user to lockout all membrane mounted control switches to prevent unauthorized tampering. This cover shall be mounted with hinges and have a latch that may be padlocked. The membrane panel shall be suitable for mounting by others when furnished on open type units.

2.2 OPERATION

A Controls

1. A four line, 20 character LCD display and dynamic 4 button keypad shall be an integral part of the controller for viewing all available data and setting desired operational parameters. Operational parameters shall also be available for viewing and control through the communications interface port or USB. The following parameters shall only be adjustable via a password protected programming on the controller:
   a Nominal line voltage and frequency
   b Single or three phase sensing
   c Operating parameter protection
   d Transfer operating mode configuration (Programmed transition, or Closed transition)

B Voltage and Frequency

1. Voltage (all phases) and frequency on both the normal and emergency sources shall be continuously monitored. Voltage on both normal and emergency sources and frequency on the emergency sources shall be adjustable with the following pickup, dropout, and trip setting capabilities (values shown as % of nominal unless otherwise specified):

	Parameter	Dropout/Trip	Pickup/Reset
a	Parameter	Dropout/Trip	Pickup/Reset
b	Under voltage	75 to 98%	85 to 100%
c	Over voltage	06 to 135%	95 to 100% of trip
d	Under frequency	95 to 99%	80 to 95%
e	Over frequency	01 to 115%	105 to 120%
f	Voltage unbalance	5 to 20%	3 to 18%

2. Repetitive accuracy of all settings shall be within ± 0.5% over an operating temperature range of -20°C to 70°C.
3. An adjustable dropout time for transient voltage and frequency excursions shall be provided. The time delays shall be 0.1 to 9.9 seconds for voltage and .1 to 15 seconds for frequency.
4. Voltage and frequency settings shall be field adjustable in 1% increments either locally with the display and keypad, remotely via the communications interface port or USB.

5. The controller shall be capable of sensing the phase rotation of both the normal and emergency sources. The source shall be considered unacceptable if the phase rotation is not the preferred rotation selected (ABC or BAC). Unacceptable phase rotation shall be indicated on the LCD; the service required LED and the annunciation through the communication protocol and dry contacts. In addition, the phase rotation sensing shall be capable of being disabled, if required.
6. The provided ATS shall be capable of synchronization (paralleling with Utility) for a maximum of 100ms prior to switching back to the normal power source from generator power.
7. The controller shall be capable of detecting a single phasing condition of a source, even though a voltage may be regenerated by the load. This condition is a loss of phase and shall be considered a failed source.
8. Source status screens shall be provided for both normal & emergency to provide digital readout of voltage on all 3 phases (phase to phase and phase to neutral), frequency, and phase rotation.

C Additional Features

1. The controller shall have 3 levels of security. Level 1 shall allow monitoring of settings and parameters only. The Level 1 shall be capable of restricted with the use of a lockable cover. Level 2 shall allow test functions to be performed and Level 3 shall allow setting of all parameters.
2. The display shall provide for the test functions, allowed through password security. The test function shall be load, no load or auto test. The auto test function shall request an elapsed time for test. At the completion of this time delay the test shall be automatically ended and a retransfer sequence shall commence. All loaded tests shall be immediately ended and retransfer shall occur if the emergency source fails and the normal source is acceptable.
3. A contact closure shall be provided for a low-voltage engine start signal. The start signal shall prevent dry cranking of the engine by requiring the generator set to reach proper output, and run for the duration of the cool down setting, regardless of whether the normal source restores before the load is transferred.
4. Auxiliary contacts shall be provided consisting of a minimum of two contacts, closed when the ATS is connected to the normal source and two contacts closed, when the ATS is connected to the emergency source.
5. LED indicating lights shall be provided; one to indicate when the ATS is connected to the normal source (green) and one to indicate when the ATS is connected to the emergency source (red).
6. LED indicating lights shall be provided and energized by controller outputs. The lights shall provide true source availability of the normal (green) and emergency sources (red), as determined by the voltage, frequency and phase rotation sensing trip and reset settings for each source.
7. A membrane switch shall be provided on the membrane panel to test all indicating lights and display when pressed.
8. Provide the ability to select “commit/no commit to transfer" to determine whether the load should be transferred to the emergency generator if the normal source restores before the generator is ready to accept the load.
9. Terminals shall be provided for a remote contact which opens to signal the ATS to transfer to emergency and for remote contacts which closes to inhibit transfer to emergency and/or retransfer to normal. Both of these inhibit signals can be activated through the keypad, communications interface port or USB. A “not-in-auto" LED shall indicate anytime the controller is inhibiting transfer from occurring.
10. An in-phase monitor shall be a standard feature in the controller. The monitor shall control transfer so that motor load inrush currents do not exceed normal starting currents, and shall not require external control of power sources. The in-phase monitor shall be specifically designed for and be the product of the ATS manufacturer. The in-phase monitor shall be capable of being enabled or disabled from the user interface, communications interface port or USB.
11. A time based load control feature shall be available to allow the prioritized addition and removal of loads based during transfer. This feature may be enabled for either or both sources. The user

