



INDEPENDENT EVALUATOR

Annual Report on Compliance for Wildfire
Mitigation Plan Compliance Year 2024

JUNE 30, 2025

BUREAU
VERITAS



C2 GROUP®

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DISCLAIMER

This report has been compiled through the process of observation and review of documents provided by the electric service provider named herein. The Office of Energy Infrastructure Safety (“Energy Safety”) instituted the requirement for an independent evaluation of electric utility providers Wildfire Mitigation Plans (“WMP”). Bureau Veritas is not the designer, implementer, or owner of the WMP and is not responsible for its content, implementation and/or any liabilities, obligations or responsibilities arising therein.

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1. EXECUTIVE SUMMARY

The devastating wildfires of the past and present have taught us valuable lessons about safeguarding California's lands, particularly in areas where electrical infrastructure coexists with wildland environments. In response to these challenges, the California Public Utilities Commission (CPUC) initiated Rulemaking 18-10-007 to provide guidance on Wildfire Mitigation Plans (WMPs) for Investor-Owned Utilities (IOUs), now referred to as Electrical Corporations (ECs). These WMPs are designed to cover a three-year period, with the first cycle of independent evaluations beginning in 2020.

The 2024 WMP is part of the second three-year planning cycle. During the first evaluation of this cycle, which ended in 2023, Bear Valley experienced no ignition events or conditions that would trigger a Public Safety Power Shutoff (PSPS) event. Bear Valley's 2023-2025 WMP builds on the previous cycle by enhancing grid hardening, improving risk assessment and prioritization, and advancing situational awareness and weather monitoring capabilities. These improvements, along with existing mitigation measures, are founded on the understanding that effective natural resource management is crucial for maintaining facilities. Many of these existing programs include comprehensive monitoring and data collection, such as wildfire cameras, in-depth Quality Assessment and Quality Control (QA/QC) programs, asset inspections, and situational awareness tools. Overall, the previous year saw a reduction in reportable ignitions within the High Fire Threat Districts (HFTD) and High Fire Risk Areas (HFRA) in Bear Valley's service area.

This Independent Evaluator (IE) Annual Report of Compliance (ARC) assesses Bear Valley's second cycle plan, which began in 2023 and extends to 2025. The IE ARC reviews the WMP initiatives as outlined for 2024 and evaluates Bear Valley's performance in meeting their committed objective targets. These targets include specific quantifiable or qualitative performance goals, verification of QA/QC program implementation, processes, and results, as well as the distribution of funding to initiatives described within the WMP.

Pursuant to Public Utilities Code Section 8386.3(c)(2)(B)(i), (ii), (iii), and (iv), Bureau Veritas North America, Inc. (BVNA) has been selected as the IE to review and assess Bear Valley's 2024 WMP in its entirety. This IE ARC will present BVNA's findings and results for review. BVNA was included in the Office of Energy Infrastructure and Safety (Energy Safety) Independent Evaluator List for 2024 WMPs, dated January 27, 2025, in accordance with Public Utilities Code section 8386.3(c)(2)(A).

In compliance with Energy Safety's requirements, Bear Valley Electric Service, Inc. has contracted BVNA to provide the IE assessment. This assessment includes the IE responsibilities outlined in Public Utilities Code section 8386.3(c)(5)(C), which involve performing the following tasks:

- Task 1: Consult with Energy Safety on compliance assurance auditing that will be performed
- Task 2: Perform compliance assurance auditing, including field inspections
- Task 3: Draft and provide to Energy Safety a report on audit findings, including deficiencies of underfunded WMP activities
- Task 4: Draft and provide to Energy Safety a report on deficiencies of electrical corporations
- Task 5: Track and report deficiencies of audit findings

Docket Title: 2023 to 2025 Electrical Corporation Wildfire Mitigation Plans; Docket #: 2023-2025-WMPs produced on July 22, 2024, for Bear Valley Electric Service Inc. 2025 WMP R2 update and the requirements of the Public Utilities Code (PU Code); Bureau Veritas North America, Inc. (BVNA), in partnership with C2 Group, have reviewed Bear Valley's 2024 WMP.

Introduction

As California continues to face the persistent threat of wildfires and their devastating consequence, the California Department of Forestry and Fire Protection (CAL FIRE) has emphasized the need for increasingly vigilant measures in the coming years. This heightened vigilance is necessary due to stressed forests resulting from droughts, bark beetle infestations, forest management challenges, and other factors that impact wildfire risk.

Bear Valley Electric Service, Inc., often referred to as BVES or Bear Valley, is a subsidiary of American States Water Company. Bear Valley serves a 32-square-mile territory in Southern California, located in the San Bernardino Mountains, 80 miles east of Los Angeles. The service area encompasses the mountain communities surrounding Big Bear City and Big Bear Lake. The entire service territory is situated above 3,000 feet in elevation, with approximately 90% classified as HFTD Tier 2 and 10% as HFTD Tier 3. According to the National Fire Danger Rating System (NFRDS), the service area is considered "Very Dry" or "Dry" over 75% of the time. This persistent dry condition, combined with heavy vegetation, results in a high level of available fuel, significantly increasing the potential severity of wildfires in the region. Bear Valley has 50 employees, and 24,691 customers. There are 13 substations and a total of 9,156 poles, along with 267.1 total circuit miles with 206.7 being overhead and 60.4 being underground.

Throughout the 2023-2025 three-year cycle of the WMP, Bear Valley's primary objective is to construct, maintain, and operate its electric line and equipment in a way that minimizes the risk of catastrophic wildfire. This goal is pursued through ongoing initiatives that aim to

reduce threats of utility-caused wildfires by eliminating sources of ignition, and to increase resilience of their assets and provide emergency and restoration response in the event of a wildfire affecting the service area.

Independent Evaluator Review of Compliance

BVNA, in partnership with the C2 Group, have been selected as Bear Valley's IE to assess compliance to the 2023-2025 WMP. The IE ARC focuses on Bear Valley's progress in 2024, evaluation completion of proposed initiatives, distribution of fundings, and verification of QAQC programs.

The evaluation process began with an Energy Safety kick-off meeting, which served as an introduction between Bear Valley representatives, BVNA/C2 staff, and assigned Energy Safety personnel. This introductory meeting established key elements, including communication and documentation protocols, as well as the identification of individuals responsible for receiving requests from the IE. Following this meeting, the IE initiated a review of Bear Valley's 2024 WMP and related publicly available documents, as listed in Section 7. This review aimed to identify Bear Valley's stated goals within the 2024 WMP.

To evaluate activities described in the WMP that were not available in public records, BVNA's team of evaluators submitted data requests and conducted interviews with Subject Matter Experts (SMEs). These steps helped verify activities stated within the 2023-2025 WMP (see Section 7 for a list of Data Requests/SME Interviews). In addition to document analysis, data requests, and SME interviews, the IE conducted field assessments within HFTD Tier 2 and Tier 3 areas. These assessments allowed the IE to collect photographic evidence and evaluate compliance with 2024 activities and initiatives identified during the initial review. Detailed analysis and key findings for each respective category are presented in the following sections of this report.

The IE has classified each initiative as "Validated," "Not Validated", or "Not Applicable." "Validated" indicates that the EC has clearly demonstrated meeting the stated WMP target for the review year. "Not Validated" means the EC either failed to provide sufficient documentation to support their claim or did not meet the WMP target, the individual reviews will elaborate and make the distinction. "Not Applicable" signifies that the EC has determined the initiative is not relevant to the current review period.

BVNA's understanding of collected utility strategies demonstrated throughout the state are summarized below:

- 1. Inspection and maintenance of distribution, transmission, and substation** includes a comprehensive approach conducting system patrols and ground inspections using advanced technological tools, managing predictive and electrical preventative

maintenance, performing vegetation inspections and management, implementing vulnerability detection methods such as Light Detection and Ranging (LiDAR) inspection, and utilizing geospatial and topography identification along with geographic information system (GIS) mapping data. A key aspect of these programs is the identification and collection of data elements through each initiative. Understanding how this data is used and shared is essential for improving utility practices and enhancing overall wildfire mitigation efforts.

2. **System hardening** includes pole replacement, non-expulsion equipment, advanced fuses, tree attachment removal, less flammable transformer oil, covered wire and wire wrap, and undergrounding where it is supported by a cost benefit analysis.
3. **De-energization** actions are triggered and prioritized based on various fire weather conditions such as forecasted, imminent, and validated extreme fire weather conditions. Plans for re-energization when weather conditions subside to safe levels are implemented. Both manual and automatic capabilities to implement the de-energization and re-energization process exist.
4. **Advanced Technologies** include Distribution Fault Anticipation (DFA) technology, tree growth regulators, pulse control fault interrupters, oblique and hyperspectral imagery, advanced transformer fluids, advanced LiDAR systems, and advanced Supervisory Control and Data Acquisition (SCADA) systems. These technologies help reduce risk of electrical ignition, mitigate power outages, and prevent equipment damage.
5. **Vegetation management**, including routine preventative vegetation maintenance; corrective vegetative management and off-cycle tree work; emergency vegetation clearance, prioritized for portions of the service territory in Tier 2 and 3 HFTD; quality control processes; and resource protection plan, including animal and avian mitigation programs. Enhanced Vegetation Management (EVM) with enhanced inspections, aims to keep all aspects of trees away from power lines and to prescribe minimum clearances that exceed state standards. EVM implements frequencies of inspection beyond the routine patrols to address dead, diseased or dying trees from power lines where they can do no harm.
6. **Situational Awareness** involves gathering real-time information from various sources to create a comprehensive understanding of current conditions. This included data from devices and sensors on electrical systems, weather monitoring equipment, and other tools that assess wildfire conductivity conditions. Utilization of programs such as online feeds and websites like the NFRDS help the EC employ risk-informed, data-supported decision-making processes. The goal of these situational awareness

efforts is to achieve a shared understanding of actual conditions amongst all stakeholders, thereby improving collaborative planning and decision-making.

7. **Emergency Preparedness, Outreach, and Response** efforts engage a wide range of key stakeholders, including critical facilities, customers, local government, and essential agencies such as CAL FIRE. Strong communication channels are employed with local law enforcement agencies, first responders, hospitals, local emergency planning committees, other utility providers, and the California Independent System Operator. Coordination agreements such as mutual Aid or Assistance, as well as a community outreach plan is in place to inform and engage the various stakeholders.
8. **Operational practices** include communication protocols and the execution of specific plans designed to minimize fire danger. A key element of this approach is the strategic deactivation of automatic reclosers during high-risk periods. De-energization decisions are based on a multifaceted risk assessment that consider various factors, including the type of facility, tree and vegetation density, the presence of available dry fuel, and other location specific vulnerabilities to wildfire risk.

Key Findings:

As Bear Valley completes its second year in the current cycle, and fifth year overall, in executing the WMP, it's evident that the EC has embraced the challenges of complying with statewide wildfire mitigation regulations set forth by Energy Safety and participation in the IE process. Bear Valley has met or exceeded several target goals for initiatives, demonstrating the effectiveness of its mitigation strategies.

COE_1, 8.5.2 - Public Outreach and Education Awareness Program

BVES exceeded its target for COE_1 conducting 1,013 events against a goal of 360, representing a positive variance of 181.39%. These events provided outreach through various media that provided educational awareness related to wildfire and other emergency events.

COE_2, 8.5.3 - Engagement with Access & Functional Needs Populations

BVES exceeded its target for COE_2 verifying 26 AFN customers against a goal of 12, representing a positive variance of 116.67%. The utility employs multiple strategies to connect with AFN populations, continuously evaluating and updating their AFN list throughout the year and providing awareness for PSPS and other emergency events.

COE_4, 8.5.5 - Best Practice Sharing with Other Utilities

BVES exceeded its target for COE_4 participating in 135 work groups, conferences, or councils against a goal of 15, representing a positive variance of 800%. This extensive involvement in diverse collaborative forums allows BVES to gather and share valuable lessons and best practices.

Field Verified Initiative Key Findings:

GD_7 Pole Replacement and System Reinforcement:

BVES completed 262 pole replacements, 134% of its target, significantly reinforcing the distribution system in high-risk zones. The initiative improved system resilience against wildfire ignition.

GD_14 Capacitor Bank Upgrade:

While BVES aimed to replace six capacitor banks, only four were completed, with the initiative facing setbacks. Despite this, the work completed strengthened system reliability and reduced wildfire ignition risks.

Funding Verification Key Findings:

GD_5 Radford Line Replacement Project

Expenditure Variance in Grid Hardening: The Radford Line replacement project experienced significant overspend with an actual expenditure of \$5.87 million, exceeding the planned budget. Despite the variance, these costs reflect BVES's prioritization of high-risk areas.

GD_12 Substation Automation

Overspending on Substation Automation: The initiative to automate substations resulted in a 70% overspend, totaling \$1.11 million. This financial variance was linked to expanded scope requirements, improving wildfire risk mitigation

GD_15 Fuse TripSaver Automation

Operational Overspend in Technology Integration: BVES's initiative to connect Fuse TripSavers to SCADA came in 46% under target, resulting in a notable budget variance. This investment, however, supports advanced wildfire detection and remote system control capabilities

Bear Valley's service programs are continuously evolving as their understanding of wildfire threats and mitigation opportunities deepens. The EC has consistently improved and developed programs to reduce fire risks within their territory and minimize the impact of PSPS events on customers. The Bear Valley 2024 WMP demonstrates a comprehensive

approach to enhancing all five categories of their WMP initiatives, ranging from grid design and system hardening to community outreach.

Initiatives Completed Within 5% of the WMP Targets: 66 Total Number of Initiatives (96%)

Table 1: List of Initiatives that Missed Target or Could Not Be Validated

Initiative Number, WMP Section Number, and Name	Missed Target or Could Not Be Validated
GD_14, 8.1.2.8, Capacitor Bank Upgrade Project	Missed Target
GD_15, 8.1.2.8, Fuse TripSaver Automation	Missed Target
GD_23, 8.1.4.2, Other Tech. Not Listed Above (Lake Substation)	Missed Target

Table 2: Initiatives with Absolute % Differences > 10%
(Spend in Thousand \$)
44 Total Number of Initiatives (56%)

Initiative Number, WMP Section Number, and Name	Total Budget (\$)	Total Expenditure (\$)	Total Variance Between Budget and Expenditure (%)
COE_1 - 8.5.2 Public outreach and education awareness program	\$92.70	\$148.30	60.0%
COE_2 - 8.5.3 Engagement with access and functional needs populations	\$30.90	\$59.90	93.9%
COE_3 - 8.5.4 Collaboration on local wildfire mitigation planning	\$23.30	\$31.30	34.3%
EP_2 - 8.4.3 External collaboration and coordination	\$22.00	\$31.60	43.6%
GD_12 - 8.1.2.8 Substation Automation	\$656	\$1,114.30	69.9%
GD_13 - 8.1.2.8 Switch and Field Device Automation	\$674	\$1,200.30	78.2%
GD_14 - 8.1.2.8 Capacitor Bank Upgrade Project	\$319.1	\$692.50	117.0%
GD_15 - 8.1.2.8 Fuse TripSaver Automation	\$136.9	\$297.70	117.5%
GD_16 - 8.1.2.8 Server Room	\$103.2	\$61.40	40.5%
GD_17 - 8.1.2.8 Distribution Management Center	\$37.4	\$65.30	74.6%
GD_19 - 8.1.2.10 Tree Attachment Removal Project	\$607.2	\$699.30	15.2%
GD_2 - 8.1.2.1 Radford Line Replacement Project	\$3,633.6	\$5,865.30	61.4%

Initiative Number, WMP Section Number, and Name	Total Budget (\$)	Total Expenditure (\$)	Total Variance Between Budget and Expenditure (%)
GD_25 - 8.1.3.1 Detailed Inspections	\$13.9	\$25.30	82.0%
GD_26 - 8.1.3.1 Patrol Inspections	\$32.4	\$58.90	81.8%
GD_27 - 8.1.3.1 UAV Thermography	\$77.5	\$65.20	15.9%
GD_28 - 8.1.3.1 UAV HD Photography/Videography	\$77.5	\$65.20	15.9%
GD_3 - 8.1.2.2 Minor Undergrounding Upgrades Projects	\$303.7	\$95.30	68.6%
GD_30 - 8.1.3.1 3rd Party Ground Patrol	\$64.3	\$21.40	66.7%
GD_32 - 8.1.3.1 Substation inspections	\$283.3	\$110.50	61.0%
GD_33 - 8.1.4 Equipment maintenance and repair	\$1,073.2	\$1,440.90	34.3%
GD_34 - 8.1.5 Asset management and inspection enterprise system(s)	\$57.7	\$42.80	25.8%
GD_37 - 8.1.8.1 Equipment Settings to Reduce Wildfire Risk	\$5.1	\$7.10	39.2%
GD_5 - 8.1.2.3 Radford Line Replacement Project	\$1,557.3	\$2,513.70	61.4%
GD_6 - 8.1.2.3 Evacuation Route Hardening Project	\$808.0	\$541.30	33.0%
GD_8 - 8.1.2.5 Traditional overhead hardening	\$809.8	\$1,669.60	106.2%
RMA_1 - 6 Technosylva Contractor. Program implemented and ongoing.	\$88.60	\$180.40	103.6%
SAF_1 - 8.3.2 Advanced weather monitoring and weather stations	\$7.30	\$8.60	17.8%
SAF_3 - 8.3.3 Online Diagnostic System	\$77.30	\$17.20	77.7%
SAF_5 - 8.3.5 Weather forecasting	\$70.60	\$82.20	16.4%
ST_1 - 5.4.5 Environmental compliance and permitting	\$25.4	\$31.30	23.2%
VM_1 - 8.2.2.1 Detailed Inspections	\$13.90	\$25.30	82.0%
VM_13 - 8.2.3.7 Fire-resilient rights-of-way	\$14.40	\$16.30	13.2%
VM_14 - 8.2.3.8 Emergency response vegetation management	\$28.80	\$37.90	31.6%
VM_15 - 8.2.4 Vegetation management enterprise system	\$21.60	\$18.30	15.3%
VM_16 - 8.2.5 Vegetation Management Quality assurance / quality control	\$50.90	\$66.10	29.9%
VM_17 - 8.2.6 Vegetation Management Open work orders	\$35.70	\$41.90	17.4%
VM_18 - 8.2.7 Vegetation Management Workforce planning	\$6.40	\$7.80	21.9%
VM_2 - 8.2.2.1 Patrol Inspections	\$32.40	\$58.90	81.8%

Initiative Number, WMP Section Number, and Name	Total Budget (\$)	Total Expenditure (\$)	Total Variance Between Budget and Expenditure (%)
VM_3 - 8.2.2.1 UAV HD Photography/Videography	\$77.50	\$67.20	13.3%
VM_5 - 8.2.2.1 3rd Party Ground Patrol	\$64.30	\$21.40	66.7%
VM_6 - 8.2.2.1 Substation inspections	\$4.40	\$15.00	240.9%
VM_8 - 8.2.3.2 Wood and slash management	\$520.40	\$453.80	12.8%
VM_9 - 8.2.3.3 Clearance	\$2,212.80	\$1,935.40	12.5%
WMSD_1 - Various Wildfire Mitigation Strategy Development	\$30.50	\$37.60	23.3%

Table 3: 10 Largest Initiatives by Planned Expenditure

No.	Initiative Number, WMP Section Number, and Name	Failed to Fund? (Funded below 100%)
1	GD_1 - 8.1.2.1 Covered Conductor Replacement Project	Yes
2	GD_2 - 8.1.2.1 Radford Line Replacement Project	No
3	VM_9 - 8.2.3.3 Clearance	Yes
4	GD_4 - 8.1.2.3 Covered Conductor Replacement Project	Yes
5	GD_5 - 8.1.2.3 Radford Line Replacement Project	No
6	GD_33 - 8.1.4 Equipment maintenance and repair	No
7	GD_8 - 8.1.2.5 Traditional overhead hardening	No
8	GD_6 - 8.1.2.3 Evacuation Route Hardening Project	Yes
9	GD_22 - 8.1.2.12 Partial Safety and Technical Upgrades to Maltby Substation	Yes
10	GD_13 - 8.1.2.8 Switch and Field Device Automation	No

Recommendations

Based on the IE review findings, BVES has demonstrated compliance with many of its WMP initiative for the 2024 review period. However, there are some areas where improvements could be made to enhance the utility's wildfire mitigation efforts.

