

PUBLIC UTILITIES COMMISSION
505 Van Ness Avenue
San Francisco CA 94102-3298



Bear Valley Electric Service, Inc.
ELC (Corp ID 913)
Status of Advice Letter 411E
As of March 8, 2021

Subject: Q4 2020 BVES Quarterly WMP Safety Report Pursuant to Public Utilities Code Section 8389(e)(7)

Division Assigned: Energy

Date Filed: 02-09-2021

Date to Calendar: 02-10-2021

Authorizing Documents: None

Disposition:	Accepted
Effective Date:	02-09-2021

Resolution Required: No

Resolution Number: None

Commission Meeting Date: None

CPUC Contact Information:

edtariffunit@cpuc.ca.gov

AL Certificate Contact Information:

Nguyen Quan

(909) 394-3600 X664

RegulatoryAffairs@bvesinc.com

PUBLIC UTILITIES COMMISSION
505 Van Ness Avenue
San Francisco CA 94102-3298



To: Energy Company Filing Advice Letter

From: Energy Division PAL Coordinator

Subject: Your Advice Letter Filing

The Energy Division of the California Public Utilities Commission has processed your recent Advice Letter (AL) filing and is returning an AL status certificate for your records.

The AL status certificate indicates:

- Advice Letter Number
- Name of Filer
- CPUC Corporate ID number of Filer
- Subject of Filing
- Date Filed
- Disposition of Filing (Accepted, Rejected, Withdrawn, etc.)
- Effective Date of Filing
- Other Miscellaneous Information (e.g., Resolution, if applicable, etc.)

The Energy Division has made no changes to your copy of the Advice Letter Filing; please review your Advice Letter Filing with the information contained in the AL status certificate, and update your Advice Letter and tariff records accordingly.

All inquiries to the California Public Utilities Commission on the status of your Advice Letter Filing will be answered by Energy Division staff based on the information contained in the Energy Division's PAL database from which the AL status certificate is generated. If you have any questions on this matter please contact the:

Energy Division's Tariff Unit by e-mail to
edtariffunit@cpuc.ca.gov



ADVICE LETTER SUMMARY

ENERGY UTILITY



MUST BE COMPLETED BY UTILITY (Attach additional pages as needed)

Company name/CPUC Utility No.: Bear Valley Electric Service, Inc (913-E)

Utility type:

☒ ELC ☐ GAS ☐ WATER
☐ PLC ☐ HEAT

Contact Person: Nguyen Quan

Phone #: (909) 394-3600 x664

E-mail: RegulatoryAffairs@bvesinc.com

E-mail Disposition Notice to: RegulatoryAffairs@bvesinc.com

EXPLANATION OF UTILITY TYPE

ELC = Electric GAS = Gas WATER = Water
PLC = Pipeline HEAT = Heat

(Date Submitted / Received Stamp by CPUC)

Advice Letter (AL) #: 411-E

Tier Designation: 1

Subject of AL: Q4 2020 BVES Quarterly WMP Safety Report Pursuant to Public Utilities Code Section 8389(e)(7)

Keywords (choose from CPUC listing): Compliance

AL Type: ☐ Monthly ☒ Quarterly ☐ Annual ☐ One-Time ☐ Other:

If AL submitted in compliance with a Commission order, indicate relevant Decision/Resolution #: PUC 8389(e)(7)

Does AL replace a withdrawn or rejected AL? If so, identify the prior AL: No

Summarize differences between the AL and the prior withdrawn or rejected AL:

Confidential treatment requested? ☐ Yes ☒ No

If yes, specification of confidential information:

Confidential information will be made available to appropriate parties who execute a nondisclosure agreement. Name and contact information to request nondisclosure agreement/ access to confidential information:

Resolution required? ☐ Yes ☒ No

Requested effective date: 2/9/21

No. of tariff sheets: 0

Estimated system annual revenue effect (%): N/A

Estimated system average rate effect (%): N/A

When rates are affected by AL, include attachment in AL showing average rate effects on customer classes (residential, small commercial, large C/I, agricultural, lighting).

Tariff schedules affected: N/A

Service affected and changes proposed¹:

Pending advice letters that revise the same tariff sheets: N/A

¹Discuss in AL if more space is needed.