shall be able to control up to nine loads with independent timing sequences for pre and post transfer delays in either direction of transfer.

12. The controller shall provide two form "C" contact outputs rated for up to 12A @ 240VAC or 2A @ 480VAC that can be programmed from the following values:
    a Aux switch open, Transfer switch aux contact fault, Alarm silenced, Alarm active, I/O communication loss, Contactor position, Exercise active, Test mode active, Fail to transfer, Fail to acquire standby source, Source available, Phase rotation error, Not in automatic mode, Common alarm, In phase monitor sync, Load bank control active, Load control active, Maintenance mode active, Non-emergency transfer, Fail to open/close, Loss of phase, Over/under voltage, Over/under frequency, Voltage unbalance, Start signal, Peak shave active, Preferred source supplying load, Standby source supplying load
13. The controller shall be capable of expanding the number of inputs and outputs with additional modules.
14. Engine Exerciser - The controller shall provide an internal engine exerciser. The engine exerciser shall allow the user to program up to 21 different exercise routines based on a calendar mode. For each routine, the user shall be able to:
    a Enable or disable the routine
    b Enable or disable transfer of the load during routine.
    c Set the start time, time of day, day of week, week of month (1st, 2nd, 3rd, 4th, alternate or every)
    d Set the duration of the run.
    e At the end of the specified loaded exercise duration the switch shall transfer the load back to normal and run the generator for the specified cool down period. All loaded exercises shall be immediately ended and retransfer shall occur if the standby source fails. The next exercise period shall be displayed on the main screen with the type of exercise, time and date. The type of exercise and the time remaining shall be display when the exercise is active. It shall be possible of ending the exercise event with a single button push.
15. Date and time - The date shall automatically adjust for leap year and the time shall have the capability of automatically adjusting for daylight saving and standard times.
16. System Status - The controller shall have a default display the following on:
    a System status
    b Date, time and type of the next exercise event
    c Average voltage of the preferred and standby sources
    d Scrolling through the displays shall indicate the following:
        i) Line to line and line to neutral voltages for both sources
        ii) Frequency of each source
        iii) Load current for each phase
        iv) Single or three phase operation
        v) Type of transition
        vi) Preferred source
        vii) Commit or no commit modes of operation
        viii) Source/source mode
        ix) In phase monitor enable/disable
        x) Phase rotation
        xi) Date and time
17. Controllers that require multiple screens to determine system status or display “coded" system status messages, which must be explained by references in the operator’s manual, are not permissible.
18. Self-Diagnostics - The controller shall contain a diagnostic screen for the purpose of detecting system errors. This screen shall provide information on the status input signals to the controller which may be preventing load transfer commands from being completed.
19. Communications Interface - The controller shall be capable of interfacing, through a standard communications with a network of transfer switches and generators. It shall be able to be

connected via an RS-485 serial communication (up to 4000 ft. direct connect or multi-drop configuration). This module shall allow for seamless integration of existing or new communication transfer devices and generators.