Documentation clearly showed that BVES was diligent in completing all the detailed inspections for 2024, however, based upon the inspection reports received, there is room for improvement. The IE requested copies of several detailed inspection reports and BVES sent back essentially a record of completion that contained very little detail pertaining to the inspection itself. If this document is the detailed inspection report itself then BVES should

look to include more comprehensive information on the report such as GPS location, specific findings, pictures, risk rankings, target completion date, and scope of work needed. For future WMP cycles, it is essential that BVES submit any existing reports with this level of detail. Such comprehensive reporting is crucial to demonstrate thorough due diligence in conducting detailed inspections.

BVES demonstrated exceptional performance in community outreach for educational awareness, surpassing numerous targets. The utility's implementation of outreach programs was comprehensive and showcased their commitment to thorough community engagement. However, it is recommended that Bear Valley enhance its methods for assessing the impact of communication on community awareness and behavior change. To achieve this, a bi-annual research and analytics report could be implemented that would evaluate the effectiveness of the Emergency Communications' messaging campaigns. This report should aim to measure various metrics, including customers' ability to recall specific message topics and channels, their understanding of EC's messaging goals, and the sources they rely on for emergency event information. By analyzing this statistical data, BVES can extract valuable insights to adapt and refine their outreach programs.

2. FOCUS INITIATIVES AND DISCUSSION

For the 2024 WMP Review Year, Energy Safety instructed the IE to select up to fifteen initiatives for a "focused" more robust analysis. These "Focus Initiative" were chosen by BVNA based on several key factors.

First, the IE considered the number and nature of "Notice of Violations" (NOVs) received by the EC in 2024, prioritizing initiatives related to these violations to verify compliance efforts. Funding allocation was another crucial consideration, with initiatives receiving the highest planned or actual expenditure being selected. Additionally, initiatives showing significant variance (~20%) between planned and actual spending were generally chosen, especially if target goals were not met. The WMP Risk Impact Percentage was also evaluated to assess each initiative's potential for fire risk reduction. Historically, grid hardening and vegetation management initiatives have proven most effective in mitigating fire risks and typically comprise the majority of Focus Initiatives. The specific fifteen initiative selected by BVNA for focused analysis are listed in Table 4 below, followed by a brief rationale for each selection. This approach to initiative selection ensures a thorough evaluation of the EC's most critical and impactful wildfire mitigation efforts.

Table 4: List of Focus Initiatives

No.	Initiative Number, WMP Section Number, and Name
1	GD_1 - 8.1.2.1 Covered Conductor Replacement Project
2	GD_12 - 8.1.2.8 Substation Automation
3	GD_13 - 8.1.2.8 Switch and Field Device Automation
4	GD_14 - 8.1.2.8 Capacitor Bank Upgrade Project
5	GD_15 - 8.1.2.8 Fuse TripSaver Automation
6	GD_19 - 8.1.2.10 Tree Attachment Removal Project
7	GD_2 - 8.1.2.1 Radford Line Replacement Project
8	GD_4 - 8.1.2.3 Covered Conductor Replacement Project
9	GD_5 - 8.1.2.3 Radford Line Replacement Project
10	GD_6 - 8.1.2.3 Evacuation Route Hardening Project
11	SAF_2 - 8.3.3 Install Fault Indicators
12	VM_10 - 8.2.3.4 Fall-in mitigation
13	VM_16 - 8.2.5 Vegetation Management Quality assurance / quality control
14	VM_2 - 8.2.2.1 Patrol Inspections
15	VM_9 - 8.2.3.3 Clearance

3. SITE AND SAMPLE SELECTION AND DISCUSSION

Table 5: List of Field Verified Initiatives

Initiative Number, WMP Section Number, and Name	Rationale if Not Field Verified	Rationale for Additional Field Verified Initiative
GD_1 - 8.1.2.1 Covered Conductor Replacement Project	N/A	N/A
GD_12 - 8.1.2.8 Substation Automation	N/A	N/A
GD_13 - 8.1.2.8 Switch and Field Device Automation	N/A	N/A
GD_14 - 8.1.2.8 Capacitor Bank Upgrade Project	N/A	N/A
GD_15 - 8.1.2.8 Fuse TripSaver Automation	N/A	N/A
GD_16 - 8.1.2.8 Server Room	N/A	N/A
GD_17 - 8.1.2.8 Distribution Management Center	N/A	N/A
GD_19 - 8.1.2.10 Tree Attachment Removal Project	N/A	N/A

Initiative Number, WMP Section Number, and Name	Rationale if Not Field Verified	Rationale for Additional Field Verified Initiative
GD_2 - 8.1.2.1 Radford Line Replacement Project	N/A	N/A
GD_3 - 8.1.2.2 Minor Undergrounding Upgrades Projects	N/A	N/A
GD_4 - 8.1.2.3 Covered Conductor Replacement Project	N/A	N/A
GD_5 - 8.1.2.3 Radford Line Replacement Project	N/A	N/A
GD_6 - 8.1.2.3 Evacuation Route Hardening Project	N/A	N/A
GD_7 - 8.1.2.4 Transmission pole/tower replacements and reinforcements	N/A	N/A
GD_8 - 8.1.2.5 Traditional overhead hardening	N/A	N/A
VM_10 - 8.2.3.4 Fall-in mitigation	N/A	N/A

Sample Location Methodology

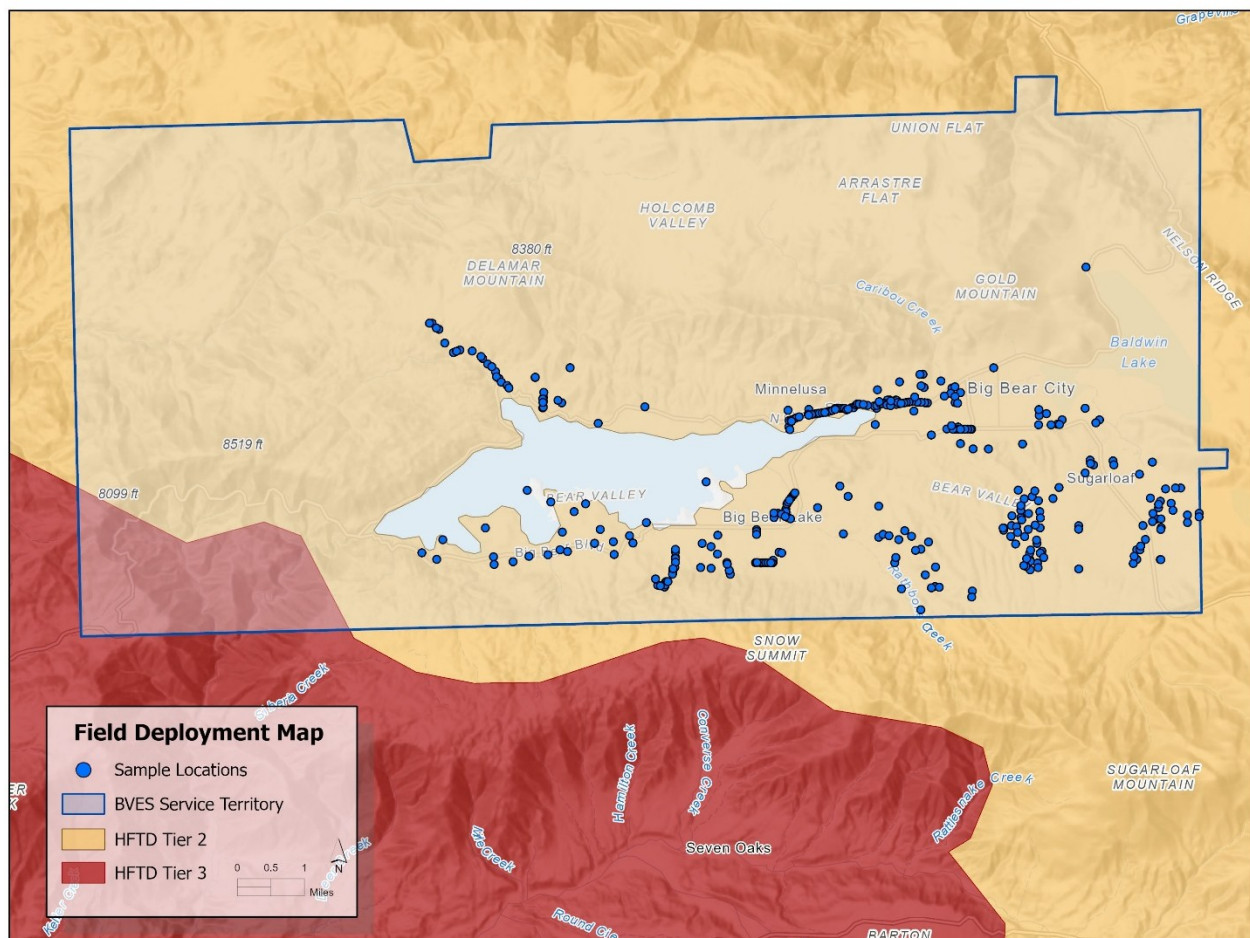
BVNA utilized random sampling for Bear Valley based upon a simplified version of Cochran's Sample Size Formula. Utilization of this formula helps determine the appropriate sample size required to achieve a desired level of precision and confidence in the results – this ensures that the sample is representative of the larger population. By specifying a confidence level for the EC's individual initiatives based upon historical trends and data, mainly previous year's validation rates, the conclusions drawn from the sample data have a higher degree of statistical confidence. This confidence rate ranged from 85% and 95%, and if the previous year's validation rate fell outside of this range, the low or high end was utilized. For example, if the prior year sample validation rate was 96%, then 95% was used, if the previous year sample validation rate was 84%, then 85% was used. If no information on the prior year's sample validation rate exists, then 90% was used, unless other factors influenced that determination.

Whether or not an initiative was classified as Focus or non-Focus also affected the number of samples required for a given initiative. For Focus Initiatives, the margin of error (MOE) was set at 5% and for non-Focus Initiatives, the MOE was set at 10%. Although there is only a 5% difference between these two MOEs, the difference in sample size produced when utilizing these two MOE values is quite significant. As the margin of error *increases*, the required sample size decreases because a larger margin of error allows for *more* variability in the sample, requiring fewer samples to achieve the desired level of precision. As the margin of error *decreases*, the opposite happens because a smaller margin of error allows for *less*

variability in the sample, requiring more samples to achieve the desired level of precision. Therefore, Focus Initiatives require more sampling than non-Focus Initiatives.

Once the total number of samples was calculated for each initiative, the IE determined how many samples should come from non-HFTD, HFTD Tier 2, and HFTD Tier 3 areas. Due to HFTD-Tier 3 areas posing the most significant threat to wildfire ignition risk, it was determined that 75% of the sampling would occur in these areas, while 25% of sampling would occur in HFTD Tier 2 areas. If a certain initiative did not reside within a HFTD Tier 3 area, then the sampling number would be drawn from a HFTD Tier 2 area; if an initiative did not reside within either a HFTD Tier 3 or 2 area, then all samples were drawn from the non-HFTD area. An additional 25% of samples were identified to be used in the case that any of the primary samples were unusable or inaccessible.

Figure 1: Overview of Field Areas Sampled



4. REVIEW OF INITIATIVES ACROSS WMP CATEGORIES: COMPLIANCE AND FUNDING

Table 6: WMP Initiative Category Initiative Summary

WMP Initiative Category	No. of Focus and Field Verifiable Initiatives	No. of Focus and Non-Field Verifiable Initiatives	No. of Non-Focus and Field Verifiable Initiatives	No. of Non-Focus and Non-Field Verifiable Initiatives
Grid Design, Operations, and Maintenance	10	5	0	27
Vegetation Management and Inspections	1	0	3	15
Situation Awareness and Forecasting	0	0	1	6
Emergency Preparedness	0	0	0	5
Community Outreach and Engagement	0	0	0	4

Funding Evaluation Methodology

The IE employed a comprehensive approach to evaluate funding compliance for each initiative in the WMP. The funding methodology approach included the following:

Budget Baseline Establishment: The IE established a baseline for planned expenditures by thoroughly reviewing budget information documented in BVES's approved 2024 WMP filing. These planned budget figures were cross-verified against BVES's officially reported data, specifically examining the Q4 2024 QDR Table 11.

Actual Expenditure Verification: Actual financial expenditures reported by BVES in their April 2025 ARC Attachment D: 2024 WMP Initiative Budget and Actual Spend Review were compared against established WMP budget baselines.

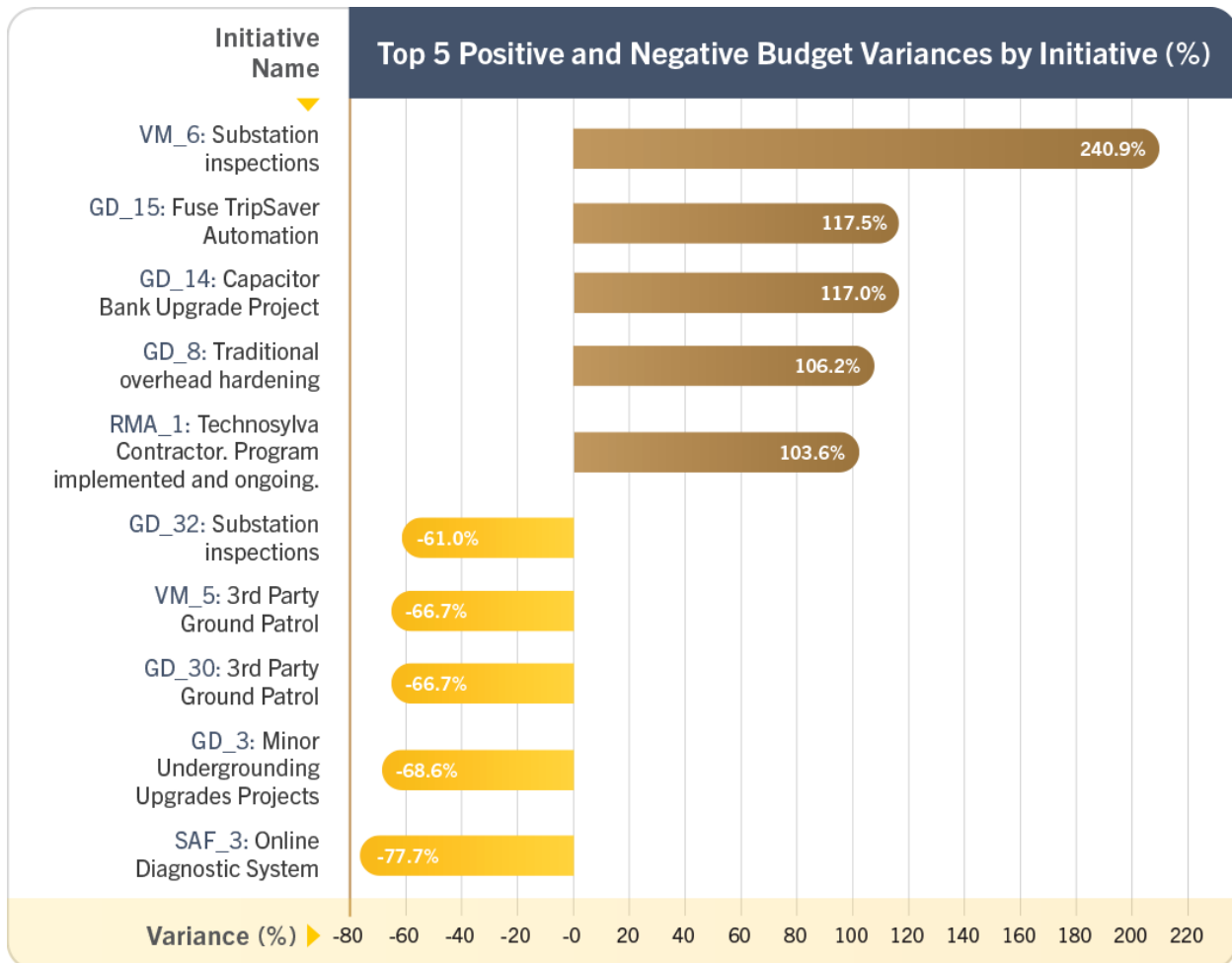
Variance Analysis: The IE calculated the absolute percent differences for each initiative by applying the formula as required by Energy Safety guidelines. These calculations were conducted for every initiative, generating detailed variance data for further review and analysis.

Threshold Application: A predefined threshold of 10% absolute percent difference was applied to systematically identify initiatives that required deeper review.

Supporting Documentation Review: For initiatives exceeding the established 10% variance threshold, the IE requested additional supporting documentation and detailed explanations from BVES. If BVES's rationale provided in the ARC was insufficient or incomplete, the IE explicitly asked for further documentation as necessary to achieve clarity and validate the reasoning behind the variances.

Detailed Analysis and Reporting: The IE documented any funding discrepancies identified during the evaluation, provided accurate corrected values, and analyzed the underlying causes for each variance, as detailed in Section 4 of this report and the top five (5) positive and negative variances as summarized in Figure 2.

Figure 2: Top 5 Positive and Negative Variance by Initiative (%)



4.1 GRID DESIGN, OPERATIONS, AND MAINTENANCE

4.1.1 Initiative Summary Table

Table 7: Initiative Summary Table (Spend in Thousands \$)

Initiative Number, WMP Section Number, and Name ¹	WMP – Initiative Target ¹	EC-Claimed Progress ²	EC-Claimed Initiative Status ³	Sample Size ⁴	Sample Validation Rate (%) ⁵	Verification Method ⁶	IE Finding on Initiative (Initiative Validation Rate) ^{7, 8}	WMP – Planned Spend (\$)	EC-Claimed Actual Spend (\$ and % from budget)	Satisfied Risk Reduction Goal? ⁹
GD_1, 8.1.2.1, Covered Conductor Replacement Project	12.9 Circuit Miles	13.32 Circuit Miles	Complete	13.32 Circuit Miles	100%	Field Inspections Project Completion Data (DR046) Project As-Built (DR046b)	Initiative Validated (103%)	\$4,737.30	\$4,595.40 (-3.0%)	Yes (3.62%)
GD_2, 8.1.2.1, Radford Line Replacement Project	2.7 Circuit Miles	2.8 Circuit Miles	Complete	2.8 Circuit Miles	100%	Field Inspections Project Completion Data (DR047) Project As-Built (DR047b)	Initiative Validated (104%)	\$3,633.60	\$0.00 (+0.0%)	No Goal Provided
GD_3, 8.1.2.2, Minor Undergrounding Upgrades Projects	No Target	N/A	Ongoing	1 Project	100%	Field Inspections Project Completion Data (DR052)	Initiative Validated (100%)	\$303.70	\$0.00 (+0.0%)	Yes (4.98%)
GD_4, 8.1.2.3, Covered Conductor Replacement Project	200 Poles	262 Poles	Complete	72 Poles	100%	Field Inspections Project Completion Data (DR055)	Initiative Validated (134%)	\$2,030.30	\$1,969.50 (-3.0%)	Yes (60%)
GD_5, 8.1.2.3, Radford Line Replacement Project	70 Poles	83 Poles	Complete	49 Poles	100%	Field Inspections Project Completion Data (DR057)	Initiative Validated (126%)	\$1,557.30	\$2,513.70 (+61.4%)	No Goal Provided
GD_6, 8.1.2.3, Evacuation Route Hardening Project	500 Poles	1,095 Poles	Complete	85 Poles	100%	Field Inspections Project Completion Data (DR058)	Initiative Validated (186%)	\$808.00	\$541.30 (-33.0%)	Yes (12%)
GD_7, 8.1.2.4, Transmission pole/tower replacements and reinforcements	N/A	N/A	N/A	N/A	N/A	N/A	N/A	\$0.00	\$0.00 (+0.0%)	No Goal Provided

¹ N/A in the Initiative Target column means that the EC did not provide a target in the WMP.

² N/A in the Claimed Progress column means that the EC did not provide any claimed progress on QDR4 or the EC ARC

³ N/A in the Claimed Status column means that the EC did not provide a claimed status on QDR4 or the EC ARC

⁴ N/A in the Sample Size column means that no target was provided by the EC, or the target was qualitative and did not have a sampling component.

⁵ N/A in the Sample Validation column means that no sampling was reviewed; therefore, no validation rate was applied.

⁶ N/A in the Verification Method column means that the initiative was not reviewed.

⁷ As detailed in Energy Safety's issued IE ARC Outline for WMP Compliance Year 2024 document, if the total initiative validation is greater or equal to 95%, the initiative is considered validated by the IE.

⁸ N/A in the Initiative Validation column means that the initiative was not reviewed and therefore could not be validated/invalidated.

⁹ Risk Reduction Goal can still be met or missed even if the Sample Size and Validation Rate column contains N/A. This is due to the initiative target goal being qualitative and therefore no sampling is required because the documentation initially provided fulfills the sampling requirement.

