



PALMDALE WATER DISTRICT

A CENTURY OF SERVICE

June 3, 2020

BOARD OF DIRECTORS

ROBERT E. ALVARADO

Division 1

DON WILSON

Division 2

GLORIA DIZMANG

Division 3

KATHY MAC LAREN

Division 4

VINCENT DINO

Division 5

AGENDA FOR REGULAR MEETING OF THE BOARD OF DIRECTORS OF THE PALMDALE WATER DISTRICT

TO BE HELD VIA TELECONFERENCE ONLY

DIAL-IN NUMBER: 571-748-4021 ATTENDEE PIN: 587-569-217#

Submit Public Comments at: <https://www.gomeet.com/587-569-217>

MONDAY, JUNE 8, 2020

6:00 p.m.

NOTES: To comply with the Americans with Disabilities Act, to participate in any Board meeting please contact Dawn Deans at 661-947-4111 x1003 at least 48 hours prior to a Board meeting to inform us of your needs and to determine if accommodation is feasible.

Additionally, an interpreter will be made available to assist the public in making **comments** under Agenda Item No. 4 and any action items where public input is offered during the meeting if requested at least 48 hours before the meeting. Please call Dawn Deans at 661-947-4111 x1003 with your request. (PWD Rules and Regulations Section 4.03.1 (c))

Adicionalmente, un intérprete estará disponible para ayudar al público a hacer **comentarios** bajo la sección No. 4 en la agenda y cualquier elemento de acción donde se ofrece comentarios al público durante la reunión, siempre y cuando se solicite con 48 horas de anticipación de la junta directiva. Por favor de llamar Dawn Deans al 661-947-4111 x1003 con su solicitud. (PWD reglas y reglamentos sección 4.03.1 (c))

Agenda item materials, as well as materials related to agenda items submitted after distribution of the agenda packets, are available for public review at the District's office located at 2029 East Avenue Q, Palmdale (Government Code Section 54957.5). Please call Dawn Deans at 661-947-4111 x1003 for public review of materials.

PUBLIC COMMENT GUIDELINES: The prescribed time limit per speaker is three-minutes. Please refrain from public displays or outbursts such as unsolicited applause, comments, or cheering. Any disruptive activities that substantially interfere with the ability of the District to carry out its meeting will not be permitted, and offenders will be requested to leave the meeting. (PWD Rules and Regulations, Appendix DD, Sec. IV.A.)

Each item on the agenda shall be deemed to include any appropriate motion, resolution, or ordinance to take action on any item.

- 1) Pledge of Allegiance/Moment of Silence.
- 2) Roll Call.
- 3) Adoption of Agenda.

DENNIS D. LaMOREAUX

General Manager

ALESHIRE & WYNDER LLP

Attorneys



- 4) Public comments for non-agenda items.
- 5) Presentations:
 - 5.1) None at this time.
- 6) Action Items - Consent Calendar (The public shall have an opportunity to comment on any action item on the Consent Calendar as the Consent Calendar is considered collectively by the Board of Directors prior to action being taken.)
 - 6.1) Approval of minutes of regular meeting held May 26, 2020.
 - 6.2) Payment of bills for June 8, 2020.
- 7) Action Items - Action Calendar (The public shall have an opportunity to comment on any action item as each item is considered by the Board of Directors prior to action being taken.)
 - 7.1) Consideration and possible action on California Special Districts Association Board of Directors Seat C Southern Network election for the 2021-2023 term. (No Budget Impact – General Manager LaMoreaux)
 - 7.2) Consideration and possible action on authorization for staff to enter into a contract for Arc Flash Assessment Services with P2S Inc. in the amount of \$40,528.00. (\$40,528.00 – Budgeted – Budget Item No. 1-02-5070-007 – Engineering/Grant Manager Rogers)
 - 7.3) Consideration and possible action on authorization of the following conferences, seminars, and training sessions for Board and staff attendance within budget amounts previously approved in the 2020 Budget:
 - a) None at this time.
- 8) Information Items:
 - 8.1) Reports of Directors:
 - a) Meetings; Standing Committee/Assignment Reports; General Report.
 - 8.2) Report of General Manager.
 - 8.3) Report of General Counsel.
- 9) Public comments on closed session agenda matters.
- 10) Closed session under:
 - 10.1) Conference with Legal Counsel – Anticipated Litigation: A closed session will be held, pursuant to Government Code §54956.9 (d)(4), to confer with General Counsel regarding one case of potential litigation.
- 11) Public report of any action taken in closed session.
- 12) Board members' requests for future agenda items.
- 13) Adjournment.



DENNIS D. LaMOREAUX, General Manager
DDL/dd

**PALMDALE WATER DISTRICT
BOARD MEMORANDUM**

DATE: June 1, 2020 **June 8, 2020**
TO: BOARD OF DIRECTORS **Board Meeting**
FROM: Mr. Dennis D. LaMoreaux, General Manager
RE: ***AGENDA ITEM NO. 7.1 – CONSIDERATION AND POSSIBLE ACTION ON CALIFORNIA SPECIAL DISTRICTS ASSOCIATION BOARD OF DIRECTORS SEAT C SOUTHERN NETWORK ELECTION FOR THE 2021-2023 TERM. (NO BUDGET IMPACT – GENERAL MANAGER LaMOREAUX)***

Information for the California Special Districts Association (CSDA) 2020 election for Seat C of the Southern Network for the 2021-2023 term is attached for your consideration. The District is asked to vote for one candidate by July 10, 2020.

The candidates are as follows:

- Arlene Schafer
Costa Mesa Sanitary District
- Ronald L. Coats
East Valley Water District
- Daniel K. Jagers
Beaumont-Cherry Valley Water District
- Greg Mills
Serrano Water District

Supporting Documents:

- CSDA ballot
- All CSDA candidate statements and information sheets



- Home
- How It Works
- Logout **Dennis Lamoreaux**

CSDA Board of Directors Election Ballot - Term 2021-2023; Seat C - Southern Network

Please vote for your choice

Choose one of the following candidates:

- Arlene Schafer*
- Ronald Coats
- Daniel Jagger
- Greg Mills

- Arlene Schafer*** [\[view details\]](#)
- Ronald Coats** [\[view details\]](#)
- Daniel Jagger** [\[view details\]](#)
- Greg Mills** [\[view details\]](#)

Continue**Cancel**



2021-2023 CSDA BOARD CANDIDATE INFORMATION SHEET

The following information **MUST** accompany your nomination form and Resolution/minute order:

Name: Arlene Schafer

District/Company: Costa Mesa Sanitary District

Title: Board Secretary

Elected/Appointed/Staff: Elected

Length of Service with District: 20

1. Do you have current involvement with CSDA (such as committees, events, workshops, conferences, Governance Academy, etc.):

Current CSDA Board member, Legislation Committee member, Professional Development Committee member, Alliance Executive Council Committee member, Member Services Committee, Finance Committee member.

2. Have you ever been associated with any other state-wide associations (CSAC, ACWA, League, etc.):

League, California Association Sanitation Agencies (CASA)

3. List local government involvement (such as LAFCo, Association of Governments, etc.):

Orange County LAFCO Chair, Orange County Council of Governments, Independent Special Districts Orange County

4. List civic organization involvement:

Harbor Mesa Lions, Costa Mesa Chamber of Commerce Government Association Committee

****Candidate Statement** – Although it is not required, each candidate is requested to submit a candidate statement of no more than 300 words in length. **Any statements received in the CSDA office after March 26, 2020 will not be included with the ballot.**

ELECT ARLENE SCHAFER CALIFORNIA SPECIAL DISTRICTS ASSOCIATION SOUTHERN NETWORK, SEAT C

Arlene Schafer – Secretary Costa Mesa Sanitary District



PREVIOUS EXPERIENCE SERVING SPECIAL DISTRICTS

- ◆ OC LAFCO Chair
 - ◆ CSDA Board President
 - ◆ CSDA Board Vice President
 - ◆ CSDA Board Secretary
 - ◆ CSDA Finance Corporation
 - ◆ CSDA Legislation Committee
 - ◆ CSDA Fiscal Committee
 - ◆ CSDA Membership Committee
 - ◆ Independent Special Districts Orange County (ISDOC) Second Vice President
-

It has been an honor to serve as your Southern Network, Seat C representative for the past 12 years. I believe my 28 years of experience as a local government leader that includes 20 years serving special districts in a variety of different capacities makes me the best candidate. I believe it is important for CSDA to continue serving as an advocate for California special districts by informing the legislature and the public of the important and essential services we provide to our communities. Furthermore, I believe it's important for special districts to demonstrate good governance that will help earn the public's trust.

Currently, I am serving on the Board of Directors for the Costa Mesa Sanitary District (CMSD) where I have been a Board member for 20 years. CMSD provides solid waste and wastewater collection services to over 116,000 residents residing in the City of Costa Mesa and portions of Newport Beach and the unincorporated Orange County. I am proud to be part of an organization that has been a District of Distinction since 2009, earned the Transparency Certificate of Excellence and CMSD is one of few special districts in California that received Platinum Recognition in Special District Governance.