Protests and all other correspondence regarding this AL are due no later than 20 days after the date of this submittal, unless otherwise authorized by the Commission, and shall be sent to:

CPUC, Energy Division
Attention: Tariff Unit
505 Van Ness Avenue
San Francisco, CA 94102
Email: EDTariffUnit@cpuc.ca.gov

Name: Nguyen Quan
Title: Regulatory Affairs Manager
Utility Name: Bear Valley Electric Service, Inc
Address: 630 E. Foothill Blvd
City: San Dimas State: California
Telephone (xxx) xxx-xxxx: (909) 394-3600 x664
Facsimile (xxx) xxx-xxxx: (909) 394-7427
Email: RegulatoryAffairs@bvesinc.com; nquan@gswater.com

Name: Zeng Zhu
Title: Rate Analyst
Utility Name: Bear Valley Electric Service, Inc
Address: 630 E. Foothill Blvd
City: San Dimas State: California
Telephone (xxx) xxx-xxxx: (909) 394-3600 x495
Facsimile (xxx) xxx-xxxx: (909) 394-7427
Email: RegulatoryAffairs@bvesinc.com; zeng.zhu@bvesinc.com

Clear Form



Bear Valley Electric Service, Inc.
P.O. Box 9028
San Dimas, CA 91773-9028
A Subsidiary of American States Water Company

February 9, 2021

Advice Letter No. 411-E

(U 913 E)

California Public Utilities Commission

Bear Valley Electric Service, Inc. ("BVES") hereby transmits for filing the following:

SUBJECT: *Q4 2020 BVES Quarterly WMP Safety Report Pursuant to Public Utilities Code Section 8389(e)(7).*

PURPOSE

Pursuant to requirements of Section 8389(e)(7), which were added to the Public Utilities Code by Assembly Bill ("AB") 1054 on July 12, 2019, BVES submits to the California Public Utilities Commission ("Commission") this advice letter ("AL").

Statutory provision requires that BVES file a Tier 1 AL "on a quarterly basis that details the implementation of both its approved wildfire mitigation plan and recommendations of the most recent safety culture assessment, and a statement of recommendations of the board of director's safety committee meetings that occurred during the quarter." Section 8389(e)(7) also requires that the AL "shall summarize the implementation of safety committee recommendations from the electrical corporation's previous advice letter filing".

This advice letter is to report BVES's 2020 Q4 activities.

This advice letter is BVES's final quarterly filing for calendar year 2020 activities.

BACKGROUND

Governor Newsom signed AB 1054 into law on July 12, 2019. AB 1054 contains numerous statutory provisions and amendments designed to enhance the mitigation and prevention of catastrophic wildfires – including wildfires linked to utility equipment – in California. AB 1054 added Section 8389 to the Public Utilities Code. Section 8389(e) establishes the requirements for annual safety certifications and, inter alia, requires electrical corporations to establish a safety committee of its board of directors composed of members with relevant safety experience, establish board-of-director-level reporting to the Commission on safety issues, and file quarterly Tier 1 ALs as described above.

IMPLEMENTATION OF BVES's APPROVED WILDFIRE MITIGATION PLAN

BVES is executing 34 different mitigations proposed in its Wildfire Mitigation Plan ("WMP"). These mitigations involve a wide-array of topic areas such as inspection and maintenance programs, infrastructure replacement programs, and vegetation management programs, which all mitigate the risk of ignitions due to a fault on the electric system. BVES has mitigation programs to enhance situational awareness, which informs BVES's risk models and helps prioritize infrastructure replacement; and strategies and tools for real time decision making. As of December 31, 2020 the following is the status of some key mitigations:

Fuse Replacement Program: To date BVES replaced 2,303 conventional expulsion fuses with 1,985 current limiting fuses (non-expulsion fuses) and 318 electronic fuses. BVES will replace the remaining 901 conventional fuses by the end of May 2021.

Tree Attachment Removal Project: To date in this 5-year project (2018 to 2022) to remove all tree attachments in the BVES system. BVES removed a total of 493 tree attachments and has 714 tree attachments remaining in the system, which will be removed by December 2022.

Pole Loading and Assessment Program: To date in this 5-year program (2018 to 2022), BVES has assessed 2,695 poles, replaced 608 poles and remediated 108 poles. The project is on track to complete by December 2022.

Weather Stations: BVES installed a total of 18 weather stations in its system and plans on installing another 2 stations by May 2021. The two weather station installations were delayed due to access issues at one of the sites and power issues at the other site. BVES's service area is 31 square miles and will have 0.6 weather stations per square mile. This density of weather stations will vastly improve BVES's situation awareness for wildfire mitigation.

Covered Wire Program: Having completed its covered wire pilot program successfully testing 394.5 AAAC and 336.4 ACSR covered wire, BVES began to install covered wire in its service area covering 3.0 circuit miles of 34 kV sub-transmission and 2.5 circuit miles of 4 kV distribution power lines. BVES plans on replacing a total of 12.9 circuit miles (4.3 circuit miles of 34.5 kV and 8.6 circuit miles of 4 kV).

Evacuation Route Hardening Program: BVES's service area has predetermined routes to evacuate the public in the event of a wildfire due to any causes. BVES recognizes that maintenance and fortification of BVES facilities along evacuation routes is critical to ensure they do not fail and limit mobility. BVES initiated a pilot program to test various solutions such as fire-resistant overhead facilities and to protect wood poles with fire resistant and strengthening materials. BVES has successfully installed fire resistant composite poles and a wire mesh protective coating for wood poles. As part of the pilot

program, BVES had planned to install light steel poles as the third possible solution to this issue. However, at this point in the program BVES concludes that the optimal policy for hardening its evacuation routes is to install the wire mesh protective coating for the 800 plus wood poles over a 2-year period. Should poles on the evacuation route require replacement for other reasons than wildfire evacuation, they would be replaced with proven fire resistant poles such as fire resistant composite poles and light steel poles.