Initiative Number, WMP Section Number, and Name	WMP – Initiative Target ¹	EC-Claimed Progress ²	EC-Claimed Initiative Status ³	Sample Size ⁴	Sample Validation Rate (%) ⁵	Verification Method ⁶	IE Finding on Initiative (Initiative Validation Rate) ^{7, 8}	WMP – Planned Spend (\$)	EC-Claimed Actual Spend (\$ and % from budget)	Satisfied Risk Reduction Goal? ⁹
GD_8, 8.1.2.5, Traditional overhead hardening	No Target	N/A	Ongoing	9 Maintenance Activities	100%	Field Inspections Project Completion Data (060)	Initiative Validated (100%)	\$809.80	\$1,669.60 (+106.2%)	Yes (4.36%)
GD_9, 8.1.2.6 Emerging Grid Hardening Tech. Installations & Pilots	N/A	N/A	Not Started in 2024	N/A	N/A	N/A	N/A	\$0.00	\$0.00 (+0.0%)	No Goal Provided
GD_10, 8.1.2.7 Bear Valley Solar Energy Project, Microgrids	Perform Necessary Project Action	N/A	Not Started in 2024	N/A	N/A	Battery & Solar Ruling BVES Testimony BVES Solar & Storage Application (DR014)	Initiative Validated (100%)	\$0.00	\$0.00 (+0.0%)	No Goal Provided
GD_11, 8.1.2.7 Energy Storage Project, Microgrids	Perform Necessary Project Action	N/A	Not Started in 2024	N/A	N/A	Battery & Solar Ruling BVES Testimony BVES Solar & Storage Application (DR015)	Initiative Validated (100%)	\$0.00	\$0.00 (+0.0%)	No Goal Provided
GD_12, 8.1.2.8, Substation Automation	3 Substations	3 Substations	Complete	3 Substations	100%	Field Inspections Project Location Data (DR016)	Initiative Validated (100%)	\$655.90	\$1,114.30 (+69.9%)	Yes (29%)
GD_13, 8.1.2.8, Switch and Field Device Automation	10 Switches	10 Switches	Complete	10 Switches	100%	Field Inspections Project Completion Data (DR017)	Initiative Validated (100%)	\$673.60	\$1,200.30 (+78.2%)	Yes (22%)
GD_14, 8.1.2.8, Capacitor Bank Upgrade Project	6 Capacitor Banks	4 Capacitor Banks	Missed Target	4 Capacitor Banks	100%	Field Inspections Project Completion Data (DR018)	Initiative Not Validated (67%)	\$319.10	\$692.50 (+117.0%)	No
GD_15, 8.1.2.8, Fuse TripSaver Automation	50 Fuse TripSavers	27 Fuse TripSavers	Missed Target	27 FuseTripSavers	100%	Field Inspections Project Completion Data (DR019)	Initiative Not Validated (54%)	\$136.90	\$297.70 (+117.5%)	No
GD_16, 8.1.2.8, Server Room	Project Milestone for Server Installation	Yearly Target Met	Complete	1 Server Room	100%	Field Inspections Project Completion Data (DR020)	Initiative Validated (100%)	\$103.20	\$61.40 (-40.5%)	Yes (84%)
GD_17, 8.1.2.8, Distribution Management Center	Project Milestone for Distribution Management Center	Initiative Complete	Complete	1 Distribution Management Center	100%	Field Inspections Project Completion Data (DR047)	Initiative Validated (100%)	\$37.40	\$65.30 (+74.6%)	Yes (72%)
GD_18, 8.1.2.9 Line Removals	N/A	N/A	N/A	N/A	N/A	N/A	N/A	\$0.00	\$0.00 (+0.0%)	No Goal Provided
GD_19, 8.1.2.10, Tree Attachment Removal Project	100 Tree Attachments	104 Tree Attachments	Complete	54	100%	Field Inspections Project Completion Data (DR048)	Initiative Validated (104%)	\$607.20	\$699.30 (+15.2%)	Yes
GD_20, 8.1.2.11, Other Grid Topology Improvement to Mitigate or Reduce PSPS Events	N/A	N/A	N/A	N/A	N/A	N/A	N/A	\$0.00	\$0.00 (+0.0%)	No Goal Provided

Initiative Number, WMP Section Number, and Name	WMP – Initiative Target ¹	EC-Claimed Progress ²	EC-Claimed Initiative Status ³	Sample Size ⁴	Sample Validation Rate (%) ⁵	Verification Method ⁶	IE Finding on Initiative (Initiative Validation Rate) ^{7, 8}	WMP – Planned Spend (\$)	EC-Claimed Actual Spend (\$ and % from budget)	Satisfied Risk Reduction Goal? ⁹
GD_21, 8.1.2.12, BVPP Phase 4 Upgrade Project	Project Milestone	N/A	Complete	N/A	N/A	-Executed Budget -Phase 4 PSPS Risk -Power Plant 2024 Timeline -SDP Invoice for Phase 3 (DR023)	Initiative Validated (100%)	\$561.60	\$594.40 (+5.8%)	Yes (24.80%)
GD_22, 8.1.2.12, Partial Safety and Technical Upgrades to Maltby Substation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	\$795.00	\$794.70 (-0.0%)	No Goal Provided
GD_23, 8.1.2.12, Safety and Technical Upgrades to Lake Substation	64% of Project Completion	N/A	Not Started in 2024	N/A	N/A	-QDR4 Table 1 -BVES 2024 WMP Updates R2	Initiative Not Validated (0%)	\$0.00	\$0.00 (+0.0%)	No
GD_24, 8.1.2.12, Partial Safety and Technical Upgrades to Village Substation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	\$0.00	\$0.00 (+0.0%)	No Goal Provided
GD_25, 8.1.3.1 Detailed Inspection Program	51 Inspections	51 Inspections	Complete	14 Inspections	100%	-Detailed Inspection Circuits (DR025) -Detailed Inspection Reports (DR025.b)	Initiative Validated (100%)	\$13.90	\$25.30 (+82.0%)	Yes (4.36%)
GD_26, 8.1.3.2, Patrol Inspection Program	205 Circuit Miles	205 Circuit Miles	Complete	17 Circuit Miles	100%	-Patrol Inspection Record (DR026) -Patrol Inspections (DR026.b)	Initiative Validated (100%)	\$32.40	\$58.90 (+81.8%)	Yes (4.36%)
GD_27, 8.1.3.3, UAV Thermography	205 Circuit Miles	205 Circuit Miles	Complete	17 Circuit Miles	100%	-2024 UAV Report (DR027) -DR27.b Explanation -Pages From Big Bear City (DR027.b)	Initiative Validated (100%)	\$77.50	\$65.20 (-15.9%)	Yes (4.36%)
GD_28, 8.1.3.4, UAV/HD Photography/ Videography	205 Circuit Miles	205 Circuit Miles	Complete	17 Circuit Miles	100%	-2024 UAV Report (DR028)	Initiative Validated (100%)	\$77.50	\$65.20 (-15.9%)	Yes (4.36%)
GD_29, 8.1.3.1, LiDAR Inspection	205 Circuit Miles	205 Circuit Miles	Complete	17 Circuit Miles	100%	-Mobile LiDAR Data (DR029) -Encroachments KMZ (DR029.b)	Initiative Validated (100%)	\$79.60	\$71.80 (-9.8%)	Yes (4.36%)
GD_30 [8.1.3.6] 3rd Party Ground Patrol	205 Circuit Miles	205 Circuit Miles	Complete	17 Circuit Miles	100%	-Ground Inspection Log (DR030)	Initiative Validated (100%)	\$64.30	\$21.40 (-66.7%)	Yes (4.36%)
GD_31 [8.1.3.7] Intrusive Pole Inspections	850 Poles	850 Poles	Complete	18 Circuit Miles	100%	-Intrusive Testing Results (DR031) -Intrusive Testing Follow-Up Procedure (DR031.b)	Initiative Validated (100%)	\$19.10	\$19.30 (+1.0%)	Yes (4.36%)
GD_32 [8.1.3.8] Substation Inspections	144 Inspections	156 Inspections	Complete	16 Inspections	100%	-Inspection Reports (DR032)	Initiative Validated (108%)	\$283.30	\$110.50 (-61.0%)	Yes (4.36%)
GD_33 [8.1.4.3] Equipment Maintenance & Repair	N/A	Quarterly Target Met	Ongoing	N/A	N/A	-2024 QDR4 Table 11 (DR033) -Budget Breakdown (DR033.b)	Initiative Validated	\$1,073.20	\$1,440.90 (+34.3%)	Yes (4.36%)
GD_34, 8.1.5 Asset Management & Inspection Enterprise System(s)	100%	N/A	Ongoing	N/A	N/A	-Executed Contract -Meter Inspection Portal Response (DR034)	Initiative Validated	\$57.70	\$42.80 (-25.8%)	Yes (4.36%)

Initiative Number, WMP Section Number, and Name	WMP – Initiative Target ¹	EC-Claimed Progress ²	EC-Claimed Initiative Status ³	Sample Size ⁴	Sample Validation Rate (%) ⁵	Verification Method ⁶	IE Finding on Initiative (Initiative Validation Rate) ^{7, 8}	WMP – Planned Spend (\$)	EC-Claimed Actual Spend (\$ and % from budget)	Satisfied Risk Reduction Goal? ⁹
GD_35, 8.1.6, Asset Quality Assurance/Quality Control	20 Asset QCs	20 Asset QCs	Complete	13 Asset QCs	100%	Asset QC Documentation (DR053, DR053.b)	Initiative Validated (100%)	\$20.30	\$22.10 (+8.9%)	Yes (4.36%)
GD_36, 8.1.7 Open Work Orders	All WO Resolved	Quarterly Target Met	Ongoing	N/A	N/A	-BVES GO165 Procedures -BVES Inspection Schedule (DR035)	Initiative Validated	\$17.80	\$19.30 (+8.4%)	No Goal Provided
GD_37, 8.1.8.1 Equipment Settings to Reduce Wildfire Risk	Review & Evaluate System Settings	Quarterly target Met	Ongoing	N/A	N/A	-Emergency Response & Disaster Plan -PSPS Procedures -Recloser Settings Clarification (DR036)	Initiative Validated	\$5.10	\$7.10 (+39.2%)	Yes (4.36%)
GD_38, 8.1.8.2 Grid Response Procedures & Notifications	Review & Update Procedure Annually	Quarterly Target Met	Complete	N/A	N/A	-Firefighting Coordination Protocols (DR037) -Firefight Coordination Response -Emergency Response & Disaster Plan (DR037.b)	Initiative Validated	\$8.90	\$9.70 (+9.0%)	Yes (85%)
GD_39, 8.1.8.3 Personnel Work Procedures & Training in Conditions of Elevated Fire Risk	Review & Update Procedure Annually	Quarterly Target Met	Complete	N/A	N/A	-PSPS Procedures -QAQC Personnel Work Procedures -PSPS Post Season Report 2024 -PSPS Procedure Review (DR054)	Initiative Validated	\$3.80	\$4.10 (+7.9%)	Yes (3.62%)
GD_40, 8.1.9 Workforce Planning	Staffing Level Verified	Staffing Levels Verified	Complete	N/A	N/A	-Executed Outsource Contracts -Executed Work Change Orders -QAQC Asset Workforce Planning (DR056)	Initiative Validated	\$6.40	\$6.90 (+7.8%)	Yes (3.62%)
ST_1, 5.4.5 Environmental Compliance & Permitting	Annual Review & Update	Quarterly Target Met	Ongoing	N/A	N/A	-Big Bear Power Line Biology Report (DR041) -Radford Survey Requirement (DR041.b)	Initiative Validated	\$25.4	\$31.30 (+23.2%)	No Goal Provided

4.1.2 Written Detail for Initiatives

4.1.2.1 Initiative Review – Findings & Method

GD_1 – 8.1.2.1 – Covered Conductor Replacement Project – Focus & Field Verifiable

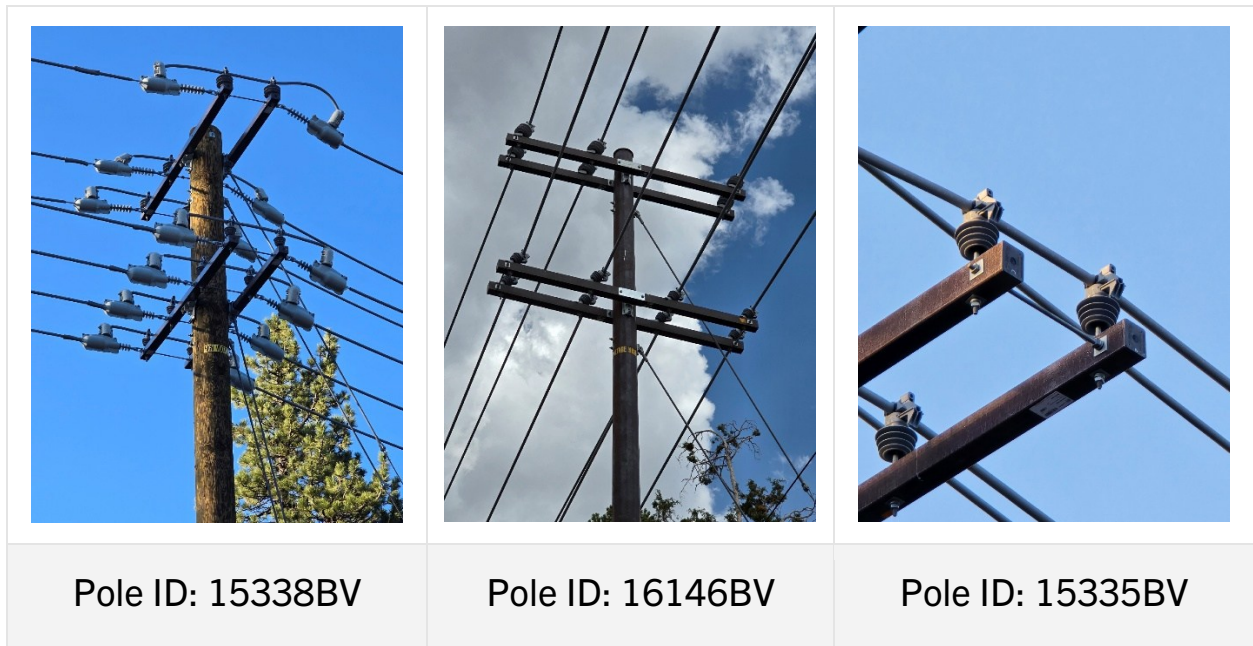
Covered conductor replacement reduces the likelihood that contact from vegetation or other foreign objects will lead to faults and ignitions on BVES's overhead distribution system. As described within the 2023-2025 WMP, BVES set a 2024 completion target of 12.9 circuit miles for this initiative and projected a 3.62% risk-reduction goal.

Per BVES's 2024 Q4 QDR dated February 1, 2025, provided in response to the Front-Loaded Data Request, BVES reported completing 13.2 circuit miles of covered conductor installation. The 2024 Annual Report on Compliance (ARC) for the 2024 WMP, dated April 1, 2025, also reports 13.2 circuit miles of covered conductor installation and states that the 3.62% risk reduction goal was achieved.

To verify completion of the initiative, the IE requested Data Requests DR046 and DR046.b, which provided project as-builts and spatial coordinates for field verification. BVES's response included the following attachments:

1. Big Bear City project as-built drawings
2. Baldwin Lake project as-built drawings
3. Fawnskin project as-built drawings
4. Covered conductor installation spatial data by segment

For illustrative examples of these observations, see Figure 3: Example Covered Conductor Installation Field Images, provided below.

Figure 3: Example Covered Conductor Installation Field Images

The IE field sampled all 13.32 miles of completed work. Using geo-referenced photographs and a 360-degree video camera mounted on a patrol vehicle, the IE verified:

- Covered conductor was installed on the reported segments.
- Conductor length and location matched the as-built drawings and completion records provided in DR046.b.
- Installation workmanship met industry construction standards.

Field assessments of this initiative were reviewed for workmanship quality and accuracy of the information in alignment with the initiative description provided in the 2023-2025 WMP. The following issues or data discrepancies were identified during the field assessment:

1. One mismatched pole tag identified
2. Location coordinates for some poles slightly off

BVES can improve its asset record accuracy by adding a final verification step to the pole replacement workflow. This verification step could involve requiring field crews to confirm that a visible, correctly numbered tag is attached to the replacement pole, reconcile that number with the work order before closeout with a photo as documentation. Based on the field evidence reviewed, the IE has validated this initiative.

Table 8: Covered Conductor Replacement Project Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR046 Response	Summary
12.9 Circuit Miles	13.32 Circuit Miles	13.32 Circuit Miles	13.32 Circuit Miles	Initiative Validated

GD_2 – 8.1.2.1 – Radford Line Replacement Project –Focus & Field Verifiable

Replacing aging conductors and hardware on the Radford Line reduces the likelihood that equipment failure will lead to faults and ignitions on BVES’s overhead distribution system. As described within the 2023-2025 WMP, BVES set a 2024 completion target of 2.7 circuit miles for this initiative and projected a 10 % risk-reduction goal.

Per BVES’s 2024 Q4 QDR dated February 1, 2025, provided in response to the Front-Loaded Data Request, BVES initially reported completing 3.1 circuit miles of Radford Line replacement. However, the 2024 Annual Report on Compliance, dated April 1, 2025, reports 2.8 circuit miles of completed work and states that the 10 % risk-reduction goal was achieved.

To reconcile the mileage discrepancy, the IE issued DR049 requesting confirmation of the actual completion length. BVES confirmed the correct total is 2.8 circuit miles verified via GPS coordinates, aligning with the 2024 ARC figure. In DR049.b, BVES provided project as-builts and completion records for the following Radford Line projects:

1. Knickerbocker segment conductor replacement as-built drawings
2. Forest segment conductor installation as-built drawings
3. Forest segment conductor removal as-built drawings

For illustrative examples of these observations, see Figure 4: Example Radford Line Replacement Field Images, provided below.

Figure 4: Example Radford Line Replacement Field Images



New Pole ID: 15226BV



New Pole ID: 15221BV



New Pole ID: 16266BV

The IE was only able to field verify 0.75 miles of the 2.8-mile reconductor for the Radford Line due to an emergency road closure by the US Forest Service. This closure prohibits all forms of vehicle and pedestrian access. See Figure 5: Forest Road Emergency Closure, provided below.

Figure 5: Forest Road Emergency Closure



US Forest Service Road Closure Warning

The IE performed comprehensive field verifications of the accessible line segments using foot patrols and drone-based data capture. Foot patrols involved examining replaced line segments, capturing geo-referenced photographs with a high-resolution hand-held camera, integrated with GPS to validate line replacements. Drone flights captured high-resolution imagery from above, supplemented by GPS telemetry data detailing flight paths, headings, positions, and elevations.

The IE verified:

- Replaced conductor and hardware were installed on the reported segments.
- Line length and location matched the as-built drawings and completion records provided in DR049.b.
- Installation workmanship meets industry construction standards.

Field assessments of this initiative were reviewed for workmanship quality and accuracy of the information in alignment with the initiative description provided in the 2023-2025 WMP. No issues or data discrepancies were found during field assessment. The IE validates this initiative.

Table 9: Radford Line Replacement Project Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR049 Response	Summary
2.7 Circuit Miles	2.8 Circuit Miles	3.1 Circuit Miles	2.8 Circuit Miles	Initiative Validated

GD_3 – 8.1.2.2 – Minor Undergrounding Upgrades Projects – Non-Focus & Field Verifiable

BVES does not have any large-scale undergrounding projects planned within its 2023 – 2025 WMP cycle. Instead, the utility carries out small undergrounding upgrades for new developments and minor improvements to existing underground facilities.

As described within the 2023-2025 WMP, BVES assigned a 4.98 % risk-reduction goal to this initiative but did not set a 2024 completion target.

Neither BVES’s 2024 Q4 QDR dated February 1, 2025, nor the 2024 Annual Report on Compliance dated April 1, 2025, reported any completion metrics for this initiative, and the ARC does not state whether the risk-reduction goal was achieved.

To identify if any minor undergrounding upgrades projects were completed in 2024, the IE issued Data Request DR052. BVES confirmed one minor underground project and provided the following project details.

- Project description
- Work order number
- Circuit ID
- Date of completion
- Location coordinates

For illustrative examples of these observations, see Figure 6: Example URD Pedestal Change-Out Field Images, provided below.

Figure 6: Example URD Pedestal Change-Out Field Images



W/O#: 60400219: Castle Glen URD Pedestal Change Out

The Independent Evaluator (IE) field-verified the Castle Glen URD pedestal change out location, capturing geo-referenced photographs and assessing workmanship and quality. No issues or data discrepancies were identified. IE concludes that BVES's reported activity is consistent with the initiative description. The IE validates the 2024 activity for this initiative.

