



## ENGINEERING COMMITTEE

### AGENDA

Committee Meeting:  
Thursday, May 2, 2019  
2:00 PM (Board Room)

Calaveras County Water District  
120 Toma Court / P.O. Box 846  
San Andreas, California 95249

In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please contact the Administration Office at (209) 754-3028. Notification in advance of the meeting will enable CCWD to make reasonable arrangements to ensure accessibility for this meeting. Any documents that are made available to the Committee before or at the meeting, not privileged or otherwise protected from disclosure, and related to agenda items, will be made available at CCWD for public review.

### ORDER OF BUSINESS

#### CALL TO ORDER / PLEDGE OF ALLEGIANCE

1. **PUBLIC COMMENT**

At this time, members of the public may address the Committee on any non-agendized items. The public is encouraged to work through staff to place items on the agenda for consideration by the Committee. Comments are limited to three (3) minutes per person.

2.\* **APPROVAL OF MINUTES**

- Date of Prior Minutes: March 5, 2019

3.\* **NEW BUSINESS**

3a Pacific Gas and Electric's (PG&E's) Public Safety Power Shutoff Program and Power and Reliability Changes  
(Damon Wycoff, Director of Operations)

4. **OLD BUSINESS**

4a Presentation / Discussion of Update on Meter Sizing for Residential Fire Sprinklers  
(Charles Palmer, District Engineer)

5. **FUTURE AGENDA ITEMS**

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6. **NEXT COMMITTEE MEETING**

Tentative: Tuesday, June 4, 2019 at 2:00 p.m.

7. **ADJOURNMENT**

\*Paperwork included in package

**CCWD ENGINEERING COMMITTEE  
CALAVERAS COUNTY WATER DISTRICT  
March 5, 2019**

The Engineering Committee of CALAVERAS COUNTY WATER DISTRICT met at the CCWD Offices in San Andreas, California, at approximately 2:00 p.m.

The following Directors/Committee Members were present:

Russ Thomas  
Jeff Davidson

Staff Present:

Michael Minkler  
Charles Palmer  
Robbie Creamer  
Jesse Hampton  
Jeffrey Meyer  
Joel Metzger  
Damon Wycoff

General Manager  
District Engineer  
Engineering Analyst  
Plant Operations Manager  
Director of Administrative Services  
Manager of External Affairs, Conservation and Grants  
Director of Operations, CCWD

Others Present:

Mike Lemke  
Mike Evans  
Kevin Barnes

Miramont Homes / Lemke Homes  
DeNova Homes  
Ferguson Meter Automation Group

1. **PUBLIC COMMENT:**  
There was no public comment.

2. **APPROVAL OF MINUTES:**

The December 4, 2018 Minutes were approved as presented by a motion from Director Davidson, and seconded by Director Thomas.

3. **NEW BUSINESS:**

3a Presentation / Discussion of County of Calaveras Public Works Road Encroachments, Requests for Paving Notifications for District Patch Paves (Damon Wycoff, Director of Operations)

Mr. Wycoff discussed the Calaveras County Public Works revised paving requirements and the additional costs that the district would incur for the updated paving and

compaction testing requirements. Increase in costs could be \$150,000.00/yr. The area of Rancho Calaveras alone has 60 upcoming patch paves to be completed. Discussion followed.

Director Davidson requested staff to follow up with County office to determine if a board action item was submitted on their paving changes, to write up concrete language to provide to county of CCWD requirements and to check CCWD Design and Construction Standards for paving t-section and update accordingly if necessary.

**3b Presentation / Discussion of District's Geographic Information System (GIS) Needs and Implementation (Sam Singh, Engineering Technician)**

The presenter for this presentation was changed to Charles Palmer, District Engineer.

Mr. Palmer presented a slideshow presentation explaining the benefits of a (GIS) system mapping data base. The benefits would be: provides live updates, makes data available immediately to field staff personnel, creates an asset management program and is environmentally friendly.

**3c Presentation / Discussion of Update on Ebbetts Pass Reach 1 Water Pipeline Project (Charles Palmer, District Engineer)**

Mr. Palmer provided an overall review of the Ebbetts Pass Reach 1 Water Pipeline Project. The following information was provided; the lowest bidder, a resolution to be taken to the board for approval, construction begin date of May 2019 with a completion date in the Summer of 2020.

Director Davidson requested staff to provide a detailed comparison of the estimated cost and lowest bid explaining where and how the estimated cost was undershot. This item to be presented to the Board.

**4. OLD BUSINESS:**

**4a Presentation / Discussion of Update on Meter Sizing for Residential Fire Sprinklers (Charles Palmer, District Engineer)**

Mr. Palmer provided an updated overview of the fire sprinkler/meter sizing requirements of the CCWD water system. Mr. Wycoff provided a brief explanation of the Amador Water Agency's prior ruling on this matter. Public comments were received by Mr. Lemke, Mr. Evans and Mr. Barnes.

Directors Davidson and Thomas requested staff to review the current Prop 218 rate study to determine if a new billing classification could be established for a new meter size for fireflow and to contact State Fire Marshall and/or local fire departments for discussion on the requirements.

