



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

Via Electronic Filing

April 2, 2024

Caroline Thomas Jacobs, Director
Office of Energy Infrastructure Safety
715 P Street, 20th Floor
Sacramento, CA 95814
Caroline.ThomasJacobs@energysafety.ca.gov

RE: *Bear Valley Electric Service, Inc. 2023 Electrical Corporation Annual Report on Compliance Pursuant to Public Utilities Code Section 8386.3(c)(1).*

Dear Director Jacobs,

This report serves as Bear Valley Electric Service, Inc.'s ("BVES's") response to Public Utilities Code ("PUC") §8386.3(c)(1), where an electrical corporation ("EC") must file with the Office of Energy Infrastructure Safety ("Energy Safety")¹ annual reports addressing compliance of approved Wildfire Mitigation Plans ("WMPs") and associated activities during the prior calendar year. BVES submits this annual report addressing its compliance with the WMP during the 2023 calendar year.

If you have any questions or requests for additional information, please contact me at paul.marconi@bvesinc.com.

Sincerely,

//s//

Paul Marconi
President, Treasurer and Secretary
Bear Valley Electric Service, Inc.

¹ Formerly known as the California Public Utilities Commission Wildfire Safety Division, which transitioned to the OEIS under the California Natural Resources Agency on July 1, 2021.



I. Background

The report is developed in accordance with the California Public Utilities Commission (“CPUC”) Wildfire Safety Division *Compliance Operational Protocols* issued in November 2020 and modified in February 2021 under Resolution (“R.”) WSD-012, which, among other items, directs the development of an Annual Report on Compliance (“ARC”). The *Compliance Operational Protocols* remain in effect under the regulatory authority of Energy Safety.

BVES submitted its 2023-2025 Base WMP on May 8, 2023. In accordance with the *Revision Notice to Bear Valley Electric Service, Inc.* BVES submitted revisions to its 2023-2025 Base WMP on August 23, 2023. After submission of the revised 2023-2025 Base WMP, the OEIS brought forth several concerns for future remediation while addressing conditions for improvement when reviewing BVES’s WMP for approval. BVES has made strides to rectify the issues identified in the *Decision on Bear Valley Electric Service, Inc.’s 2023-2025 Wildfire Mitigation Plan*, issued on November 6, 2023. Additional directives are poised to be addressed within the 2025 WMP Update submission and in future WMP updates.

This EC ARC report serves to address PUC §8386.3(c)(1) addressing annual compliance for the 2023 calendar year. The italicized language in the sections below signal regulatory prompts for required content for this report.

II. Assessment of Initiative Risk Reduction

1.a) An assessment of whether the EC met the risk reduction intent by implementing all of their approved WMP initiatives, i.e., the degree to which initiative activities have reduced ignition probabilities;

1.a.i) If the EC fails to achieve the intended risk reduction, EC shall provide a detailed explanation of why and a reference to where associated corrective actions are incorporated into their most recently submitted WMP.

In 2023, BVES did not experience and record any wildfire ignitions or PSPS events. BVES focuses on implementing approved WMP initiatives that collectively reduce the probability of utility-caused ignitions, reduce the potential impact of wildfires on the BVES system, and



mitigate the frequency and scope of Public Safety Power Shutoff (“PSPS”) events in the future.

Risk reduction is measured through a variety of means including successful mitigation implementation, risk event tracking, and the modeling results of BVES’s risk registry tools. BVES maintains a risk assessment toolkit to identify risk drivers and potential consequences of wildfire threat while gauging the success of mitigation initiatives.

BVES seeks to reduce risk on all circuits identified as “high risk” to reduce the prioritized circuit risk threshold. The intent is to further reduce the secondary risk category, “medium risk” circuits to bring all circuits into the low-risk range. The progress in this effort is demonstrated in Tables 1, 2, and 3 below.

Table 1: Risk Reduction Year over Year

Date	Risk Score (Per Fire Safety Matrix)
12/31/2019	115,969
12/31/2020	110,745
12/31/2021	90,386
12/31/2022	81,829
12/31/2023	74,354



Table 2: 2023 Estimated Reduction in Wildfire Risk by Circuit

Circuit	Substation	2019 Wildfire Risk Group ¹	2020 Wildfire Risk Group ¹	2021 Wildfire Risk Group ¹	2022 Wildfire Risk Group ¹	2023 Wildfire Risk Group ²
Radford	SCE Feed	30521	30621	31215	31215	31215
Shay	SCE Feed	14230	13367	7103	3524	190
Baldwin	SCE Feed	7185	7763	7606	6891	6322
Boulder	Village	3351	2951	1230	882	700
North Shore (Fawnskin)	Fawnskin	7518	7538	6721	6717	6604
Erwin Lake	Maltby	7401	3416	2006	0	0
Pioneer (Palomino)	Palomino	5706	5206	2426	2730	2447
Clubview	Moonridge	3460	4060	3331	3225	2643
Goldmine	Moonridge	5559	6659	4491	4539	4535
Paradise	Maltby	3493	3493	2894	1810	1140
Sunset	Maple	3583	3883	2533	2374	2002
Sunrise (Maple)	Maple	2650	2650	2217	1857	1539
Holcomb (Bear City)	Bear City	5916	4516	4205	4746	4718
Georgia	Pineknott	1919	2019	1280	1384	1380
Eagle	Pineknott	2072	2072	1813	1813	1510
Harnish (Village)	Village	385	585	793	786	794
Garstin	Meadow	2440	1750	1392	1366	1166
Lagonita	Village	2023	2323	1576	1533	1531
Interlaken	Meadow	3275	2475	1652	1485	1129
Castle Glen (Division)	Division	1982	2238	2365	1483	1482
Country Club	Division	984	845	709	640	640
Fox Farm	Meadow	0	0	0	0	0
Pump House (Lake)	Lake	287	287	202	202	40
Lift (Summit TOU)	Summit	28	28	627	627	627
Skyline (Summit Res)	Summit	0	0	0	0	0
Geronimo (Bear Mtn.)	Bear Mtn.	0	0	0	0	0
		115969	110745	90386	81829	74354

Table 3: Fire Safety Circuit Matrix Key

Wildfire Risk Groups	
High	≥3,000
Moderate	1201 to 2999
Low	≤1200

Tables 2 and 3, above, provide an estimation of the degree to which 2023 mitigation initiatives reduced wildfire risk at the circuit level. BVES has met its intent to reduce both the number of high-risk circuits and overall wildfire ignition risk.

A. Risk Assessment and Mapping

BVES implemented the Fire Safety Circuit Matrix as a model to assess risk at the circuit level and prioritize initiatives on the BVES sub-transmission and distribution system. This model determines circuit-level risk under current and planned mitigation activities intended to reduce ignition potential. The purpose of the Fire Safety Circuit Matrix is to serve as a



planning tool in determining a circuit-level risk that accounts for the current and planned mitigation activities that intend to reduce ignition potential. The Fire Safety Circuit Matrix is utilized to consider changes to the risk profile as mitigations are executed over time. Outputs (mitigations and controls) from the risk-based decision-making approach are integrated in the Fire Safety Circuit Matrix to establish where and in what sequence the mitigations or controls should be applied to the sub-transmission and distribution systems. BVES updates this model on a semi-annual basis as initiative targets are reviewed and revisited for the following year.

Beginning in 2021, the utility contracted expert services, first REAX engineering, then Technosylva and DIREXYION to enhance current risk maps and expand its capability to model, better predict fire conditions and behaviours and make appropriate mitigation decisions. The REAX model aimed to address four separate subtasks of the Risk Mapping Program: (1) ignition probability mapping showing the probability of ignition along overhead electric lines and equipment; (2) match drop simulations showing the potential wildfire consequence of ignitions that occur along electric lines and equipment under current (2021) conditions; (3) match drop simulations showing the potential wildfire consequence of ignitions that occur along the electric lines and equipment under future (2050) conditions; and (4) summarized risk maps showing overall ignition probability and estimated wildfire risk under current and future conditions. BVES's modeling package accounts for ignition risk probability and wildfire consequence (both area burned, and structures impacted) through climate-driven factors. The visuals present a guide, which influences future planning targeting areas of greatest risk.

In June of 2022, BVES contracted with Technosylva, an expert wildfire risk modeling consultant firm, to further advance the Risk Mapping Program and enhance situational awareness. This effort leveraged Technosylva's Wildfire Analyst Enterprise (WFA-E) software capabilities and solutions implemented across California for other electric utility companies. Engaging with Technosylva provided BVES software applications and analysis to generate the following:

- Through use of WFA-E FireSim, provision of on-demand, real time wildfire behaviour modelling, predictive spread conditions, and derivation of potential impacts analysis.



- Ability to conduct simulations on-demand, to reflect changing conditions or local data observations, including proactive “what if” scenarios.
- Weather and wildfire risk forecasting for customer assets and the service territory using daily weather prediction integration to support PSPS activation calls and response operations.
- Asset risk analysis using historical weather climatology to support WMP development and mitigation planning.

In 2023, BVES utilized Technosylva’s FireSight (previously named WRRM) which uses historical climatology (weather & fuel moisture data) as key input weather scenarios (~ 30 year and 2 km hourly re-analysis data). The model produces risk metrics by running fire spread simulations for each weather scenario territory wide. The outputs can be aggregated based on percentile and assigned to assets. The model uses historical or predicted fuels data (2030 etc.) and utilizes hundreds of millions of fire spread simulations across customer service territory. The outputs are used to support mitigation planning in addition to setting context for daily FireSight asset risk forecasts.

BVES’s intends to transition from using the Fire Matrix to use the FireSight to prioritize its WMP initiatives in 2024. BVES completed the first runs of FireSight in February 2023. This serves as a baseline (no mitigation efforts included) intended to provide BVES with metrics to compare future mitigation efforts. In November 2023, the second run of FireSight was completed. The second run provided BVES with the current state of its service territory, as all mitigation efforts were included in the run.

BVES believes that replacing the Fire Safety Circuit Matrix with the FireSight will provide a probabilistic model and the level of granularity will eventually shift from the circuit level to the segment or span level. The model will provide calculated probability, consequence, and risk.

In late 2023, Technosylva delivered the Fire Potential Index (FPI) model developed specifically for the BVES service area that quantifies the fire activity potential over the territory based on different parameters including fuels, terrain, and weather. In 2024, BVES has begun using the FPI model on a daily basis to assist BVES in making operation decisions regarding the sub-transmission and distribution system.



B. Situational Awareness and Forecasting

Since 2019, BVES operates 20 weather stations, which it continuously monitors. The weather stations record weather data in a historian and the outputs are utilized by BVES's weather consultant, Technosylva's models, and are available to open-source forecasting (NOAA). In 2023, BVES developed a maintenance plan in which two (2) to three (3) weather stations per month will undergo maintenance and calibration based on the manufacturers' recommendations. This allows for timely maintenance and maximizes the number of in operation weather stations producing accurate data.