Table 10: Minor Undergrounding Upgrades Project Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR052 Response	Summary
No Target	N/A	N/A	Records of Completion for Minor UG Project	Initiative Validated

GD_4 – 8.1.2.3 – Covered Conductor Replacement Project (Pole Replacements) –Focus & Field Verifiable

Covered conductors are insulated, adding extra weight compared to bare conductors. To support that additional load and to comply with pole-loading and construction standards, replace or reinforce of certain distribution poles are necessary as part of covered conductor installation program.

As described within the 2023-2025 WMP, BVES set a 2024 completion target of 200 distribution poles for this initiative and projected a 60 % risk-reduction goal.

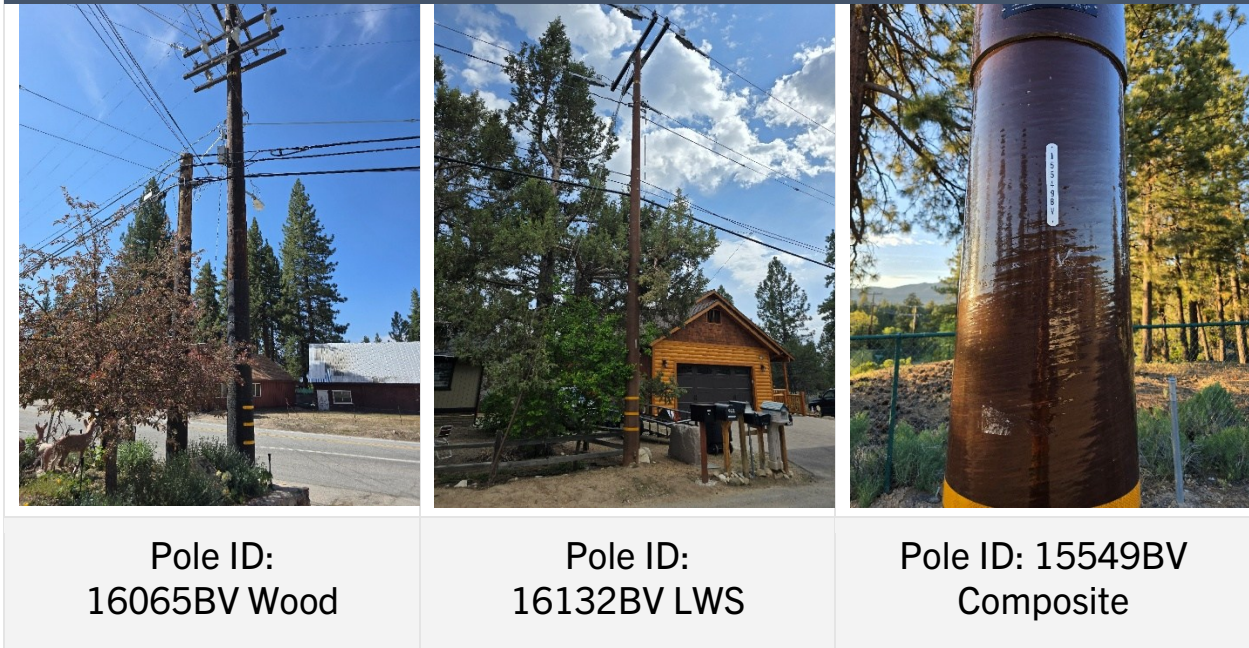
Per BVES's 2024 Q4 QDR dated February 1, 2025, provided in response to the Front Loaded Data Request, BVES reported completing 262 pole replacements and reinforcements. The 2024 Annual Report on Compliance (ARC) dated April 1, 2025, reports the same 262 poles and states that the 60 % risk-reduction goal was achieved.

To verify 2024 completion figures, the IE issued Data Request DR055, requesting records of completion. BVES provided an attachment containing the following attributes for each pole:

- Previous Pole #
- New Pole #
- New Pole Type & Height / Class
- Circuit ID
- Latitude / Longitude
- Work Type

BVES's response to DR055 confirmed a total of 262 distribution pole replacements and reinforcements. For illustrative examples of these observations, see Figure 7: Example Pole Replacement Field Images, provided below.

Figure 7: Example Pole Replacement Field Images



The Independent Evaluator (IE) randomly sampled 72 poles, capturing geo-referenced photographs and assessing workmanship and coordinate accuracy. Two minor issues were identified:

1. One mismatched pole-tag ID
2. One pole location slightly offset from the reported coordinates

As discussed in GD_1 - Covered Conductor Replacement Project above, the IE recommends an additional verification step to the pole replacement workflow to improve its asset record accuracy. Based on the field evidence reviewed, the IE has validated this initiative.

Table 11: Covered Conductor Replacement (Poles) Project Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR055 Response	Summary
200 Poles	262 Poles	262 Poles	262 Poles	Initiative Validated

GD_5 – 8.1.2.3 – Radford Line Replacement Project (Pole Replacements or Reinforcements) –Focus & Field Verifiable

The Radford Line traverses BVES's highest fire-risk terrain. Replacing or reinforcing distribution poles along this corridor reduces the likelihood that pole failure will lead to conductor contact and wildfire ignition.

As described within the 2023-2025 WMP, BVES set a 2024 completion target of 70 distribution poles for this initiative, but no risk reduction goal was identified.

Per BVES's 2024 Q4 QDR dated February 1, 2025, provided in response to the Front Loaded Data Request, BVES reported completing 83 pole replacements and reinforcements. The 2024 Annual Report on Compliance (ARC) dated April 1, 2025, reports the same 83 poles and states that the Radford Line pole replacement effort achieved its risk reduction objective.

To verify the reported completion figures, the IE issued Data Request DR057, requesting records of completion. BVES provided an attachment containing the following attributes for each pole:

- Old Pole ID
- New Pole ID
- Work Type (Replacement or Reinforcement)
- Latitude / Longitude
- Circuit ID

BVES's response confirmed a total of 80 pole replacements and 8 pole reinforcements performed between July 24, 2024, and October 31, 2024, for a combined total of 88 poles.

For illustrative examples of these observations, see Figure 8: Example Radford Line Pole Replacement Field Images, provided below.

Figure 8: Example Radford Line Pole Replacement Field Images



Pole ID: 16268BV



Pole ID: 15219BV



Pole ID: 16269BV

The IE was only able to field verify 13 of the 83 pole replacements for the Radford Line due to an emergency road closure by the US Forest Service. This closure prohibits all forms of vehicle and pedestrian access. See Figure 9: Forest Road Emergency Closure, provided below.

Figure 9: Forest Road Emergency Closure



US Forest Service Road Closure Sign

Field assessments of the pole replacement samples were reviewed for workmanship quality and accuracy of the information in alignment with the initiative description provided in the 2023 - 2025 WMP. No issues or data discrepancies were identified during the field assessment. Based on the field evidence reviewed, the IE has validated this initiative.

Table 12: Radford Line Replacement (Poles) Project Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR057 Response	Summary
70 Poles	83 Poles	83 Poles	88 Poles	Initiative Validated

GD_6 – 8.1.2.3 – Evacuation Route Hardening Project –Focus & Field Verifiable

BVES maintains three primary and several secondary evacuation routes to facilitate safe public egress during wildfires or other emergencies. Hardening the poles along these corridors by wrapping poles with fire-resistant mesh adds resiliency to reduce egress risk.

As described within the 2023-2025 WMP, BVES set a 2024 completion target of 500 distribution poles for this initiative and projected a 12 % risk-reduction goal.

Per BVES’s 2024 Q4 QDR dated February 1, 2025, provided in response to the Front Loaded Data Request, BVES reported completing 1,095 hardened poles along evacuation routes. The 2024 Annual Report on Compliance cites the same 1,095 poles and states that the 12 % risk reduction goal was achieved.

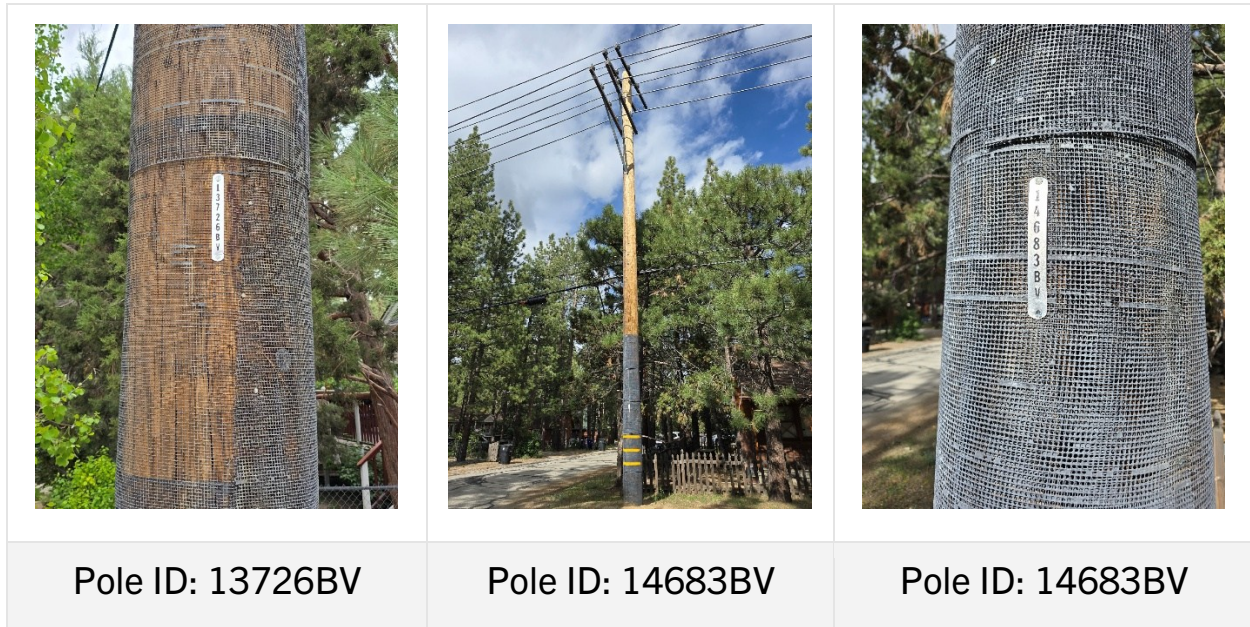
To verify these figures, the IE issued Data Request DR058, requesting records of completion. BVES provided an attachment with the following attributes for each pole that was wrapped with fire-resistant mesh:

- Install Date
- Pole #
- Address / Street
- Height
- Circuit (Top)
- Latitude / Longitude

BVES’s response confirmed a total of 929 pole wraps completed, 166 fewer poles than reported in the 2024 QDR and 2024 ARC, but still exceeding the 500 pole target set in the 2023 – 2025 WMP.

For illustrative examples of these observations, see Figure 10: Example Evacuation Route Pole Hardening Field Images, provided below.

Figure 10: Example Evacuation Route Pole Hardening Field Images



The IE randomly sampled 85 pole wraps, capturing geo-referenced photographs and assessing workmanship and location accuracy. One minor issue was repeated:

- Three occurrences of mismatched pole IDs in the completion records.

As discussed in GD 1 – Covered Conductor Replacement Project above, the IE recommends an additional verification step in BVES’s pole-replacement workflow to improve asset-record accuracy. Based on the field evidence reviewed, the IE has validated this initiative.

Table 13: Evacuation Route Hardening Project Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR058 Response	Summary
500 Poles	1,095 Poles	1,095 Poles	929 Poles	Initiative Validated

GD_7 – 8.1.2.4 – Transmission pole/tower replacements and reinforcements – Non-Focus & Field Verifiable

As reported in BVES's 2024 Q4 QDR dated February 1, 2025, provided in the response to the Front Loaded Data Request and confirmed by the Annual Report on Compliance for the 2024 WMP, this initiative did not have any target or work completed for 2024.

Based upon this, the IE has determined that this initiative is not applicable for the 2024 review period.

GD_8 – 8.1.2.5 – Traditional overhead hardening – Non-Focus & Field Verifiable

BVES performs "as-needed" maintenance on overhead distribution assets, replacing or repairing poles that are leaning, structurally deficient, or damaged, to keep the system in safe, operating condition and reduce wildfire-ignition risk.

As described within the 2023-2025 WMP, BVES identified a 4.36 % risk-reduction goal but no 2024 completion target beyond the commitment to address maintenance issues as they are identified.

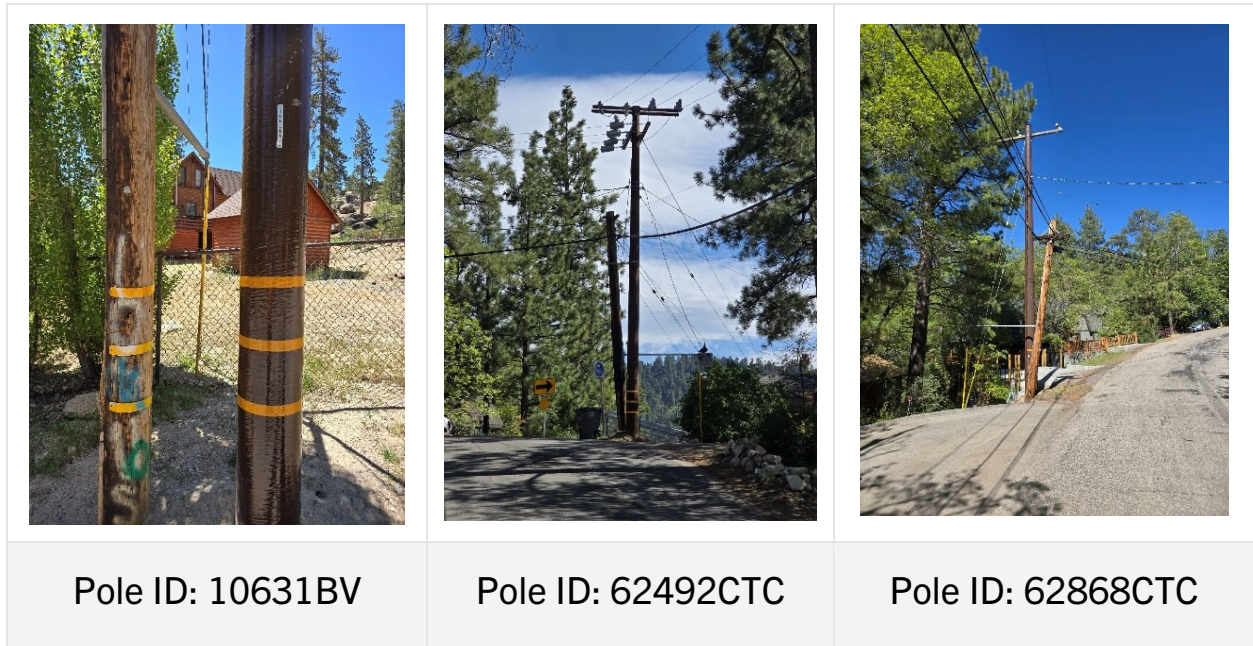
Neither BVES's 2024 Q4 QDR dated February 1, 2025, nor the 2024 Annual Report on Compliance (ARC) dated April 1, 2025, reported completion figures for this initiative, and the 2024 ARC does not state whether the risk reduction goal was achieved.

To confirm 2024 activity, the IE issued DR060, requesting records of all "as-needed" overhead maintenance performed in 2024. BVES provided a log of nine pole-related maintenance activities categorized as: 1) Leaning Pole, 2) Pole Loading Failure, or 3) Pole Damage. The completion file included the following attributes for each pole:

- Date
- Structure #
- Circuit
- Maintenance Details (Leaning Pole / Pole Loading Failure / Pole Damage)
- Completed (Yes / No)
- Address
- Latitude / Longitude

BVES's response confirms nine pole repairs completed between January 10, 2024, and December 15, 2024. For illustrative examples of these observations, see Figure 11: Example As-Needed Pole Maintenance Field Images, provided below.

Figure 11: Example As-Needed Pole Maintenance Field Images



The IE field verified all nine sites, capturing geo-referenced photographs and assessing workmanship and location accuracy. One minor issue was repeated: couple of occurrences of mismatched pole IDs in the completion records.

As discussed in GD 1 – Covered Conductor Replacement Project above, the IE recommends an additional verification step in BVES’s pole-replacement workflow to improve asset-record accuracy. Based on the field evidence reviewed, the IE has validated this initiative

Table 14: Traditional overhead hardening Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR060 Response	Summary
As Needed Maintenance	N/A	N/A	9 Maintenance Activities	Initiative Validated

GD_9, 8.1.2.6 - Emerging Grid Hardening Technology Installations and Pilots – Non-Focus & Non-Field Verifiable

Bear Valley's WMP does not outline any targets for 2024 related to GD_9: Emerging Grid Hardening Technology Installations and Pilots per table 8-3 on page 124. Section 8.1.2.6 states "BVES does not have any pilots planned at this time and will continue to monitor developments underway at other utilities. BVES did not set a risk reduction goal for this initiative. The IE has determined that GD_9 is not applicable to review year 2024.

GD_10, 8.1.2.7 - Bear Valley Solar Energy Project, Microgrids – Non-Focus & Non-Field Verifiable

In support of Initiative GD_10, BVES was asked to provide documentation showing progress toward the stated 2024 goal of filing application for the Bear Valley Energy Storage and Solar Project. BVES did not set a risk reduction goal for this initiative. The utility responded by submitting a Certificate of Public Convenience and Necessity to the CPUC, along with a request for a 14-day extension, which was acknowledged by a CPUC ruling dated April 18, 2025. Additionally, BVES provided a 45-page application and supporting public testimony for the project. The formal filing and documentation demonstrate that the utility engaged in the necessary project action targeted for 2024.

This response directly aligns with the WMP's 2024 objective for GD_10, which was to file an application, with success measured by the project's timeline and budget trajectory. The utility's filings provide evidence that the project advanced as planned within the target year. The submission of regulatory documents and testimony indicates active regulatory engagement and supports the claim that BVES met its 2024 goal under the microgrids initiative. The documentation confirms that key steps were taken toward eventual project deployment, which is part of reducing PSPS-related disruptions and increasing local energy resilience in accordance with the WMP. Based upon this analysis and the documentation provided, the IE has determined that BVES is in compliance with this initiative for the 2024 review period.

Table 15: Bear Valley Solar Energy Project, Microgrids

2024 Target	2024 ARC	2024 Q4 QDR	DR014 Response	Summary
File Application	N/A	N/A	Application Filed	Initiative Validated

GD_11, 8.1.2.7 - Energy Storage Project, Microgrids – Non-Focus & Non-Field Verifiable

Initiative GD_11 focuses specifically on the development of a 5 MW / 20 MWh lithium-ion battery energy storage system, which is a key component of the broader microgrid strategy outlined in GD_10. This initiative tracks progress on the battery installation itself. The energy storage system will be co-located with the Bear Valley Solar Energy Project (BVSEP) and directly connected to the BVES distribution system, enabling stored energy to support grid reliability during transmission outages. The project significantly mitigates the impact of Public Safety Power Shutoff (PSPS) events by providing a local, dispatchable energy source. BVES did not set a risk reduction goal for this initiative.

Once operational the battery and other systems will allow BVES to supply most customers without reliance on SCE during de-energization events. The utility submitted a 45-page application, including public testimony, and a Certificate of Public Convenience and Necessity (CPCN) to own and operate both the Bear Valley Solar Energy Project (BVSEP) and the co-located energy storage facility. The CPCN filing and requested a 14-day extension was ruled on by the CPUC in April 2025, demonstrating that BVES followed through with the required regulatory steps. This supports the WMP's 2024 objective of improving community resilience, and documentation submitted to the CPUC in 2024 confirms the utility has met the target milestone of filing its application for this facility and the initiative has been validated.

Table 16: Energy Storage Project, Microgrids

2024 Target	2024 ARC	2024 Q4 QDR	DR015 Response	Summary
File Application	N/A	N/A	Application Filed	Initiative Validated

GD_12 – 8.1.2.8 – Substation Automation –Focus & Field Verifiable

Automating distribution substations and tying them into BVES's Supervisory Control and Data Acquisition (SCADA) system gives BVES operators real-time visibility and remote control, improving situational awareness and shortening outage-response times.

As described within the 2023-2025 WMP, BVES set a 2024 completion target of 3 substations and projected a 29 % risk reduction goal for this initiative.

Per BVES's 2024 Q4 QDR dated February 1, 2025, provided in response to the Front Loaded Data Request, BVES reported that 3 substations had been automated and connected to

SCADA. The 2024 Annual Report on Compliance (ARC) dated April 1, 2025, cites the same 3 substations completion figure and states that the 29 % risk reduction goal was achieved.