20. The transfer switch shall also be able to interface to 3rd party applications using Modbus RTU open standard protocols utilizing Modbus register maps. Proprietary protocols shall not be acceptable.
21. The controller shall contain a USB port for use with a software diagnostic application available to factory authorized personnel for downloading the controller's parameters and settings; exercise event schedules; maintenance records and event history. The application can also adjust parameters on the controller.
22. Data Logging - The controller shall have the ability to log data and to maintain the last 2000 events, even in the event of total power loss. The following events shall be time and date stamped and maintained in a non-volatile memory. The controller shall be able to display up to the last 99 events. The remaining events shall be accessible via the communications interface port or USB.
    a Event Logging
        i) Data, date and time indication of any event
    b Statistical Data
        i) Total number of transfers*
        ii) Total number of fail to transfers*
        iii) Total number of transfers due to preferred source failure*
        iv) Total number of minutes of operation*
        v) Total number of minutes in the standby source*
        vi) Total number of minutes not in the preferred source*
        vii) Normal to emergency transfer time
        viii) Emergency to normal transfer time
        ix) System start date
        x) Last maintenance date
        xi) * The statistical data shall be held in two registers. One register shall contain data since start up and the second register shall contain data from the last maintenance reset.
23. External DC Power Supply - An optional provision shall be available to connect up to two external 12/24 VDC power supply to allow the LCD and the door mounted control indicators to remain functional when both power sources are dead for extended periods of time. This module shall contain reverse battery connection indication and circuit protection.

D Operation Sequence

2.3 ACCESSORIES

A. Programmable Exerciser. A programmable exerciser shall be supplied to allow programming of up to 56 on/off events.
B. Seismic Certification. The seismic certification shall be available for 150-3000 amp switches with NEMA 1 enclosures. Certification shall depend on geographic location. Contact local distributor for details
C. Standard I/O Module. The standard I/O Module shall have two programmable inputs and six programmable outputs.
    i. Inputs Available 2
        1. Contact Closure
        2. Current 5mA Max.
        3. Connection Type Terminal Strip
        4. Wire Size #14-24 AWG
        5. Max Distance 700 feet
    ii. Outputs Available 6
        1. Contact Type Form C (SPDT)

2. Contact Rating 2A @ 30VDC, 500mA @ 125VAC
3. Connection Type Terminal Strip
4. Wire Size #14-24

2.4 SOURCE QUALITY CONTROL

A Test and Inspection

1. Upon request, the manufacturer shall provide a notarized letter certifying compliance with all of the requirements of this specification including compliance with the above codes and standards. The certification shall identify, by serial number(s), the equipment involved. No exceptions to the specifications, other than those stipulated at the time of the submittal, shall be included in the certification.

2. The ATS manufacturer shall be certified to ISO 9001 International Quality Standard and the manufacturer shall have third party certification verifying quality assurance in design/development, production, installation and servicing in accordance with ISO 9001.

PART 3 EXECUTION

3.1 INSTALLATION

A General: Automatic transfer switches shall be installed, including all connections, where and as indicated on Drawings and wiring diagrams as specified herein, and in accordance with approved shop drawings and manufacturer's instructions.

B Standards: Comply with the requirements of NEMA and NEC standards and applicable portions of NECA's, "Standard for Installation", for transfer switches.

C Tightness: Torque bus connections and tighten mechanical fasteners.

D Concrete Pad: Install floor-mounted transfer switches on a reinforced concrete pad. The ATS pad shall extend 3 inches beyond the switch enclosure, unless noted otherwise. Switch shall be bolted to the housekeeping pad using 3/8 inch minimum galvanized bolts and anchors on 30 inch maximum centers. Furnish the exact location of any block-outs, dimensions, and locations of the housekeeping pads in a timely manner so as to prevent delay of the concrete work. Refer to Section 26 0501 "Electrical Basic Materials and Methods" for additional requirements.