As discussed above, during this period, BVES implemented Technosylva's Fire Potential Index (FPI) model that was developed specifically for BVES service territory. This capability has enhanced BVES's ability to evaluate the potential for invoking Public Safety Power Shutoffs (PSPS).

In 2023, BVES also initiated a pilot with GreenGrid iSIU. The pilot involved the installation of camera units (also referred to as nodes) that continuously monitor the line, pole, and associated assets. The iSIU system provides automated monitoring of assets' physical conditions as well as ignition monitoring. The system consists of units that contain optical sensors, communication modules, processors, and power supply. These nodes allow for autonomous monitoring of the power line infrastructure and can advise the remote maintenance, inspections, or operator crews on equipment status and potential hazardous events. The program hopes to increase real time data as well as reduce operational costs, and human and environmental risk.

C. Grid Design and System Hardening

Bear Valley achieved a significant amount of system hardening to mitigate ignitions, reduce consequence of wildfires, and minimize PSPS event impacts during the 2023 WMP period. By the end of 2023, BVES achievements included the following:

- Exceeded the annual target to harden 500 poles along the main evacuation routes to the Big Bear Lake area by installing fire-resistant wire mesh on 909 poles.
- Exceeded the annual target to replace 200 poles by replacing 309 poles.



- Replaced 20.7 circuit miles of bare wire with covered conductor exceeding annual target of 12.9 circuit miles.
- Installed 35 Fault Indicators (FIs) exceeding the yearly target by 5 Fault Indicators
- Connected 3 Substations, 13 Field Switches, and 6 Capacitor Banks to SCADA as part of the System Automation initiatives.
- Remediated 114 tree attachments, exceeding its annual target of 100 for the year.
- Assessed a total of 349 poles and replaced or remediated 309 poles.
- Intrusively inspected 850 poles. Identified 15 poles failing inspection, which were remediated.
- Conducted 144 substation inspections.

Bear Valley's plan to replace the Radford Line, a bare wire sub-transmission line that operates at 34.5 kV with a capacity of 8 MW and consists of 80 wood poles, with high-performance covered conductor and fire resistant (ductile iron) poles because it is located in the HFTD 3 (extreme fire risk), was not completed during this WMP cycle as originally planned due to the US Forest Service (USFS) delay in the permit approval process. BVES received the permit for the Radford Line Replacement Project on January 3, 2024. BVES plans to complete all construction on the Radford Line Replacement Project by the end of 2024.

D. Asset Management and Inspections

During 2023, Bear Valley continued to conduct several advanced technology inspection techniques beyond those required by GO-165 inspection compliance requirements (*i.e.*, Detailed Inspections, Patrol Inspections, and Intrusive Pole Inspections). These techniques are listed below:

- Annual LiDAR surveys of all overhead circuits in its service area.
- Annual UAV HD photography and videography of all overhead circuits in its service area.
- Annual UAV thermography of all overhead circuits in its service area.
- Annual independent third-party patrol inspection of all overhead circuits in its service area.



Bear Valley also initiated a formal asset management quality assurance and quality control program aimed at grid hardening work as well as asset inspections. Additionally, BVES significantly upgraded its asset management enterprise system in terms of capability, geospatial data, and staff training on employing the system to enhance asset management activities.

E. Vegetation Management and Inspections

During the 2023 WMP cycle, Bear Valley focused on executing its enhanced vegetation management program, removing hazard-threat trees, continuing to use advanced technology inspection techniques beyond those required by GO-165 inspection compliance requirements (Detailed Inspections and Patrol Inspections). The following are some highlights of vegetation management achievements:

- Annual LiDAR surveys of all overhead circuits in its service area.
- Annual UAV HD photography and videography of all overhead circuits in its service area.
- Annual independent third-party patrol inspection of all overhead circuits in its service area.
- Certified arborist conducted 100% of QC checks.
- Removed 168 hazard-threat trees.
- Trimmed 3,897 trees to enhanced vegetation management specifications.
- Performed 131 vegetation management quality checks.
- Performed 5 vegetation management audits.

In 2022, vegetation density within a 24-foot corridor along all overhead (“OH”) lines was 20.2 percent as measured by LiDAR surveys. In 2023, the vegetation density was 15.4 percent, indicating that the overall density of vegetation along BVES’s lines have been reduced by 4.8 percentage points.

Bear Valley also improved its formal quality assurance and quality control program aimed at vegetation management work as well as vegetation management inspections. Additionally, BVES significantly upgraded its vegetation management enterprise system in both terms of



capability, geospatial data, and staff training on employing the system to enhance asset management activities.

In 2023, BVES also implemented AiDash software. AiDash software uses satellite imaging providing a rapid assessment of BVES's service territory and insight into whether vegetation should be assessed or moved up in priority for upcoming patrol, detailed, or third-party ground inspections. The AiDash assessment allows BVES to gain a comprehensive understanding of its service territory at a glance. AiDash also provides a complementary review of BVES's vegetation management program. BVES acknowledged the trend in wildfire mitigation towards validation and confirmation of planning associated with Vegetation and Asset based work. AiDash allows BVES to confirm that its planning efforts for vegetation management are not based upon merely institutional knowledge, but rather validated by objective satellite imagery and AI-based future state modeling and projections.

F. Grid Operations and Operating Protocols

In 2022, BVES developed and implemented operational changes to be implemented during periods of high fire threat weather conditions to reduce the risk of ignitions. The operational changes are escalatory, with the invoking of a PSPS as the action of last resort. BVES determined that during high fire threat weather, it is prudent and efficient for BVES to suspend work, by BVES staff or its contractors that might produce sparks or create fire hazards. Due to BVES's small size, BVES and its contractors are able to pivot to other low risk work during such conditions. Bear Valley refined its protocols for re-energization following a PSPS event to restore service in a safe and rapid manner. Staff are trained on these protocols and exercises were conducted as part of functional and table-top exercises for PSPS events. BVES also determined the area's most likely to experience a PSPS event during high threat fire weather conditions. BVES then developed the ability to isolate these areas from its system such that only customers in these high-risk areas would be impacted by a PSPS event.

In 2023, BVES received and began use of a Fire Potential Index (FPI) model developed by Technosylva specifically for the BVES service area that quantifies the fire activity potential over the territory based on different parameters including fuels, terrain, and weather. The model outputs a value that is then associated with a category. This category is then used with



an operational action table which provides operational action items that the BVES management team will then put into effect for the affected area. The FPI model and its outputs provide BVES with a more detailed action plan as it relates to PSPS decisions and supports BVES existing PSPS Plan items.

G. Resource Allocation Methodology

As previously discussed, BVES conducts its overall risk-based decision making in accordance with CPUC Decision D.19-04-020 of May 6, 2019, which provides the framework that the Small and Multi-jurisdictional Utilities (SMJUs) are required to follow. Using this framework BVES calculated Risk Spend Efficiencies (RSEs) and utilized the RSEs in the initiative selection process. BVES was able to successfully allocate sufficient resources to achieve WMP initiatives. No WMP initiatives during this period were not achieved because of inadequate resourcing.

H. Emergency Planning and Preparedness

BVES conducted PSPS table-top and functional exercises with excellent stakeholder participation. Also, BVES took numerous steps to ensure its workforce is well positioned to conduct restoration efforts. BVES continued routine briefings for the public and local government, agencies, and other key stakeholders (utilities, communications companies, etc.) to better coordinate emergency planning and preparedness. BVES also continued the use of a survey program to assess the effectiveness of its outreach programs so that it may improve its messaging, as well as the special customer service and assistance procedures to assist customers during any wildfire recovery.

I. Stakeholder Cooperation and Community Engagement

BVES continues to follow its comprehensive community outreach program and made significant efforts to identify and engage key community stakeholders. BVES continued to make significant progress in identifying Access and Functional Needs (AFN) customers and developed and implemented a plan to better service customers in the event of a PSPS. Additionally, BVES continued to use its developed process for identifying AFN customers during new customer sign up and periodically throughout the year because the AFN population is not a static figure. BVES identified all key stakeholders including those that



own and operate critical infrastructure and developed primary, secondary, and tertiary points of contact.

BVES's Stakeholder Portal on its website allows BVES to communicate efficiently with stakeholders during PSPS events. BVES engaged with other utilities outside California on best practices and cooperation on wildfire mitigation and PSPS issues. This has been done primarily through participation at several major transmission and distribution (T&D) conferences. Additionally, BVES provided other utilities outside of California information on wildfire mitigation initiatives upon request. BVES has been coordinating with various stakeholders for years including BBFD, CAL FIRE, the USFS, county fire authorities, mutual aid organizations and more. BVES implemented an initiative that provides BBFD, Sheriff, and CHP the iRestore App, which enables first responders to report directly into BVES's dispatch using their mobile devices (phone) with a picture of the situation and the geo-coordinates for the location. By reporting this way, BVES will have the phone number of the first responder making the report and BVES dispatch will be able to discuss the issue further with the first responder.

II. Change Order and Operation Change Review

1.b) A full and complete listing of all change orders and any other operational changes, such as initiative location changes, made to WMP initiatives, with an explanation of why the changes were necessary, and an assessment of whether the changes achieved the same risk reduction intent;

BVES did not have a need to issue any change orders in the form of formal advice or notification letters and has not implemented any other operational changes to its WMP initiatives in 2023. BVES provided all initiative updates and new or discontinued programs as part of its 2025 WMP Update. The changes provided in the 2025 WMP Update and the associated Redlines to the 2023-2025 Base WMP highlight efforts made by BVES to bolster existing programs and provide updates on programs that were not yet implemented for the initial WMP submission.



III. WMP Initiative Spend Review

1.c) Descriptions of all planned WMP initiative spend vs actual WMP initiative spend and an explanation of any differentials between the planned and actual spends;

The descriptions of all planned WMP initiative spend vs actual WMP initiative spend along with an explanation of any differentials² between the planned and actual spends is detailed in Attachment A of this report.

IV. Initiative Impact on PSPS Thresholds

1.d) A description of whether the implementation of WMP initiatives changed the threshold(s) for triggering a PSPS event and/or reduced the frequency, scale, scope and duration of PSPS events;

The triggering threshold for a PSPS event in the BVES PSPS Plan has not changed based upon the implementation of WMP initiatives. In the future, BVES anticipates continued refinement and re-designation of high-risk areas to lower risk designations after significant implementation of WMP activities. As can be seen in the snapshot of the Fire Safety Circuit Matrix in Table 2, BVES continues to lower the risk level of some circuits through its wildfire mitigation efforts. As more of this becomes apparent, and by incorporating daily FPI outputs as well as longer-term planning data from the WFA-E and FireSight models, BVES will re-evaluate its PSPS trigger threshold to determine if any changes are appropriate. Specifically, the FPI (discussed above) is being used daily as an operation tool related to wildfire potential and PSPS. This tool provides more granularity than previously available on the operational decision associated with elevated fire and PSPS risk. This tool will assist BVES in its future evaluation of PSPS thresholds.