LIDAR Aerial Inspection: BVES engaged a contractor to conduct LIDAR inspections of its overhead facilities. These inspections are being completed using helicopter, drone, and vehicle mounted imagery and mapping technology to view vegetation growth in proximity to the system. This accurate inspection provides BVES situational awareness of any potential vegetation clearance issues so that they may be resolved before contact with bare conductor is made. To date, BVES has completed two complete surveys of its facilities. Vegetation discrepancies that were noted were corrected. No urgent L 1 safety issues were identified in the surveys.

Radford Line Covered Conductor Replacement Project: BVES plans to replace bare wire with a high-performance covered conductor on the Radford 34kV sub-transmission line. This line was selected specifically since it has the highest risk of wildfires due to its location in the High Fire Threat District Tier 3. The line is located in a densely vegetated area that is difficult to patrol, so BVES believes that replacing the line completely will provide the greatest protection. The project is pending with the U.S. Forestry Service for approval of the permit to perform the scope of work. BVES anticipates starting construction in April 2021 and completing it by October 2021.

IMPLEMENTATION OF BVES SAFETY CULTURE ASSESSMENT

BVES has not yet undergone a Commission-initiated Safety Culture Assessment. Accordingly, BVES has no information to report regarding implementation. Once BVES's safety culture assessment is completed, BVES will include implementation information in future advice letters.

SAFETY AND OPERATIONS COMMITTEE MEETINGS 2020

BVES's Board Safety and Operations Committee (Safety Committee) advises and assists the Board of Directors in the oversight of the safety in providing electric power services to the Company's customers. The Safety Committee members are Mr. John K. Hawks, Mr. Harry Scarborough, and Mr. Paul A. Marconi. The Safety Committee held a regularly scheduled quarterly meeting on January 28, 2021. The Safety Committee was presented a detailed briefing on BVES's safety performance outcome metrics, Safety Culture Assessment guidance issued by the Wildfire Safety Division (WSD) on January 22, 2021, and an update on the status of executing BVES's 2020 Wildfire Mitigation Plan (WMP) programs and projects. The Safety Committee then received a detailed briefing on each deficiency identified by WSD in "Resolution Ratifying Action of the Wildfire Safety Division on Bear Valley Electric Service, Inc.'s 2020 Wildfire Mitigation Plan

Refile Pursuant to Public Utilities Code Section 8386 (WSD-013) of January 14, 2021." The Safety Committee reviewed each deficiency, its classification, conditions to clear, and actions being implemented by BVES to satisfy the WSD conditions. In addition, the Committee was presented the proposed updates to BVES's WMP which is due to be filed on March 5, 2021. The Safety Committee then approved certain specific projects to be executed in 2021. Finally, the Safety Committee reviewed BVES's Safety Certification status and actions being taken to renew the Safety Certification.

COMPLIANCE

This advice letter requests approval in compliance with Public Utilities Code Section 8389(e)(7).

TIER DESIGNATION

This advice letter is submitted with a Tier 1 designation.

EFFECTIVE DATE

BVES respectfully requests this advice letter become effective on February 09, 2021.

NOTICE AND PROTESTS

A protest is a document objecting to the granting in whole or in part of the authority sought in this advice letter. A response is a document that does not object to the authority sought, but nevertheless presents information that the party tendering the response believes would be useful to the CPUC in acting on the request.

A protest must be mailed within 20 days of the date the CPUC accepts the advice letter for filing. The Calendar is available on the CPUC's website at www.cpuc.ca.gov.

A protest must state the facts constituting the grounds for the protest, the effect that approval of the advice letter might have on the protestant, and the reasons the protestant believes the advice letter, or a part of it, is not justified. If the protest requests an evidentiary hearing, the protest must state the facts the protestant would present at an evidentiary hearing to support its request for whole or partial denial of the advice letter.

The utility must respond to a protest within five days.

All protests and responses should be sent to:

California Public Utilities Commission, Energy Division
ATTN: Tariff Unit
505 Van Ness Avenue
San Francisco, CA 94102
E-mail: EDTariffUnit@cpuc.ca.gov

Copies should also be mailed to the attention of the Director, Energy Division, Room

4004 (same address above).

Copies of any such protests should be sent to this utility at:

Bear Valley Electric Service, Inc.
ATTN: Nguyen Quan
630 East Foothill Blvd.
San Dimas, CA 91773
Fax: 909-394-7427
E-mail: RegulatoryAffairs@bvesinc.com

If you have not received a reply to your protest within 10 business days, contact Nguyen Quan at (909) 394-3600 ext. 664.