If re-elected, I will continue to collaborate with CSDA committees to ensure you have educational opportunities to enhance special district governance and help elevate public awareness of the role we play as the form of government closest and most directly accountable to our constituents. I believe my experience, knowledge, dedication and commitment to special districts will enable me to represent you well and I am asking for your vote and support. Please vote for Arlene Schafer by **July 10, 2020.**



**California Special
Districts Association**
Districts Stronger Together

2021-2023 CSDA BOARD CANDIDATE INFORMATION SHEET

The following information **MUST** accompany your nomination form and Resolution/minute order:

Name: Ronald L. Coats

District/Company: East Valley Water District

Title: Governing Board Member

Elected/Appointed/Staff: Elected

Length of Service with District: Six Years

1. Do you have current involvement with CSDA (such as committees, events, workshops, conferences, Governance Academy, etc.):

* Please see attached

2. Have you ever been associated with any other state-wide associations (CSAC, ACWA, League, etc.):

* Please see attached

3. List local government involvement (such as LAFCo, Association of Governments, etc.):

* Please see attached

4. List civic organization involvement:

* Please see attached

****Candidate Statement** – Although it is not required, each candidate is requested to submit a candidate statement of no more than 300 words in length. **Any statements received in the CSDA office after March 26, 2020 will not be included with the ballot.**

Ronald L. Coats – 2020 CSDA Board Candidate Information Sheet

1) Involvement with CSDA

- Currently serving on the Member Services Committee and the Professional Development Committee.
- Received the Recognition in Special District Governance.
- Received my Certificate of Completion in the Special District Leadership Academy Advanced Coursework.
- Attended several workshops, webinars and conferences through CSDA.

2) State-wide Associations

1. Member of the California State Sheriff's Association (Over 30 Years)

3) Local government involvement

1. Currently serving as a Director, previously served as Vice Chair and Chairman of the Board for East Valley Water District (5 Years)
2. Currently serving as Vice Chair for the Advisory Committee on Water Policy for the San Bernardino Valley Municipal Water District (2 Years)
3. Served on the Citizens Advisory Committee for the Review of the General Plan for the City of San Bernardino (2 Years)
4. Served as a member, Vice Chair and Chairman of the Citizens Oversight Committee for the San Bernardino City Unified School District (12 Years)
5. Served as a member and Chairman of the Citizens Oversight Committee for the San Bernardino Community College District (3 Years)
6. Currently serving as a Board President for the Association of San Bernardino County Special Districts (2 Years)

4) Civic involvement

1. Donated over 36 gallons of Blood to Life Stream Blood Bank in San Bernardino and Riverside Counties
2. Member of the American Legion Post 421 in Highland, CA. (Over 35 Years)
3. Conducted "mock" job interviews to seniors at Redlands Unified School District schools (3 Years)
4. Served on the Planning and Allocations and Community Impact Cabinet committees for the Arrowhead United Way (15 Years)
5. Served in the United States Army from August of 1966 until August of 1970, attaining the rank of Staff Sergeant. Served in the United States and The Federal Republic of Germany (4 Years)
6. Served as a member and Chairman of the Ambassadors for the San Bernardino Area Chamber of Commerce (15 Years)



EAST VALLEY WATER DISTRICT

LEADERSHIP | PARTNERSHIP | STEWARDSHIP

BOARD OF DIRECTORS

David E. Smith
President

Phillip R. Goodrich
Vice President

Chris Carrillo
Director

Ronald L. Coats
Director

James Morales, Jr.
Director

John Mura, General Manager/CEO

Dear Fellow CSDA Member:

Since joining the East Valley Water District Board in 2014, I have had the pleasure of being part of a world class organization. I firmly believe in the importance of transparent government and public service. With these foundational principles, I look forward to representing this region in a professional manner, as the Southern Network, Seat B, Board of Directors representative for the California Special Districts Association (CSDA).

I am a proud member of the California Special District's Association and currently sit on the Member Services Committee and the Professional Development Committee. I am committed to active civic engagement, where I was also an ambassador for the San Bernardino Area Chamber of Commerce; Chairman of the Citizens Oversight Committee for San Bernardino Community College District; Vice Chairman of Advisory Commission on Water Policy Board for San Bernardino Valley Municipal Water District; Budget Review Committee member for the San Bernardino City Unified School District; along with being a 36 gallon plus donor to Life Stream Blood Bank; served in the United States Army; and member of many other civic organizations.

I have had the opportunity to work with a number of organizations through my involvement with CSDA, and truly believe in the importance of sharing knowledge, experiences, and lessons learned. As a lifetime member of the CSDA Leadership Foundation, I have experienced the benefits of a strong peer network firsthand. With East Valley Water District recently receiving its Gold District of Distinction Accreditation, we look forward to continuing to be an active member in the valuable organization.

As a CSDA Director, I will bring that passion for good governance and public service. I look forward to conveying local issues for discussion on a broader level and working through the challenges and opportunities facing special districts in California.

Whether it is serving in the military, participation in local organization, or representing the residents East Valley Water District, I have taken great pride in being an active member of my community. I look forward to your consideration for allowing me the opportunity to serve on the board of our special district community.

Sincerely,

Ronald L. Coats
East Valley Water District Board Member



California Special
Districts Association
Districts Stronger Together

2021-2023 CSDA BOARD CANDIDATE INFORMATION SHEET

The following information **MUST** accompany your nomination form and Resolution/minute order:

Name: Daniel K. Jagers
District/Company: Beaumont-Cherry Valley Water District
Title: General Manager
Elected/Appointed/Staff: Staff
Length of Service with District: Eight (8) years

1. Do you have current involvement with CSDA (such as committees, events, workshops, conferences, Governance Academy, etc.):

None

2. Have you ever been associated with any other state-wide associations (CSAC, ACWA, League, etc.):

No

3. List local government involvement (such as LAFCo, Association of Governments, etc.):

No

4. List civic organization involvement:

None

****Candidate Statement –** Although it is not required, each candidate is requested to submit a candidate statement of no more than 300 words in length. **Any statements received in the CSDA office after March 26, 2020 will not be included with the ballot.**

Promoted to the position of General Manager of Beaumont-Cherry Valley Water District in October 2017, Dan Jagers brings more than 25 years of professional experience to the District. Prior to this appointment, Mr. Jagers served BCVWD for more than five years as Director of Engineering, overseeing long-range planning, capital improvements, and project design on local and regional levels.

As General Manager, Mr. Jagers directs the activities of the District, moving the District toward its goals while maintaining consistency with the District's mission and vision. Mr. Jagers provides leadership based on the direction set by a five-member elected Board of Directors, manages operations, strategic planning, and policy implementation.

Mr. Jagers' experience as Director of Engineering for BCVWD garnered him the internal knowledge and proficiency to guide and manage the District. He directed and participated in Engineering Department goals and operating policies, provided direction to managers and coordinated all issues needing Board approval or policy direction from the Board of Directors.

A resident of the inland empire for more than 26 years, Dan brings local knowledge and experience to the District. He served as a Senior Engineer at Desert Water Agency, and spent 18 years in the private sector as a Senior Engineering Consultant with Krieger & Stewart, Inc. where he focused on all aspects of public facilities planning, design and construction service including full support services for small to large public infrastructure projects for water, recycled water, wastewater, storm water, site development, and street improvements. From planning, design and construction project management, Mr. Jagers' experience is high level and varied.

Dan's combination of public and private experience make him an asset to BCVWD.

Mr. Jagers graduated from Ohio State University with a Bachelor of Science in Civil Engineering. He is a Registered Civil Engineer in the State of California and has developed a reputation for trustworthiness, positivity, passion and professionalism.



California Special
Districts Association
Districts Stronger Together

2021-2023 CSDA BOARD CANDIDATE INFORMATION SHEET

The following information **MUST** accompany your nomination form and Resolution/minute order:

Name: Greg Mills

District/Company: Serrano Water District

Title: Vice President/Director

Elected/Appointed/Staff: _____

Length of Service with District: 4 years

1. Do you have current involvement with CSDA (such as committees, events, workshops, conferences, Governance Academy, etc.):

Actively attends conference.

2. Have you ever been associated with any other state-wide associations (CSAC, ACWA, League, etc.):

ACWA-JPIA Board member - 2 years.

3. List local government involvement (such as LAFCo, Association of Governments, etc.):

Orange County Sanitation District (Director 2 years); Orange

County Vector Control (Director 3 years); Villa Park City

Councilman & Mayor (4 years).

4. List civic organization involvement:

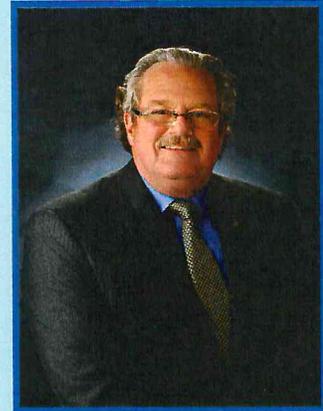
Villa Park Rotary (22 years); Indian Princess (7 years); Elks

Club (8 years).