BVES has not experienced a utility-caused wildfire or a PSPS event, nor has it had to facilitate an evacuation. Currently, the highest probability for triggering a PSPS event within the BVES service territory is the loss of Southern California Edison (SCE) energy imports to the BVES service area due to a SCE-directed PSPS of the SCE supply lines. BVES imports from SCE are subject to PSPS activation initiated by SCE. SCE may activate a proactive de-

² BVES only lists the discrepancies if the difference between the actual and planned spend is greater than 20 percent (in either direction) in accordance with the accounting style of the Risk Spending Accountability Reports to the CPUC.



energization of these lines even if conditions on these circuits within the BVES service area do not meet BVES PSPS thresholds. The designation of SCE supply lines into the BVES service territory is illustrated in Figure 1.

To address the possibility of SCE-directed PSPS events, BVES proposes to construct an energy storage project of approximately 5 MW/20 MWh (four-hour) lithium-ion utility-grade battery serving the BVES service area. In conjunction with the existing Bear Valley Power Plant, BVES would be able to initially meet its energy demands during a potential supply drop from SCE. BVES will continue with project planning and evaluation of an energy storage facility within the BVES service territory, though, this project timeline has been extended due to siting delays.

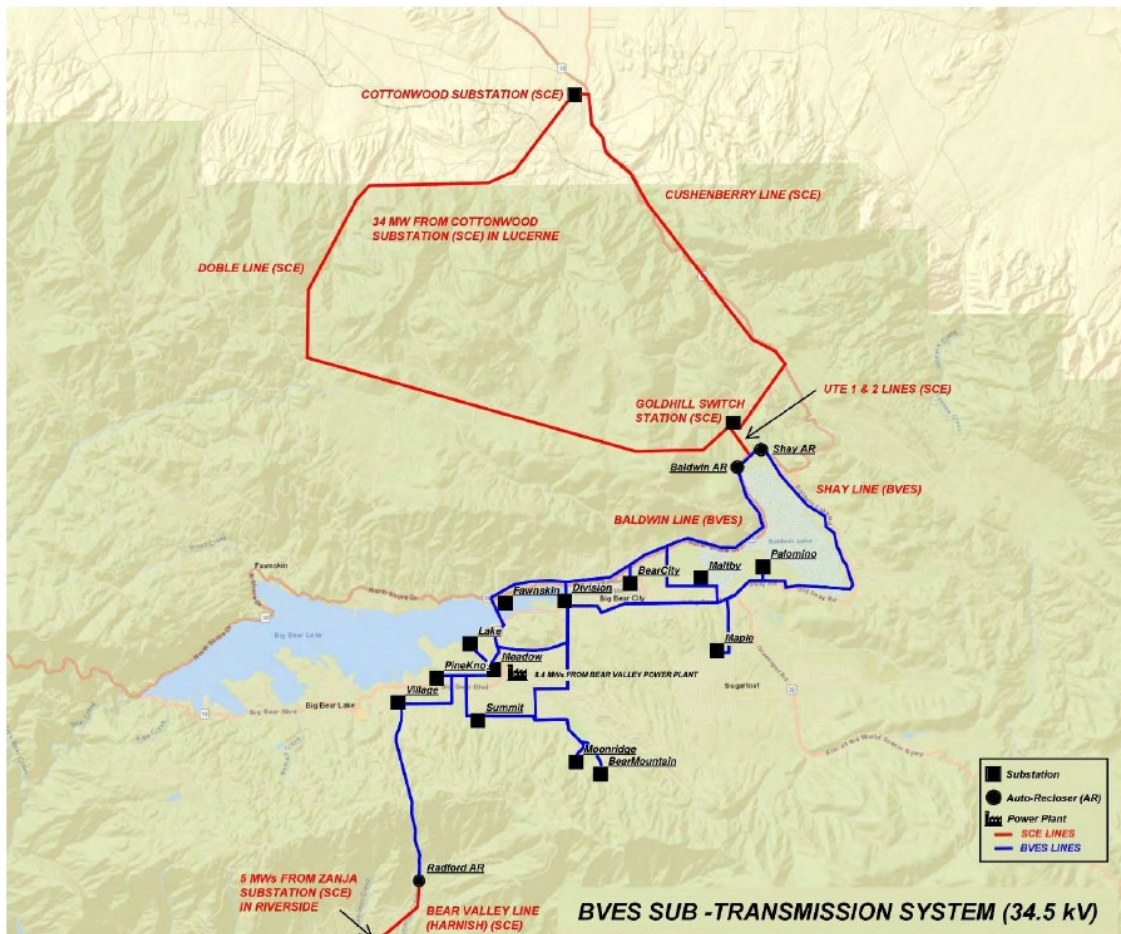


Figure 1: BVES Supply Lines, Sources of Power and Sub-Transmission System

Although BVES has never implemented a PSPS, BVES is committed to reducing the scope, frequency, and duration of PSPS events and will only implement PSPS as a measure of last resort when the safety risk of imminent fire danger is greater than the impact of de-



energization. The high-risk areas and customers that may become affected by a PSPS event are presented in Attachment B.

Currently, BVES does not estimate the reduced frequency, scale, scope, and duration of PSPS events as a result of implementation of wildfire mitigation programs because no such PSPS triggering conditions have been met. However, by their very nature, wildfire mitigation programs such as grid design and system hardening, and situational awareness and forecasting reduce the frequency, scale, scope, and duration of PSPS events by reducing the probability of utility-involved ignitions and reducing the potential impact of wildfires on the BVES system. Additionally, BVES is working to automate its network with increased remote monitoring and operating capabilities which will allow BVES to quickly enact a PSPS in a manner that is limited in scope and duration necessary to mitigate the threat to a particular circuit or set of circuits in extreme risk situations.

As BVES continues to reduce ignition risk through the deployment of wildfire mitigation programs, BVES anticipates the likelihood to use its PSPS to become even more remote, but BVES will continue to evaluate the risk and necessity for its use. BVES notes the sufficient progress made on the eastern side of its territory in hardening efforts, which may lead to a threshold increase for PSPS triggers. This means that wind gusts and/or speed triggers may rise to activate a PSPS, particularly for the Erwin circuit on the eastern side, as the risks become lowered through mitigation measures such as covered conductor hardening, the completed fuse replacement project, and pole reinforcements.

V. OEIS Defect Review

1.e) A summary of all defects identified by the WSD within the annual compliance period, the corrective actions taken and the completion and/or estimated completion date.

BVES received the following Notice of Violation (NOV) and Notice of Defect (NOD) issued by Energy Safety in 2023. Formal written notice for the NOV and NODs was not received until 2024 which is why some of the items were not addressed in the 2023 compliance period.



Table 4: BVES Notice of Violation and Notice of Defect

Record ID	Date Of Inspection	Date Notice Received	Wildfire Safety Concern Description	Utility Corrective Action	Completion Date	Status
BVES_CAC12_20231025_0837_20	N/A	2/27/2024	Vegetation touching guy wire above insulator	Trims were completed on 2/29/2024.	2/29/2024	Complete
BVES_CAC14_20231024_0818	10/24/2023	3/15/2024	Poplar under lines growing up about 5 ft from lines	This violation was corrected on 11/17/2023 as part of BVES's routine vegetation management program. The tree was trimmed to approximately 12 feet from the primary conductors.	11/17/2023	Complete
BVES_CAC14_20231024_1020_1	N/A	2/27/2024	2 Pine trees touching conductor. Vegetation within radial clearance	Vegetation was trimmed on 11/21/2023, additionally, vegetation was reinspected on 2/28/2024.	2/28/2024	Complete
BVES_CAC14_20231025_1009_7	N/A	2/27/2024	Danger tree within striking distance. Pine tree with dead top	Tree top was removed on 3/8/2024.	3/8/2024	Complete
BVES_CAC14_20231025_1111_1	N/A	2/27/2024	Maple tree is contacting guy wire above insulator and out of compliance	Tree trim was completed on 12/20/2023. Location was reinspected on 2/28/2024	12/20/2023	Complete
BVES_CAC15_20231025_1031	10/25/2023	3/15/2024	Clearance	BVES was made aware of the violation on March 15, 2024. Vegetation crews made corrective trims to approximately 12 feet around the lines on March 21, 2024.	3/21/2024	Complete
BVES_CAC15_20231025_1031_1	N/A	2/27/2024	Pine trunk in contact with covered conductor	Lines were relocated to give proper clearance from the tree on 11/6/2023.	11/6/2023	Complete
BVES_CAC15_20231026_1009	10/26/2023	3/15/2024	Clearance	BVES was made aware of the violation by a phone call on October 26, 2023. Vegetation crews made corrective trims around the lines near the pole on October 26, 2023. Additionally, when this notice was	10/26/2023	Complete



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Record ID	Date Of Inspection	Date Notice Received	Wildfire Safety Concern Description	Utility Corrective Action	Completion Date	Status
				sent to BVES on March 15, 2024, the lines were re-inspected on for any additional growth.		
BVES_CAC15_20231026_1009_11	N/A	2/27/2024	Vegetation in contact with covered conductor	Vegetation work was completed on 10/26/2023. Inspector called BVES about infraction. Work was completed on the same day.	10/26/2023	Complete
BVES_CAC15_20231101_1008	11/1/2023	3/15/2024	Clearance from Crossarm	BVES was made aware of the violation on March 15, 2024. Vegetation crews made corrective trims to approximately 10 feet from the conductors on March 21, 2024.	3/21/2024	Complete
BVES_CAC15_20231101_1008_4	N/A	2/27/2024	Vegetation contacting down guy wire above insulator	Trims were completed on 11/3/2023, additionally, the location was reinspected on 2/28/2024	11/3/2023	Complete



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Table 5 below provides discussions of the areas for continued improvement communicated to BVES as part of the Final Action Statement with progress updates, plans for fully remediating the issues, and alternative timelines, as applicable. A full report and update will be communicated in BVES's next 2025 WMP Update filing and associated Redline submission set to be filed on April 2, 2024.