Correspondence:

Any correspondence regarding this compliance filing should be sent by regular mail or e-mail to the attention of:

Nguyen Quan
Manager, Regulatory Affairs
Bear Valley Electric Service, Inc.
630 East Foothill Blvd.
San Dimas, California 91773
Email: RegulatoryAffairs@bvesinc.com

The protest shall set forth the grounds upon which it is based and shall be submitted expeditiously. There is no restriction on who may file a protest.

Sincerely,

/s/Zeng Zhu
Zeng Zhu
Rate Analyst, Regulatory Affairs

cc: Edward Randolph, Director, Energy Division
Franz Cheng, Energy Division
R. Mark Pocta, California Public Advocates Office
BVES General Order 96-B Service List

BEAR VALLEY ELECTRIC SERVICE, INC.

G.O. 96-B
SERVICE LIST

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EMAIL ONLY

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P.O. BOX 10000
BIG BEAR LAKE, CA 92315

CITY ATTORNEY
CITY OF BIG BEAR LAKE
39707 BIG BEAR BLVD.
P.O. BOX 10000
BIG BEAR LAKE, CA 92315

COUNTY CLERK
COUNTY OF SAN BERNARDINO
385 N. ARROWHEAD AVENUE - 2ND FLOOR
SAN BERNARDINO, CA 92415-0140

COUNTY COUNSEL
COUNTY OF SAN BERNARDINO
385 N. ARROWHEAD AVENUE - 4TH FLOOR
SAN BERNARDINO, CA 92415-0140

HERSCHEL T. ELKINS
ASST ATTORNEY GENERAL
OFFICE OF THE ATTORNEY GENERAL
STATE OF CALIFORNIA
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LOS ANGELES, CA 90013

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REA.ESTRELLA@NAVY.MIL

LIBERTY UTILITIES
9750 WASHBURN ROAD
DOWNEY, CA 90241
AdviceLetterService@libertyutilities.com



March 22, 2021

Caroline Thomas Jacobs, Director
Wildfire Safety Division
California Public Utilities Commission
300 Capital Mall
Sacramento, California 95814
WildfireSafetyDivision@cpuc.ca.gov

Re: BVES Q4 2020 Quarterly Advice Letter Supplemental Filing

Background

On February 9, 2021, Bear Valley Electric Service, Inc. (“BVES” or “Bear Valley”) submitted its Quarterly Advice Letter (“QAL”) to the Wildfire Safety Division (“WSD”), which was accepted by the WSD on March 8, 2021. This submission represents a supplemental filing to align BVES’s previous submissions with the new template for QAL submissions and to include a declaration of compliance with PUC §8389(e)(7) regarding BVES’s most recent safety culture assessment.

Safety Compliance Declaration

BVES does not yet have any safety compliance recommendations to report under the Compliance Operational Protocols requirements for the QAL. Future filings will include Safety Culture Assessment recommendations once they are performed. The BVES, Inc. Safety and Operations Committee met on October 22, 2020 for a regularly scheduled committee meeting. The Committee was provided an update on safety issues at BVES and an update on COVID-19 mitigation measures that BVES had implemented to provide for public and worker safety and continue critical utility operations, maintenance, and construction projects and the resultant impact of these measures. The Committee also received a detailed briefing on the status of Wildfire Mitigation Plan projects and programs. The Committee members were offered the opportunity to discuss and comment on items presented. While the Committee discussed specific issues and initiatives and asked questions, the Committee did not offer any specific, actionable recommendations at this meeting as it appeared the Committee members were satisfied with Management’s progress in this area.”

Conclusion

This submission represents a supplement to the QAL filed by BVES on February 9, 2021.¹ It is intended to comply with the procedural, substantive, and formatting requirements set forth by the WSD. Future BVES QAL filings will include all necessary elements and will be submitted in the correct templated format.

Respectfully submitted,

Bear Valley Electric Service, Inc.

/s/ Paul Marconi

Paul Marconi
President

¹ BVES filed its Advice Letter 411E “Q4 2020 BVES Quarterly WMP Safety Report Pursuant to Public Utilities Code Section 8389(e)(7)” prior to the February 16, 2021 issuance of the Compliance Operational Protocols, which sets forth the guidance on the contents, format, and timing of the compliance reporting to the WSD.



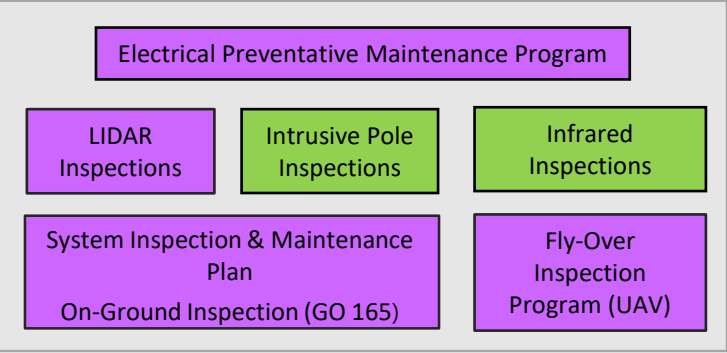
Wildfire Mitigation Plan Quarterly Advice Letter Initiative Report