****Candidate Statement** – Although it is not required, each candidate is requested to submit a candidate statement of no more than 300 words in length. **Any statements received in the CSDA office after March 26, 2020 will not be included with the ballot.**

GREG MILLS

Candidate for Seat C CSDA



BUSINESS

- Small business owner – sixteen years
- Analytical Chemist – six years
- Process Engineer – six years
- Technical Marketing Manager – three years
- Marketing Director – three years
- Marketing Executive – five years

COMMUNITY INVOLVEMENT

- Board Member (Vice President) - Serrano Water District three years
- Villa Park City Councilman – four years; One term Mayor and one term Mayor Pro-Tem (one year each)
- Orange County Sanitation District - Director two years
- Orange County Vector Control District - Director three years
- ACWA-JPIA - Representative Serrano Water District
- Villa Park Family Picnic – five years
 - Chair – three years
- Eagle Scout; Camp Counselor
- Villa Park Rotary - Board member twenty-two years
 - Club President; Paul Harris Fellow; Speaker Chair
- Indian Princess YMCA - seven years
- Orange Elks Lodge – seven years

PROFESSIONAL

- American Chemical Society – thirty years
- CS Mantech – eleven years
- PDA (Parenteral Drug Association)– five years
- ISPE (International Society of Pharmaceutical Engineering – eight years
- SEMI (Semiconductor Equipment and Manufacturer Institute – nine years
- Optical Society of America – four years
- MEPTEC
- AVS (American Vacuum Society)
 - ICMCTF

EDUCATION

- B.A., Chemistry – Illinois College
 - Phi Alpha President/Vice President
- M.S., Engineering Management – Santa Clara University

PERSONAL

- Married – 25 years. Wife: Journalist and active member of the community. One daughter currently at university.

Dawn Deans

From: Dennis LaMoreaux
Sent: Thursday, May 28, 2020 3:52 PM
To: Dawn Deans
Subject: FW: CSDA Candidate - Director Greg Mills
Attachments: Candidate Seat C CSDA Mills.pdf

Importance: High

Hi Dawn,
Please include this with the agenda item.

Thank you,
Dennis D. LaMoreaux
General Manager



PALMDALE WATER DISTRICT
A CENTURY OF SERVICE

PALMDALE WATER DISTRICT
2029 East Avenue Q, Palmdale, CA 93550
d: 661-456-1017 • c: 661-917-3031 • f: 661-947-8604
dlamoreaux@palmdalewater.org • www.palmdalewater.org



From: Jerry Vilander <JerryV@serranowater.org>
Sent: Thursday, May 28, 2020 3:47 PM
Cc: SWD <info@serranowater.org>; Greg Mills <gregmills@serranowater.org>; Greg Mills <greg@axrtech.com>; Jerry Vilander <JerryV@serranowater.org>
Subject: CSDA Candidate - Director Greg Mills
Importance: High

Good Afternoon,

On behalf of Vice President Greg Mills of the Serrano Water District Board of Directors and myself, we ask for your vote in support of Vice President Mills for Seat C of CSDA. Attached is his candidate statement for review. Please forward this information to your full governing Board. As you will see, Mr. Mills possesses all the qualifications necessary to be an outstanding and highly involved CSDA Board Member.

If you would like to further discuss his commitment to CSDA and the utmost importance of highly efficient local control, please do not hesitate to contact myself directly at (714) 955-2491 or Vice President Mills at (714) 803-5111.

Have an excellent day, and we look forward to your support.

Jerry Vilander, General Manager
Serrano Water District

P A L M D A L E W A T E R D I S T R I C T
B O A R D M E M O R A N D U M

DATE: June 2, 2020 **June 8, 2020**
TO: BOARD OF DIRECTORS **Board Meeting**
FROM: Mr. Scott Rogers, Engineering Manager
VIA: Mr. Adam Ly, Assistant General Manager
Mr. Dennis D. LaMoreaux, General Manager
RE: ***AGENDA ITEM NO. 7.2 – CONSIDERATION AND POSSIBLE ACTION ON AUTHORIZATION FOR STAFF TO ENTER INTO A CONTRACT FOR ARC FLASH ASSESSMENT SERVICES WITH P2S INC. IN THE AMOUNT OF \$40,528.00. (\$40,528.00 – BUDGETED – BUDGET ITEM NO. 1-02-5070-007 – ENGINEERING/GRANT MANAGER ROGERS)***

Recommendation:

Staff recommends that the Board authorize staff to enter into a contract with P2S Inc. for the arc flash assessment services for modeling and analysis of our District’s electrical systems, perform an arc flash analysis, create arc flash hazard warning labels, and electrical safety training and develop an electrical safety program for implementation at the District.

Alternative Options:

No alternative option exists.

Impact of Taking No Action:

The potential impact from taking no action is not fully protecting employees around electrical and mechanical equipment and possible legal liability.

Background:

The District owns, operates, and maintains 23 groundwater wells, eight booster stations, water treatment plant, and hydroelectrical generator station. All the facilities are operated by electrical power, which provides a certain amount of danger to employees who maintain the facilities. On July 10, 2014, Occupational Safety and Health Administration (OSHA) issued regulation 29 CFR 1910.269 on Electrical Power Generation, Transmission, and Distribution Standard. As part of ensuring the District is current and meets current industry standards for arc flash hazard and identification for protecting employees, an analysis of the arc flash potential will be done and identification of the correct Personal Protective Equipment (PPE) for working with energized electrical equipment as it relates to National Fire Protection Association, OSHA, National Electric Code and the American National Standards Institute.

BOARD OF DIRECTORS
PALMDALE WATER DISTRICT

VIA: Mr. Adam Ly, Assistant General Manager
Mr. Dennis D. LaMoreaux, General Manager

June 2, 2020

Arc Flash (also called a flashover) is the light and heat produced as part of an arc fault, a type of electrical explosion or discharge that results from a connection through air to ground or another voltage phase in an electrical system. The light and heat produced can reach temperatures up to 35,000 degrees Fahrenheit and gives off intense UV radiation. These extremes can cause great bodily injury. Arc Flash assessment determines the fault current which then relates to specific PPE that is needed to protect employees from potential hazard of arc flash events when staff is required to work on live electrical equipment.

The District issued a Request For Proposals on March 12, 2020 and distributed to seven (7) firms. Three firms provided a response, and their costs are listed:

Firm	Cost
P2S Inc.	\$ 40,528.00
LG Holdings, Inc. dba GJR Electric	\$100,855.00
Fenton Solutions, LLC	\$187,439.00
Carollo	Decline to bid
Kennedy Jenks	Decline to bid
Linkture Consulting	No Bid
MTA Electrical Engineers	No bid

Strategic Plan Initiative/Mission Statement:

This item is under Strategic Initiative No. 3 – Systems Efficiency.
This item directly relates to the District’s Mission Statement.

Budget:

This item is budgeted under the Administration Budget, Budget Item No. 1-02-5070-007 – Consultants.

Supporting Documents:

- Arc Flash Assessment Service RFP
- P2S Inc. Proposal



PALMDALE WATER DISTRICT
A CENTURY OF SERVICE

March 12, 2020

BOARD OF DIRECTORS

ROBERT E. ALVARADO
Division 1

DON WILSON
Division 2

GLORIA DIZMANG
Division 3

KATHY MAC LAREN
Division 4

VINCENT DINO
Division 5

DENNIS D. LaMOREAUX
General Manager

ALESHIRE & WYNDER LLP
Attorneys

REQUEST FOR PROPOSALS FOR
PALMDALE WATER DISTRICT ARC FLASH SERVICES

TO: ATTACHED LIST

SERVICE REQUESTED: ARC FLASH SERVICES

PROPOSAL DUE DATE: APRIL 2, 2020, 5:00 P.M. TO:

PALMDALE WATER DISTRICT
ATTN: SCOTT ROGERS,
ENGINEERING MANAGER
2029 EAST AVENUE Q
PALMDALE CA 93550



The Palmdale Irrigation District was formed in 1918 under the provisions of Division 11 of the Water Code of the State of California to supply irrigation water to the approximately 4,500 acres of agricultural land within its boundaries. Under this Code, the District's primary functions were, and continue to be, to acquire, control, conserve, store, and distribute water for the beneficial use of inhabitants and water users within the District.

The Palmdale Water District (District) is an independent special district governed by a five-member Board of Directors who serve the public by division. Special districts provide accountability and a means to vote selectively and provide customers the opportunity to express their preferences more precisely. The most basic virtue of a special district is to allow citizens to customize government to suit their needs.

The District meets the demands of nearly 28,000 accounts, or a population of 115,000, by providing water from a 35 million gallon per day (MGD) surface water treatment plant that receives water from the State Water Project and 23 groundwater wells. The water is delivered to customers through a distribution system that includes booster pumping stations to various pressure zones throughout the District.