Table 5: Progress Report Areas for Continued Improvement

Issue #	Title	Description	Required Progress	Status
BVES-23-01	Target Verification Methods	BVES lists “quantitative” as its targets’ verification method. It is not clear from this response what BVES methodology is to verify progress toward and achievement of the target.	In its 2026-2028 Base Wildfire Mitigation Plan (WMP), BVES must include all methods used to verify progress of year-to-year targets within the table. BVES must clearly articulate its verification methods that are effective for supporting the progress and achievement of each target.	BVES, as required by the November 6, 2023, Revision Notice, will include all of the methods used to verify the progress and achievement of year-to-year targets, and increase articulation of the effectiveness of those methods, in its 2026 – 2028 Base WMP.
BVES- 23-02	PSPS and Wildfire Risk Trade-Off Transparency	BVES does not provide adequate transparency regarding PSPS and wildfire risk trade-offs, or how it uses risk ranking and risk buy-down to determine risk mitigation selection.	In its 2025 Update, BVES must describe: - How it prioritizes PSPS risk in its risk-based decisions, including trade-offs between wildfire risk and PSPS risk. - How the rank order of its planned mitigation initiatives compares to the rank order of mitigation initiatives ranked by risk buy-down estimate, along with an explanation for any instances where the order differs.	BVES includes additional descriptions of how it assesses the tradeoff between wildfire risks and PSPS, including how it uses risk ranking and risk buy-down to determine risk mitigation initiative selection in Sections 6 and 7.
BVES- 23-03	Cross-Utility Collaboration on Best Practices for Inclusion of Climate Change Forecasts in Consequence Modeling, Inclusion of Community Vulnerability in Consequence Modeling, and Utility Vegetation Management for Wildfire Safety	BVES and the other IOUs have participated in past Energy Safety-sponsored scoping meetings on these topics but have not reported other collaboration efforts.	BVES and the other IOUs must participate in all Energy Safety-organized activities related to best practices for: - Inclusion of climate change forecasts in consequence modeling. - Inclusion of community vulnerability in consequence modeling. - Utility vegetation management for wildfire safety. BVES must collaborate with the other IOUs on developing the above-mentioned best practices. In their 2025 Updates, the IOUs (not including independent transmission operators) must provide a status update on any collaboration with each other that has taken place, including a list of any resulting changes made to their WMPs since the 2023-2025 WMP submission.	BVES has recently joined bi-monthly WMP Joint IOU meetings and attends the CalFire Wildfire Mitigation Advisory Committee meetings, covering a range of topics including Climate Change Forecasts in Consequence Modeling, Inclusion of Community Vulnerability in Consequence Modeling, and Utility Vegetation Management for Wildfire Safety. BVES participation and collaboration with adjacent IOUS’s is represented in table 8-63 in the WMP. Additionally, the aforementioned subjects are covered within the Risk Modeling working group agenda. BVES has been an active participant in all Energy Safety-led risk modeling workshops since inception and is committed to future involvement all Energy Safety-led risk modeling working group meetings. BVES has attended other Energy Safety-led workshops pertaining to these topics and will continue to attend any future workshops.



Issue #	Title	Description	Required Progress	Status
BVES- 23-04	Cross-Utility Collaboration on Risk Model Development	BVES and the other IOUs have participated in past Energy Safety-led risk modeling working group meetings. The risk modeling working group meetings facilitate collaboration among the IOUs on complex technical issues related to risk modeling. The risk modeling working group meetings are ongoing.	BVES and the other IOUs must continue to participate in all Energy Safety-led risk modeling working group meetings.	As discussed in Section 6, BVES has participated in every Energy Safety-led risk modeling workshop since the workshop began. BVES will continue to participate in all Energy Safety-led risk modeling working group meetings. BVES participation in risk-modeling workshops is captured in tables 8-63 and 11-2 of the WMP.
BVES- 23-05	Collaboration Between Vendor and Utility Risk Teams	BVES has not shown how its internal team and risk model vendor will share risk modeling duties.	<p>In its 2025 WMP update, BVES must:</p> <ul style="list-style-type: none"> - Demonstrate how BVES differentiates between activities completed by the internal staff and vendor staff throughout risk modeling narratives. This includes processes, procedures, methodologies, flow charts, schematics, and any explanations that describe collaboration with a risk modeling vendor. - Demonstrate how BVES identifies activities that require vendor discretion and state whether final approval from the BVES risk team is required. This includes any decisions that need to be made, such as mitigation selection. - Indicate the source of the data where a description of data is required, specifically indicating whether the data is internally generated, or vendor generated. If BVES cannot indicate the source of the data, it must explain why. 	<p>In pursuit of grid modeling efforts, BVES provides the required grid information, while Technosylva and DIREXYON provide the risk modeling information. The details of this collaboration are discussed in Section 6.</p> <p>BVES has written Quality Assurance (QA) and Quality Control (QC) procedures for reviewing risk modeling protocols. BVES utilizes these models to determine if requirements for initiating Public Safety Power Shutoff (PSPS) events are met, wildfire preventative procedures, and grid hardening initiatives. All decisions regarding actions flowing from the utilization of these models are performed by BVES personnel.</p> <p>Technosylva co-published a paper with Cal Fire in the International Journal of Wildland Fire where they assess the performance of fire spread models for initial attack incidents used in California throughout the analysis of the rate of spread (ROS) of 1853 wildfires. Technosylva retrieved observed growth from the FireGuard (FG) Database, ran an automatic simulation with Wildfire Analyst Enterprise and assessed the accuracy of the simulation by comparing observed and predicted ROS with well-known error and bias metrics, analyzing the main factors influencing accuracy. It was deemed that the model errors and biases were</p>



Issue #	Title	Description	Required Progress	Status
				reasonable for simulations performed automatically. It was concluded that the fire spread model's performance for California is in line with studies developed in other regions and the models are accurate enough to be used in real time to assess initial attack fires.
BVES- 23-06	Vendor Fire Risk Model Implementation Milestones and Dates	BVES's operational and planning models may experience many changes once the vendor model implementation is complete. Energy Safety needs more information regarding improvements BVES expects in its operational and planning models along with expected milestones and dates to ensure BVES is being transparent about the state of its model maturity.	In its 2025 Update, BVES must describe how it will use the new vendor risk modeling software to improve operational and/or planning risk analysis and provide a plan with milestones and dates for achieving those improvements.	BVES describes the modifications to existing models as well as new models developed and implemented in 2023 or 2024 in detail in Sections 6.2.2, 7.1.3, and 7.1.4. This includes changes to vendor risk modeling software to improve operational or planning risk analyses made or implemented since last year's 2023-2025 WMP Updates. The Technosylva FireSight (previously named Wildfire Risk Reduction Model (WRRM)) model was implemented in February 2023 and was initially used to create a baseline showing the state of BVES's service territory with no WMP grid hardening initiatives. FireSight was then run taking into account WMP grid hardening initiatives in November 2023. These updated maps for Sub Transmission and Distribution are an additional tool used in the prioritization of grid hardening efforts. The updated graphics as outputted by the model can be found in Section 7.1.1 Figures 7-2 through 7-5.
BVES- 23-07	Risk Informed Prioritization of Grid Hardening Installation	BVES's current covered conductor scope does not demonstrate proper decision-making considerations regarding project prioritization.	In its 2026-2028 Base WMP, BVES must: - Explain how it is focusing its covered conductor and other grid hardening projects in the areas of highest risk based on the most recent and available WRRM output. - Adjust its targets as needed based on its analysis.	BVES decisions of where to add covered conductor have always been based on risk reduction as all of BVES's service territory is designated as at least elevated risk by the CPUC HFTD maps. This is described in the 2023-2025 WMP. In this year's 2025 Update, BVES includes additional detail in Section 8.1 and where targets are adjusted based on analysis. BVES will also address this in the 2026 – 2028 Base WMP. BVES is currently using the Technosylva FireSight model, which integrates equipment failure and ignition



Issue #	Title	Description	Required Progress	Status
				probability data for assets with individual fire spread predictions to determine which assets are most likely to fail and cause an ignition, to determine where to install covered conductors.
BVES- 23-08	Covered Conductor Mitigation Selection	BVES’s current covered conductor scope does not demonstrate proper decision-making considerations regarding mitigation selection.	In its 2026-2028 Base WMP, BVES must: - Demonstrate how it compares alternative initiatives, mitigations, and combinations of mitigations to covered conductor, and provide the analyses used for such comparisons. - Adjust its targets as needed based on its analysis.	BVES decisions of where to add covered conductor have always been based on risk reduction as all of BVES’s service territory is designated as at least elevated risk by the CPUC HFTD maps. This is described in the 2023-2025 WMP. In this year’s 2025 Update, BVES includes additional detail in Section 8.1 and where targets are adjusted based on analysis. BVES will also address this in the 2026 – 2028 Base WMP. BVES is currently using the Technosylva FireSight model, which integrates equipment failure and ignition probability data for assets with individual fire spread predictions to determine which assets are most likely to fail and cause an ignition, to determine where to install covered conductors.
BVES- 23-09	Radford Line Project	BVES’s covered conductor replacement for the Radford Line has been delayed continuously since 2019.	In its 2025 Update, BVES must provide a status update on the completion of the Radford line project, including how it plans to expedite construction after receiving a permit from the USFS and provide a threshold date by which time the lack of a permit would delay completion of the project past 2023. If the permit from USFS continues to delay the project, BVES must provide an update on how it has been working with the USFS to expedite completion of the permit, including a description of all interactions BVES has had with USFS regarding permit issuance. Additionally, BVES must provide plans on how it will reduce impacts and delays for any similar hardening projects moving forward.	BVES obtained a “Letter to Proceed” from the United States Forest Service (USFS) on January 3, 2024. BVES anticipates commencing the project in May 2024, depending on the snowpack, and aims to complete the project by the end of 2024. BVES maintains a good working relationship with the USFS and expects shorter permitting processes in the future. Justification for the delay is reported in Section 7.1.3 of the WMP.