E Adjustment: Adjust operating mechanisms for free mechanical movement.

F Finish: Touch-up scratched or marred surfaces to match original finish.

3.2 CONTROL WIRING:

A General: Provide control wiring from automatic transfer switch to the generator for generator starting and transfer switch control.

B Load Disconnect: Provide load disconnect control wiring and relays as required from each automatic transfer switch load disconnect contact to disconnect control power to load served by that automatic transfer switch, stopping all motors during transfer in either direction. Control wiring shall be installed in a suitable raceway.

C Annunciator Wiring: Provide wiring between transfer switches and to transfer switch annunciator located in the Fire Command Center. Communications wiring shall be installed in a suitable raceway.

D Auxiliary Contacts: One additional N.O. (normally open) auxiliary contact which closes when ATS is connected to normal power and one additional N.O. (normally open) auxiliary contact which closes

when ATS is connected to standby power. These contacts are for future use and are in addition to any contacts required for control, interlock, or monitoring functions

3.3 COORDINATION

A Instructions and Drawings: Complete instructions, consisting of operating and maintenance manuals, parts book, dimensional drawings, separate unit wiring diagrams and schematics and interconnecting wiring diagrams shall be provided to the Engineer within 30 days of completion of the Project.

3.4 TESTING

A Pre-energization Checks: Prior to energization, check automatic transfer switches for continuity of circuits and for short circuits.

B General:

1. The complete installation shall be initially operated and checked out for operational compliance by representatives of the manufacturer of the ATS.

2. Upon completion of initial start-up and system checkout, the supplier of the ATS or his authorized representative shall perform a field test, witnessed by the Engineer, to demonstrate full compliance with all requirements of the specification, but not be limited to demonstration of proper operation of all control interlocks and a minimum of four automatic operations of each transfer switch. This testing shall be performed in conjunction with standby generator system testing.

C Reporting: Upon completion of the field test, four copies of the final report shall be documented, certified, and sent to the Engineer for distribution to the Owner or authorized Owner's representative, indicating that all automatic transfer switches in conjunction with the standby electric power system have been tested and are 100% operational.

D Thermographic Testing: Refer to Section 26 0125 "Electrical Testing" for thermographic testing

3.5 OPERATOR TRAINING

A The manufacturer's startup representative shall provide a minimum of 8 hours of operating and maintenance training to the Owner's maintenance personnel. Training shall be provided at times convenient to the Owner. Approved Operating and Maintenance Manuals shall be available to the Owner prior to the training session.

END OF SECTION

ITEM #8.D

ACWA Board Officers' Election for President & Vice President

DEL PASO MANOR WATER DISTRICT

BOARD MEETING

DATE: September 05, 2023 **AGENDA ITEM NO. 8.D**

SUBJECT: ACWA Board Officers' Election for President & Vice President

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STAFF CONTACT:
Adam Coyan, General Manager

BACKGROUND:

ACWA's membership is organized into 10 regions, each of which has a Board of Directors comprised of five to seven members who serve two-year terms. ACWA's regional elections are currently underway and will determine the boards of each region, including the region Chair, Vice Chair and three to five board members.

Committee representative Director Dolk is the authorized voting representative for Del Paso Manor Water District.

RECOMMENDATION:
Receive information provided and direct staff/voting representative to submit vote for upcoming President and Vice President of ACWA.

ATTACHMENTS:
Cathy Green Candidate Statement
Ernesto "Ernie" Avila Candidate Statement
Michael Saunders Candidate Statement

ENVIRONMENTAL IMPACT:
This item is not a project under Section 21065 of the California Public Resources Code, as it could not have any direct or indirect impact on the environment.

FINANCIAL IMPACT:
This item will not have any direct or indirect financial impact on the district.