The Palmdale Water District (District) is seeking a firm to provide Arc Flash Services including a short circuit, protective device coordination, and Arc Flash Study per the NFPA 70E and IEEE 1584 standards for the twenty-three (23) groundwater wells and seven (7) booster pumping stations with 480v electric services to become compliant with the current electrical codes and standards associated with Arc Flash labeling.

Objectives for this RFP are as follows:

- Development of a single line diagram of the electrical distribution system that has also been 100% field verified for accuracy.
- Documentation of the installed equipment ratings including voltage, amperage of equipment, feeder sizes, types, lengths and equipment locations.
- Determine compliance of the installation with the currently adopted NEC.
- Determine the level of hazard and the proper rating of the personal protective equipment (PPE) necessary for personnel arc flash protection.
- Ensure that District is compliant with applicable industry standards for arc flash hazard identification and protection, i.e. NFPA 70E, OSHA, NEC, ANSI.

There are several codes and/or standards that currently enforce a compliant Arc Flash Hazard Analysis, and these requirements must be met. These major codes include the following:

OSHA 29 CFR 1910.132 (d) – Requires employers to assess the workplace to determine hazards and select appropriate personal protective equipment (PPE).

NEC 110.16 – Requires that switchboards, panel boards, industrial control panels, and motor control centers requiring maintenance, inspection, servicing, etc., be field marked to warn qualified persons of potential electric Arc Flash Hazards.

NFPA 70E 2015 – Requires that an Arc Flash Hazard study be performed to properly identify and protect operations personnel from injury due to an Arc Flash event. This study shall determine the Arc Flash Hazard boundary and the PPE required to protect qualified persons while working within this boundary.

IEEE 1584 – This guide to performing Arc Flash Hazard calculations includes the detailed steps on how to perform this analysis and all required steps that should be followed.

Scope of Services:

The District is seeking a firm to:

- Conduct a short circuit current study
- Conduct an overcurrent protective device coordination study
- Conduct an arc flash hazard analysis
- Provide and produce arc flash hazard warning labels
- NFPA 70E electrical safety training
- Prepare final report and associated files used in conducting the analysis.
- Customize electrical safety program (Optional task)

Consultant shall refer to Attachment 1 for more detailed scope of services.

Proposals:

Proposals submitted shall include the following items:

- History of firm and qualifications of personnel assigned to the work
- Consultant will recommend, provide pricing and use a software system that can be used to provide the solutions necessary to address the components required within this scope of work with the understanding the District will utilize the software for future updates. Consultant will provide all working files of each site studied. For example, Power Tools software provided by SKM Systems Analysis, Inc. or approved equivalent.
- Similar completed and current projects and reference list
- Cost estimates for each of the four categories in the scope of services
- Timeline for completion of each of the four categories in the scope of services

Evaluation of Proposals:

The following areas of evaluation will be considered, but not limited to, during review of the proposals: Experience and qualifications of personnel; approach and compliance with proposal requirements; past record of performance on similar projects; efforts related to project management, cost control, work quality, and ability to complete work timely.

Additional Information:

Additional questions to be directed to Scott Rogers, Engineering/Grant Manager:

661-456-1020
srogers@palmdalewater.org.

Costs for developing proposals are the responsibility of the proposing firms. Palmdale Water District shall not be responsible for any costs associated with the development of proposals.

Palmdale Water District reserves the right to reject any or all proposals and to waive any informality or minor irregularity in any proposal.

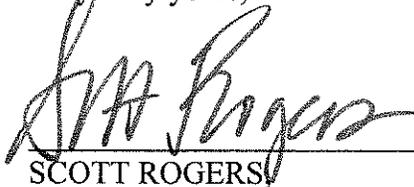
Attachments:

Attachment 1 - Scope of Work
Attachment 2 – Existing Facility Service and Load Information Summary
Attachment 3 – Facility One-Line Diagrams
Attachment 4 – Utility Transformer Data

Company Distribution List:

MTA Electrical Engineers 350 Pauma Place Escondido, CA 92029 (760) 658-6098 info@mtaee.com	Fenton Solutions, Inc. Roger.a.fenton@gmail.com (909) 767-8408
P2S Inc. 5000 Spring Street, 8 th Floor Long Beach, CA 90815 (562) 497-2999 marco.cabibbo@p2sinc.com	Linkture Consulting 6240 West Third Street, Ste 421 Los Angeles, CA 90036 (323) 297-3575 info@linkture.com
LG Holdings, Inc DBA GJR Electric 7900 Limonite Ave, G-192 Jurupa Valley, CA 92509 (951) 275-1735 greg@gjrelectric.com	Kennedy Jenks 300 North Lake Avenue, Suite 1020 Pasadena, California 91101 (626) 568-4311 PaulChau@kennedyjenks.com
Carollo 3150 Bristol Street, Suite 500 Costa Mesa, California 92626 (303) 980-8260 TheDlund@carollo.com	

Very truly yours,



SCOTT ROGERS
Engineering/Grant Manager

SR/dd

Enclosures



Palmdale Water District

Arc Flash Services

APRIL 2, 2020

ENGINEERING SERVICES

TABLE OF CONTENTS

3	COVER LETTER
5	FIRM PROFILE
9	STAFF
14	EXPERIENCE
19	COST ESTIMATES
22	TIMELINE

4/2/20

**Palmdale Water
District**

Scott Rogers
Engineering Manager
2029 East Avenue Q
Palmdale, CA 93550

Dear Mr. Rogers and Selection Committee,

Thank you for this opportunity to submit our qualifications to provide Arc Flash Services for the Palmdale Water District. We have reviewed the RFP and are confident that our firm has the history and experience in performing these studies and analysis, and that our selected team of engineers will complete the tasks listed on the RFP on time and in accordance to your standards. The team will provide due diligence to help mitigate known hazards associated with different locations, label all the electrical equipment studied under this project and ensure safe working zones.

P2S is familiar with water treatment facilities. We've worked with different authorities and municipalities in California since 2005, on projects including arc flash analyses and studies, as well as electrical systems design. Our engineering staff includes a licensed water treatment and distribution operator (T2 and D2) who has worked in water operations for more than 10 years.

Additionally, P2S has been providing engineering design and services for 29 years. These include arc flash studies for the City of Monrovia Water Department, City of Anaheim Water Department and Elsinore Valley Municipal Water District, as well as power system upgrades for many municipal, industrial and education clients throughout California.

The team selected for this project are responsive and dedicated to support your staff. Leading the team is Marco Cabibbo, who will be the main contact for this project and is available at 562.497.2999 and marco.cabibbo@p2sinc.com. Marco brings over 30 years of electrical design, construction, and utility system operation experience including power plants, water/wastewater treatment plants as well as ports and marine facilities.

We sincerely believe you will find that P2S has the right people, expertise, and track record to become a valuable engineering partner for the Palmdale Water District

Sincerely,



Marco Cabibbo, PE, LEED AP BD+C, SWRCB T2 and D2
Senior Electrical Engineer

SECTION 1

Firm Profile



Designing a better future, every day.

P2S Eng has brought forward-thinking, sustainable engineering solutions to California and beyond over 29 years. We take client dreams and make them reality with inventive, sustainable solutions fueled by the desire to make the future a better place. We believe innovative, responsible design is more than cost savings and efficiency, it's the promise of a brighter, greener future that begins today.

One-Stop Resource



ENG Services

- Building systems design
- Central utility plants
- Utility master plans
- Infrastructure design
- Feasibility studies
- Energy audits

Sustainable Design Services

- Renewable power sources
- Life-cycle studies
- LEED design and documentation

Client Expertise

- Higher Education
- K-12 Education
- Healthcare
- Ports & Marine
- Aviation
- Aerospace
- Labs Facilities: Wet Labs, Dry Labs, Imaging Facilities, cGMP Labs, Vivarium, BSL
- Specialty Manufacturing
- Water & Wastewater
- Federal & Municipal
- Entertainment
- Retail & Commercial
- Office & Mixed Use



OUR FOCUS

- High-performance building systems and central plants
- Future-focused sustainable design
- Holistic, performance-based project approach



CORE VALUES

- Think Green: Build Strong
- Forward-thinking, sustainable engineering solutions
- Innovative, responsible design is more than cost savings and efficiency, it's the promise of a brighter, greener future that begins today.



INDUSTRY RECOGNITION

- Top 40 Electrical Design Firms (EC&M)
- Top 30 Engineering Firms (BD+C)
- MEP Engineering Giants in North America (CSE)
- Best Place to Work in LA (LA Business Journal)
- Best Place to Work in US (Glassdoor)

Our Staff by the Numbers

242 TOTAL EMPLOYEES

70 Professional Engineers

61 Electrical Staff

7 CM Staff

92 Mechanical Staff

15 Technology Staff

16 Cx Agents

20 Plumbing Staff

45 LEED Accredited

Project Design

55 LEED® PROJECTS

6 LEED® PLATINUM

6 NET-ZERO ENERGY

Our Locations

Long Beach

5000 E. Spring Street
Suite 800
Long Beach, CA 90815
T: 562.497.2999
F: 562.497.2990

Los Angeles

5901 Century Blvd
Suite 750
Los Angeles, CA 90045
T: 310.338.0031
F: 310.641.3434

San Diego

9665 Chesapeake Drive
Suite 230
San Diego, CA 92123
T: 619.618.2347
F: 619.330.0668

San Jose

18 S 2nd Street
Suite 115
San Jose, CA 95113
T: 669.268.1007

COMPANY OVERVIEW & HISTORY

Experts in arc flash and electrical design. Hiring professional engineers to perform your arc flash study is not a legal requirement – but is always the right decision. A qualified electrical engineer can note protection and code violations and provide working AutoCad drawings to keep your systems running effectively. When working with P2S, you will always have a professional engineer supporting your arc flash project.