To verify the reported progress, the IE issued Data Request DR016 requesting the names and addresses of the completed sites. BVES identified the following 3 substations:

1. Bear Mountain Substation
2. Division Substation
3. Maple Substation

The IE visited all three substations, capturing geo-referenced photographs of control cabinets, communications equipment, and SCADA interface hardware. For illustrative examples of these observations, please refer to Figure 12: Examples of Substation Automation and SCADA Integration Field Images, provided below. No issues were identified during field assessment.

Figure 12: Examples of Substation Automation and SCADA Integration Field Images



Division Substation



Maple Substation



Bear Mountain Substation

Field assessments of this initiative were reviewed for workmanship quality and accuracy of the information in alignment with the initiative description provided in the 2023 - 2025 WMP. No issues or data discrepancies were found during field assessment. The IE validates this initiative.

Table 17: Substation Automation Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR016 Response	Summary
3 Substations	3 Substations	3 Substations	3 Substations	Initiative Validated

GD_13 – 8.1.2.8 – Switch and Field Device Automation –Focus & Field Verifiable

Automating field switches and connecting them to BVES’s SCADA system enables operators to sectionalize circuits remotely, improving outage response and reducing wildfire-ignition risk.

As described within the 2023-2025 WMP, BVES set a 2024 completion target of 10 field switches and projected a 22 % risk-reduction goal for this initiative.

Per BVES’s 2024 Q4 QDR dated February 1, 2025, provided in response to the Front Loaded Data Request, BVES reported that 10 field switches had been automated and connected to

SCADA. The 2024 Annual Report on Compliance dated April 1, 2025, cites the same 10 switches completion figure and states that the 22 % risk reduction goal was achieved.

To verify the reported progress, the IE issued Data Request DR017 requesting detailed records of completion. BVES confirmed the 10 field switches and provided the attributes shown below:

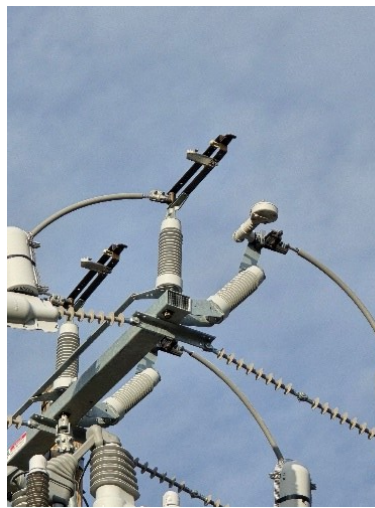
- GIS element name
- Pole ID
- Voltage and circuit
- Quantity per location
- Nearby address
- GPS coordinates

The IE visited all 10 locations, capturing geo-referenced photographs of the automated switchgear and communication antennas. The IE field assessment team utilized the California Power Line Fire Prevention Guide, 2021 Edition, as their ruling document to validate Exempt equipment installations (Pages 88-95, Figures B-22 through B-41). For illustrative examples of these observations, please refer to Figure 13: Examples of Switch and Field Device Field Images, provided below.

Figure 13: Examples of Switch and Field Device Field Images



Pole ID: 14939BV



Pole ID: 15469BV



Pole ID: 16619BV

Field assessments of this initiative were reviewed for workmanship quality and accuracy of the information in alignment with the initiative description provided in the 2023 - 2025 WMP. During the field assessment the IE noted two recurring data issues:

1. GIS coordinates were slightly off at two locations.
2. One pole tag did not match the reported pole ID.

The IE recommends that BVES incorporate an additional verification step in its switch automation workflow, similar to the pole replacement recommendation in GD 1, to improve asset record accuracy going forward. Based on the field evidence reviewed, the IE has validated this initiative.

Table 18: Switch and Field Device Automation Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR017 Response	Summary
10 Switches	10 Switches	10 Switches	10 Switches	Initiative Validated

GD_14 – 8.1.2.8 – Capacitor Bank Upgrade Project –Focus & Field Verifiable

Replacing legacy capacitor banks and tying them into BVES's SCADA system improves voltage stability and situational awareness, reducing the likelihood of voltage-related faults and ignitions.

As described within the 2023-2025 WMP, BVES set a 2024 completion target of 6 capacitor banks and projected a 29 % risk reduction goal for this initiative.

Per BVES's 2024 Q4 QDR dated February 1, 2025, provided in response to the Front Loaded Data Request, BVES reported that 4 capacitor banks had been replaced and connected to SCADA. The 2024 Annual Report on Compliance dated April 1, 2025, cites the same four-bank completion figure, explains that two additional banks could not be fully commissioned due to software and connectivity issues, and notes that 67 % of the identified risk reduction was achieved in 2024.

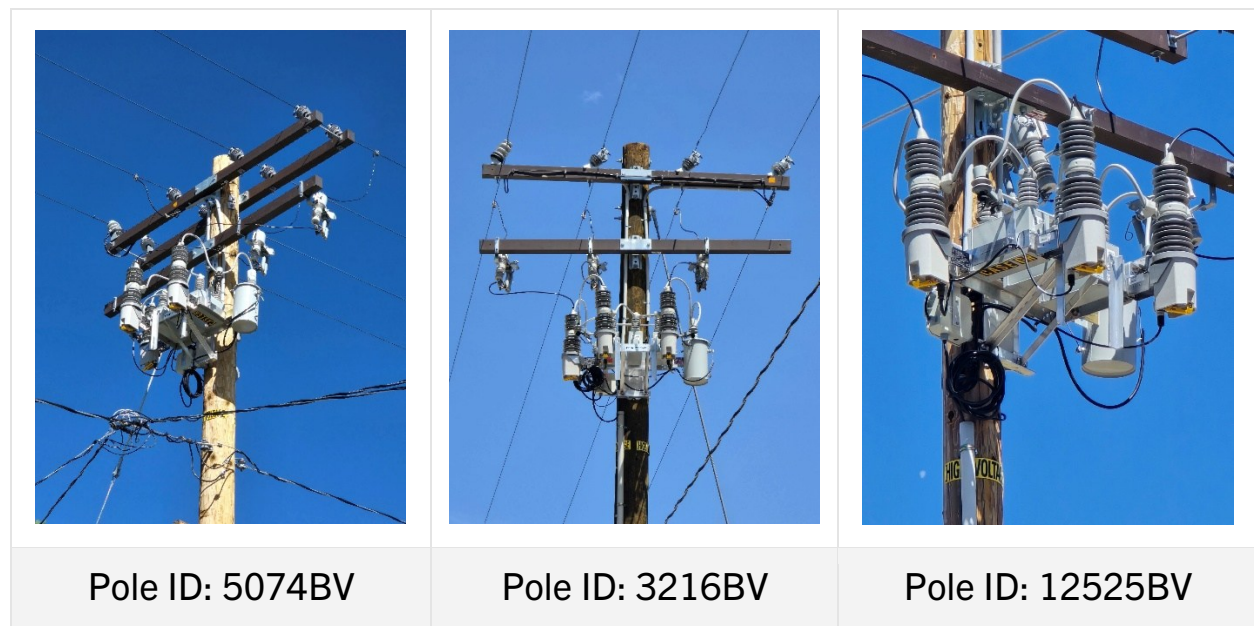
To verify the reported progress, the IE issued Data Request DR018 requesting detailed records of completion. BVES confirmed the four capacitor-bank replacements and provided the attributes shown below:

- GIS element name
- Pole ID

- Voltage and circuit
- Quantity per location
- Nearby address
- GPS coordinates

The IE visited all four substations, capturing geo-referenced photographs of the new capacitor banks and SCADA communication hardware. The IE field assessment team utilized the California Power Line Fire Prevention Guide, 2021 Edition, as their ruling document to validate Exempt equipment installations (Page 99, Figures B-50 through B-51). For illustrative examples of these observations, please refer to Figure 14: Examples of Capacitor Bank Replacement and SCADA Integration Field Images, provided below.

Figure 14: Examples of Capacitor Bank Replacement and SCADA Integration Field Images



During field assessment the IE noted one recurring data issue: one of the provided pole IDs did not match the pole tags observed in the field. No workmanship or construction issues were identified.

The IE recommends that BVES incorporate an additional verification step in its capacitor-bank installation workflow, similar to the pole-replacement recommendation in GD 1, to ensure pole-tag data are updated in BVES's asset management database before closing work orders.

Because BVES completed four out of the six capacitor-bank upgrades and did not meet its 2024 WMP goal, this initiative is not validated by the IE.

Table 19: Capacitor Bank Upgrade Project Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR018 Response	Summary
6 Capacitor Banks	4 Capacitor Banks	4 Capacitor Banks	4 Capacitor Banks	Initiative Not Validated

GD_15 – 8.1.2.8 – Fuse TripSaver Automation –Focus & Field Verifiable

Automating Fuse TripSavers and integrating them into BVES’s SCADA system enables remote sectionalizing and faster fault isolation, reducing customer outages and lowering the likelihood of ignition events.

As described within the 2023-2025 WMP, BVES set a 2024 completion target of 50 Fuse TripSavers and projected a 29 % risk reduction goal for this initiative.

Per BVES’s 2024 Q4 QDR dated February 1, 2025, provided in response to the Front Loaded Data Request, BVES reported that 27 Fuse TripSavers had been installed and connected to SCADA. The 2024 Annual Report on Compliance dated April 1, 2025, cites the same 27 unit figure and explains that 23 additional devices could not be connected before year-end due to connectivity issues even though those 23 units were installed and operational. The ARC notes that 54 % of the intended risk reduction was achieved in 2024.

To verify the reported progress, the IE issued Data Request DR019 requesting detailed records of completion. BVES confirmed the 27 Fuse TripSavers and provided the attributes shown below:

- GIS element name
- Pole ID
- Voltage and circuit
- Quantity per location
- Nearby address
- GPS coordinates

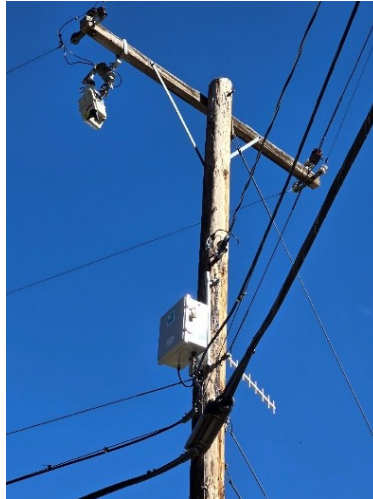
The IE field-verified all 27 devices, capturing geo-referenced photographs of the automated Fuse TripSavers and associated communication hardware. The IE field assessment team utilized the California Power Line Fire Prevention Guide, 2021 Edition, as their ruling document to validate Exempt equipment installations (Page 80, Figures A-6

through A-7). For illustrative examples of these observations, please refer to Figure 15: Examples of Fuse TripSaver Automation and SCADA Integration Field Images, provided below.

Figure 15: Examples of Fuse TripSaver Automation and SCADA Integration Field Images



Pole ID: 5447BV



Pole ID: 6821BV



Pole ID: 6821BV

During field assessment the IE identified two recurring data issues:

1. Incorrect GPS coordinates
2. Pole or asset IDs did not match the tags observed in the field

The IE recommends that BVES add a final verification step to its Fuse TripSaver installation workflow, similar to the pole-tag recommendation in GD 1, to ensure location and asset ID data are correct in the asset management database prior to workorder closeout.

Because BVES completed 27 out of the 50 Fuse TripSaver automations and did not meet its 2024 WMP goal, this initiative is not validated by the IE.

Table 20: Fuse TripSaver Automation

2024 Target	2024 ARC	2024 Q4 QDR	DR019 Response	Summary
50 Fuse TripSavers	27 Fuse TripSavers	27 Fuse TripSavers	27 Fuse TripSavers	Initiative Not Validated

GD_16 – 8.1.2.8 – Server Room – Non-Focus & Field Verifiable

Upgrading BVES’s server room strengthens the utility’s IT systems, improving data security, equipment reliability, and the availability of SCADA.

As described within the 2023-2025 WMP, the 2024 objective for this initiative was to complete the server-installation project milestone, and the WMP identified an 84 % risk reduction goal.

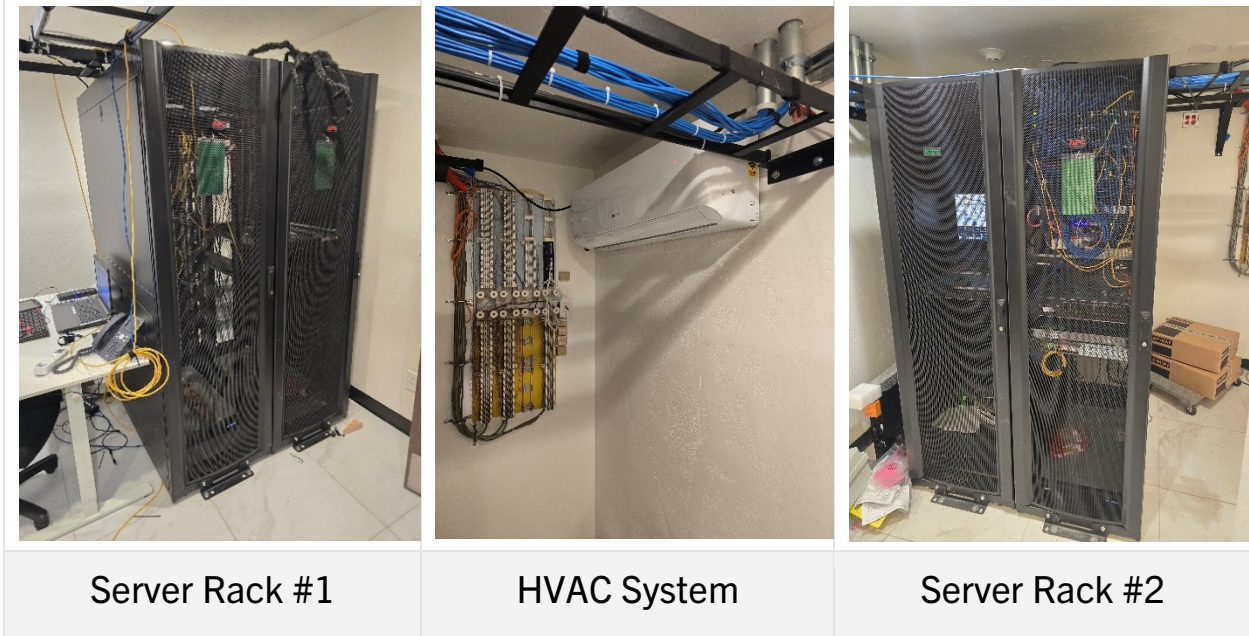
Per BVES’s 2024 Q4 QDR dated February 1, 2025, provided in response to the Front Loaded Data Request, BVES reported that the 2024 server-room milestone had been met. The 2024 Annual Report on Compliance (ARC) dated April 1, 2025, does not provide additional completion detail or state whether the 84 % risk reduction goal was achieved.

To verify the reported progress, the IE issued Data Request DR020 requesting records of completion. BVES supplied a spreadsheet listing the upgrades performed in 2024, including:

- Drywall and painting
- Server racks installation
- Flooring replacement
- HVAC system upgrade

The IE visited BVES’s main facility, capturing photographs of the renovated server room and the installed equipment. For illustrative examples of these observations, please refer to Figure 16: Examples of Server Room Upgrade Field Images, provided below.

Figure 16: Examples of Server Room Upgrade Field Images



No workmanship issues or data discrepancies were identified during field assessment. Based on the field evidence reviewed, the IE has validated this initiative.

Table 21: Server Room Upgrade Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR020 Response	Summary
Project Milestone for Server Installation	N/A	Yearly Target Met	Yearly Target Met	Initiative Validated

GD_17 – 8.1.2.8 – Distribution Management Center – Non-Focus & Field Verifiable

Establishing a Distribution Management Center (DMC) gives BVES operators a consolidated workspace with real-time visibility of system conditions and enabling quicker decision-making during wildfire events or other emergencies.

As described within the 2023-2025 WMP, the 2024 objective for this initiative was to complete the DMC project milestone, and the WMP identified a 72 % risk-reduction goal.

Per BVES's 2024 Q4 QDR dated February 1, 2025, provided in response to the Front Loaded Data Request, BVES reported that the 2024 DMC milestone had been met. The 2024 Annual Report on Compliance (ARC) dated April 1, 2025, does not provide additional completion detail or state whether the 72 % risk-reduction goal was achieved.

To verify the reported progress, the IE issued Data Request DR047 requesting the current status and layout of the DMC. BVES supplied a vector drawing that depicts:

- Six wall-mounted displays
- Primary SCADA workstation
- Backup SCADA workstation
- Two docking-station desks
- Four operator chairs
- Multiple shared workspaces

The IE performed a site visit at BVES's main facility, confirming that the room configuration and equipment matched the drawing. For illustrative examples of these observations, please refer to Figure 17: Examples of Distribution Management Center Field Images, provided below.

Figure 17: Example of Distribution Management Center Field Images



Entrance View of DMC

No workmanship issues or data discrepancies were identified during field assessments. Based on the field evidence reviewed, the IE has validated this initiative.

Table 22: Distribution Management Center Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR047 Response	Summary
Project Milestone for DMC	N/A	Initiative Complete	Project Milestone Met	Initiative Validated

GD_18, 8.1.2.9 - Line Removals (in HFTD) – Non-Focus & Non-Field Verifiable

In review of initiative GD_18, per table 8-3 of the WMP, BVEs outlines no target for the 2024 review year. BVES did not set a risk reduction goal for this initiative. In section 8.1.2.9, BVES states that they currently do not employ a line removal program and have no plans to remove lines. They state that a program will be established if line removal is needed in the future.

Based upon this analysis, the IE has determined that GD_18 is not applicable to the 2024 review period. If BVES implements a line removal program in future WMP cycles, the IE will opt to review based upon implementation per a future WMP cycle.

GD_19 – 8.1.2.10 – Tree Attachment Removal Project –Focus & Field Verifiable

Removing legacy tree attachments eliminates direct contact points between vegetation and energized conductors, reducing the likelihood of vegetation-related faults and ignitions.

As described within the 2023-2025 WMP, BVES set a 2024 completion target of 100 tree attachment removals and projected a 10 % risk-reduction goal for this initiative.

Per BVES’s 2024 Q4 QDR dated February 1, 2025, provided in response to the Front Loaded Data Request, BVES reported that 104 tree attachment removals had been completed. The 2024 Annual Report on Compliance dated April 1, 2025, cites the same 104 removal figure and states that the 10 % risk-reduction goal was achieved.

To verify the reported progress, the IE issued Data Request DR048 requesting records of completion. BVES provided an attachment confirming the 104 removals and listing the following attributes for each entry:

- Marker ID
- New Pole ID (where applicable)
- Circuit
- Work type

- Construction year
- New pole type (if installed)
- Construction completion date
- GPS coordinates
- Address

The Independent Evaluator (IE) randomly sampled 54 of the reported removals, capturing geo-referenced photographs and assessing workmanship quality and coordinate accuracy. For illustrative examples of these observations, please refer to Figure 18: Examples of Tree Attachment Removal Field Images, provided below.



No issues or data discrepancies were identified during field assessment. Based on the field evidence reviewed, the IE has validated this initiative.

Table 23: Tree Attachment Removal Project

2024 Target	2024 ARC	2024 Q4 QDR	DR048 Response	Summary
100 Tree Attachments	104 Tree Attachments	104 Tree Attachments	104 Tree Attachments	Initiative Validated

GD_20, 8.1.2.11 - Other Grid Topology Improvements to Mitigate or Reduce PSPS Events – Non-Focus & Non-Field Verifiable

In review of initiative GD_20, per table 8-3 of the WMP, BVEs outlines no target for the 2024 review year. Section 8.1.2.11, the applicable area of the WMP, contains no information for a currently implemented Other Grid Topology program. BVES did not set a risk reduction goal for this initiative.

Based upon this analysis, the IE has determined that GD_20 is not applicable to the 2024 review period. If BVES implements any targets related to other grid topology improvements in future WMP cycles, the IE will opt to review based upon implementation per a future WMP cycle.

GD_21, 8.1.2.11 - BVPP Phase 4 Upgrade Project – Non-Focus & Non-Field Verifiable

The initiative target indicates that 64% completion corresponds to a 24.8% risk impact, with full project completion intended to meet key reliability objectives. The WMP identifies this work as critical to ensuring local generation capacity during Public Safety Power Shutoff (PSPS) events, thus maintaining energy supply to the community during wildfire threats.