CATHY GREEN FOR ACWA PRESIDENT

COMMITMENT · EXPERIENCE · LEADERSHIP

ACWA BOARD MEMBER

· ACWA Vice President (2022-current)
· Executive Committee (2020-current)
· Region 10 Chair (2018-2019)
· Region 10 Vice Chair (2016-2017, 2020-2021)
· Region 10 Board Member (2012-2021)

ACWA COMMITTEES

· Water Quality Committee (2012-current)
· Energy Committee (2019-current)
· State Legislative Committee (2012-2015)

ORANGE COUNTY WATER DISTRICT

· President (2015-2016, 2022-current)
· 1st Vice President (2013, 2014, 2019-2022)
· Director (2010-current)
· Joint Planning Committee: Chair
· Labor Ad Hoc Committee: Chair
· Communications/Legislative Liaison Committee: Vice Chair

CIVIC AND PROFESSIONAL EXPERIENCE

· Santa Ana River Flood Protection Agency: Chair
· CalDesal: Director
· City of Huntington Beach Mayor (2003, 2009)
· Councilwoman (2002-2010)
· Registered Nurse
· Law degree

My vision for ACWA is to embrace its motto -- Bringing Water Together -- which, for me, is about unifying ACWA members and working collaboratively with diverse stakeholders to find smart solutions to the challenges we are now facing.

CATHY GREEN BIOGRAPHY

In December of 2021, Cathy Green was elected vice president of the Association of California Water Agencies (ACWA) for a two-year term. She has served as an active member of ACWA since 2012, including serving on ACWA's executive committee since 2020, the ACWA Board since 2016, and the Region 10 Board from 2012-2021. She held the position of ACWA Region 10 chair from 2018-2019 and served as vice chair from 2016-2017 and 2020-2021. Cathy Green has also served on several ACWA committees including the water quality committee since 2012, the energy committee since 2019, and the state legislative committee from 2012-2015.

Cathy Green was elected to the Orange County Water District (OCWD) Board of Directors in November 2010 and was re-elected in 2012, 2016 and 2020. She was selected by the Board to serve as its 2015, 2016 and 2023 president. She served as 1st vice president in 2013, 2014 and from 2020 to 2022.

Cathy Green currently serves as vice chair of National Water Research Institute, a 501c3 nonprofit that collaborates with water utilities, regulators, and researchers in innovative ways to help develop new, healthy, and sustainable sources of drinking water.

Prior to Cathy Green's service on OCWD's Board, she was elected to two consecutive terms on the Huntington Beach City Council where she served two terms as mayor. Cathy Green has been involved as a council liaison and committee member on many city boards, commissions and committees. She served on the Orange County Transportation Authority Board and was a director of OC Clean Tech.

Cathy Green serves on the boards of the Huntington Valley Boys and Girls Club and the Orange County Explorer Program; serves on the Huntington Beach City School District Medi-Cal Collaborative; is a director of the Prime Health Foundation and the Huntington Beach Hospital; is a member of the American Legion Unit 133 Auxiliary, Huntington Beach Community Emergency Response Team (CERT) and the Elks Lodge 1959; and is on the advisory board of the Bolsa Chica Conservancy. She is a founding member of Amigos de Bolsa Chica.

In addition, her community involvement has included serving as president of the Therapeutic Riding Center and the Huntington Beach Community Clinic, chair of the Orange County Emergency Medical Care Committee and of Explorer's/Learning for Life, first aid chair of Huntington Beach CERT, and board member of the OC Boy Scouts of America Council and American Family Housing.

Cathy Green is the recipient of many awards. Her most recent is a 2020 Boys and Girls Clubs of America National Service to Youth Award. In 2010, she was the recipient of the Spurgeon Award, and, in 2005, she was named Woman of the Year by then State Senator John Campbell. Other awards include the 2006 United Way Excellence in Child Care Planning, the 2007 Peace Maker Award from the Greater Huntington Beach Interfaith Council and the Golden West College Pillar of Achievement Award. She has also been recognized as Huntington Beach's Citizen of the Year by the Huntington Beach Chamber of Commerce, a Huntington Beach Soroptimist's Woman of Distinction and a Bolsa Chica Conservancy Conservator of the Year.