Support beyond the study. At P2S, our engineers look beyond the parameters of the arc flash analysis to make recommendations for modernization and energy savings. As a full-service firm we can even provide cost estimates and manage the design and construction of these changes, if you elect to pursue them. This allows for consistent quality throughout your electrical systems as you move into the future.

Independent input. As engineers, we offer an independent assessment of your electrical systems with just one goal: safety. Unlike many technicians or manufacturers reps, our analysis and recommendations will be based solely on your specific needs, not our own agenda.

A name you can trust. Since 2006, P2S has performed more than 40 independent arc flash studies for companies such as The Boeing Company, Disney, Sony Pictures and the California State University system. What's more, 30%+ of our team is LEED® certified.

Sustainable design is at the heart of our company. We believe that optimizing efficiencies and saving money go hand-in-hand with preserving the environment. We create systems that use renewable power sources, minimize the use of natural resources, and offer reduced operation costs. Our team can also provide life-cycle studies to illustrate the long-term savings of your chosen design.

We've got the experience. We have worked or various California cities on a variety of large-scale projects. Our engineers have extensive water and power utility system operation and design experience. We understand how your systems work, and we strive to make them work even better.

We share your mission. We understand the importance of making clean water available to our communities. We're proud to use our expertise to help you bring water and public health services to residents in your region.

Our work gets noticed. We've been named as one of the Top 40 Electrical Design Firms by *Electrical Construction & Maintenance (EC&M)*, a Top 30 Engineering Firm by *Building Design+Construction (BD+C)*, and we're nationally ranked as one of the MEP Engineering Giants in North America by *Consulting-Specifying Engineer (CSE)*. We have even been voted one of the Best Places to Work in Los Angeles – ten times running – by the *Los Angeles Business Journal* and a 2019 Best Places to Work in the US by *Glassdoor.com*.

SECTION 2

Staff



ARAVIND BATRA

PE, LC, LEED AP BD+C

Principal-in-Charge, Senior Electrical Engineer | P2S Inc.

Aravind Batra has over 25 years of experience in consulting engineering covering both renovation and new construction. He currently serves as Vice President where he helps to continuously assure P2S quality standards. Aravind brings an in-depth knowledge of electrical systems and their requirements to numerous needs assessments, systems upgrades, renovations and new building projects for various educational clients. He is also responsible for the design of numerous high performance buildings, independent reviews of various types of buildings, and providing peer review on various renovations and new buildings projects for educational, industrial and commercial facilities.

Aravind currently serves as campus Executive Electrical Engineer for University of California, San Diego where he has assisted the University in planning and upgrading their medium voltage electrical distribution system to achieve reliability, redundancy, flexibility and the required capacity to meet the aggressive growth that the University has seen over the years. Aravind has also assisted a number of community colleges and state and private universities with their planning and upgrading of the electrical systems to meet the demands of their existing and proposed facilities.

EDUCATION

BS, Electrical Engineering,
Bangalore University

REGISTRATIONS

Electrical Engineer,
California, E16609

CERTIFICATIONS

- LC
- LEED AP BD+C

AFFILIATIONS

- AEE
- IEE
- IESNA
- USGBC

RELEVANT PROJECT EXPERIENCE

- **Cal Poly Pomona**
12kV Medium Voltage Electrical Infrastructure Upgrades
Pomona, CA
- **UC San Diego**
Electrical Master Specifications
La Jolla, CA
- **UC San Diego**
Revelle Switching Station
La Jolla, CA
- **UC San Diego**
Satellite Utility Plant
La Jolla, CA
- **UC Irvine**
Primary Electrical Upgrades
Irvine, CA
- **San Diego State University**
Utility Master Plan
San Diego, CA
- **Fullerton College**
Utility Master Plan
Fullerton, CA
- **UC San Diego**
North Campus 12kV Switching Station
La Jolla, CA
- **CSU Northridge**
Utility Infrastructure Master Plan
Northridge, CA
- **CSU San Marcos**
Utility Infrastructure Master Plan
San Marcos, CA
- **San Bernardino Community College District**
Utility Master Plan Peer Review
San Bernardino, CA
- **Chaffey College**
Utility Infrastructure Master Plan
Rancho Cucamonga, CA
- **Cypress Community College**
Utility Master Plan
Cypress, CA
- **Long Beach City College**
Utility Infrastructure Master Plan
Long Beach, CA



MARCO CABIBBO

PE, LEED AP BD+C

Project Manager, Senior Electrical Engineer | P2S Inc.

EDUCATION

MS, Electrical Engineering,
CSU Long Beach

BS, Electrical Engineering,
Cal Poly Pomona

REGISTRATIONS

Electrical Engineer,
California, E17508

Electrical Contractor,
California, C10 658090

Water Treatment
Operator Grade 2, 20440

Water Distribution
Operator Grade 2, 9011

CERTIFICATIONS

- LEED AP BD+C

AFFILIATIONS

- IEEE
- AWWA
- ISA

Marco Cabibbo is an Electrical Engineering Group Manager, electrician, licensed electrical contractor, and certified Grade 2 water treatment and distribution system operator. He specializes in industrial power systems, instrumentation and control system design. His 30+ years of experience includes research, design, engineering, construction administration, and project management for an extensive range of facilities including water/wastewater treatment plants, petrochemical refineries, bulk loading plants, motion picture studios, healthcare and educational facilities.

Marco strives to deliver top-tier projects through close collaboration with project stakeholders and equipment manufacturers, as well as his extensive field experience in construction, troubleshooting, maintenance and repair. Marco volunteers his time to various initiatives in the Long Beach community. He is a member of the IEEE, AWWA and the ISA.

RELEVANT PROJECT EXPERIENCE

- **Elsinore Valley Municipal Water District**
Arc Flash Risk Assessment
Lake Elsinore, CA
- **Electrical Training Institute**
Arc Flash Study
Commerce, CA
- **TECOM Industries**
Arc Flash Study
Thousand Oaks, CA
- **Port of Long Beach**
Infrastructure Assessment
Long Beach, CA
- **Port of Los Angeles**
Distribution Center Medium Voltage
Infra Upgrades
San Pedro, CA
- **City of Monterey Park**
Water Utility Well & Booster Station
Electrical Upgrades
Monterey Park, CA
- **Irvine Ranch Water District**
Pressure Regulating Station
Instrumentation & Controls
Irvine, CA
- **City of Anaheim**
Water Department Arc Flash
Analysis
Anaheim, CA
- **City of Anaheim**
Design-Build Harbor 12kV
Substation
Anaheim, CA
- **City of Monrovia**
Arc Flash Study
Monrovia, CA
- **Los Angeles Department of Water and Power**
Sun Valley Battery Storage
Sun Valley, CA
- **San Diego State University**
Infrastructure Assessment
San Diego, CA
- **Long Beach Water Department**
Groundwater Treatment Plant HVAC
Study
Long Beach, CA
- **City of Long Beach**
Willow Springs Wetlands Restoration
Project Electrical Plan Review
Long Beach, CA



RICHARD BONO

PE

Quality Assurance / Quality Control | P2S Inc.

EDUCATION

Bachelor's Degree, Electrical Engineering, The City University of New York

REGISTRATIONS

Electrical Engineer, California E12315

Electrical Contractor California C10 1022099

AFFILIATIONS

- IEEE
- IEEE PCIC
- IEEE IAS

Richard Bono has over 45 years experience in electrical engineering. His experience includes numerous schedule-driven projects for the design and construction of refineries, fossil, gas turbine and nuclear-fueled electrical utility generating stations, combined cycle and industrial cogeneration facilities and related interconnection substations. During his tenure with Fluor, he directed the engineering, design specification and selection of new electrical systems as well as modified systems for revamp projects, performed economic evaluations of major electrical equipment and system components and directed several electrical system fault and reliability studies. He also performed computer optimization studies for electrical systems using the ETAP Powerstation software, grounding and cathodic protection design and protective relaying design for refinery, power plant and high voltage electrical systems. He ensured that the overall design meets the client's expectations and requirements for a safe, reliable, constructible and maintainable system.

Richard is a Life Senior Member of the Institute of Electrical and Electronic Engineers (IEEE) and participates in the Industrial Applications Society (IAS) and Petroleum and Chemical Industry Committee (PCIC). He has had two publications for the IEEE PCIC annual conference.