Issue #	Title	Description	Required Progress	Status
BVES- 23-10	Grid Hardening Pilots	BVES’s 2023-2025 WMP lacks discussion of exploration, piloting, and monitoring of new technologies, such as DFA, EFD, and REFCL.	<p>In its 2025 Update, BVES must:</p> <ul style="list-style-type: none"> - Explain BVES’s specific process for monitoring pilot programs being performed by IOUs, including BVES’s plan and criteria on how and when to decide which technologies to select. This should include dates of meetings held in which BVES conferred with IOUs on piloted technologies, including specifics on which technologies were discussed. - Provide an update on BVES’s assessments of technologies being explored by IOUs, including specifics on DFA, EFD, and REFCL. This should detail why and how BVES is moving forward with any such technologies. Details should include analysis of feasibility and barriers for implementation, and risk mitigation benefits. 	<p>In the WMP Joint IOU Covered Conductor (CC) workshops, BVES has participated in discussions on new technologies such as Distribution Fault Anticipation (DFA), Early Fault Detection (EFD), and Rapid Earth Fault Current Limiters (REFCL). It was determined that REFCL applies to a grounded system only, and BVES 34KV sub-transmission is a delta system. Therefore, REFCL is not compatible with the BVES grid system.</p> <p>In Mid-2022 BVES initiated a pilot program to install an Online Diagnostic System, which uses continuous monitor sensors to provide usable grid insight information that is measured, reported, and documented on one of its circuits. BVES Online Diagnostic System is similar to DFA and EFD. In 2023, BVES installed the Online Diagnostic System onto two (2) circuits and in 2024 BVES plans to install the system on an additional circuit. The system is designed to pinpoint irregularities, which may be due to degrading/imminent hardware failures, as well as identify objects such as vegetation contacting the lines. This will assist BVES in rapidly inspecting potential problems before they develop into an ignition source and is described in Section 8.1.</p> <p>In late 2023, BVES conducted a second pilot program to install cameras on poles that continuously monitor the pole and associated lines in partnership with Green Grid Inc. BVES installed cameras on two (2) different circuits. This program is described in Section 8.3.3.1. As WMP Joint IOU Covered Conductor (CC) workshops continues in 2024, BVES will be part of the discussion with other IOUs on other new technologies that may be suitable to BVES system.</p>



Issue #	Title	Description	Required Progress	Status
BVES- 23-11	Covered Conductor Inspections and Maintenance	BVES does not incorporate checks in its inspection programs that address failures specific to covered conductor. BVES must tailor its inspection practices to address failure modes specifically related to covered conductor.	In its 2025 Update, BVES must discuss how failure modes unique to covered conductor will be accounted for in its inspections, including water intrusion, splice covers, and surface damage. If BVES determines any or all the above changes are unnecessary, then it must discuss how its current inspection and maintenance processes address covered conductor failure modes.	<p>BVES has not had any covered conductor failures in the system. As part of WMP Joint IOU Covered Conductor (CC) workshops Southern California Edison (SCE), Pacific Gas & Electric (PG&E) and San Diego Gas & Electric (SDG&E) performed testing of CC, to better understand the advantages, operative failure mode, and current state of knowledge regarding CC. Testing scenarios were conducted that included various contact-from-object, wire down, system strength, flammability, water ingress, environmental, service life, UV exposure, degradation, and mechanical strength tests. The testing results are provided in the 2023-2025 WMP Joint IOU Covered Conductor Working Group Report.</p> <p>BVES continues to follow all GO 165 requirements for patrol and detailed inspections. Additionally, BVES exceeds the minimum requirements by including other inspection: 3rd party ground patrol, Unmanned Aerial Vehicles (UAV) Thermography, UAV HD Photography/Videography and LiDAR inspection. For additional details, please refer to section 8.1.3 Asset Inspections of BVES 2023-2025 WMP.</p> <p>As WMP Joint IOU Covered Conductor (CC) workshops continues in 2024, BVES will be part of the discussion with other IOUs on other IOU best practice on cover conductor inspection and maintenance.</p> <p>BVES has participated in discussions with cable manufacturers on the techniques to handle water intrusion and will develop a strategy for this issue.</p> <p>BVES assesses that the following inspections, which BVES conducts are able to detect covered conductor issues:</p> <ul style="list-style-type: none"> • GO 165 detailed inspections, • GO 165 patrol (BVES Inspector),



Issue #	Title	Description	Required Progress	Status
				<ul style="list-style-type: none"> • UAV thermography, • UAV photography/video, and 3rd party GO 165 patrol (independent contractor).
BVES- 23-12	Distribution Detailed Inspection Frequency	BVES performs the minimum frequency of detailed inspections required by GO 95 and 165.	<p>BVES must strive to adopt a risk-based approach by increasing the frequency of detailed inspections on assets that have the highest risk according to its risk model. In its 2025 Update, BVES must either:</p> <ul style="list-style-type: none"> - Outline a plan to update its detailed inspections in higher risk areas, including: <ul style="list-style-type: none"> o An analysis for determining the updated frequency for performing detailed inspections. o A description of how it prioritized higher risk areas based on risk analysis and risk model output, including HFTD Tier 3 lands. o Updates to inspection checklists to account for equipment or configurations that may pose greater wildfire risk. o A plan to obtain any needed workforce for performing more frequent inspections. <p>OR</p> <ul style="list-style-type: none"> o Provide information demonstrating that its existing inspection program adequately addresses risk, including an analysis of the number of Level 1 or critical issues found during detailed inspections. 	<p>BVES assesses its existing detailed inspection program adequately addresses risk in the 2023-2025 WMP cycle. BVES will be revising its detailed inspection program in its next WMP cycle by increasing the frequency of detailed inspections on assets that have the highest risk according to its risk model.</p> <p>BVES currently performs Detailed Inspections which meets GO 165 requirements based on the time since the previous inspection.</p> <p>All circuits in the BVES service area are in the HFTD Tier 2 or Tier 3 area and they all have fundamentally similar wildfire risk profiles. Currently, the highest risk factor is the amount of bare wire remaining for each circuit. All 34Kv bare wire in the BVES territory is expected to be replaced with covered wire by 2026. All higher risk BVES's 4K bare wire is scheduled to be replaced with covered conductor by 2031.</p> <p>As covered wire is installed, the relative risk for each circuit changes significantly. Therefore, risk calculations for circuits change on a yearly basis. For example, the Radford line pre installation of covered conductor has a risk factor of 31,215 and is the highest risk circuit. Post installation of covered conductor on the Radford line will have a risk factor of 522 and will not be in the top 10 of the highest risk circuits.</p> <p>Therefore, as the amount of covered wire installed in the BVES circuits becomes relatively significant, BVES will be revising its detailed inspection program in its next WMP cycle by increasing the frequency of</p>



Issue #	Title	Description	Required Progress	Status
				<p>detailed inspections on assets that have the highest risk according to its risk model.</p> <p>For this WMP cycle, BVES will continue scheduling detailed inspections in accordance with GO 165 requirements.</p> <p>It should be noted that in addition to performing the scheduled detailed inspections per GO 165, BVES conducts the following inspections on every above ground circuit (all above ground assets) each year:</p> <ul style="list-style-type: none"> • GO 165 patrol (BVES Inspector), • LiDAR survey, • UAV thermography, • UAV photography/video, and • 3rd party GO 165 patrol (independent contractor). <p>Analysis of all inspection findings in 2023 (GO 165 detailed inspections, GO 165 patrol (BVES Inspector), LiDAR survey, UAV thermography, UAV photography/video, and 3rd party GO 165 patrol) indicated that:</p> <ul style="list-style-type: none"> • There were no Level 1 findings or critical issues found during detailed inspections performed per GO 165, • The UAV photography inspection uncovered one Level 1 finding, which was immediately remediated, and • No other inspections conducted yielded any other Level 1 findings or critical issues.
BVES- 23-13	Asset Inspection QA/QC Program	BVES has not implemented a QA/QC process for its asset inspections.	In its 2025 Update, BVES must demonstrate progress toward implementing a comprehensive QA/QC process for each of its asset inspections (detailed, patrol, UAV thermography, UAV photography/video, LiDAR, intrusive pole, and substation inspections), including plans and timelines for the following:	<p>Written procedures are available for all types of inspections. They are specific written procedures or procedures written as part of our signed contracts with our vendors. BVES's inspection practices are detailed in Section 8.1.3 of the 2025 WMP Update.</p> <p>BVES has finalized written QA/QC procedures for the</p>



Issue #	Title	Description	Required Progress	Status
			<ul style="list-style-type: none"> - Written procedures for performing each type of inspection. - Standardized inspection forms to be used and completed during each inspection. - A system for timestamping and filing photographs taken during inspections. - Written procedures for performing QA/QC on each type of inspection. <p>In its 2025 Update, BVES must also include the following information regarding its asset inspection QA/QC activities:</p> <ul style="list-style-type: none"> - Inspection sample size. - Verification methods. - Pass rate targets. - Actual pass rates. 	<p>following inspections: Detailed, patrol, UAV thermography, UAV photography/video, LiDAR, intrusive pole, and substation.</p> <p>Standardized inspection forms for each type of inspection are completed during each inspection.</p> <p>Where appropriate, photographs are taken during inspections with timestamping and stored in the iRestore, MyRowKeeper or Milsoft software systems.</p>
BVES- 23-14	Non-Exempt Surge Arrester Replacement	BVES states that it is replacing lightning/surge arresters that are not exempted by CAL FIRE with CAL FIRE-exempt arresters but BVES does not provide targets or procedural updates in its 2023-2025 WMP.	<p>In its 2025 Update, BVES must provide its plan to identify and replace currently installed non-exempt lightning arresters with exempt lightning arresters. The plan should include:</p> <p>The progress made identifying currently installed non-exempt arresters.</p> <ul style="list-style-type: none"> - The number of non-exempt arresters replaced in 2023. - A set target for number of arresters to replace in 2024 and 2025. - The estimated completion date of the project. - Adding associated numeric targets as necessary. 	<p>In 2023, BVES replaced 43 non-exempt lightning/surge arresters with exempt lightning/surge arresters.</p> <p>Beginning in 2024, BVES plans to replace 58 non-exempt lightning/surge arresters per year with exempt lightning/surge arresters. The project aims to replace the remaining 173 non-exempt lightning/surge arresters by the end of 2026.</p>
BVES- 23-15	Reliability Impacts of Fast Trip Settings	BVES has not demonstrated an understanding of the reliability impacts of using fast trip settings.	<p>In its 2025 Update, BVES must provide the following information for 2023 outages that occurred while fast curve settings were enabled in a spreadsheet format:</p> <ul style="list-style-type: none"> - Circuit impacted by outage. - Circuit segment impacted by outage. - Cause of outage (in line with QDR Table 6 drivers). 	<p>BVES operates its devices with fast curve trip settings (fast curve as provided by the manufacture) for all operations all the time. The need for BVES to operate in fast curve trip settings is related to ensuring the reliability of the BVES system due to the Southern California Edison (SCE) power supply lines. If BVES were to adjust its fast curve trip settings to slower trip curve settings and therefore, allow SCE devices to trip</p>