Cathy Green is a registered nurse and holds a degree in law. As a nurse, she worked in the health care areas of intensive care, student health, community health, and patient advocacy. In addition to nursing, she gained experience with a variety of environmental projects while associated with Lockhart and Associates.

Cathy Green has been a resident of Huntington Beach since 1970 where she raised her two children, Teresa and Tom, with her late husband Peter.

ERNIE AVILA FOR ACWA Vice President

"The Association of California Water Agencies (ACWA) truly represents the nexus of knowledge and leadership in water for California. We are emerging from difficult times on many fronts, notably a multi-year drought and we need to lock into strategies to keep water in the public eye with ACWA and member agencies as the trusted sources of information. With over 40 years of experience in the water world, I am dedicated to continuing ACWA's leading role on state-wide water issues, including the protection of water rights. United between all water users, we can inform the needed investments state-wide in storage, groundwater recharge, conveyance, desalination, recycling, reuse and conservation to strengthen our water systems for future generations." – *Ernesto (Ernie) Avila, P.E.*

ACWA BOARD MEMBER

- Executive Committee of the ACWA Board of Directors
- ACWA Board of Directors
- ACWA Region 5 Board of Directors
- ACWA Foundation Steering Committee

ACWA COMMITTEES

- Local Government Committee, Chair
  - Property Tax Working Group
  - Housing Densification Working Group
  - Paving Standards Working Group
- Federal Affairs Committee
- Foundation Fundraising Working Group

CONTRA COSTA WATER DISTRICT

- Contra Costa Water District, Board President
- Operations & Engineering, Committee Chair
- East Bay Leadership Council, Director
- Los Vaqueros Reservoir Joint Powers Authority, Director

PROFESSIONAL EXPERIENCE

- Vice-President, Avila and Associates Consulting Engineers, Inc.
- Monterey Peninsula Water Management District, General Manager
- Director of Engineering, Contra Costa Water District
- Northern California Salinity Coalition, Executive Director
- California Urban Water Agencies, Executive Director

ERNIE AVILA FOR ACWA Vice President

Ernesto (Ernie) Avila, PE
Board President
Contra Costa Water District

Recent ACWA and Regional Water Coalition Experience

Association of CA Water Agencies (ACWA). I have had the pleasure of supporting ACWA over twenty years at the regional and state level. My recent ACWA experience has included serving on ACWA's:

- Executive Committee of the ACWA Board of Directors
- Board of Directors
- Region 5 Board
- Local Government Committee (Chair)
  - Property Tax Working Group
  - Housing Densification Working Group
  - Paving Standards Working Group
- Federal Affairs Committee
- Foundation Steering Committee
  - Foundation Fundraising Working Group

As part of these efforts, I led ACWA's assessment of potential water industry impacts associated with Sacramento-based housing initiatives including Auxiliary Dwelling Units, Commercial Properties and Transit Center Hubs and led a workshop to consider potential ACWA next steps associated with these new initiatives and their related changes to water agency fees and charges. I led the ACWA Region 5 session on *Safe Drinking Water Issues Affecting Disadvantaged Communities*, and helped with the development of the *ACWA New Water System Approval Fact Sheet*. I also participated in the ACWA Foundation Steering Committee including several related Ad Hoc committees and contributed to Federal Affairs Committee work groups associated with the Water Infrastructure Finance and Innovation Act (WIFIA) .