RELEVANT PROJECT EXPERIENCE

- **Moffett Federal Airfield**
12kV Electrical-Communications Infrastructure
Mountain View, CA
- **City of Anaheim**
Water Department Arc Flash Analysis
Anaheim, CA
- **CSU Long Beach**
Lighting and Power Electrical Design for Cart Storage
Long Beach, CA
- **Port of Long Beach**
Maintenance Yard Energy Pilot Project Support|
Long Beach, CA
- **Los Angeles Department of Water and Power**
Haynes Units 3-6 Demolition
Long Beach, CA
- **Veterans Affairs Medical Center**
Electrical Design for Clinic Renovation
San Francisco, CA
- **Elsinore Valley Municipal Water District**
Arc Flash Risk Assessment
Lake Elsinore, CA
- **Veterans Affairs Central**
California Healthcare
PACT Building Electrical Design
Clovis, CA
- **Veterans Affairs San Diego**
DDC Controls Upgrade
San Diego, CA
- **Los Angeles Pierce College**
Campus Wide Fire Alarm and Electrical Repairs
Woodland Hills, CA
- **Plenty Farms**
Lighting and Power Electrical Design
San Francisco, CA
- **2177 3rd Street**
Electrical Design
San Francisco, CA



MANDAR MANJAREKAR

PE

Electrical Engineer | P2S Inc.

Mandar Manjarekar has seven years of electrical engineering experience in electrical distribution system analysis. His roles and responsibilities have included medium voltage design, power, lighting, breaker coordination, arc flash studies, power system field surveys, risk assessment studies and cost estimates. He has been involved in performance of power flow, transient stability and control system analyses to evaluate system impacts. He has also worked in customer service, responsible for assisting engineering firms and facility maintenance organizations in troubleshooting application issues as it related to their technical studies.

EDUCATION

MS, Electrical Engineering,
CSU Long Beach

BE, Electrical Engineering,
University of Mumbai

REGISTRATIONS

Electrical Engineer,
California E21985

CERTIFICATIONS

- ETAP Certified Instructor
(Protection, Coordination
and Arc Flash)

AFFILIATIONS

- IEEE

RELEVANT PROJECT EXPERIENCE

- **City of Monrovia**
Arc Flash Study
Monrovia, CA
- **Elsinore Valley Municipal Water District**
Arc Flash Risk Assessment
Lake Elsinore, CA
- **Cal Poly Pomona**
Coordination and Arc Flash Study
Pomona, CA
- **Cal Poly Pomona**
Campus-wide Electrical
Infrastructure
Pomona, CA
- **Crafton Hills College**
Coordination and Arc Flash Study
Yucaipa, CA
- **Moffett Federal Airfield**
12kV Electrical-Communications
Infrastructure
Mountain View, CA
- **Port of Long Beach**
Pier Terminal Container Yard/
Intermodal Railyard Stage 3
Short Circuit and Coordination
Study
Long Beach, C
- **Loma Linda University**
12kV Cogen Switchgear Arc Flash
Study
Loma Linda, CA
- **City of Anaheim**
Water Department Arc Flash
Analysis
Anaheim, CA
- **San Diego State University**
Campus Wide Electrical System
Assessment
San Diego, CA
- **City of Anaheim**
Water Department Arc Flash
Analysis
Anaheim, CA
- **Fresno State University**
Athletic Complex Electrical
Infrastructure Upgrades
Fresno, CA
- **Fresno State University**
Bulldog Stadium Electrical
Upgrades
Fresno, CA
- **UC San Diego**
Executive Infrastructure Master Plan
Phase II
San Diego, CA

SECTION 3

Experience

SAMPLE EXPERIENCE: ARC FLASH & COORDINATION

City of Anaheim

- » Water Department Arc Flash Analysis

City of Monrovia

- » Arc Flash Study

Elsinore Valley Municipal Water District

- » Arc Flash Risk Assessment

City Light and Power, Moreno Valley, CA

- » Short Circuit and Coordination Study at MRAB

Cal Poly Pomona

- » Arc Flash, Short Circuit and Coordination Study
- » Medium Voltage Electrical Infrastructure Upgrades

CSU Fullerton

- » Engineering Switchboard Arc Flash, Short Circuit and Coordination Study

CSU San Bernardino

- » Arc Flash Study, Short Circuit and Coordination Study for CSUSB Palm Desert Campus

CSU Long Beach

- » Arc Flash Study, Short Circuit and Coordination Study

CSU Northridge

- » Arc Flash Study, Short Circuit and Coordination Study

Certified Alloy Products

- » Arc Flash Study, Short Circuit & Coordination Study

Chapman University

- » Arc Flash, Short Circuit and Coordination Study for Campus-wide 12kV Distribution

Crafton Hills College

- » Campus-wide Arc Flash, Short Circuit and Coordination Studies

Disney Studios

- » Burbank Studio Lot Arc Flash Study
- » Prospect Studios Lot Arc Flash Study

Loyola Marymount University

- » New Science Building Short Circuit, Coordination and Load Study
- » Medium Voltage Switch Short Circuit, Coordination and Load Study

Redwood City Electric, Inc.

- » SAVVIS SC9 Arc Flash Analysis

Sony Pictures Entertainment

- » Arc Flash Study

Spectrolab

- » Site-wide Arc Flash Study

San Bernardino Community College

- » Campus-wide Arc Flash, Short Circuit and Coordination Studies

Rhodia Chemical Plant, Wilmington, CA

- » Dominguez Plant Arc Flash Study

Swift Transportation Corporation

- » Arc Flash Study

The Boeing Company

- » **Long Beach** B47, B52, B74, B75, B78, B98, B800, B801, B802, C13, Douglas Center, Fitness Center Arc Flash and Coordination Studies,

- » **Douglas Center Garden Grove**

Arc Flash Study

- » **Huntington Beach** B16, B17, B20, B21, B22, B28, B30, B31, B32, B33, B37, B38, B39, B40, B41, B42, B43, B44, B45, B45B, B49, B51, C13 Arc Flash and Coordination Studies

- » **Huntington Beach**

Site Arc Flash Study

- » **El Segundo** SS01, SS02, SS06, SS07, SS08, SS09, SS14, SS15, SS5A, SS5B, S03B, S13, S25, S37,

- » S49, S50 Arc Flash Study

- » **Mesa, AZ** B531 G109, B510, B540, Basalt-B543 Arc Flash Studies

VA Palo Alto Health Care System

- » Building 54 Arc Flash Study

ARC FLASH PROJECT EXPERIENCE

City of Anaheim Water Department, Arc Flash Study. The City of Anaheim turned to P2S for a short circuit analysis, protective device coordination and Arc Flash study. The project involved visiting all 21 identified locations and collecting the appropriate data, developing flash protection boundaries for each class of equipment, establishing personal protective equipment (PPE) requirements for each class of equipment, and labeling for each class of equipment. The safety signage included voltage shock hazard, flash hazard boundary, incident energy, PPE level, limit shock approach boundary, and restricted shock approach boundary. Recommendations were compliant with NFPA 70E-2018 requirements.

City Of Monrovia, Well Field Arc Flash Study. P2S provided electrical engineering services for an arc flash study for the City of Monrovia which included field investigation and data collection, single-line diagrams and descriptions of existing equipment condition, a subcontracted electrical contractor to perform collection of data on electrical equipment, arc flash for 480/277V and 208/120V main distribution equipment and study report. P2S also provided and installed 4x6 vinyl arc flash labels for all main distribution equipment and subpanels.

Elsinore Valley Municipal Water District, Arc Flash Study. Elsinore Valley Municipal Water District regenerated the completely dry Lake Elsinore, and created an oasis in an arid, desert-like region of western Riverside County when it was created in 1950. To assist its mission of providing customers with safe, affordable water, P2S provided an Arc Flash Risk Assessment of electrical distribution equipment at over 158 district sites. Our team created a Short Circuit Contribution Report, an Overcurrent Protective Device Coordination Study, an Arc Flash Risk Mitigation Report and a final Arc Flash Risk Assessment Report for the district. We will be conducting (1) 3-hour Arc Flash and Shock Hazard Electrical Safety training session for district electrical and maintenance personnel.

Our team collected data, verified equipment in the field, created one-line diagrams and safely obtained equipment information for: distribution equipment types and ratings, conductor sizes, conductor lengths, overcurrent protection, and transformer ratings and impedances. We created power system study models in ETAP, based on the field surveys and verified as-builts. We modeled and analyzed switching configurations for the most conservative results for Short Circuit, Coordination, and Arc Flash. We are now in the final stages of the project as we coordinate with Southern California Edison to obtain the utility's contribution to fault current to complete our final analysis.