Bear Valley Electric Service
Q4 2020

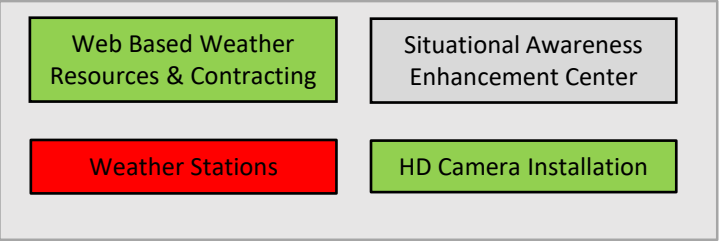
WMP Activity Summary

Not Started Completed/Ongoing Ahead of Plan On Track Off Track

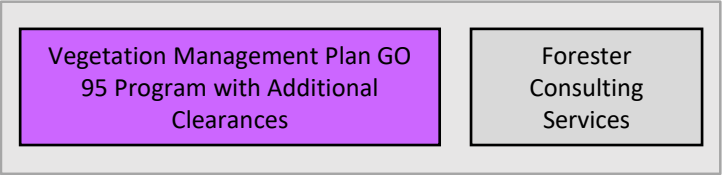
Asset Management & Inspections



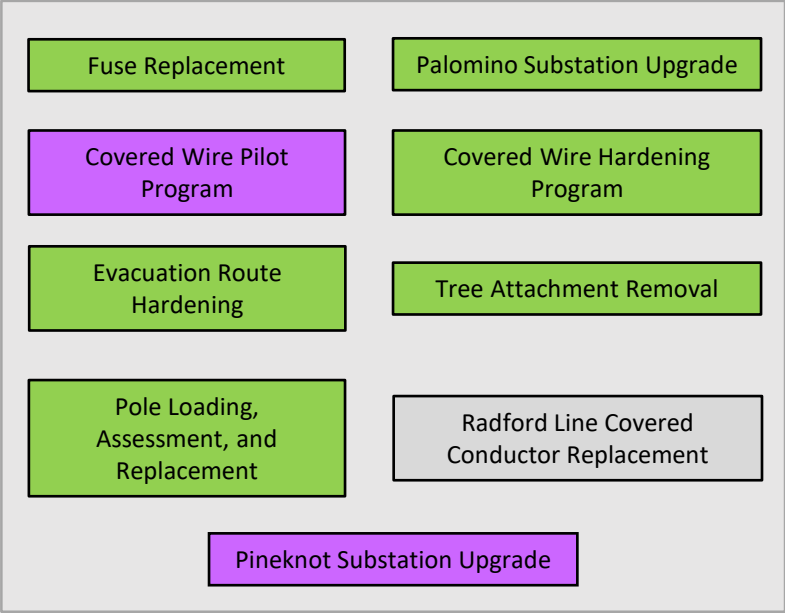
Situational Awareness & Forecasting



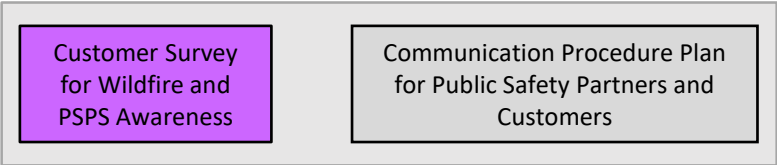
Vegetation Management & Inspections



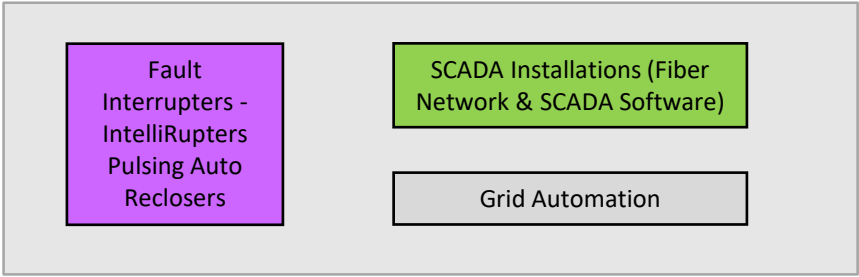
Grid Design & System Hardening



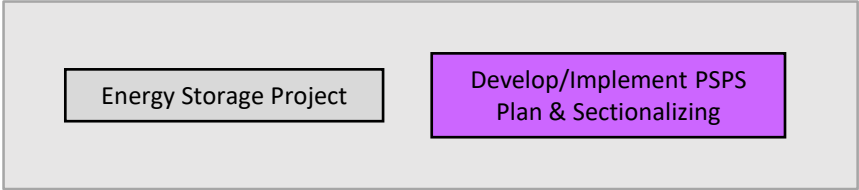
Stakeholder Cooperation & Community Outreach