**5. FUTURE AGENDA ITEMS:**

**6. NEXT MEETING**

Tentative: Tuesday, April 9, 2019 @ 2:00 p.m.

**7. ADJOURNMENT**

There being no further business, the meeting adjourned at approximately 3:56 p.m.

Respectfully submitted,

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**Alesia Danner**  
**Administrative Technician**

# Agenda Item

DATE: May 2nd, 2019

TO: Engineering Committee  
Michael Minkler, General Manager

FROM: Damon Wyckoff, Director of Operations

SUBJECT: Pacific Gas and Electric's (PG&E's) Public Safety Power Shutoff Program and Power and Reliability Changes

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## SUMMARY:

PG&E has implemented its *Public Safety Power Shutoff Program (PSPSP)*. In extreme fire danger conditions, PG&E will now de-energize the grid to reduce the risk of liability associated with electrically-caused wildfires and to protect their infrastructure. This Policy will affect water and wastewater treatment, water distribution, and wastewater collections system's operation throughout all District Service Areas due to the fact that PG&E power will be cut-off to District facilities.

PG&E couples together several criteria such as strong-wind predictions, very low humidity levels, critically dry vegetation assessments, and on-the-ground observations to determine implementation of the PSPSP. When the determination is made that the program is going to be implemented, PG&E will reach out directly to both the Director of Operations and the Plant Operations Manager via phone, text, and email. District Operations Management and Field Staff then review the area of impact from a risk perspective that considers many factors including affected infrastructure and criticality, stand-by generator availability (on-site or no), access, and the re-fueling regimen. The result of the review informs the next steps to ensuring uninterrupted water and wastewater service during the PSPSP outage.

As an example – When PG&E implements the program in West Point, Staff will be placed on notice of program implementation, the generators at the Water and Wastewater Treatment Plants will be topped off with fuel and given an additional inspection to ensure ops prior to the shutdown. Trailer mounted generators will be topped off with fuel and brought into town to operate the one wastewater lift station in town and Acorn Pump Station (should the middle fork diversion be in operation). If it is understood the PSPSP will last beyond 48 hrs., the District will make arrangements for staff to re-fuel the generators as needed to ensure uninterrupted facility operation.

Moving forward CCWD can anticipate an increased number of power outages of longer duration. This fact has many facets that continue to be understood, namely from a cost and generator availability perspective. As a result, when PSPSP outages are set to

occur, District Staff will create a project number in order to track material (fuel) and O&M Costs (labor) associated with the outage. Additionally, District staff are developing a generator utilization chart to more efficiently understand what District sites currently do not have generators and what trailer mounted generators can be deployed where to remediate the fact. A Generator Utilization Chart will also help to direct the District's focus when it comes to budgeting for new generator purchases as well.

Looking forward, increased power outages of longer duration are here to stay. By pro-actively managing and maintaining our existing onsite generators, trailer-mounted generator fleet, and installing new generators at sites where they don't currently exist, the District will be poised to positively adjust to these changes.

#### **FINANCIAL CONSIDERATIONS:**

CCWD can anticipate an increase in labor costs and diesel fuel purchases associated with this PG&E program.

# Agenda Item

DATE: May 2, 2019

TO: Engineering Committee  
Michael Minkler, General Manager

FROM: Charles Palmer, District Engineer

SUBJECT: Presentation/Discussion Update on Meter Sizing for Residential Fire Sprinklers

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## INTRODUCTION

This topic was last presented at the Engineering Committee meeting on March 5, 2019. In summary, representatives of the local building industry have asked the District to increase its standard residential meter size from 5/8" to 1" to supply fire sprinklers in new construction of single family homes. As of January 1, 2011, the California Building Standards Code required all new construction of single family homes to have fire sprinklers. The code requires a minimum of two sprinkler nozzles at 13-gpm each plus a residual domestic demand of 5-gpm or a total flow of 31-gpm. While a 5/8" meter is adequate to supply all domestic water uses for a single family home, it falls short of the peak flow rate for fire sprinklers. Other water agencies have responded by allowing larger 3/4" and 1" meters. The Committee members expressed a desire to expedite a favorable interim solution prior to the next rate study yet avoid Prop.218 challenges.

A presentation will be made of various topics relating to the sizing of residential meters, evaluating water demands, and calculating capacity fees, as follows:

- Standard Meter Sizes and Meter Equivalents
- Master Plans and Capacity Fees
- Equivalent Single Family Units (ESFU's)
- Design and Development Standards
- Analysis of Residential Meter Data
- Manual v.s. Radio Read Meters

The District will be applying for a USDA RD loan/grant to replace all our residential meters, which opens up an opportunity to resize meters for all customers. However, if 5/8" and 3/4" meters are eliminated and all customers get 1" meters, how can capacity fees be fairly assessed if no longer based on meter size? Staff will present an alternative approach for assessing capacity charges.

## FINANCIAL CONSIDERATIONS:

None at this time.