Cal Poly Pomona, Arc Flash, Short Circuit And Coordination Studies. P2S provided electrical engineering services for campus-wide arc flash, short circuit and coordination studies in accordance with IEEE 1584, NFPA 70E and NEC from the incoming medium voltage utility service down to low-voltage panels. The purpose of the study was to develop a computer model using Electrical Transient and Analysis Program (ETAP) based on the existing single line diagrams, and data gathered during a field survey of the existing equipment ratings, protective device settings and feeder sizes and lengths. The model has used by the program to calculate the system available fault currents and incident energy levels due to arc flash at each of the medium and low voltage distribution panels and prepare device coordination curves for evaluating the existing overcurrent device settings for coordination with upstream and downstream protective devices. The results of the electrical system analysis were used to make recommendations for improved system coordination and arc flash mitigation measures. P2S also provided labels for the medium and low voltage electrical distribution equipment such as medium and low-voltage switchgear, load interrupter switches, MCC and low-voltage panels.

REFERENCES

ELSINORE VALLEY MUNICIPAL WATER DISTRICT, ARC FLASH STUDY - LAKE ELSINORE, CA

CLIENT REFERENCE:

Sarah Meyer, CIH
CSP Safety Officer
951.674.3146 x8267
smeyer@evmwd.net

PROJECT TEAM:

Marco Cabibbo
Mandar Manjarekar
Richard Bono

PROJECT DATES:

January 2017- July 2017

CITY OF MONROVIA, WELL FIELD ARC FLASH STUDY - MONROVIA, CA

CLIENT REFERENCE:

Brian O'Connor
Facilities Supervisor
626.932.5521
boconnor@ci.monrovia.ca.us

PROJECT TEAM:

Marco Cabibbo
Mandar Manjarekar

PROJECT DATES:

July 2016- December 2016

CITY OF ANAHEIM WATER DEPARTMENT, ARC FLASH STUDY - ANAHEIM, CA

CLIENT REFERENCE:

Jon Sanks
Environmental Services Manager
jsanks@anaheim.net
714.765.4117

PROJECT TEAM:

Marco Cabibbo
Mandar Manjarekar
Richard Bono

PROJECT DATES:

June 2018- December 2018

CAL POLY POMONA, ARC FLASH, SHORT CIRCUIT & COORDINATION STUDIES - POMONA, CA

CLIENT REFERENCE:

George A. Lwin
Manager, Energy Services
galwin@cpp.edu
909.869.3034

PROJECT TEAM:

Aravind Batra
Marco Cabibbo
Mandar Manjarekar

PROJECT DATES:

February 2015- April 2016

ADDITIONAL EXPERIENCE

LONG BEACH WATER DEPARTMENT, CONSULTING SERVICES FOR NETWORK INFRASTRUCTURE UPGRADE

Long Beach Water District needed to upgrade their facilities with enhanced fiber backbone cabling and horizontal cabling to allow for increased bandwidth and monitoring capabilities. P2S provided engineering services to aid LBWD selecting, replacing and upgrading the existing fiber and cable infrastructure that supported voice, data, wireless access control, and security applications.

SANITATION DISTRICTS OF LOS ANGELES COUNTY HVAC & PLUMBING DESIGN FOR NEW LAB BUILDING

We worked with LA County Sanitation as they planned a new sanitation lab and office building at their wastewater treatment plant in Palmdale, California. Our team was responsible for mechanical and plumbing design and construction support services for the project

Our team coordinated the new mechanical and plumbing systems closely with LA County Sanitation engineers and staff met regularly with them to ensure high-level communication and coordination on electrical, structural and architectural issues. These regular meetings ensured a cohesive and complete design effort and included reviews of the mechanical design, direct digital controls (DDC), and laboratory controls. This project is a perfect example of how we partner with clients to meet their specific needs.

SANITATION DISTRICTS OF LOS ANGELES COUNTY JAO TENANT IMPROVEMENT AND ENERGY AUDIT

Our team was hired to evaluate and offer recommendations to the phased tenant improvement project at the Sanitation Districts of Los Angeles County's (LACSD) Joint Administration Office (JAO) in Whittier. Phase I was to assess the existing HVAC double-duct constant volume system. Phase II was the structural and HVAC feasibility study to replace two existing air handling unit (AHU) systems. We also conducted various site surveys of HVAC systems, produced as-built mechanical drawings, and took system air-flow measurements to verify current performance levels.

SANITATION DISTRICTS OF LOS ANGELES COUNTY DUCT AIRFLOW MODELING

The Sanitation Districts of Los Angeles County are made up of 24 independent special districts that provide cost-effective wastewater and solid waste management for 5.5 million people in Los Angeles County. Its Joint Administration Office (JAO) facility needed engineering services for airflow modeling of the existing duct system. We were brought on board to provide recommendations and the subsequent design for increasing airflow capacity.

We provided drawings and details showing duct repairs by using data collected during the creation of as-builts drawings for JAO. Our team submitted modeling output of a complete duct system at increased flow-rates necessary to support the recommended increased capacity. We formulated recommendations and drawings for duct strengthening improvements and designed detailed duct repair issues and reinforcements determined by modeling or by field survey. This included drawings and details in the LACSD plans and specifications. We also provided air-flow modeling of the duct mains using the Trane "VariTrane" duct design program, and added high pressure ducts feeding approximately 147 double duct variable air volume (VAV) zones connected to the planned rooftop units and branch ducts.

SECTION 4

Cost Estimates

COST ESTIMATES

Arc Flash Assessment for City of Palmdale

Firm: P2S Inc

Work Item	Cost	Engineer Grade 5	Engineer Grade 2	Engineer Grade 1	Electrician
Field Data Collection	\$10,806	4	34		25
Model and Perform Electric Power Systems Analysis	\$10,855	1	23	34	
Arc Flash Hazard Analysis	\$2,051	1	9		
Arc Flash Hazard Warning Labels Creation	\$1,852	1	8		
Arc Flash Hazard Warning Labels Installation(Including Safety Factor)	\$3,842	1	18		
NFPA 70E Electrical Safety Training	\$1,194		6		
Final Report	\$3,428	4	12		
Customized Electrical Safety Program (Optional)	\$6,500	25			
Total Hours		37	110	34	25
Hourly Rate		\$260	\$199	\$177	\$120
P2S Fee subtotal by Person		\$9,620	\$21,890	\$6,018	\$3,000
P2S Elec Fee Subtotal excluding Optional Safety Program	\$34,028				
P2S Elec Fee Subtotal including Optional Safety Program	\$40,528				

Below is a general P2S fee schedule for reference.



P2S INC.
RATE SCHEDULE FOR ENGINEERING SERVICES
ON A TIME AND EXPENSE BASIS

<u>Category</u>	<u>Rate</u>
PRINCIPAL ENGINEER	\$310
ENGINEER GRADE 05	\$260
ENGINEER GRADE 04	\$251
ENGINEER GRADE 03	\$216
ENGINEER GRADE 02	\$199
ENGINEER GRADE 01	\$177
DESIGN ENGINEER GRADE 05	\$216
DESIGN ENGINEER GRADE 04	\$199
DESIGN ENGINEER GRADE 03	\$177
DESIGN ENGINEER GRADE 02	\$156
DESIGN ENGINEER GRADE 01	\$139
DESIGNER GRADE 04	\$148
DESIGNER GRADE 03	\$139
DESIGNER GRADE 02	\$127
DESIGNER GRADE 01	\$121
CAD/BIM DESIGNER GRADE 04	\$122
CAD/BIM DESIGNER GRADE 03	\$112
CAD/BIM DESIGNER GRADE 02	\$99
CAD/BIM DESIGNER GRADE 01	\$90
COMMISSIONING GRADE 05	\$260
COMMISSIONING GRADE 04	\$225
COMMISSIONING GRADE 03	\$192
COMMISSIONING GRADE 02	\$153
COMMISSIONING GRADE 01	\$132
PROJECT ASSISTANT	\$90

In addition, for direct out-of-pocket expenses (if and when they occur) we quote the following:

- 1) Automobile: at current IRS rate per mile from home office for travel outside Los Angeles, Orange, San Diego, San Bernardino and Riverside counties
- 2) Travel Expense: at Cost
- 3) Subsistence: While away from home office for more than 1 day: at Cost, but not to exceed \$250 per day per person.
- 4) Plan Check Fees: at Cost plus 10% markup
- 5) Third Party Services: at Cost plus 10% markup
 - Printing and copy services
 - Consultant and subcontract professional fees
 - Surveying / Soils Investigation
 - Testing Laboratory Work

LIABILITY LIMITS

Professional Liability	\$ 2,000,000.
General Liability	\$ 5,000,000.