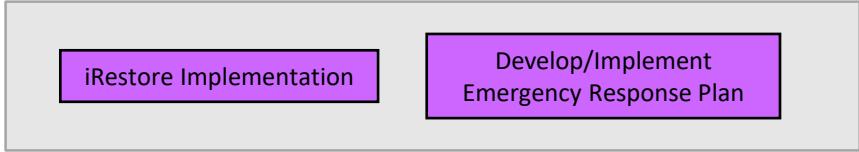
Grid Operations & Protocols



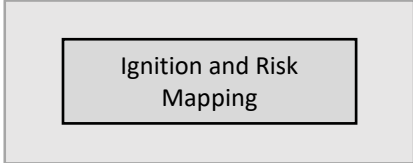
Public Safety Power Shutoff



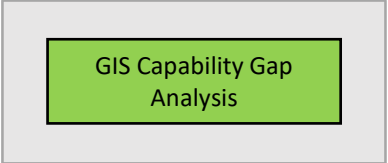
Emergency Planning & Preparedness



Risk Assessment & Mapping



Data Governance



WMP Activities Status vs. WMP Activity Goals

Asset Management & Inspection

1 **Electrical Preventative Maintenance Program**

2020 Performance & Planned Activities:

Per GO 95 and 165, this Preventative Maintenance program assesses major equipment assets located at BVES substations and in the field at locations in the BVES sub-transmission (34.5 kV) and distribution (up to 4.160 kV) system. The results of the program are designed to evaluate the condition of key distribution equipment assets, identify equipment at risk of failure, improve performance, reduce costs, and extend equipment life.

2 **System Inspection & Maintenance Plan**

2020 Performance & Planned Activities:

BVES performs annual "patrol inspection" is a visual inspection designed to identify obvious structural problems and hazards. These patrols are designed to identify gross defects. Gross defects may include, but are not limited to, damaged poles, broken cross-arms, damaged insulators, sagging wires, leaking transformers, vegetation encroachment inside of minimum clearance standards, etc. These defects have the potential to spark and possibly ignite a wildfire.

211 Circuit Miles Inspected
Ongoing

Fly-Over Inspection Program (UAV)

2020 Performance & Planned Activities:

UAV Fly-over Inspections (detects Level 1 and 2 vegetation and facilities discrepancies and other discrepancies that may lead to safety issues; also detects if previously noted discrepancies are being properly cleared). BVES intends to competitively solicit bids from qualified contractors with experience in UAV inspection type to perform an annual fly-over inspection of BVES facilities. Ideally, this inspection will be performed prior to the fire season. In 2021, BVES aims to conduct the inspection prior to the end of June or as achievable before September 1st. This has been a successful initiative for the utility.

422 Circuit Miles Planned Survey by 2022
Ongoing

Intrusive Pole Inspections
100%
Annual Targets Completed
On Track

2020 Performance & Planned Activities:

BVES performs intrusive pole inspections in accordance with GO 95. In 2021 and future years, BVES will comply and test poles to loading standards, GO requirements, intrusive inspection criteria and age and then, replaces or remediates non-compliant poles.

LIDAR Aerial Inspections
422 Overhead Circuit Miles Surveyed
Ongoing

2020 Performance & Planned Activities:

BVES engaged a contractor to conduct LIDAR inspections of its overhead facilities (210.9 Circuit miles within the service area). These inspections are being completed using helicopter, drone, and vehicle mounted imagery and mapping technology to view vegetation growth in proximity to the system. This accurate inspection provides BVES situational awareness of any potential vegetation clearance issues so that they may be resolved before contact with bare conductor is made. To date, BVES has completed two complete surveys of its facilities. Vegetation discrepancies that were noted were corrected. No urgent Level 1 safety issues were identified in the surveys.

Infrared Inspections
211
Overhead Circuit Miles Planned Survey in 2024
Paused / On Track

2020 Performance & Planned Activities:

BVES paused use of this inspection methodology. Intends to conduct every 5 years. Next inspection is programmed for 2024.

WMP Activities Status vs. WMP Activity Goals

Risk Assessment & Mapping

Ignition and Risk Mapping
**100% Plan Development by the 2021
fire Season**
Not Started

2020 Performance & Planned Activities: Beginning in June of 2021, BVES will be using consultants to develop risk mapping that shows ignition probability, estimated wildfire consequence, climate-driven risks, and initiatives for the BVES services area. BVES executed a GIS gap analysis to determine current capabilities and modeling needs. To support alignment to the WSD Data Schema framework, BVES plans to enhance risk mapping and modeling tools over 2021 and 2022

Data Governance

GIS Capability Gap Analysis
100% Completed Assessment
On Track

2020 Performance & Planned Activities:

This initiative category is dependent on the work executed under the GIS gap analysis, which is now categorized under mapping and modeling work (Risk Assessment & Mapping) and data schema architecture. This will require BVES to revise certain aspects of data management and its existing platforms to provide more integrations in the software available to the utility at this time. This work is on track with the increase of staffing capabilities internally and externally to the utility's available resources.