The WMP outlines that Phase 4 activities include engine control upgrades, detonation sensing system improvements, and installation of new speed and generator controls, all aimed at improving plant performance, reducing vibration, and ensuring operational readiness. These upgrades are intended to significantly lower the risk of extended outages during de-energization events, especially during cold weather, which poses a heightened risk to vulnerable populations.

Based on the review of submitted documents, BVES provided information that reasonably supports progress toward the WMP goals. The submission included a list of seven engines with corresponding Phase 4 work items and a completion date, a narrative on how the upgrades reduce PSPS risk, an invoice confirming Phase 3 work at one unit, and an executed contract with San Diego Power LLC outlining four project phases and seven change orders. While the high level engines completion date and the invoice provided were not a detailed record of the project timeline and budget, the combination of documents demonstrates measurable advancement, supporting the conclusion that the utility has met the 64% milestone indicated in the WMP. Based upon this analysis and the documentation provided, the IE has validated this initiative.

Table 24: BVPP Phase 4 Upgrade Project Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR023 Response	Summary
64% Project Milestone	N/A	N/A	64% Project Milestone	Initiative Validated

GD_22 – 8.1.2.12 – Partial Safety and Technical Upgrades to Maltby Substation – Non-Focus & Non-Field Verifiable

As reported in BVES's 2024 Q4 QDR dated February 1, 2025, provided in the response to the Front Loaded Data Request and confirmed by the Annual Report on Compliance for the 2024 WMP, this initiative did not have any target or work completed for 2024.

Based upon this, the IE has determined that this initiative is not applicable for the 2024 review period.

GD_23, 8.1.4.2 - Safety and Technical Upgrades to Lake Substation – Non-Focus & Non-Field Verifiable

The initiative target indicates that a 64% completion milestone aligns with an 87% risk impact metric, with full completion expected to enhance substation automation and safety. The goal is to complete upgrades and SCADA automation at substations by 2025, specifically the Lake Substation, as part of BVES's broader initiative to ensure system visibility, safety, and resilience during wildfire events and Public Safety Power Shutoffs (PSPS).

The WMP outlines that this includes phased upgrades across multiple years: Village, Meadow, and Bear Mountain substations in 2023; Bear City, Division, and Fawnskin in 2024; and Maltby, Maple, and Lake substations in 2025. Specific improvements at the Lake Substation will include converting overhead infrastructure to underground, installing IntelliRupter switches, and upgrading substation controls.

In review of BVES' 2024 WMP Updates R2, published on July 22, 2024, which outlines specific significant updates and changes to approved targets, objectives, and expenditures, BVES submitted an updated expected completion date of 2026. The justification for the change was due to work loading and planning constraints with higher priority initiatives taking more resources than originally planned. BVES also stated that substation equipment is facing significant delays of 12 to 15 months due to supply chain issues. In QDR4 Table 1, BVES states that this program did not start in 2024. Based upon review of this

documentation, and the delay of the Lake Substation project, the IE has not validated this initiative.

Table 25: Safety and Technical Upgrades to Lake Substation Summary

2024 Target	2024 ARC	2024 Q4 QDR	N/A Response	Summary
64% Project Milestone	N/A	N/A	Project Not Started	Initiative Not Validated

GD_24 – 8.1.2.12 – Partial Safety and Technical Upgrades to Village Substation – Non-Focus & Non-Field Verifiable

As reported in BVES's 2024 Q4 QDR dated February 1, 2025, provided in the response to the Front Loaded Data Request and confirmed by the Annual Report on Compliance for the 2024 WMP, this initiative did not have any target or work completed for 2024.

Based upon this, the IE has determined that this initiative is not applicable for the 2024 review period.

GD_25, 8.1.3.1 - Detailed Inspection Program – Non-Focus & Non-Field Verifiable

GD_25 outlines BVES' detailed inspection program. Detailed inspections are completed once every five years and BVES divides its system up with 20% of the total system being inspected annually. Field Inspectors perform these inspections and are required to be a Journeyman Lineman with experience in inspection of electrical transmission and distribution facilities and power lines. The inspections are designed to identify any existing defects which may include, but is not limited to, open wire, corona effect on cross-arms, warning signage issues, visibility strips and pole-tag issues, and rotten poles. When a defect is identified, BVES prioritizes the defect based on risk and resolves the issues in compliance with GO95 Rule 18 timeframe. Inspections are rated by level 1, 2, or 3 in accordance with GO95 Rule 18 and entered into the GIS database.

In response to BVES_DR025, BVES provided an excel spreadsheet that outlined all detailed inspections completed in 2024. The exact circuit, mileage inspected, date completed, and HFTD were provided. BVES had a target goal of 51 circuit miles inspected during 2024 and based upon the documentation provided in this initial data request, they met this goal.

In BVES_DR025.b, the IE requested the specific detailed inspection reports for all the circuits completed, totaling 51 miles. BVES responded with an "inspection record" for each of the circuits identified that included the circuit name, mileage inspected, inspection type,

inspector name, and date the inspection took place. Based on this analysis and the documentation provided, the IE has validated this initiative. To enhance future WMP reporting, BVES could look to provide with the record of completion the scope of task, GPS location, inspection findings, code for non-compliance, safety concerns or issues found, photos of the asset and of any issues, risk rank based on GO95 Rule 18, and a repair completion date based on priority.

Table 26: Detailed Inspection Program

2024 Target	2024 ARC	2024 Q4 QDR	DR025/.b Response	Summary
51 Circuit Miles Inspected	51 Circuit Miles Inspected	51 Circuit Miles Inspected	51.35 Circuit Miles Inspected	Initiative Validated

GD_26, 8.1.3.2 - Patrol Inspection Program – Non-Focus & Non-Field Verifiable

To support the 2024 Wildfire Mitigation Plan (WMP) target of inspecting 211 circuit miles of overhead facilities, BVES provided documentation in response to data requests that confirms substantial progress toward this goal. Specifically, BVES submitted a list of 27 named circuits totaling approximately 205 circuit miles, with completion dates in 2024 for 24 of those circuits. Additionally, 22 inspection reports were provided, each dated in 2024 and containing basic verification details such as circuit name, inspector signature, voltage, and inspection type.

Although the inspection reports lacked detail on findings or explicit HFTD tier identification, the documentation supports that BVES conducted a widespread inspection effort consistent with the WMP's expectations. Given that the utility's entire territory is located within HFTD Tiers 2 and 3, the lack of tier-level detail does not undermine the coverage. The volume and scope of documentation provided with consistent inspection practices and compliance with GO 165 noted in the WMP demonstrate that the utility substantially met the 2024 WMP initiative goals for patrol inspections. Based upon this analysis and the documentation provided, the IE has validated this initiative.

Table 27: Patrol Inspection Program

2024 Target	2024 ARC	2024 Q4 QDR	DR026/.b Response	Summary
205 Circuit Miles Inspected	205 Circuit Miles Inspected	205 Circuit Miles Inspected	205.52 Circuit Miles Inspected	Initiative Validated

GD_27, 8.1.3.3 - UAV Thermography – Non-Focus & Non-Field Verifiable

The initiative is committed to performing high-definition (HD) UAV (drone) inspections across the entire 205 miles of overhead electric infrastructure. This initiative targets early identification of potential ignition risks such as degraded equipment, vegetation hazards, and structural anomalies.

In response to data requests, BVES provided a comprehensive spreadsheet covering 5,718 pole locations, each annotated with UAV-derived observations. These included notes on conductor and insulator condition, vegetation encroachments, signage issues, and transformer condition. This demonstrates alignment with the WMP goal of detailed system surveillance. An item was flagged at pole 35834CIT for potential arc damage, and was followed up with a confirmed repair plan dated April 2, 2024, and the affected structure was documented as part of a reconductoring effort. This specific example substantiates that BVES not only conducted the inspections as outlined in the WMP but also acted on identified risks in a timely manner, supporting the initiative's goal of preemptive hazard mitigation.

In a SME Interview conducted on 06/03/25, BVES adequately demonstrated that the number of poles provided in the documentation supplied in DR027, equates to the number of circuit miles targeted for this initiative. BVES maintains a database named "ResourceKeeper" which their contractor, Davey, utilizes to input UAV Thermography inspections. BVES elaborated that maintaining the target for this initiative in circuit miles is more efficient than targeting number of poles, even though the inspection is completed by poles. This is due to the number of poles fluctuating year-to-year while the number of circuit miles generally stays the same. By verification through ResourceKeeper that all primary poles on the BVES system had been inspected, it is determined that BVES has met the goal of 205 circuit miles inspected.

BVES granted the IE access to the ResourceKeeper database which allowed for sampling verification. The database keeps a detailed record of all assets inspected for any given year. Details pertaining to the pole and associated equipment such as broken parts, blown fuses, damage to various entities, pole condition, and more are all captured. Detailed photos are captured and included in this database and are flagged as "needing attention" when a condition is found. Comments can be left for the photo to further elaborate on the condition. The IE opted to sample 18 random poles determined by the document provided in DR027 and identified by "Site ID." Only two anomalies were noted in the sample selection and all areas of the inspection report contained an entry. On report 85779 and 89100 a comment was left for the visual photo pertaining to degrading coating on wires and beetle damage on crossarm, however, neither of these were pertaining to an anomaly related to the thermography. Photos taken by UAV thermography of the asset were included in all the reports reviewed.

Based upon this analysis, the documentation received, and the SME interview conducted, the IE has validated this initiative.

Table 28: UAV Thermography

2024 Target	2024 ARC	2024 Q4 QDR	DR027/.b Response	Summary
205 Circuit Miles Inspected	205 Circuit Miles Inspected	205 Circuit Miles Inspected	5,718 Poles Inspected	Initiative Validated

GD_28, 8.1.3.4 - UAV/HD Photography/Videography – Non-Focus & Non-Field Verifiable

To support the initiative to inspect all 205 circuit miles annually the utility submitted a comprehensive spreadsheet covering 5,718 pole locations with metadata on inspection dates, hardware conditions, vegetation observations, and maintenance notes. The dataset included visual and thermographic UAV findings, confirming the use of aerial inspections in conjunction with ground-based LiDAR. The documentation also indicated attention to specific hazards, including a flagged potential transformer arc damage at pole 35834CIT. BVES responded with a follow-up showing that the issue had been addressed and tied the location to a planned 4kV reconductoring project, indicating corrective action was taken in alignment with WMP response protocols for hazard mitigation.

In a SME Interview conducted on 06/03/25, BVES adequately demonstrated that the number of poles provided in the documentation supplied in DR028, equates to the number of circuit miles targeted for this initiative. BVES maintains a database named “ResourceKeeper” which their contractor, Davey, utilizes to input UAV Thermography inspections. BVES elaborated that maintaining the target for this initiative in circuit miles is more efficient than targeting number of poles, even though the inspection is completed by poles. This is due to the number of poles fluctuating year-to-year while the number of circuit miles generally stays the same. By verification through ResourceKeeper that all primary poles on the BVES system had been inspected, it is determined that BVES has met the goal of 205 circuit miles inspected.

BVES granted the IE access to the ResourceKeeper database which allowed for sampling verification. The database keeps a detailed record of all assets inspected for any given year. Details pertaining to the pole and associated equipment such as broken parts, blown fuses, damage to various entities, pole condition, and more are all captured. Detailed photos are captured and included in this database and are flagged as “needing attention” when a condition is found. Comments can be left for the photo to further elaborate on the condition. The IE opted to sample 18 random poles determined by the document provided in DR027 and identified by “Site ID.” Only four anomalies were noted in the sample selection and all

areas of the inspection report contained an entry. Report 86602 stated the photo needs attention and cross arm support is not connected; report 87871 stated that wood boring beetle damage was noted; report 89097 stated that the pole was leaning towards the street; and report 83609 stated the photo needs attention and cross arm decay exists. All reports had “yes” populated in the “visited” area, however only one contained a population in the “visit date” area. Photos taken by UAV of the asset were included in all the reports reviewed.

Based upon this analysis, the documentation received, and the SME interview conducted, the IE has validated this initiative.

Table 29: UAV/HD Photography/Videography

2024 Target	2024 ARC	2024 Q4 QDR	DR028 Response	Summary
205	205	205	5,718 Structures Inspected	Initiative Validated

GD_29, 8.1.3.5 - LiDAR Inspections – Non-Focus & Non-Field Verifiable

To support the 2024 WMP goal of inspecting all 205 circuit miles within its HFTD territory, BVES was requested to provide its annual LiDAR inspection report data, specifically in a format that would allow reviewers to assess findings associated with each inspected structure. In response, BVES initially provided GIS shapefile data. Upon further request, the utility furnished a KMZ file containing detailed geospatial data for thousands of overhead structures across its territory. This file included structure numbers, feeder voltages, circuit names, tree clearance values, and geographic coordinates. The KMZ dataset demonstrates that BVES performed LiDAR inspections on all 205 circuit miles of their service territory. Data such as overhang square footage, encroachment (in.), encroachment clearance level, and tree height could also be viewed as an itemized list in the .dbf files.

In a SME Interview conducted on 06/03/25, BVES adequately demonstrated that the number of structures provided in the documentation supplied in DR029/.b, equates to the number of circuit miles targeted for this initiative. BVES elaborated that maintaining the target for this initiative in circuit miles is more efficient than targeting number of structures, even though the inspection is completed by structures. This is due to the number of structures fluctuating year-to-year while the number of circuit miles generally stays the same. By verification through the provided shapefile dataset and KMZ file that all structures on the BVES system had been inspected, it is determined that BVES has met the goal of 205 circuit miles inspected.

Based upon this analysis and the documentation provided, the IE has validated this initiative.

Table 30: LiDAR Inspections Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR029/.b Response	Summary
205 Circuit Miles Inspected	205 Circuit Miles Inspected	205 Circuit Miles Inspected	205 Circuit Miles Inspected	Initiative Validated

GD_30, 8.1.3.6 - 3rd Party Ground Patrol – Non-Focus & Non-Field Verifiable

To support the 2024 Wildfire Mitigation Plan (WMP) initiative targeting annual inspections of all 205 circuit miles in high fire-threat areas, BVES provided a spreadsheet detailing inspection data from its third-party ground patrol. The dataset included 6,615 overhead structure entries, each with location data, inspection dates, and condition notes on pole hardware and vegetation. Observations included common maintenance issues such as damaged signage, pest activity, guy wire condition, and pole replacements. Although vegetation was identified as a specific category, fewer than 1% of records flagged vegetation concerns, and no detailed vegetation-related notes were included.

In a SME Interview conducted on 06/03/25, BVES adequately demonstrated that the number of structures provided in the documentation supplied in DR030, equates to the number of circuit miles targeted for this initiative. BVES maintains a database named “ResourceKeeper” which their contractor, Davey, utilizes to input 3rd party ground patrol inspections. BVES elaborated that maintaining the target for this initiative in circuit miles is more efficient than targeting number of structures, even though the inspection is completed by structures. This is due to the number of structures fluctuating year-to-year while the number of circuit miles generally stays the same. By verification through ResourceKeeper that all primary structures on the BVES system had been inspected, it is determined that BVES has met the goal of 205 circuit miles inspected.

The IE opted to review 18 random assets identified by Site ID and Remote ID on the spreadsheet provided in DR030. 5 anomalies were noted in this review and all information was adequately populated on the inspection reports. No photos were included, however, that remains consistent for all of the assets listed and is not unique to the 18 selected for sampling. Report 79277 noted that the pole was missing a high voltage sign; report 81487 noted that there was a new pole and provided a unique pole ID and type of pole; report 81587 noted that no pole existed and was removed from the field; report 83400 noted that there was no ID on pole; and report 83583 noted a new pole and provided the unique pole ID and pole type. All reports contained a yes populated to the visited column aside from the one

report that listed no pole at location. These documents included inspector name and inspection date.

Based upon this analysis, the documentation provided, and the SME interview conducted, the IE has validated this initiative.

Table 31: 3rd Party Ground Patrol

2024 Target	2024 ARC	2024 Q4 QDR	DR030 Response	Summary
205 Circuit Miles Inspected	205 Circuit Miles Inspected	205 Circuit Miles Inspected	6,615 Overhead Structures	Initiative Validated

GD_31, 8.1.3.7 - Intrusive Pole Inspections – Non-Focus & Non-Field Verifiable

To support the 2024 initiative goal of performing 850 intrusive pole inspections, BVES provided a detailed spreadsheet listing exactly 850 pole locations. Each entry included the inspection date, circuit information, and approximately 70 condition-related data fields, with a final “Okay” or “Not Okay” designation. This clearly aligns with the WMP's stated goal to assess the structural integrity of aged wood poles beyond visual inspection by addressing conditions such as internal decay, pest damage, and pole strength.

In response to a follow-up data request, BVES confirmed that “Not Okay” poles are evaluated by infraction type such as vegetation, pole damage, or strength concerns, and then assigned to appropriate crews for trimming or replacement prioritization. Poles determined to require replacement are added to pole replacement work orders. This indicates a direct link between the findings of the intrusive inspections and corrective maintenance action, meeting the intent of the WMP initiative. Based upon this analysis and the documentation provided, the IE has validated this initiative.

Table 32: Intrusive Pole Inspections

2024 Target	2024 ARC	2024 Q4 QDR	DR031/.b Response	Summary
850 Pole Inspections	850 Pole Inspections	850 Pole Inspections	850 Pole Inspections	Initiative Validated

GD_32, 8.1.3.8 - Substation Inspections – Non-Focus & Non-Field Verifiable

The initiative established a goal of completing 144 monthly substation inspections across all 13 substations in 2024, in accordance with CPUC General Order 174. This initiative aims to reduce wildfire ignition risks and improve system reliability by ensuring the timely inspection and maintenance of critical substation equipment. The WMP specifies that inspections include gas-in-oil analysis, monitoring of oil levels and temperature, contamination checks, and routine protective relay testing and calibration.

In response to a data request, BVES provided inspection records for the 13 substations, with documentation a total of 156 substation inspections. This response containing the monthly substation logs for each substation shows that BVES exceeded the 144-inspection target for 2024. The data supports that the utility conducted regular inspections aligned with the WMP's goals, suggesting adherence to the planned schedule and effective implementation of the initiative. Based on this analysis and the documentation provided, the IE has validated this initiative.

The inspection report contains an area for general information such as a date conducted, inspector's name, time of reading, ambient, temperature, and which station is being inspected. The sheet contained an area to record information pertaining to voltage regulators, reclosers and other devices, and to leave notes. On the second page was a check list for the inspector to walk through and complete with an area to leave notes for "items needing attention."

The 16 reports reviewed contained no anomalies and all reports were fully completed with signature and date at the bottom. Only some reports contained notes and none of the notes discussed any items needing attention. Several notes pertained to weed abatement and the last completion date on it, and other notes were stating that the substation had cleared inspection, although this note was not consistent across all reports reviewed.

Based on this analysis and the documentation provided, the IE has validated this initiative.

Table 33: Substation Inspections

2024 Target	2024 ARC	2024 Q4 QDR	DR032 Response	Summary
144 Substation Inspections	156 Substation Inspections	156 Substation Inspections	156 Substation Inspections	Initiative Validated

GD_33, 8.1.4.3 - Equipment Maintenance & Repair – Non-Focus & Non-Field Verifiable

BVES provided documentation in response to data requests that supports meeting the 2024 goals under this Initiative for Connectors, Including Hotline Clamps, and the goal of 100% budget allocation for equipment maintenance and repair. In the initial response, BVES submitted a quarterly report dated January 2, 2024, showing OPEX budget allocations across WMP initiatives. The report indicates that 100% of the equipment maintenance and repair budget totaling \$1,073,177 was allocated to High Fire-Threat Districts (HFTD), demonstrating alignment with the WMP's 2024 target of full allocation to high-risk areas.

In a follow-up request, BVES supplied additional documents including a draft purchase order for fast tap connectors and a CAPEX report detailing \$800K in authorized capital work at Maltby Substation and server upgrades. Though no specific 2024 hotline clamp replacement documentation was submitted, BVES' WMP states that hotline clamps are extremely rare on its system, with only six replaced in the last five years. Their established procedure of identifying and removing hotline clamps upon discovery, tracking them in GIS, and avoiding new installations all support the initiative's risk mitigation objectives. These responses substantiate that BVES is taking appropriate steps to meet the equipment maintenance and risk-reduction goals outlined in the WMP. Based upon this analysis and the documentation provided by BVES, the IE has validated this initiative.