Multi-State Salinity Coalition (MSSC). For over 20 years, I have served as Program Director and Board member of MSSC which consists over 30+ water agencies from New Mexico, northern and southern California, Nevada, Colorado, Arizona and Texas. The MSSC mission is to promote advancements in technologies for desalination, reuse, salinity control strategies (watersheds and agriculture), water/energy efficiencies and related policies that will assist communities in meeting their water needs. I also helped to establish relationships regarding salinity management and desalination with water agencies in Australia, Mexico and Israel. In February 2023, the MSSC awarded me with the ***MSCC "Salt of the Earth" National Award*** for outstanding commitment, leadership, vision and dedication to our water industry.

Contra Costa Water District (CCWD). As President of CCWD, I helped to form the coalition of eight northern California water agencies that make up the Los Vaqueros Reservoir Joint Powers Authority (LVJPA). Once completed, the expanded reservoir will improve the Bay Area's regional water supply reliability and water quality while protecting Delta fisheries and providing additional Delta ecosystem benefits. I currently serve as the CCWD Director to the LVJPA.

California Urban Water Agencies (CUWA). As Executive Director, I led CUWA's effort in the development of Department of Water Resources (DWR) Methodologies for Calculating Baseline and Compliance Urban Per Capita Water Use as part of the Water Conservation Act of 2009 (Senate Bill X7-7) with our southern and northern California water agency members. I also made certain that CUWA's finances and practices were sound and transparent.

Northern California Salinity Coalition. As Executive Director, I led a coalition of ten San Francisco Bay Area water agencies in crafting grant application strategies and DWR outreach that would demonstrate the value of supporting watershed management, brackish desalination and groundwater project associated with salinity management. Working with the Coalition agencies, we secured the largest Proposition 50 grant funding for our region.

Professional Work Experience (40 years)

- Vice-President, Avila and Associates Consulting Engineers, Inc.
- General Manager, Monterey Peninsula Water Management District
- Director of Engineering, Contra Costa Water District
- Associate Engineer, East Bay Municipal Water District
- Construction Manager, CH2M Hill
- Professional Civil Engineer (California – C41727)

Community Service Experience

- Contra Costa Water District, President of the Board
- John Muir Community Health Fund Board of Directors (Treasurer)
- Association of California Engineering Companies – Chair of the Healthcare Trust (non-profit)
- Knights of Columbus, Scholarship Chair
- St. Francis of Assisi School Board, President
- City of Concord, CA – Planning Commission, Chair
- City of Concord, CA – Design Review Board
- City of Walnut Creek, CA – Transportation Commission, Vice-Chair

Education and Related Credentials

- B.S. – Civil Engineering, Santa Clara University
- M.B.A. – St. Mary's College of California
- Professional Civil Engineer (California – C41727)
- California Farm Bureau Member

Michael Saunders, MD
Georgetown Divide Utility District, Director
Candidate ACWA Vice-President
Outline and Statement of Qualifications

Appointed Offices:
Georgetown Divide Public Utility District - Finance Committee (2018)

Elected Offices:
Georgetown Divide Public Utility District - 5 years (2018-2022), (2022-2026)
Served as Treasurer, Vice-President, President
Currently Legislative Liaison

El Dorado County LAFCO - Alternate Special District Commissioner (2019 to present)
Budget Workgroup, Small to Medium Water District MSR workgroup, Recruitment Committee, Grand Jury committee

Regional Offices
Mountain Counties Water Resources Association - WUE workgroup
Regional Water Authority (RWA) - Board Member, Executive Board Member

Regional Activities:
Consumnes, American, Bear, Yuba (CABY) Integrated Regional Water Management Group
Participated in helping to define the vulnerability, economic, and support levels for the communities within El Dorado County.