Grid Operational & Protocols

Fault Interrupters - IntelliRupters Pulsing
Auto Reclosers
100% Completed in 2020
Completed/Ongoing

2020 Performance & Planned Activities:

BVES plans to install S&C's Pulse Closer Fault Interrupters across its major 34 kV system auto-reclosers was completed in 2020. This technology provides the settings necessary to reduce electrical ignition, while also helping mitigate power outages and equipment damage by using low energy pulses to test for faults. BVES has installed Fault Indicators (FIs) at key locations to reduce the time it takes to locate faults; thereby, reducing the time to isolate faults from the system or correcting the damage. Prior to the start of the program, BVES had 110 FIs installed in its system at key locations. As part of the WMP, BVES will install an additional 117 FIs at 39 key locations to provide optimal FI coverage in the system in 2022.

2020 Performance & Planned Activities:

BVES current SCADA system is inadequate with few controls for the distribution system and limited monitoring capability. Through the Grid Automation Project, BVES will establish a service area network, build out its SCADA software and historian capabilities, connect substations and field switches, and install circuit metering and monitoring devices such as weather stations. SCADA automation is projected at 40% with a completion year of 2022

1

SCADA Installations (Fiber Network &
SCADA Software)
40% Complete Integration
Grid Automation
On Track

2

WMP Activities Status vs. WMP Activity Goals

Situational Awareness & Forecasting

**Weather
Stations
90%
Installed**

2020 Performance & Planned Activities:

BVES installed a total of 18 weather stations in its system and plans on installing another 2 stations by May 2021. The two weather station installations were delayed due to access issues at one of the sites and power issues at the other site. BVES's service area is 31 square miles and will have 0.6 weather stations per square mile. This density of weather stations will vastly improve BVES's situation awareness for wildfire mitigation.

**Web Based
Weather
Resources &
Contracting
On Track**

2020 Performance & Planned Activities:

BVES has installed 18 advanced weather stations and is planning to add 2 more in 2021. BVES uses a contract meteorologist and uses several web-based weather data gathering sites. Tools used include: products developed by the NWS, local weather forecasts, and the NFDERS 7-day significant fire potential product which is monitored daily by BVES Field Operations.

**Situational
Awareness
Enhancement
Center
Not
Started**

2020 Performance & Planned Activities:

This project is not expected to be initiated until 2022. Initial planning will begin in 2022 with work expected to be complete by the end of 2024.

**HD Camera
Installation
On
Track**

2020 Performance & Planned Activities:

Cameras are already installed in three locations throughout BVES's territory (Bear Mountain, Snow Summit, and Deadman's Ridge). Two additional camera locations are scheduled for installation in 2021. BVES will work to improve this mitigating activity in the future by developing designs to leverage solar and battery power to feed cameras where no low voltage secondary exists.

WMP Activities Status vs. WMP Activity Goals

Vegetation Management

Vegetation Management
Plan GO 95 Program with
Additional Clearances
**Completed/
Ongoing**

2020 Performance & Planned Activities:

BVES has a vegetation management plan that meets or exceeds the PUC's GOs. The plan will be reviewed and updated on an as-needed basis not to exceed three years. The program includes three components: **preventative vegetation management** ensures appropriate clearance specs are being met, **corrective vegetation clearance** which ensure the timely correction of any identified clearance discrepancies, and **emergency vegetation clearance** which provides maintenance on an as-needed basis (ie. after a major storm).

Forester Consulting
Services
Not Started

2020 Performance & Planned Activities:

BVES has entered into a contract to engage a full-time forester to provide field support and oversight of high-risk vegetation management work. The forester is expected to be on-site to commence work in April 2021.

Stakeholder Cooperation & Community Outreach

Customer Survey for
Wildfire and PSPS
Awareness
**Completed/
Ongoing**

2020 Performance & Planned Activities:

In an effort to educate and prepare customers about fire prevention, BVES has conducted a public outreach survey which has identified the need for a comprehensive Public Outreach and Communications Plan BVES plans to provide PSPS communication before a PSPS activation and during/after the event. BVES will continue to engage with the community to ensure proper communication through PSPS events

Communication Procedure
Plan for Public Safety
Partners and Customers
Not Started

2020 Performance & Planned Activities:

BVES plans to develop the Public Outreach and Communications Plan prior to the 2021 Fire season. The goal of the plan will be to ensure the proper communication of on-going activities as well as future planned activities. BVES is working to refine its plan, but no formal steps have been developed at this time.

WMP Activities Status vs. WMP Activity Goals

Grid Design & System Hardening Initiatives

Fuse Replacement
72% Replaced
On Track

2020 Performance & Planned Activities:

To date BVES replaced 2,303 conventional expulsion fuses with 1,985 current limiting fuses (non-expulsion fuses) and 318 electronic fuses. BVES will replace the remaining 901 conventional fuses by the end of May 2021.