Issue #	Title	Description	Required Progress	Status
			<ul style="list-style-type: none"> - Number of customers impacted. - Number of customers impacted belonging to vulnerable populations (such as customers with access and functional needs and Medical Baseline customers). - Duration of outage. - Response time to outage. - Customer minutes of interruption. 	<p>prior to BVES devices, then when a localized fault in the BVES system occurs, it would cause a loss of supply to the entire service area instead of limiting it to the group of assets associated with the localized fault. Such a scenario would significantly increase the size of outages in the BVES service area for small localized faults.</p> <p>It should be noted to avoid confusion, unlike other utilities that have established “fast trip settings” (or enhanced powerline safety settings), BVES is using the fast curve setting recommended by the device manufacturer. This is different than setting the trip values to a fixed set current value at one tenth of a second. The manufacturer’s fast curve settings are a traditional time-current curve in shape.</p> <p>BVES has captured the following outage information for its system. As noted above BVES’s entire service territory operates with its protective curve settings set to fast curve trip settings.</p> <ul style="list-style-type: none"> - Circuit impacted by outage. - Circuit segment impacted by outage. - Cause of outage (in line with QDR Table 6 drivers). - Number of customers impacted. - Number of customers impacted belonging to vulnerable populations (such as customers with access and functional needs and Medical Baseline customers). - Duration of outage. - Response time to outage. - Customer minutes of interruption. <p>This data has been provided as an attachment to the 2025 WMP Update file submitted to Energy Safety. BVES has held discussions with Pacific Gas and Electric (PG&E) engineering personnel regarding how PG&E operates their fast trip settings and BVES plans</p>



Issue #	Title	Description	Required Progress	Status
				on hiring a consultant in 2024 to perform an overall evaluation of the BVES device setting policy.
BVES- 23-16	Vegetation Management Quality Control Personnel Qualifications	In its response to BVES-22-16, Vegetation Management Quality Control Personnel Qualifications, BVES has not demonstrated that it has considered alternative staffing for its vegetation management quality control checks. BVES has not shown that it has properly identified trained and qualified personnel for its vegetation quality control checks.	In its 2026-2028 Base WMP, BVES must: - Present a plan to improve the utility vegetation management-related qualifications of its QC check personnel. - Explain and provide the decision-making process on its consideration of alternative staffing for its vegetation management QC checks, including consideration of employing or contracting with certified arborists or registered professional foresters to perform these checks.	BVES added additional qualifications for its Vegetation Management Quality Control Personnel as discussed in Section 8.2 of the 2023-2025 Base WMP. BVES management is trained on Vegetation Quality Control inspections, and members of the management team have been conducting these inspections for years. As a result, BVES will continue having management provide Vegetation Management Quality Control checks. In 2023, BVES added the requirement that a certified arborist must conduct 100% QC checks of tree trimming activities in the BVES territory.
BVES- 23-17	Weather Station Maintenance and Calibration	BVES reports having over 20 weather stations in its network that collect weather data. Frequent calibration and maintenance of weather stations is critical for ensuring accurate, reliable, and high-quality data. As BVES performs its annual weather station maintenance and calibration, Energy Safety will need BVES to report on the following to verify the integrity of the data collected from its weather station network.	BVES must: - Continue to maintain and keep a log of all the annual maintenance calibration for each weather station, including the station name, location, and conducted maintenance. The log must include the length of time from initiation of a repair ticket to completion and the corrective maintenance performed to bring the station back into functioning condition. - In its 2025 Update, provide documentation indicating the number of weather stations that received their annual calibration and the number of stations that were unable to undergo annual maintenance and/or calibration due to factors such as remote location, weather conditions, customer refusals, environmental concerns, and safety issues. This documentation must include: o The station name and location. o The reason for the inability to conduct maintenance and/or calibration. o The length of time since the last maintenance	BVES has developed a plan in which two (2) to three (3) weather stations per month will undergo maintenance and calibrations. This plan allows for timely maintenance activities, while maximizing the number of operating weather stations. Sensors will be replaced as specified by the vendor. Records will be maintained that include: - The station name and location. - The reason for the inability to conduct maintenance and/or calibration. - The length of time since the last maintenance and calibration. - The number of attempted but incomplete maintenance or calibration events for these stations in each calendar year. Additionally, all the weather station's data will be reviewed monthly. If a weather station is not operating properly, it will undergo non-scheduled maintenance.



Issue #	Title	Description	Required Progress	Status
			and calibration. o The number of attempted but incomplete maintenance or calibration events for these stations in each calendar year.	
BVES- 23-18	Fire Potential Index Settings	BVES reports that it is developing and implementing a FPI through a third-party vendor by the end of 2023. However, BVES’s 2023-2025 WMP lacks any specific details concerning the development, validation, or implementation of its future FPI.	In its 2025 Update, BVES must: - Specify the inputs and the data sources used to calculate its FPI. - Describe the methodology and threshold values for varying fire potential levels. - Describe how the FPI will be used in its daily operations and how it plans to validate the predictions measuring against actual wildfire events. - Discuss any planned improvements or future updates on its FPI.	BVES received an FPI model developed by Technosylva tailored to the BVES service area in December 2023 and is now utilizing it on a daily basis as of Q1 2024. In Section 6.2.2 and 8.3 of the 2023-2025 Base WMP, BVES includes significant details about the FPI, including: - The inputs and the data sources used to calculate its FPI. - Descriptions of the methodology and threshold values for varying fire potential levels. - Details on how BVES will be using the FPI in its daily operations and how it plans to validate the predictions measuring against actual wildfire events. - Planned improvements or future updates on its FPI.



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ATTACHMENT A:

2023 Forecast and Actual Spend Differentials



Table 6: 2023 ARC Forecast and Actual Spend with Variance Drivers

WMP Initiative Category	Utility Initiative Tracking ID	WMP Initiative Activity	Utility Initiative Name	2023 Forecast CAPEX (\$000)	2023 Forecast OPEX (\$000)	2023 Actuals CAPEX (\$000)	2023 Actuals OPEX (\$000)	CAPEX (\$000) Variance Overrun/ (Underrun)	CAPEX (%) Variance Overrun/ (Underrun)	OPEX (\$000) Variance Overrun/ (Underrun)	OPEX (%) Variance Overrun/ (Underrun)	Variance Drivers (Results +/- 20%)
Community Outreach and Engagement	COE 1	Public outreach and education awareness program	Public outreach and education awareness program	0.00	90.00	0.00	91.294	0.00	0%	1.29	1%	Within 20%
Community Outreach and Engagement	COE 2	Engagement with access and functional needs populations	Engagement with access and functional needs populations	0.00	30.00	0.00	33.321	0.00	0%	3.32	11%	Within 20%
Community Outreach and Engagement	COE 3	Collaboration on local wildfire mitigation planning	Collaboration on local wildfire mitigation planning	0.00	22.63	0.00	22.804	0.00	0%	0.17	1%	Within 20%
Community Outreach and Engagement	COE 4	Best practice sharing with other utilities	Best practice sharing with other utilities	0.00	14.80	0.00	16.562	0.00	0%	1.77	12%	Within 20%
Emergency Preparedness	EP 1	Emergency preparedness plan	Emergency preparedness plan	0.00	4.69	0.00	5.245	0.00	0%	0.56	12%	Within 20%
Emergency Preparedness	EP 2	External collaboration and coordination	External collaboration and coordination	0.00	21.40	0.00	23.08	0.00	0%	1.68	8%	Within 20%
Emergency Preparedness	EP 3	Public emergency communication strategy	Public emergency communication strategy	0.00	4.19	0.00	4.693	0.00	0%	0.50	12%	Within 20%
Emergency Preparedness	EP 4	Preparedness and planning for service restoration	Preparedness and planning for service restoration	0.00	5.67	0.00	6.349	0.00	0%	0.68	12%	Within 20%
Emergency Preparedness	EP 5	Customer support in wildfire and PSPS emergencies	Customer support in wildfire and PSPS emergencies	0.00	3.45	0.00	3.864	0.00	0%	0.41	12%	Within 20%
Grid Design, Operations, and Maintenance	GD 1	Covered Conductor Replacement Project	Covered conductor installation	4785.70	0.00	11630.16	0.00	6844.46	143%	0.00	0%	CAPEX Overrun: CAPEX overrun was due to BVES exceeding annual target. The annual target was purposely



WMP Initiative Category	Utility Initiative Tracking ID	WMP Initiative Activity	Utility Initiative Name	2023 Forecast CAPEX (\$000)	2023 Forecast OPEX (\$000)	2023 Actuals CAPEX (\$000)	2023 Actuals OPEX (\$000)	CAPEX (\$000) Variance Overrun/(Underrun)	CAPEX (%) Variance Overrun/(Underrun)	OPEX (\$000) Variance Overrun/(Underrun)	OPEX (%) Variance Overrun/(Underrun)	Variance Drivers (Results +/- 20%)
												exceeded due to system conditions permitting additional project work.
Grid Design, Operations, and Maintenance	GD 2	Radford Line Replacement Project	Covered conductor installation	4340.24	0.00	117.302	0.00	4222.94	97%	0.00	0%	CAPEX Underrun: Radford project was delayed beyond 2023 due to permit in processing with US Forest Service. BVES obtained permit on January 3, 2024. Project will be completed in 2024.
Grid Design, Operations, and Maintenance	GD 3	Minor Undergrounding Upgrades Projects	Undergrounding of electric lines and/or equipment	200.00	0.00	724.922	0.00	524.92	262%	0.00	0%	CAPEX Overrun: CPAEX Overrun was due to additional undergrounding work being conducted than estimated.
Grid Design, Operations, and Maintenance	GD 4	Covered Conductor Replacement Project	Distribution pole replacements and reinforcements	2051.02	0.00	4984.355	0.00	2933.34	143%	0.00	0%	CAPEX Overrun: CAPEX overrun was due to BVES exceeding annual target. The annual target was purposely exceeded due to system conditions permitting additional project work.



WMP Initiative Category	Utility Initiative Tracking ID	WMP Initiative Activity	Utility Initiative Name	2023 Forecast CAPEX (\$000)	2023 Forecast OPEX (\$000)	2023 Actuals CAPEX (\$000)	2023 Actuals OPEX (\$000)	CAPEX (\$000) Variance Overrun/(Underrun)	CAPEX (%) Variance Overrun/(Underrun)	OPEX (\$000) Variance Overrun/(Underrun)	OPEX (%) Variance Overrun/(Underrun)	Variance Drivers (Results +/- 20%)
Grid Design, Operations, and Maintenance	GD 5	Radford Line Replacement Project	Distribution pole replacements and reinforcements	1860.10	0.00	50.272	0.00	1809.83	97%	0.00	0%	CAPEX Underrun: Radford project was delayed beyond 2023 due to permit in processing with US Forest Service. BVES obtained permit on January 3, 2024. Project will be completed in 2024.
Grid Design, Operations, and Maintenance	GD 6	Evacuation Route Hardening Project	Distribution pole replacements and reinforcements	816.24	0.00	405.692	0.00	410.55	50%	0.00	0%	CAPEX Underrun: Annual target for 2023 was achieved (actually exceeded) at lower than budgeted. Labor was less than originally estimated.
Grid Design, Operations, and Maintenance	GD 7	N/A	Transmission pole/tower replacements and reinforcements	0.00	0.00	0	0.00	0.00	0%	0.00	0%	Within 20%
Grid Design, Operations, and Maintenance	GD 8	Traditional overhead hardening	Traditional overhead hardening	500.00	0.00	1318.331	0.00	818.33	164%	0.00	0%	CAPEX Overrun: CPAEX Overrun was due to additional overhead hardening work being conducted than estimated.