Table 34: Equipment Maintenance & Repair

2024 Target	2024 ARC	2024 Q4 QDR	DR033/.b Response	Summary
N/A	N/A	Quarterly Target Met	N/A	Initiative Validated

GD_34, 8.1.5 - Asset Management & Inspection Enterprise System(s) – Non-Focus & Non-Field Verifiable

BVES GD_34 pertains to their Asset Management and Inspection Enterprise System. Per page 165 of the WMP, BVES has made key updates to the main internal inspection enterprise system by integrating all internal inspections into one central database via an application known as “iRestore.” Further, BVES has added a Detailed Inspections Portal, a Substation Inspection Portal, and a Vegetation Management Inventory database – all of these together creates a reliable, searchable, and comprehensive database for BVES to access. BVES planned on adding a meter inspection portal to iRestore and anticipated completion in 2024 per page 166 of the WMP.

The IE requested documentation to verify BVES' ongoing support of their Asset Management System and Inspection Enterprise System. The IE also requested that BVES provide documentation outlining the implementation of the iRestore Database. In response to BVES_DR034, BVES provided two documents: 1) C_3127-000 Fully Executed and 2) Meter Inspection Portal Response. In the first document, C_3127-000, BVES has demonstrated and validated compliance with maintaining both the asset management and inspection enterprise system. The document contains email correspondence between BVES and iRestore and clearly outlines the services that iRestore will provide such as the base inspection app license, GO-165 customization (Detailed Inspection Reports), and substation inspection. The license went into effect on 02/12/2021 and will end in 02/11/2026, therefore it is currently active. BVES provided a written response, Meter Inspection Portal Response, that they have decided to place the implementation of the Meter Inspection Portal on hold due to iRestore being sold to Urbint at the end of 2022 and BVES' dissatisfaction with the quality of support for the platform. Based upon this analysis and the documentation provided, the IE has validated this initiative.

Table 35: Asset Management & Inspection Enterprise System(s)

2024 Target	2024 ARC	2024 Q4 QDR	DR034 Response	Summary
100% Maintenance of Asset Management System	N/A	N/A	100% Maintenance of Asset Management System	Initiative Validated

GD_35 – 8.1.6 – Asset Quality Assurance/ Quality Control – Non-Focus & Non-Field Verifiable

The Asset Quality Control (QC) initiative ensures that WMP work meets established quality standards through a formal QC process. Per the 2023–2025 WMP, the 2024 target was to complete 20 asset QCs on WMP work, which was associated with a 4.36% risk-reduction goal.

In its 2024 Q4 QDR, BVES reported the completion of 20 asset QCs, meeting its annual target. The 2024 ARC, however, does not state whether the risk reduction goal was achieved. In response to Data Requests DR053 and DR053.b, BVES provided a table detailing all 20 QCs performed, including the date, pole numbers, circuit, and type of work reviewed, which consisted primarily of pole replacements and remediation. The work

reviewed under this initiative occurred between March and October 2024 on circuits including the North Shore 4kV, Baldwin 34kV, and Shay 34kV.

The IE performed a documentation review of a sample of these records. The IE reviewed records for 13 of the 20 completed QCs to verify the reported work. No issues were identified during the IE's review of the sample QC data.

BVES met its 2024 target for this initiative. Based on the documentation reviewed and the successful verification of the data sample, the IE validates the completion of 20 asset QCs reported for 2024.

Table 36: Asset Quality Assurance/ Quality Control Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR053 Response	Summary
20	20	20	20	Initiative Validated

GD_36, 8.1.7 - Open Work Orders – Non-Focus & Non-Field Verifiable

The 2024 WMP initiative for open work order (WO) management set a target to have all discrepancies must resolved within the timeframes established under General Order 95 (GO 95), with verification through a maintained order log. BVES did not set a risk reduction goal for this initiative. BVES submitted a spreadsheet listing 12 structure locations with open work orders identified in 2024, including descriptions of the issues, associated circuits, and due dates that fall between 2024 and 2029 and within allowable GO 95 timeframes based on severity classification. Additionally, BVES provided a 17-page GO 165 procedure document, which outlines the required inspection cycles and facility types covered, demonstrating a formal process for identifying and managing deficiencies. Once an issue is discovered under GO 165 inspection protocols, it is then classified and managed under the timeframes and severity levels dictated by GO 95.

The materials provided align with the WMP initiative summary, which describes the use of the iRestore system for tracking work orders, applying GO 95 timelines automatically, and ensuring prioritization based on severity, fire threat tier, and circuit risk. The documentation supports the stated intent of the WMP that all open work orders remain in compliance. No overdue orders were noted, and mitigation procedures are in place for high-severity issues. The provided work order data and procedural documentation confirm that BVES is meeting the 2024 target of resolving all work orders within GO 95 timeframes. Based upon this analysis and the documentation provided, the IE has validated this initiative.

Table 37: Open Work Orders

2024 Target	2024 ARC	2024 Q4 QDR	DR035 Response	Summary
All WO Resolved Within GO95 Timelines	N/A	Quarterly Target Met	All WO Resolved Within GO95 Timelines	Initiative Validated

GD_37, 8.1.8.1 - Equipment Settings to Reduce Wildfire Risk – Non-Focus & Non-Field Verifiable

BVES has addressed the requirements of Section 8.1.8.1 (GD_37) of the WMP by outlining its operational protocols and equipment settings designed to reduce wildfire risk. The utility continues to rely on fast trip protective settings year-round across all high-voltage overhead circuits, a long-standing policy intended to minimize ignition potential in its high fire threat territory. From April through October, BVES implements 1-shot non-reclosing settings on reclosers and de-energizes select lines, while from November to March, devices revert to a three-shot to lockout configuration to optimize for system reliability. BVES has not reported any significant reliability tradeoffs and has not recorded any reportable ignitions in over 20 years.

In response to a request for additional details on its equipment settings and operational procedures, BVES provided written clarification confirming the continued use of fast mode recloser settings and seasonal application of 1-shot operation. The utility noted that no new reclosers are being introduced, as its entire 205-mile overhead system is already equipped with protective devices. In addition, BVES supplied a 40-page Public Safety Power Shutoff (PSPS) procedures report updated as of March 2025 and a 65-page emergency and disaster response plan last revised in March 2022. While the utility did not elaborate extensively on the criteria or effectiveness estimates for each setting, it did provide sufficient evidence of existing protocols and risk-informed operations, which align with its historical wildfire mitigation approach. Based upon this analysis and the documentation provided, the IE has validated this initiative.

Table 38: Equipment Settings to Reduce Wildfire Risk

2024 Target	2024 ARC	2024 Q4 QDR	DR036 Response	Summary
Review & Evaluate System Settings	N/A	Quarterly Target Met	System Settings Have Been Reviewed & Evaluated	Initiative Validated

GD_38, 8.1.8.2 - Grid Response Procedures & Notifications – Non-Focus & Non-Field Verifiable

BVES submitted a written explanation of their internal detection and response systems, including the use of SCADA, FLISR, trip savers, and customer call center input. They also noted a confidentiality agreement with local fire agencies regarding communication protocols. While no standalone procedure document for fire agency notification was provided initially, BVES did later supply a copy of their 2022 Emergency and Disaster Response Plan. This 65-page document included detailed planning for fire-related incidents, and Section 2 was verified to show that the emergency manager is designated to coordinate with firefighting agencies through a formal 9-layer operations structure.

Based on the materials submitted and verified, BVES appears to have met the 2024 initiative goal to finalize review of their grid response and fire coordination procedures. The utility's small size supports rapid response adjustments, and the formalized coordination structure documented in their emergency plan aligns with WMP expectations. The documentation provided is sufficient to demonstrate that BVES has both the operational readiness and communication pathways necessary to respond effectively to wildfire risks from grid events, supporting the high-risk reduction impact assigned to this initiative. Based upon this analysis and the documentation provided by BVES, the IE has validated this initiative.

Table 39: Grid Response Procedures & Notifications

2024 Target	2024 ARC	2024 Q4 QDR	DR037/.b Response	Summary
Review & Update Procedure Annually	N/A	Quarterly Target Met	Procedures Have Been Reviewed & Updated	Initiative Validated

**GD_39, 8.1.8.3 - Personnel Work Procedures & Training in Conditions of Elevated Fire Risk
– Non-Focus & Non-Field Verifiable**

BVES submitted a comprehensive set of documents that align with the Workforce Training and Coordination objectives of the 2024 Wildfire Mitigation Plan. The utility's submission includes a 40-page PSPS Procedures document, which addresses critical elements outlined in the WMP, including chain of responsibility, plan activation considerations, PSPS procedures, and public outreach communication. This submission meets the WMP's requirement for detailed PSPS procedures and coordination strategies for de-energization.

In addition, the inclusion of a 2-page QAQC procedure document provides clarity on the utility's processes for training and maintaining records, which is in line with the WMP's emphasis on establishing clear procedures for workforce training. A 62-page post-season report further supports BVES's adherence to the WMP's guidelines for evaluating and improving PSPS efforts based on past experiences. They also provided a PSPS spreadsheet documenting summer 2024 meetings with key stakeholders, including Bear Valley Fire, the school district, the Chamber of Commerce, waste and power services, and the hospice center, aligns with the WMP's requirement to engage with external partners on wildfire risk and de-energization planning.

By providing these specific documents, BVES demonstrates that it has systematically addressed wildfire mitigation and PSPS topics through internal and external coordination. Based on this thorough documentation, the IE has validated this initiative

Table 40: Personnel Work Procedures & Training in Conditions of Elevated Fire Risk

2024 Target	2024 ARC	2024 Q4 QDR	DR054 Response	Summary
Review & Update Procedure Annually	N/A	Quarterly Target Met	Procedures Have Been Reviewed & Updated	Initiative Validated

GD_40, 8.1.9 - Workforce Planning – Non-Focus & Non-Field Verifiable

The documents provided by BVES align well with the WMP initiative's goal of ensuring proper workforce qualifications for wildfire and PSPS mitigation activities. The executed contracts related to the tree attachment program and similar contracts clearly demonstrate BVES' commitment to grid hardening and wildfire mitigation, which is a key element of the WMP. These contracts show that BVES is actively engaging contractors and establishing frameworks for the necessary tasks, reflecting their workforce planning efforts.

Additionally, the QAQC asset workforce planning document offers valuable insight into BVES' procedures for ensuring qualified workforce planning. The six-step process outlined in the QAQC document includes roles, procedures, and record-keeping, directly supporting the WMP's objective to ensure workforce qualifications and compliance. This process helps ensure that employees are properly trained for critical roles such as asset inspections and grid hardening, which are essential for wildfire and PSPS mitigation. The inclusion of amendments and updates further demonstrates BVES' commitment to refining their workforce management practices and aligning them with the targets set in the WMP initiative. Based upon this analysis and the documentation provided, the IE has validated this initiative.

Table 41: Workforce Planning

2024 Target	2024 ARC	2024 Q4 QDR	DR056 Response	Summary
Staffing Level Verified	N/A	Staffing Levels Verified	Staffing Levels Verified	Initiative Validated

ST_1, 5.4.5 - Environmental Compliance & Permitting – Non-Focus & Non-Field Verifiable

Bear Valley Electric Service (BVES) provided two key responses that align with and support the Environmental Compliance and Permitting initiative's stated goals for 2024. BVES did not set a risk reduction goal for this initiative. BVES submitted a PDF of the PSPS Procedures. Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 7.

(Rev3), which outlines internal procedures including the chain of responsibility and activation protocols related to Public Safety Power Shutoffs (PSPS). While this document focuses on operational responses, its inclusion supports procedural transparency and readiness in managing environmental and safety compliance during wildfire-related events. This reflects part of the initiative's broader goal of maintaining regulatory adherence and proactive planning.

Secondly, in response to a request regarding the necessity of a pre-construction biological survey, BVES confirmed that the survey for the Big Bear Power Line Replacement project was mandated by the U.S. Forest Service to obtain permitting for work on National Forest land. This directly supports the WMP initiative's requirement for coordination with external agencies and compliance with federal regulations such as the National Environmental Policy Act (NEPA). The response demonstrates BVES's continued practice of consulting appropriate agencies during project planning and permitting phases, ensuring environmental protection requirements are fully integrated into its wildfire mitigation work.

Together, these responses indicate that BVES has met the 2024 target of maintaining finalized reviews and the IE has validated this initiative.

Table 43: Environmental Compliance & Permitting

2024 Target	2024 ARC	2024 Q4 QDR	DR041/.b Response	Summary
Annual Review & Update	N/A	Quarterly Target Met	Reviewed & Updated	Initiative Validated

4.1.2.2 Funding Verification – Findings

GD_1 - 8.1.2.1 Covered Conductor Replacement Project

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 7.

GD_10 - 8.1.2.7 Bear Valley Solar Energy Project

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 7.

GD_11 - 8.1.2.7 Energy Storage Project

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 7.

GD_12 - 8.1.2.8 Substation Automation

Strategic Overview and Risk Mitigation: This initiative connects nine substations to BVES's SCADA network over a three-year period, enabling remote real-time monitoring, reporting, control, and collection or modification of settings. The goal for 2024 was to automate three substations. The initiative specifically targets reducing the likelihood of catastrophic equipment failures leading to ignitions, environmental damage from oil spills, and enhancing rapid fault detection and response capabilities.

Financial Performance Analysis

- Planned Spend: \$655,880.00
- Actual Expenditure: \$1,114,315.00
- Variance: +\$458,435.00 (+69.9% overspend)

- BVES Justification: The overspend resulted from higher-than-estimated labor and equipment costs, including unforeseen underground fiber optic cable repairs necessary for SCADA connectivity.

Operational Impact and Risk Reduction BVES successfully automated and connected three substations (Bear Mountain, Division, Maple) to the SCADA network, meeting the established target. Enhanced real-time visibility and remote-control capabilities directly contribute to reduced equipment ignition risk.

Assessment and Conclusion Despite significant overspend, BVES effectively completed the targeted automation, thereby achieving the stated 29% risk reduction goal. The initiative enhances operational responsiveness, reducing potential ignition risks.

GD_13 - 8.1.2.8 Switch and Field Device Automation

Strategic Overview and Risk Mitigation Despite the overspend, BVES effectively completed the targeted substation automation. This achievement enhanced critical operational capabilities, directly contributing to the intended risk reduction by enabling faster detection and resolution of faults, and reducing the likelihood of equipment failures that could lead to wildfires or environmental damage.

Financial Performance Analysis

- Planned Spend: \$673,608.00
- Actual Expenditure: \$1,200,318.00
- Variance: +\$526,710.00 (+78.2% overspend)
- BVES Justification: The overspend was due to higher costs for switches, communications equipment, additional labor hours, and unplanned third-party quality assurance testing.

Operational Impact and Risk Reduction BVES automated and connected the targeted 10 switches to the SCADA network, significantly improving circuit sectionalizing capabilities, outage response, and wildfire risk mitigation.

Assessment and Conclusion The overspend enabled BVES to meet the operational targets and achieve the projected 22% risk reduction. Enhanced remote control and sectionalizing capabilities positively impact overall system safety, supporting effective wildfire risk management.

GD_14 - 8.1.2.8 Capacitor Bank Upgrade Project

Strategic Overview and Risk Mitigation

This initiative focuses on replacing legacy capacitor banks and integrating them into BVES's SCADA system. The upgrade aims to improve voltage stability and enhance situational awareness, thereby reducing the likelihood of voltage-related faults and ignitions. The target for 2024 was to replace six capacitor banks, with a projected 29% overall reduction in risk.

Financial Performance Analysis

- Planned Spend: \$319,110.00
- Actual Expenditure: \$692,486.00
- Variance: +\$373,376.00 (+117.0% overspend)
- BVES Justification: Higher-than-estimated costs for capacitor banks, communications equipment, and labor were cited. Additionally, unplanned third-party quality control testing of equipment before installation contributed to the overspend.

Operational Impact and Risk Reduction

BVES replaced and connected four capacitor banks to SCADA, falling short of the target by two units (33% shortfall). Two capacitor banks faced commissioning issues due to software and connectivity problems.

Assessment and Conclusion

Despite significant financial overspend, the initiative did not meet its physical target. With only four of the six planned capacitor banks fully operational, BVES achieved approximately 67% of the intended operational target for 2024. The incomplete integration reduced the expected improvements in voltage stability and situational awareness, thereby limiting the effectiveness of the overall wildfire risk reduction goal.

GD_15 - 8.1.2.8 Fuse TripSaver Automation

Strategic Overview and Risk Mitigation

This initiative automates Fuse TripSavers by connecting them to BVES's SCADA network, specifically targeting a reduction in wildfire ignition risks posed by conventional fuses. Automated TripSavers facilitate rapid fault detection, remote resetting, and sectionalizing capabilities, particularly crucial during high fire-risk weather conditions ("dry" and "very dry" days). The 2024 target was to automate 50 Fuse TripSavers, supporting a projected 29% reduction in risk associated with overall wildfire ignition risks.

Financial Performance Analysis

- Planned Spend: \$136,879.00
- Actual Expenditure: \$297,732.00
- Variance: +\$160,853.00 (+117.5% overspend)
- BVES Justification: Higher-than-estimated communications equipment costs and increased labor hours needed to establish proper SCADA connectivity.

Operational Impact and Risk Reduction

BVES completed automation and SCADA connection of 27 Fuse TripSavers, resulting in a shortfall of 23 units (46% below target). Additional units encountered delays related to staffing, COVID-19, evacuation disruptions due to the Line Fire, fiber optic conduit breaks, and radio data transfer challenges.

Assessment and Conclusion

The financial overspend did not coincide with the achievement of the operational target. With only 27 out of 50 Fuse TripSavers connected, BVES's intended enhancements in remote fault management and rapid response capabilities were only partially achieved. Consequently, the anticipated reduction in wildfire ignition risks from conventional fuses was limited compared to the projected goals for 2024.

GD_16 - 8.1.2.8 Server Room

Strategic Overview and Risk Mitigation

This initiative expands and upgrades BVES's computer server room to enhance security, reliability, and operational flexibility of the SCADA network. These improvements facilitate the integration of intelligent remote devices, enhancing BVES's capability to detect and respond to faults, outages, and potential fire risks across its system. The 2024 milestone marked the completion of server room upgrades, which supported an 84% overall reduction in wildfire risk.

Financial Performance Analysis

- Planned Spend: \$103,183.00
- Actual Expenditure: \$61,371.69
- Variance: -\$41,811.31 (-40.5% underspend)
- BVES Justification: Lower-than-anticipated modification costs allowed for project completion under budget.

Operational Impact and Risk Reduction

BVES successfully met the 2024 milestone by completing the server room upgrades. Field verification confirmed the installation of security controls, environmental controls, backup power, and server racks, significantly strengthening essential IT infrastructure.

Assessment and Conclusion

The project milestone was efficiently completed under budget. The upgraded server room enhances BVES's capabilities to remotely monitor and control its system, thereby directly supporting the wildfire risk mitigation strategy by enabling faster detection and response to system faults.

GD_17 - 8.1.2.8 Distribution Management Center

Strategic Overview and Risk Mitigation

This initiative established a Distribution Management Center (DMC) to provide BVES operators with a consolidated workspace offering real-time visibility into system conditions. The enhanced monitoring and control capabilities enable quicker decision-making during wildfire events or other emergencies, directly supporting improved situational awareness and rapid operational responses to mitigate wildfire risks.

Financial Performance Analysis

- Planned Spend: \$37,407.00
- Actual Expenditure: \$65,333.58
- Variance: +\$27,926.58 (+74.6% overspend)
- BVES Justification: Higher-than-expected equipment and construction costs, driven by increased prices for specific technology components and unforeseen construction complexities, led to the financial overrun.

Operational Impact and Risk Reduction

BVES completed the DMC in 2024, as verified through a site visit, confirming that the layout and equipment matched the planned specifications. The center significantly enhances the ability to monitor and manage the distribution system in real-time, thus improving BVES's readiness and responsiveness during wildfire incidents.

Assessment and Conclusion

Despite the financial overspend, BVES effectively achieved the initiative's milestone, substantially enhancing operational capabilities. The Distribution Management Center

enhances situational awareness, system monitoring, and emergency response capabilities, thereby positively contributing to the intended wildfire risk mitigation objectives.

GD_18 - 8.1.2.9 Line removals (in HFTD)

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 7.

GD_19 - 8.1.2.10 Tree Attachment Removal Project

Strategic Overview and Risk Mitigation

This initiative focuses on removing existing distribution line attachments from trees, replacing them with poles as needed. This work improves system reliability, safety, and reduces fire hazards by minimizing vegetation-related ignition risks. BVES targeted the removal of 100 tree attachments in 2024, projecting a 10% risk reduction goal.

Financial Performance Analysis

- Planned Spend: \$607,223.00
- Actual Expenditure: \$699,279.00
- Variance: +\$92,056.00 (+15.2% overspend)
- BVES Justification: The overspend was primarily due to higher labor costs than initially projected.

Operational Impact and Risk Reduction

BVES successfully removed 104 tree attachments, exceeding the planned target by 4%. Field verification confirmed compliance with technical standards and significantly reduced the risk of vegetation-related ignitions.