State Level Workgroups
Department of Water Resources
DWR Workgroup Member for Water Use Efficiency Workgroups
- Water Loss Workgroup
- Annual Water Supply and Demand Assessment Workgroup

DWR Stakeholder participant
- County Drought Advisory Group
- Water Use Studies (LAM, Variances; Indoor, Outdoor, CII budgets)

Association of California Water Agencies (ACWA)
Workgroups:
- Diversity, Equity, and Inclusion Workgroup
- Headwaters Workgroup
- Water Use Efficiency Workgroup
- State Infrastructure Workgroup

Committees:
- Membership Committee

ACWA Region 3
- ACWA Region 3 Board Member (2022 - present)
- ACWA Region 3 Regional Issue Forum Planning workgroup
    - "*Protecting Communities in the New Era of Wildfire: The Important Role of Water Purveyors*"

My background includes a Bachelor of Science (BS) in Nutritional Biochemistry from Cornell University and a Doctor of Medicine (MD) from Howard University. My journey in water issues began with an empty horse water trough one hot summer day when there was no water. I began as a community volunteer on the Finance Committee where I began to learn about the finances of my water District. I was elected to the Georgetown Divide Public Utility District (GDPUD) Board in 2018. I am now in my 5th year as a Board member in my second term of office. I have served as the Treasurer, Vice-President, and President of the Board. I currently serve as the Board's Legislative Liaison.

I learned about water systems, delivery, infrastructure and our issues starting at the local level as a Board member, becoming more expansive through working with our Urban Water Management Plan and managing the District's water supply through drought mandates, water contingency plans, and wildfires. My understanding of the County water issues began as I actively participated in the Consumnes, American, Bear, Yuba (CABY) Integrated Regional Water Management Group including helping to define all of the vulnerability, economic, and support levels for the communities within El Dorado County. At the County level, I am the Alternate Special District Commissioner for LAFCO. I was part of the LAFCO workgroup for Small to Medium Water Districts Municipal Service Reviews and I have reviewed all the MSRs for the County learning of all of our County water districts infrastructures, finances, and challenges. As an Executive board member of the Regional Water Authority, I have had the opportunity to learn more on groundwater basins, and working on trying to get a Federally recognized water bank and working on conjunctive use efforts between surface water storage and groundwater storage.

At the State Level, I have worked on the Water Use Efficiency and County Drought Advisory Groups with the Department of Water Resources (DWR) beginning in 2019. This experience allowed me to understand about the challenges and issues throughout the State. This also gave me the opportunity to provide recommendations and solutions specific to rural, mountain counties that were not being addressed and began my active role in advocating for rural, mountain water agencies.

I have been an active participant with ACWA, attending conferences, workgroups, webinars, regional tours, board meetings, symposiums. I have been an advocate for issues attending State and Federal symposiums and legislative days, working and advocating through County, Regional, State and National committees, workgroups, task forces, legislative meetings, testimonies, letters, coalition letters, and hearings. The work with the DEI workgroup helped form ACWA's new foundation.

The ACWA Regional Board has allowed me to play a leadership role in our Region. Working closely with our regional board members and member agencies, we gathered information on issues in which we were able to work with ACWA staff to facilitate a meeting with State Water Resource Control Board members. I continue to outreach and work with our members and agencies to highlight the issues and challenges that our region faces and bring them to the various committees and workgroups.

ITEM #9.A

Field Report on Current and Upcoming Projects

DEL PASO MANOR WATER DISTRICT REGULAR BOARD MEETING
FIELD REPORT

MEETING DATE: September 05, 2023

AGENDA ITEM 9.A:

Leaks: We had 2 mainline leak, 1 service line leak on our side, and 2 service line leak on the customer's side

Complaints: We had 1 water quality concern

Water Waste: We had 10 water waste reports

Field Work:

1. 82 USA's marked in July & August
2. TCR samples for July & August were absent
3. Disinfection Byproducts samples were all absent
4. To date a total of 25 fire hydrants have been painted
    a. Please contact the office if you would like to get on the schedule to have yours painted
5. To date a total of 130 road markers for fire Hydrants have been placed

Current and Upcoming Projects:

1. Replace 1 more non-functional meter
2. Continue landscaping maintenance around fire hydrants
3. Continue infrastructure measurements

FIELD STAFF RESPONSIBLE FOR REPORT: Mike Jenner, Field Manager
09/05/2023