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Grid Design, Operations, and Maintenance	GD 9	Emerging grid hardening technology installations and pilots	Emerging grid hardening technology installations and pilots	0.00	0.00	0	0.00	0.00	0%	0.00	0%	Within 20%
Grid Design, Operations, and Maintenance	GD 10	Bear Valley Solar Energy Project	Microgrids	0.00	0.00	0	0.00	0.00	0%	0.00	0%	Within 20%
Grid Design, Operations, and Maintenance	GD 11	Energy Storage Project	Microgrids	0.00	0.00	0	0.00	0.00	0%	0.00	0%	Within 20%
Grid Design, Operations, and Maintenance	GD 12	Substation Automation	Installation of system automation equipment	654.14	0.00	676.319	0.00	22.18	3%	0.00	0%	Within 20%
Grid Design, Operations, and Maintenance	GD 13	Switch and Field Device Automation	Installation of system automation equipment	711.05	0.00	666.735	0.00	44.31	6%	0.00	0%	Within 20%
Grid Design, Operations, and Maintenance	GD 14	Capacitor Bank Upgrade Project	Installation of system automation equipment	345.02	0.00	165.87	0.00	179.15	52%	0.00	0%	CAPEX Underrun: Annual target for 2023 was achieved at lower than budgeted. Labor was less than originally estimated.
Grid Design, Operations, and Maintenance	GD 15	Fuse TripSaver Automation	Installation of system automation equipment	197.65	0.00	218.576	0.00	20.93	11%	0.00	0%	Within 20%
Grid Design, Operations, and Maintenance	GD 16	Server Room	Installation of system automation equipment	126.70	0.00	23.517	0.00	103.18	81%	0.00	0%	CAPEX Underrun: Project is ongoing and will be completed in 2024. Therefore, budgeted costs for the project were



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												not fully realized in 2023.
Grid Design, Operations, and Maintenance	GD 17	Distribution Management Center	Installation of system automation equipment	0.00	0.00	0.00	0.00	0.00	0%	0.00	0%	Within 20%
Grid Design, Operations, and Maintenance	GD 18	Line removals (in HFTD)	Line removals (in HFTD)	0.00	0.00	0.00	0.00	0.00	0%	0.00	0%	Within 20%
Grid Design, Operations, and Maintenance	GD 19	Tree Attachment Removal Project	Other grid topology improvements to minimize risk of ignitions	605.61	0.00	698.606	0.00	92.99	15%	0.00	0%	Within 20%
Grid Design, Operations, and Maintenance	GD 20	Other grid topology improvements to mitigate or reduce PSPS events	Other grid topology improvements to mitigate or reduce PSPS events	0.00	0.00	0	0.00	0.00	0%	0.00	0%	Within 20%
Grid Design, Operations, and Maintenance	GD 21	BVPP Phase 4 Upgrade Project	Other technologies and systems not listed above	0.00	0.00	0	0.00	0.00	0%	0.00	0%	Within 20%
Grid Design, Operations, and Maintenance	GD 22	Partial Safety and Technical Upgrades to Maltby Substation	Other technologies and systems not listed above	0.00	0.00	0	0.00	0.00	0%	0.00	0%	Within 20%
Grid Design, Operations, and Maintenance	GD 23	Safety and Technical Upgrades to Lake Substation	Other technologies and systems not listed above	0.00	0.00	0	0.00	0.00	0%	0.00	0%	Within 20%
Grid Design, Operations, and Maintenance	GD 24	Partial Safety and Technical Upgrades to Village Substation	Other technologies and systems not listed above	0.00	0.00	0	0.00	0.00	0%	0.00	0%	Within 20%
Grid Design, Operations, and Maintenance	GD 25	Detailed Inspections	Asset inspections	0.00	13.50	0.00	19.813	0.00	0%	6.31	47%	OPEX Overrun: Labor hours dedicated to this initiative were higher than forecasted. Annual



WMP Initiative Category	Utility Initiative Tracking ID	WMP Initiative Activity	Utility Initiative Name	2023 Forecast CAPEX (\$000)	2023 Forecast OPEX (\$000)	2023 Actuals CAPEX (\$000)	2023 Actuals OPEX (\$000)	CAPEX (\$000) Variance Overrun/(Underrun)	CAPEX (%) Variance Overrun/(Underrun)	OPEX (\$000) Variance Overrun/(Underrun)	OPEX (%) Variance Overrun/(Underrun)	Variance Drivers (Results +/- 20%)
												target was achieved.
Grid Design, Operations, and Maintenance	GD 26	Patrol Inspections	Asset inspections	0.00	31.50	0.00	46.23	0.00	0%	14.73	47%	OPEX Overrun: Labor hours dedicated to this initiative were higher than forecasted. Annual target was achieved.
Grid Design, Operations, and Maintenance	GD 27	UAV Thermography	Asset inspections	0.00	56.30	0.00	56.673	0.00	0%	0.38	1%	Within 20%
Grid Design, Operations, and Maintenance	GD 28	UAV HD Photography/Videography	Asset inspections	0.00	56.30	0.00	55.006	0.00	0%	1.29	2%	Within 20%
Grid Design, Operations, and Maintenance	GD 29	LiDAR Inspection	Asset inspections	0.00	57.87	0.00	70.333	0.00	0%	12.46	22%	OPEX Overrun: Contracted costs were higher than estimated. Annual target was achieved.
Grid Design, Operations, and Maintenance	GD 30	3rd Party Ground Patrol	Asset inspections	0.00	46.71	0.00	22.008	0.00	0%	24.70	53%	OPEX Underrun: BVES was able to contract the work for lower cost than projected. Intended scope of work and annual target was achieved.
Grid Design, Operations, and Maintenance	GD 31	Intrusive Pole Inspections	Asset inspections	0.00	18.54	0.00	19.703	0.00	0%	1.16	6%	Within 20%
Grid Design, Operations, and Maintenance	GD 32	Substation inspections	Asset inspections	0.00	275.00	0.00	844.912	0.00	0%	569.91	207%	OPEX Overrun: Substation equipment testing



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												was more significant than originally estimated due to emergent equipment maintenance.
Grid Design, Operations, and Maintenance	GD 33	Equipment maintenance and repair	Equipment inspections, maintenance, and repair	0.00	1041.92		1079.169	0.00	0%	37.25	4%	Within 20%
Grid Design, Operations, and Maintenance	GD 34	Asset management and inspection enterprise system(s)	Asset management and inspection enterprise system(s)	0.00	56.00	160	100.058	160.00	0%	44.06	79%	CAPEX Overrun: CPAEX Overrun was due to procurement of improved asset management and inspection systems. OPEX Overrun: OPEX Overrun was due to BVES contracting outside GIS services to comply with OEIS Data Guidelines and Reporting.
Grid Design, Operations, and Maintenance	GD 35	Asset Quality assurance / quality control	Quality assurance / quality control	0.00	19.73	0.00	22.083	0.00	0%	2.36	12%	Within 20%
Grid Design, Operations, and Maintenance	GD 36	Asset Open work orders	Open work orders	0.00	17.26	0.00	19.322	0.00	0%	2.06	12%	Within 20%
Grid Design, Operations, and Maintenance	GD 37	Equipment Settings to Reduce Wildfire Risk	Equipment Settings to Reduce	0.00	4.93	0.00	5.521	0.00	0%	0.59	12%	Within 20%



WMP Initiative Category	Utility Initiative Tracking ID	WMP Initiative Activity	Utility Initiative Name	2023 Forecast CAPEX (\$000)	2023 Forecast OPEX (\$000)	2023 Actuals CAPEX (\$000)	2023 Actuals OPEX (\$000)	CAPEX (\$000) Variance Overrun/ (Underrun)	CAPEX (%) Variance Overrun/ (Underrun)	OPEX (\$000) Variance Overrun/ (Underrun)	OPEX (%) Variance Overrun/ (Underrun)	Variance Drivers (Results +/- 20%)
			Wildfire Risk (Grid Ops)									
Grid Design, Operations, and Maintenance	GD 38	Grid Response Procedures and Notifications	Grid Response Procedures and Notifications (Grid Ops)	0.00	8.63	0.00	9.661	0.00	0%	1.03	12%	Within 20%
Grid Design, Operations, and Maintenance	GD 39	Personnel Work Procedures and Training in Conditions of Elevated Fire Risk	Personnel Work Procedures and Training in Conditions of Elevated Fire Risk (Grid Ops)	0.00	3.70	0.00	4.141	0.00	0%	0.44	12%	Within 20%
Grid Design, Operations, and Maintenance	GD 40	Asset Workforce Planning	Workforce Planning	0.00	6.17	0.00	6.901	0.00	0%	0.74	12%	Within 20%
Overview of the Service Territory	ST 1	Environmental compliance and permitting	Environmental compliance and permitting	0.00	24.66	0.00	27.604	0.00	0%	2.94	12%	Within 20%
Risk Methodology and Assessment	RMA 1	Technosylva Contractor. Program implemented and ongoing.	Risk Methodology and Assessment	0.00	64.41	0.00	149.124	0.00	0%	84.72	132%	OPEX Overrun: Additional contracted expenses were higher than initially planned due to BVES working with contractor (Direxyon) to develop Utility Risk Model.
Situational Awareness and Forecasting	SAF 1	Advanced weather monitoring and weather stations	Environmental monitoring systems	0.00	7.10	0	8.562	0.00	0%	1.46	21%	OPEX Overrun: Maintenance cost were higher than projected. Two weather stations needed to be sent



WMP Initiative Category	Utility Initiative Tracking ID	WMP Initiative Activity	Utility Initiative Name	2023 Forecast CAPEX (\$000)	2023 Forecast OPEX (\$000)	2023 Actuals CAPEX (\$000)	2023 Actuals OPEX (\$000)	CAPEX (\$000) Variance Overrun/(Underrun)	CAPEX (%) Variance Overrun/(Underrun)	OPEX (\$000) Variance Overrun/(Underrun)	OPEX (%) Variance Overrun/(Underrun)	Variance Drivers (Results +/- 20%)
												back to manufacture for maintenance and repair.
Situational Awareness and Forecasting	SAF 2	Install Fault Indicators	Grid monitoring systems	360.12	0.00	20.144	0	339.98	94%	0.00	0%	CAPEX Underrun: Annual target for 2023 was achieved (actually exceeded) at lower than budgeted. Labor was less than originally estimated.
Situational Awareness and Forecasting	SAF 3	Online Diagnostic System	Grid monitoring systems	78.04	0.00	24.473	0	53.57	69%	0.00	0%	CAPEX Underrun: Annual target for 2023 was achieved at lower than budgeted. Contractor costs were less than originally estimated.
Situational Awareness and Forecasting	SAF 4	HD ALERT Wildfire Cameras	Ignition detection systems	0.00	0.00	0	0	0.00	0%	0.00	0%	Within 20%
Situational Awareness and Forecasting	SAF 5	Weather forecasting	Weather forecasting	0.00	51.28	0	69.987	0.00	0%	18.71	36%	OPEX Overrun: Contracted expenses were higher than initially planned.
Situational Awareness and Forecasting	SAF 6	Fire potential index	Fire potential index	0.00	38.65	0	57.712	0.00	0%	19.07	49%	OPEX Overrun: Additional contracted expenses were higher than