Pole Loading and Assessment
On Track

2020 Performance & Planned Activities:

To date in this 5-year program (2018 to 2022), BVES has assessed 2,695 poles, replaced 608 poles and remediated 108 poles. The project is on track to complete by December 2022.

Covered Wire Pilot
5.5 Circuit Miles Hardened
Completed

2020 Performance & Planned Activities:

Having completed its covered wire pilot program successfully testing 394.5 AAAC and 336.4 ACSR covered wire, BVES began to install covered wire in its service area covering 3.0 circuit miles of 34 kV sub-transmission and 2.5 circuit miles of 4 kV distribution power lines. BVES plans on replacing a total of 12.9 circuit miles (4.3 circuit miles of 34.5 kV and 8.6 circuit miles of 4 kV).

Tree Attachment Removal Project
41% Removed
On Track

2020 Performance & Planned Activities:

To date in this 5-year project (2018 to 2022) to remove all tree attachments in the BVES system. BVES removed a total of 493 tree attachments and has 714 tree attachments remaining in the system, which will be removed by December 2022.

Evacuation Route Hardening
On Track

2020 Performance & Planned Activities:

BVES's service area has predetermined routes to evacuate the public in the event of a wildfire due to any causes. BVES recognizes that maintenance and fortification of BVES facilities along evacuation routes is critical to ensure they do not fail and limit mobility. BVES initiated a pilot program to test various solutions such as fire-resistant overhead facilities and to protect wood poles with fire resistant and strengthening materials. BVES has successfully installed fire resistant composite poles and a wire mesh protective coating for wood poles. As part of the pilot program, BVES had planned to install light steel poles as the third possible solution to this issue. However, at this point in the program BVES concludes that the optimal policy for hardening its evacuation routes is to install the wire mesh protective coating for the 800 plus wood poles over a 2-year period. Should poles on the evacuation route require replacement for other reasons than wildfire evacuation, they would be replaced with proven fire-resistant poles such as fire-resistant composite poles and light steel poles.

Radford Line Covered Conductor Replacement
Not Started

2020 Performance & Planned Activities:

BVES plans to replace bare wire with a high-performance covered conductor on the Radford 34kV sub-transmission line. This line was selected specifically since it has the highest risk of wildfires due to its location in the High Fire Threat District Tier 3. The line is located in a densely vegetated area that is difficult to patrol, so BVES believes that replacing the line completely will provide the greatest protection. The project is pending with the U.S. Forestry Service for approval of the permit to perform the scope of work. BVES anticipates starting construction in April 2021 and completing it by October 2021.

Palomino Substation Upgrade
On Track

2020 Performance & Planned Activities:

BVES is in the process of converting the existing Palomino Substation from an overhead-type to a pad-mounted design with dead front SCADA-enabled. The project is on track to be completed in 2021

Covered Wire Hardening Program
On Track

2020 Performance & Planned Activities:

34.5 kV – BVES has established a plan to replace 4.3 miles of bare wire per year to replace all the bare 34.5 kV wire at the end of a 6-year period. 4kV – BVES has established a plan to replace 8.6 miles of bare wire per year to replace a total of 86 miles of bare 4 kV wire at the end of 10-years.

Pineknob Substation Upgrade
Complete

2020 Performance & Planned Activities:

BVES completed the conversion of the existing Pineknob Substation from an overhead-type to a pad-mounted design.

WMP Activities Status vs. WMP Activity Goals

Public Safety Power Shutoff

Energy Storage Project
Planned Operation in 2022
Not Started

2020 Performance & Planned Activities:

BVES plans to install an 8 MW / 4 MWh battery storage facility, planned for 2022. In addition to providing local reliability, BVES finds benefit in mitigating the potential impact of Southern California Edison potentially activating a PSPS event that limits the ability for BVES to serve load during adjacent proactive de-energization events. BVES will investigate opportunities to hybridize this facility with solar generation.

Develop/Implement
PSPS Plan &
Sectionalizing
Complete

2020 Performance & Planned Activities:

BVES in response to deficiencies identified by the WSD updated its PSPS plan. As part of the 2021 WMP BVES has provided its PSPS plan as Attachment A. BVES updated its PSPS Plan in February of 2021 and will aim for continuous improvement as the utility advances its risk mapping and predictive modeling capabilities.

Emergency Planning & Preparedness

iRestore Implementation
**Complete /
Ongoing**

2020 Performance & Planned Activities:

BVES deployed iRestore a share application utilized by the local emergency response district, bridging further collaboration in reducing ignition risk or wildfire spread. BVES intends to continue to training and evaluate the effectiveness o the application. This application has been integrated in 2020.

Develop/Implement
Emergency Response
Plan
Complete

2020 Performance & Planned Activities:

BVES developed a comprehensive outage management procedures, which are applicable to all outages including outages as a result of PSPS. The BVES PSPS Plan is designed to work in conjunction with the ERP and not duplicate existing procedures.