Effective January 1, 2020 – December 31, 2020
RT-220

SECTION 5

Timeline

TIMELINE

Work Item	Days by Task
Field Data Collection	5
Model and Perform Electric Power Systems Analysis	4
Arc Flash Hazard Analysis	2
Arc Flash Hazard Warning Labels Creation	2
Arc Flash Hazard Warning Labels Installation(Including Safety Factor)	2
NFPA 70E Electrical Safety Training	1
Final Report	3
Customized Electrical Safety Program (Optional)	3
Total	22

Work Item	WEEKS				
	1	2	3	4	5
Field Data Collection	■				
Model and Power Systems Analysis		■			
AF Hazard Analysis			■		
AF Hazard Warning Labels Creation			■		
AF Hazard Warning Labels Installation				■	
NFPA 70E Electrical Safety Training				■	
Final Report				■	
Customized Electrical Safety Program					■



Contact

Marco Cabibbo, PE, LEED AP BD+C, SWRCB T2 and D2 | Engineering Group Leader
O 562.497.2999 | | C 714.580.1977
marco.cabibbo@p2sinc.com

p2sinc.com

Our Locations

Long Beach

5000 E. Spring Street, Suite 800
Long Beach, CA 90815
T: 562.497.2999 F: 562.497.2990

Los Angeles

5901 Century Blvd, Suite 750
Los Angeles, CA 90045
T: 310.338.0031 F: 310.641.3434

San Diego

9665 Chesapeake Drive, Suite 230
San Diego, CA 92123
T: 619.618.2347 F: 619.330.0668

San Jose

97 S 2nd Street, Suite 100
San Jose, CA 95113
T: 669.268.1007

MINUTES OF MEETING OF THE FINANCE COMMITTEE OF THE PALMDALE WATER DISTRICT, APRIL 21, 2020:

A meeting of the Finance Committee of the Palmdale Water District was held Tuesday, April 21, 2020, at 2029 East Avenue Q, Palmdale, California, in the Board Room of the District office. Chair Dizmang called the meeting to order at 10:01 a.m.

1) Roll Call.

Attendance:

Committee:

Gloria Dizmang, Chair

Don Wilson, Committee Member

Others Present:

Dennis LaMoreaux, General Manager

Adam Ly, Assistant General Manager

Mike Williams, Finance Manager

Judy Shay, Public Affairs Director

Bob Egan, Financial Advisor (via teleconference)

Danielle Henry, Management Analyst

1 member of the public (via teleconference)

2) Adoption of Agenda.

It was moved by Committee Member Wilson, seconded by Chair Dizmang, and unanimously carried by all members of the Committee present at the meeting to adopt the agenda, as written.

3) Public Comments for Non-Agenda Items.

There were no public comments for non-agenda items.

4) Action Items: (The Public Shall Have an Opportunity to Comment on Any Action Item as Each Item is Considered by the Committee Prior to Action Being Taken.)

4.1) Consideration and Possible Action on Approval of Minutes of Meeting Held February 18, 2020.

It was moved by Committee Member Wilson, seconded by Chair Dizmang, and unanimously carried by all members of the Committee present at the meeting to approve the minutes of the Finance Committee meeting held February 18, 2020.

4.2) Consideration and Possible Action on Refinancing Private Placement Outstanding 2013A Water Revenue Term Bonds Maturing 2038 and 2043. (\$8.81 Million – Non-Budgeted – Finance Manager Williams, Mark Northcross of NHA Advisors)

Mr. Mark Northcross, NHA Advisors, provided an overview of the District's outstanding debt, the definition of Water Revenue Bonds and the Rate Stabilization Fund, the benefits of the recent Water Rate Study, the process for issuing debt, and the opportunity to refinance existing Water Revenue Bonds at a lower interest rate.

After a brief discussion of the District's finances due to the COVID-19 event, the District's current debt, and the next steps for proceeding with this refinancing through a private placement, it was moved by Committee Member Wilson, seconded by Chair Dizmang, and unanimously carried by all members of the Committee present at the meeting that the Committee concurs with staff's recommendation to refinance outstanding 2013A Water Revenue Term Bonds maturing 2038 and 2043 through private placement.

4.3) Discussion and Overview of Cash Flow Statement and Current Cash Balances as of March 2020. (Financial Advisor Egan)

Financial Advisor Egan provided an overview of the Investment Funds Report through March 2020, including assessments received, planned debt payments, and interest income, and then reviewed the cash flow statement, including year-end projections and the importance of maintaining a strong cash balance, followed by discussion of the Rate Stabilization Fund, projects included and approved in the Water Rate Study, staging projects to maintain year-end cash, and a \$20 million 2021 bond issue for projects.

4.4) Discussion and Overview of Financial Statements, Revenue, and Expense and Departmental Budget Reports for March 2020. (Finance Manager Williams)

Finance Manager Williams reviewed in detail the balance sheet, profit and loss statement and trends, and revenue and expense analysis reports for the period ending March 2020 and stated that most departments are operating at or below the targeted expenditure percentage of 25% with the exception of Information Technology due to the COVID-19 event and software license renewals followed by discussion of the effect of COVID-19 on the District's finances.

4.5) Discussion and Overview of Committed Contracts Issued. (Finance Manager Williams)

Finance Manager Williams provided an overview of the Contractual Commitments and Needs Report for new and replacement capital projects, consulting and engineering support projects, new and replacement equipment, water quality fee funded projects, committed and projected capital expenditures, and the payout summary for the Water Revenue Bond Series 2018A through March 2020 followed by discussion of moving water from Littlerock Reservoir to Palmdale Lake, the Forest Service potentially opening the area for recreation, and the former concessionaire at Littlerock Dam.

5) Information Items.

5.1) Finance Manager Williams:

a) Effect of COVID-19 Event.

Finance Manager Williams stated that due to COVID-19 events, collection efforts have stopped as of March 17, 2020; that no reminder or shut-off notices have been mailed; that there have been no disconnections for non-payment of bills; that as of today, approximately \$41,000 in penalties have been deferred and are being tracked in the event FEMA funds become available; and that at this point, there is no noticeable reduction in cash flow.

b) Rate Assistance Program Status.

He then stated that as of March 31, there were 634 participants in the Rate Assistance Program with 297 seniors, 6 veterans, and 331 low income; that the Customer Care Department took the initiative to reach out to seniors previously enrolled in the Program to ensure they continue to stay enrolled; and that staff anticipates all available Program funds will be used this year.

c) Billing and Collection Statistics.

He then stated that comparing December 2019 to December 2018, there is a slight increase in bills issued and invoices mailed but a decrease in the percentage of shut off's for non-payment.

d) Revenue Projections.

He then stated that as of March 31, revenue projections for 2020 are ahead by approximately \$200,000 based on the rate model.

e) Accounts Receivable Aging Report.

He then stated that as of March 31, 2020, the aging report shows receivables are approximately \$300,000 higher than 2019 and is reflective of higher water sales in 2020; that there is a slight increase in 60-day delinquencies from February 2020; and that the effects of SB 998 are unknown at this time as collection activities have been halted due to the effects of COVID-19 followed by discussion of cash payment alternatives for customers.

f) Payment Transactions by Type.

He then stated that as of March 31, 2020, total payments have been reduced by approximately 2,500, which may be due to closing the office the second half of March, but that electronic payments via Pay-Near-Me have almost doubled from March to April.

5.2) Financial Advisor Egan:

a) Debt Service Coverage Status.

Financial Advisor Egan stated that the Debt Service Coverage for the period of April 2019 through March 2020 is 1.59 and that the District is in a strong position followed by discussion of the past Debt Service Coverage.

6) Board Members' Requests for Future Agenda Items.

There were no requests for future agenda items.

7) Date of Next Committee Meeting.

It was determined that the next Finance Committee meeting will be held May 5, 2020 at 10:00 a.m. to review bank proposals for refinancing the 2013A Water Revenue Bonds and that the regular Finance Committee meeting will be scheduled for the third week in May.

MINUTES OF SPECIAL MEETING OF THE FINANCE COMMITTEE OF THE PALMDALE WATER DISTRICT, MAY 5, 2020:

A special meeting of the Finance Committee of the Palmdale Water District was held Tuesday, May 5, 2020, at 2029 East Avenue Q, Palmdale, California, in the Board Room of the District office. Chair Dizmang called the meeting to order at 10:08 a.m.

1) Roll Call.

Attendance:

Committee:

Gloria Dizmang, Chair

Don Wilson, Committee

Member (via teleconf.)

Others Present:

Dennis LaMoreaux, General Manager

Adam Ly, Assistant General Manager (via teleconference)

Mike Williams, Finance Manager (via teleconference)

Judy Shay, Public Affairs Director (via teleconference)

Bob Egan, Financial Advisor (via teleconference)

Robert Alvarado, PWD Director (via teleconference)

Danielle Henry, Management Analyst (via teleconf.)

1 member of the public

2) Adoption of Agenda.

It was moved by Committee Member Wilson, seconded by Chair Dizmang, and unanimously carried by all members of the Committee present at the meeting to adopt the agenda, as written.

3) Public Comments.

There were no public comments.

4) Action Items:

4.1) Consideration and Possible Action on Bid Package and Bond Documents Received for the Refinancing of Private Placement on Outstanding 2013A Water Revenue Term Bonds Maturing 2038 and 2043. (\$8.81 Million - Non-Budgeted – Finance Manager Williams, Mark Northcross of NHA Advisors)

Mr. Mark Northcross, of NHA Advisors, provided an overview of the bids received, interest rates, and annual cash flow savings for refinancing private placement outstanding 2013A Water Revenue Term Bonds maturing 2038 and 2043, addressing Committee Member Wilson's questions submitted prior to the meeting, after which it was moved by Committee Member Wilson, seconded by Chair Dizmang, and