WMP Initiative Category	Utility Initiative Tracking ID	WMP Initiative Activity	Utility Initiative Name	2023 Forecast CAPEX (\$000)	2023 Forecast OPEX (\$000)	2023 Actuals CAPEX (\$000)	2023 Actuals OPEX (\$000)	CAPEX (\$000) Variance Overrun/ (Underrun)	CAPEX (%) Variance Overrun/ (Underrun)	OPEX (\$000) Variance Overrun/ (Underrun)	OPEX (%) Variance Overrun/ (Underrun)	Variance Drivers (Results +/- 20%)
												initially planned due to development of FPI model.
Vegetation Management and Inspection	VM 1	Detailed Inspections	Vegetation Inspections	0.00	13.50	0.00	19.813	0.00	0%	6.31	47%	OPEX Overrun: Labor hours dedicated to this initiative were higher than forecasted.
Vegetation Management and Inspection	VM 2	Patrol Inspections	Vegetation Inspections	0.00	31.50	0.00	46.23	0.00	0%	14.73	47%	OPEX Overrun: Labor hours dedicated to this initiative were higher than forecasted. Annual was target achieved.
Vegetation Management and Inspection	VM 3	UAV HD Photography/Videography	Vegetation Inspections	0.00	58.00	0.00	55.006	0.00	0%	3.00	5%	Within 20%
Vegetation Management and Inspection	VM 4	LiDAR Inspection	Vegetation Inspections	0.00	57.87	0.00	70.333	0.00	0%	12.46	22%	OPEX Overrun: Contracted costs were higher than estimated. Annual was target achieved.
Vegetation Management and Inspection	VM 5	3rd Party Ground Patrol	Vegetation Inspections	0.00	46.71	0.00	22.008	0.00	0%	24.70	53%	OPEX Underrun: BVES was able to contract the work for lower cost than projected. Intended scope of work and annual target was achieved.



WMP Initiative Category	Utility Initiative Tracking ID	WMP Initiative Activity	Utility Initiative Name	2023 Forecast CAPEX (\$000)	2023 Forecast OPEX (\$000)	2023 Actuals CAPEX (\$000)	2023 Actuals OPEX (\$000)	CAPEX (\$000) Variance Overrun/(Underrun)	CAPEX (%) Variance Overrun/(Underrun)	OPEX (\$000) Variance Overrun/(Underrun)	OPEX (%) Variance Overrun/(Underrun)	Variance Drivers (Results +/- 20%)
Vegetation Management and Inspection	VM 6	Substation inspections	Vegetation Inspections	0.00	4.25	0.00	5.393	0.00	0%	1.14	27%	OPEX Overrun: Labor hours dedicated to this initiative were higher than forecasted. Annual was target achieved.
Vegetation Management and Inspection	VM 7	Pole clearing	Pole clearing	0.00	0.00	0.00	0	0.00	0%	0.00	0%	Within 20%
Vegetation Management and Inspection	VM 8	Wood and slash management	Wood and slash management	0.00	417.31	0.00	453.771	0.00	0%	36.46	9%	Within 20%
Vegetation Management and Inspection	VM 9	Clearance	Clearance	0.00	1761.69	0.00	1935.411	0.00	0%	173.72	10%	Within 20%
Vegetation Management and Inspection	VM 10	Fall-in mitigation	Fall-in mitigation	0.00	282.88	0.00	296.328	0.00	0%	13.45	5%	Within 20%
Vegetation Management and Inspection	VM 11	Substation defensible space	Substation defensible space	0.00	15.00	0.00	13.895	0.00	0%	1.11	7%	Within 20%
Vegetation Management and Inspection	VM 12	High-risk species	High-risk species	0.00	282.88	0.00	305.607	0.00	0%	22.73	8%	Within 20%
Vegetation Management and Inspection	VM 13	Fire-resilient rights-of-way	Fire-resilient rights-of-ways	0.00	14.00	0.00	14.354	0.00	0%	0.35	3%	Within 20%
Vegetation Management and Inspection	VM 14	Emergency response vegetation management	Emergency response vegetation management	0.00	24.60	0.00	28.601	0.00	0%	4.00	16%	Within 20%
Vegetation Management and Inspection	VM 15	Vegetation management enterprise system	Vegetation management enterprise system	0.00	21.00	0.00	25.559	0.00	0%	4.56	22%	OPEX Overrun: Labor hours dedicated to this initiative were



WMP Initiative Category	Utility Initiative Tracking ID	WMP Initiative Activity	Utility Initiative Name	2023 Forecast CAPEX (\$000)	2023 Forecast OPEX (\$000)	2023 Actuals CAPEX (\$000)	2023 Actuals OPEX (\$000)	CAPEX (\$000) Variance Overrun/ (Underrun)	CAPEX (%) Variance Overrun/ (Underrun)	OPEX (\$000) Variance Overrun/ (Underrun)	OPEX (%) Variance Overrun/ (Underrun)	Variance Drivers (Results +/- 20%)
												higher than forecasted.
Vegetation Management and Inspection	VM 16	Vegetation Management Quality assurance / quality control	Quality assurance / quality control	0.00	46.06	0.00	53.444	0.00	0%	7.39	16%	Within 20%
Vegetation Management and Inspection	VM 17	Vegetation Management Open work orders	Open work orders	0.00	31.26	0.00	35.226	0.00	0%	3.96	13%	Within 20%
Vegetation Management and Inspection	VM 18	Vegetation Management Workforce planning	Workforce Planning	0.00	6.17	0.00	6.901	0.00	0%	0.74	12%	Within 20%
Wildfire Mitigation Strategy Development	WMSD 1	Wildfire Mitigation Strategy Development	Wildfire Mitigation Strategy Development	0.00	29.59	0.00	33.124	0.00	0%	3.53	12%	Within 20%



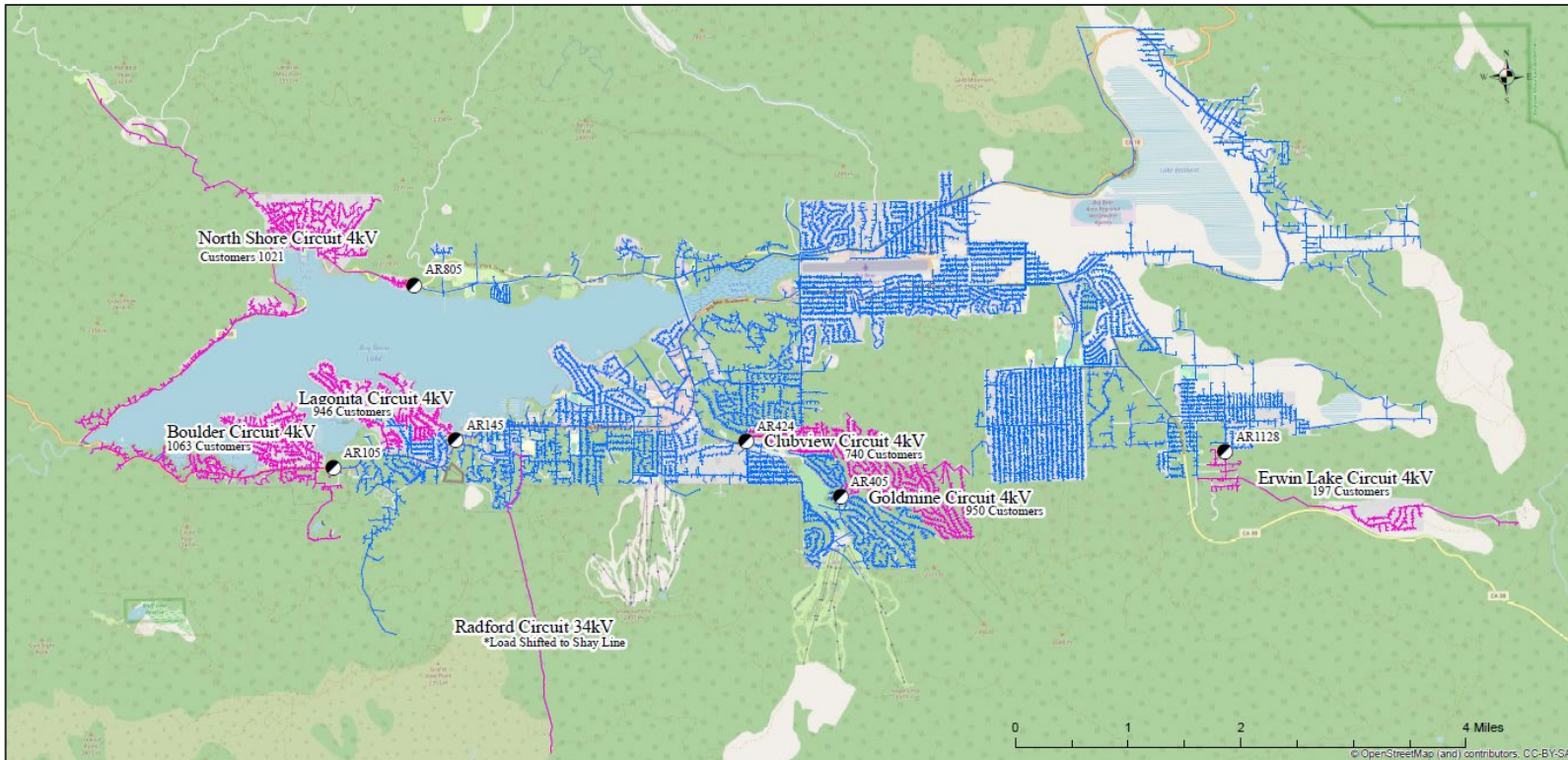
Bear Valley Electric Service, Inc.
P.O. Box 9028
San Dimas, CA 91773-9028
A Subsidiary of American States Water Company

ATTACHMENT B:

High Risk Areas for PSPS Consideration



Bear Valley Electric Service, Inc.
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A Subsidiary of American States Water Company



BVES "High Risk Areas" for PSPS Consideration



Legend	
	Auto-Reclosers
	De-energized Lines
	Energized Lines

Figure 2: High Risk Areas for PSPS Consideration and Customer Count