Assessment and Conclusion

Despite the financial overspend, BVES effectively justified the additional labor costs, which supported achieving a higher level of operational completion. The removal of tree attachments beyond the initial target enhances overall wildfire risk mitigation.

GD_2 - 8.1.2.1 Radford Line Replacement Project

Strategic Overview and Risk Mitigation

This initiative involved replacing 2.7 circuit miles of bare wire sub-transmission line and associated wood poles on the Radford 34kV line, utilizing high-performance covered conductor and fire-resistant (ductile iron) poles. The Radford line is within HFTD Tier 3, an

extreme fire risk zone characterized by dense vegetation and difficult terrain for patrols. A complete replacement was identified as the most effective measure to reduce the likelihood of vegetation-related ignition.

Financial Performance Analysis

- Planned Spend: \$3,633,600
- Actual Expenditure: \$5,865,252
- Variance: +\$2,231,652 (+61.4% overspend)
- BVES Justification: Increased costs due to prolonged delays in permitting from the U.S. Forest Service (USFS), inflation in labor and equipment costs since initial estimates in 2020, additional environmental studies required, higher helicopter support costs due to challenging terrain, unexpected delays from encountering an endangered species and the impacts of the Line Fire, overtime to complete before winter, and expanded scope including additional fiber optic cable installation.

Operational Impact and Risk Reduction

BVES completed 2.8 circuit miles of conductor replacement, exceeding the initial target of 2.7 miles. Field verification confirmed successful installation and compliance with technical standards. The completed replacements directly reduced vegetation-related ignition risk, achieving or surpassing the projected 10% risk reduction commitment.

Assessment and Conclusion

The significant overspend was adequately justified by BVES, with clear documentation of external delays, unforeseen environmental challenges, scope expansion, and inflationary pressures over the multi-year project timeline. Despite financial challenges, the initiative successfully achieved and slightly exceeded its physical target, substantially enhancing risk mitigation in a high-risk wildfire area.

GD_20 - 8.1.2.11 Other grid topology improvements to mitigate or reduce PSPS events

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 7.

GD_21 - 8.1.2.12 BVPP Phase 4 Upgrade Project

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 7.

GD_22 - 8.1.2.12 Partial Safety and Technical Upgrades to Maltby Substation

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 7.

GD_23 - 8.1.2.12 Safety and Technical Upgrades to Lake Substation

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 7.

GD_24 - 8.1.2.12 Partial Safety and Technical Upgrades to Village Substation

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 7.

GD_25 - 8.1.3.1 Detailed Inspections

Strategic Overview and Risk Mitigation

This initiative involves detailed annual inspections covering 20% of BVES's distribution system to proactively identify and remediate equipment defects, thus preventing potential ignitions. Inspections adhere to G095 Rule 18 standards for defect prioritization. The annual goal for 2024 was to inspect 51 circuit miles.

Financial Performance Analysis

- Planned Spend: \$13,900.00
- Actual Expenditure: \$25,300.00
- Variance: +\$11,400.00 (+82.0% overspend)
- BVES Justification: Increased labor hours beyond initial forecasts resulted in the financial variance.

Operational Impact and Risk Reduction

BVES achieved the inspection target by inspecting 51 circuit miles as planned. However, inspection records lacked detailed documentation, such as GPS data, specific findings, and comprehensive risk assessments, as noted in Data Request DR025.b.

Assessment and Conclusion

BVES met the inspection mileage target. The limited detail in inspection records impacts the ability to fully verify inspection outcomes and thoroughly evaluate the effectiveness of defect identification and remediation efforts, potentially influencing overall risk mitigation.

GD_26 - 8.1.3.1 Patrol Inspections**Strategic Overview and Risk Mitigation**

This initiative involves patrol inspections of overhead facilities to identify obvious structural problems and hazards. BVES targeted inspecting 205 circuit miles in 2024. These inspections contribute to early hazard identification, thereby reducing ignition risks.

Financial Performance Analysis

- Planned Spend: \$32,400.00
- Actual Expenditure: \$58,900.00
- Variance: +\$26,500.00 (+81.8% overspend)
- BVES Justification: Higher labor hours than initially forecasted contributed to the financial variance.

Operational Impact and Risk Reduction

BVES completed inspections of all 205 circuit miles as planned. Documentation provided supported widespread inspection activities aligned with the initiative's objectives.

Assessment and Conclusion

BVES met the patrol inspection target despite substantial overspend attributed to increased labor hours. The completed patrol inspections contributed to hazard identification, enhancing overall wildfire risk mitigation.

GD_27 - 8.1.3.1 UAV Thermography**Strategic Overview and Risk Mitigation**

This initiative involves UAV thermography inspections of 205 circuit miles of overhead infrastructure to detect thermal anomalies indicative of potential equipment failures and ignition risks.

Financial Performance Analysis

- Planned Spend: \$77,500.00
- Actual Expenditure: \$65,200.00
- Variance: -\$12,300.00 (-15.9% underspend)
- BVES Justification: BVES secured a lower-cost contract than initially projected, enabling budget savings.

Operational Impact and Risk Reduction

Documentation showed UAV-derived observations covering 5,718 poles, falling short of full coverage of BVES's total of 9,156 poles. The initiative lacked complete evidence confirming the entire 205 circuit miles were inspected.

Assessment and Conclusion

While BVES achieved financial savings, the incomplete documentation of pole coverage prevented validation of the full 205-mile inspection target. As a result, the risk reduction benefits from comprehensive UAV thermography inspections could not be fully confirmed for 2024.

GD_28 - 8.1.3.1 UAV HD Photography/Videography

Strategic Overview and Risk Mitigation

This initiative involved conducting UAV HD photography and videography inspections on all 205 circuit miles of overhead infrastructure. The goal was to visually identify hazards, such as degraded equipment, vegetation encroachments, and structural anomalies, to reduce ignition risks through early hazard detection.

Financial Performance Analysis

- Planned Spend: \$77,500.00
- Actual Expenditure: \$65,200.00
- Variance: -\$12,300.00 (-15.9% underspend)
- BVES Justification: Contracted services were secured at a lower cost than originally projected, enabling budget savings.

Operational Impact and Risk Reduction

BVES completed UAV HD photography/videography inspections covering all 205 circuit miles as targeted. Documentation reviewed, including responses to data requests (DR077 and DR077.b), provided evidence supporting full coverage of the intended scope. A sample of approximately 10% (22 circuit miles) of inspection records confirmed that no issues were found with inspection completion or documentation.

Assessment and Conclusion

BVES achieved the targeted inspections comprehensively, with full documentation supporting initiative validation. Cost savings were also achieved without impacting the effectiveness of the inspections, thereby supporting the intended risk reduction objectives.

GD_29 - 8.1.3.1 LiDAR Inspection

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 7.

GD_3 - 8.1.2.2 Minor Undergrounding Upgrades Projects**Strategic Overview and Risk Mitigation**

This initiative covers converting overhead electric lines and equipment to underground lines in accordance with GO 128. BVES does not have large-scale undergrounding projects planned for the 2023-2025 WMP cycle but undertakes small undergrounding upgrades for new developments and improvements to existing underground facilities. The initiative targets the reduction of vegetation-related ignition likelihood, with a WMP-assigned overall risk reduction goal of 4.98%, addressing projects as they arise without specific annual completion targets.

Financial Performance Analysis

- Planned Spend: \$303,680
- Actual Expenditure: \$95,262.36
- Variance: -\$208,417.64 (-68.6% underspend)
- BVES Justification: The underspend resulted from fewer customer and local government-initiated undergrounding projects than budgeted for 2024. BVES highlighted the high year-to-year variability due to the demand-driven nature of these projects, noting a significant overspend in 2023.

Operational Impact and Risk Reduction

BVES completed one minor underground project in 2024. The initiative's progression was aligned with actual demand, thus achieving proportional risk reduction relative to completed work, despite a lower activity level than initially budgeted.

Assessment and Conclusion

BVES's justification for the underspend was reasonable and aligned with the inherently variable, demand-driven nature of undergrounding projects. The completed project directly contributes to reducing overhead exposure and associated ignition risks, affirming the initiative's positive impact on risk reduction, despite having less activity than budgeted.

GD_30 - 8.1.3.1 3rd Party Ground Patrol**Strategic Overview and Risk Mitigation**

This initiative conducted annual third-party ground patrol inspections covering all 205 circuit miles within high fire-threat areas. Inspections focused on identifying structural issues, vegetation concerns, and other observable hazards to mitigate risks of wildfire ignition.

Financial Performance Analysis

- Planned Spend: \$64,300.00
- Actual Expenditure: \$21,400.00
- Variance: -\$42,900.00 (-66.7% underspend)
- BVES Justification: BVES secured inspection services through contracting at substantially lower costs than initially budgeted, achieving significant budget savings.

Operational Impact and Risk Reduction

Inspection documentation provided detailed data for 6,615 overhead structures, confirming comprehensive coverage across the full 205 circuit miles planned. Documentation included structural condition and vegetation assessments consistent with the initiative's stated objectives.

Assessment and Conclusion

BVES successfully achieved the operational target while underspending. The initiative's objectives were fully met, and the cost savings did not adversely affect the thoroughness or quality of the inspections. The completed inspections directly support the intended goals of wildfire risk mitigation.

GD_31 - 8.1.3.1 Intrusive Pole Inspections

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 7.

GD_32 - 8.1.3.1 Substation inspections

Strategic Overview and Risk Mitigation

This initiative required conducting monthly inspections at all 13 BVES substations, totaling 144 inspections annually, in compliance with CPUC General Order 174. Inspections included detailed analyses such as gas-in-oil sampling, monitoring of oil levels and temperatures, contamination checks, and protective relay testing and calibration to prevent equipment ignitions and enhance reliability.

Financial Performance Analysis

- Planned Spend: \$283,300.00
- Actual Expenditure: \$110,500.00
- Variance: -\$172,800.00 (-61.0% underspend)
- BVES Justification: Contracted equipment testing services were acquired at substantially lower costs than initially estimated, resulting in notable budget savings.

Operational Impact and Risk Reduction

BVES completed 156 substation inspections, exceeding the targeted 144 inspections. Inspection records comprehensively documented routine equipment checks and compliance with established inspection standards. The inspection reports were found to be thorough, properly documented, and in alignment with the initiative's stated objectives.

Assessment and Conclusion

BVES surpassed the targeted number of substation inspections while achieving significant budget savings. The initiative effectively contributed to enhanced monitoring and early identification of potential equipment issues, thereby directly supporting wildfire risk reduction and overall system reliability objectives.

GD_33 - 8.1.4 Equipment maintenance and repair

Strategic Overview and Risk Mitigation

This initiative involved the remediation, adjustment, and installation of new equipment to improve or replace existing connector equipment, such as hotline clamps, to minimize ignition risk. The goal included allocating 100% of the budget for equipment maintenance and repair to high fire-threat districts (HFTD).

Financial Performance Analysis

- Planned Spend: \$1,073,177.00
- Actual Expenditure: \$1,440,889.65
- Variance: +\$367,712.65 (+34.3% overspend)
- BVES Justification: Increased costs were attributed to higher labor expenses associated with equipment maintenance and repairs driven by inspection findings and storm damage.

Operational Impact and Risk Reduction

BVES fully allocated 100% of the equipment maintenance and repair budget to high fire-threat districts. Documentation provided indicated completion of extensive repairs and

replacements, reflecting responses to multiple inspection findings and storm-related damages, with significant labor and material costs incurred in addressing these issues.

Assessment and Conclusion

The 34.3% overspend was justified by documented increases in necessary maintenance activities, including substantial responses to storm impacts and inspection-driven repairs. The complete allocation to HFTD supported effective equipment maintenance and directly contributed to the reduction of ignition risks from equipment failures.

GD_34 - 8.1.5 Asset management and inspection enterprise system(s)

Strategic Overview and Risk Mitigation This initiative involved maintaining and updating BVES's centralized asset management and inspection enterprise system, "iRestore." The platform supports integration of inspections and asset data management, enhancing BVES's ability to proactively manage asset conditions and risks.

Financial Performance Analysis

- Planned Spend: \$57,700.00
- Actual Expenditure: \$42,800.00
- Variance: -\$14,900.00 (-25.8% underspend)
- BVES Justification: Lower-than-forecasted labor costs associated with system updates and maintenance contributed to budget savings.

Operational Impact and Risk Reduction

BVES maintained the iRestore system effectively throughout 2024. Documentation verified ongoing licensing, routine system maintenance, and successful integration of inspection data, supporting comprehensive risk management.

Assessment and Conclusion

BVES maintained critical asset management functionality at lower costs than anticipated. The sustained operational capability of the system effectively supported ongoing wildfire risk mitigation strategies.

GD_35 - 8.1.6 Asset Quality assurance/ quality control

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 7.

GD_36 - 8.1.7 Asset Open work orders

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 7.

GD_37 - 8.1.8.1 Equipment Settings to Reduce Wildfire Risk

Strategic Overview and Risk Mitigation

This initiative included operational protocols and equipment settings adjustments aimed at minimizing ignition risks, utilizing fast-trip protective settings and seasonal one-shot non-reclosing configurations on reclosers.

Financial Performance Analysis

- Planned Spend: \$5,100.00
- Actual Expenditure: \$7,100.00
- Variance: +\$2,000.00 (+39.2% overspend)
- BVES Justification: Increased labor hours required beyond initial forecasts.

Operational Impact and Risk Reduction

BVES consistently maintained and reviewed protective equipment settings, with documentation showing quarterly evaluations and continued implementation of enhanced recloser settings and PSPS event procedures.

Assessment and Conclusion

BVES effectively implemented planned protective equipment settings despite minor budget overspend, directly supporting operational risk management by reducing equipment-related ignition risks.

GD_38 - 8.1.8.2 Grid Response Procedures and Notifications

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 7.

GD_39 - 8.1.8.3 Personnel Work Procedures and Training in Conditions of Elevated Fire Risk

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 7.

GD_4 - 8.1.2.3 Covered Conductor Replacement Project

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 7.

GD_40 - 8.1.9 Asset Workforce Planning

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 7.

GD_5 - 8.1.2.3 Radford Line Replacement Project

Strategic Overview and Risk Mitigation

This initiative involves replacing or reinforcing distribution poles along the Radford Line, situated within BVES's highest fire-risk terrain (HFTD Tier 3). The initiative specifically targets reducing the likelihood of pole failure leading to conductor contact and subsequent wildfire ignition. The WMP established a 2024 completion target of 70 poles without assigning a specific percentage for risk reduction.

Financial Performance Analysis

- Planned Spend: \$1,557,300
- Actual Expenditure: \$2,513,679.60
- Variance: +\$956,379.60 (+61.4% overspend)
- BVES Justification: The overspend was attributed to prolonged USFS permitting delays, inflationary pressures on labor and equipment costs since the initial estimates in 2020, additional environmental studies, higher helicopter support fees, delays due to an endangered species and the Line Fire, necessary overtime, and an expanded scope that included additional fiber optic cable installation.

Operational Impact and Risk Reduction

BVES reported replacing or reinforcing 88 poles, exceeding the initial target of 70 poles. Field verification confirmed the successful completion and compliance with technical standards, significantly enhancing pole stability and reducing ignition risks.

Assessment and Conclusion

The substantial overspend was adequately justified, with clear documentation of delays, environmental challenges, expanded scope, and market inflation. The initiative's operational outcomes exceeded targets, demonstrating enhanced risk mitigation effectiveness in this high-risk wildfire area.

GD_6 - 8.1.2.3 Evacuation Route Hardening Project**Strategic Overview and Risk Mitigation**

This initiative involves hardening poles along primary and secondary evacuation routes maintained by BVES. Poles are wrapped with fire-resistant mesh to enhance resiliency and reduce risk during emergency evacuations. BVES set a 2024 completion target of 500 distribution poles, aiming for a 12% risk reduction focused on reducing wildfire vulnerability.

Financial Performance Analysis

- Planned Spend: \$807,986.00
- Actual Expenditure: \$541,306.00
- Variance: -\$266,680.00 (-33.0% underspend)
- BVES Justification: The underspend occurred because the 2024 annual target was achieved and exceeded at lower-than-anticipated labor costs.

Operational Impact and Risk Reduction

BVES significantly exceeded the initiative's target, completing the hardening of 929 poles compared to the planned 500 poles, representing an 85.8% increase over the original target. This substantial overachievement directly enhances public safety and egress reliability during wildfire emergencies.

Assessment and Conclusion

The underspend, combined with the substantial overachievement of physical targets, demonstrates effective execution. BVES utilized allocated funds to exceed risk reduction commitments, significantly enhancing the resiliency of critical evacuation routes and public safety.

GD_7 - 8.1.2.4 Transmission pole/tower replacements and reinforcements

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 7.

GD_8 - 8.1.2.5 Traditional overhead hardening**Strategic Overview and Risk Mitigation**

This initiative involves performing maintenance on overhead distribution assets as needed, including replacing or repairing poles identified as leaning, structurally deficient, or damaged. The primary goal is to maintain safe operating conditions and reduce the

likelihood of wildfire ignition through improved compliance and system reliability. The WMP assigned a 4.36% risk reduction goal associated with overall wildfire risk mitigation.

Financial Performance Analysis

- **Planned Spend: \$809,814.00**
- **Actual Expenditure: \$1,669,590.28**
- **Variance: +\$859,776.28 (+106.2% overspend)**
- **BVES Justification: The overspend was attributed to performing more overhead hardening work than initially estimated, including proactive replacement of non-exempt equipment, such as arresters and splices, beyond inspection-driven maintenance needs.**

Operational Impact and Risk Reduction

BVES completed nine pole-related maintenance activities. The overspend reflects increased work volume addressing comprehensive system deficiencies, enhancing system resilience and overall safety.

Assessment and Conclusion

The substantial overspend is attributed to increased maintenance scope, including proactive equipment replacements. These activities support the initiative's objective of maintaining system compliance and reliability, thus contributing positively to overall wildfire risk mitigation.

GD_9 - 8.1.2.6 Emerging grid hardening technology installations and pilots

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 7.

ST_1 - 5.4.5 Environmental compliance and permitting

Strategic Overview and Risk Mitigation

This initiative covered BVES's efforts in ensuring environmental compliance and securing necessary permits for wildfire mitigation activities, including coordination with agencies like the U.S. Forest Service (USFS).

Financial Performance Analysis

- **Planned Spend: \$25,400.00**
- **Actual Expenditure: \$31,300.00**
- **Variance: +\$5,900.00 (+23.2% overspend)**

- BVES Justification: Higher-than-anticipated permitting costs due to an increased number of projects conducted in 2024 led to the financial variance.

Operational Impact and Risk Reduction

BVES successfully completed required environmental reviews and updates, evidenced by documented coordination with USFS for permitting, including mandated pre-construction biological surveys. Procedures such as PSPS protocols were regularly updated, demonstrating effective compliance management and readiness for project execution.

Assessment and Conclusion

The increased permitting expenditures were appropriately justified by the expanded scope of project activities requiring permits. BVES successfully maintained comprehensive environmental compliance, indirectly supporting the timely and legally compliant execution of critical wildfire mitigation projects, thereby enhancing overall risk management and mitigation effectiveness.

4.1.3 Synthesis of Findings

4.1.3.1 Initiative Review

Bear Valley generally met or exceeded most of its targets across the reviewed initiatives, with a few instances of project delays or non-applicability. The overall level of wildfire risk reduction achieved appears substantial, evidenced by the implementation of various initiatives targeting grid hardening, asset inspection programs, and operational protocols. The EC's consistent use of fast trip protective settings, seasonal adjustments to recloser settings, and comprehensive inspection programs contribute significantly to reducing wildfire risk, as suggested by the absence of reportable ignitions in over 20 years. Bear Valley has demonstrated a commitment to improving data management and recordkeeping practices, notably through the implementation of the iRestore system.

However, there are areas where data accuracy and detail could be improved, particularly in detailed inspection reports and vegetation-related data granularity. Recommendations include enhancing inspection report details, improving the granularity of vegetation data reporting, and ensuring consistent documentation across all initiatives. Bear Valley's small size allows for rapid response adjustments, which is beneficial for wildfire mitigation efforts. The EC's proactive approach to grid hardening, comprehensive use of various grid and inspection technologies, and engagement with stakeholders demonstrate a holistic strategy for wildfire risk management.

In future years, Bear Valley outlines their intent to improve performance through continued substation upgrades, further refinement of asset management systems, review of PSPS

procedures, and improvements in workforce training and coordination. While there are areas for improvement in reporting detail, Bear Valley is diligent in its efforts to mitigate wildfire ignition risk, with a comprehensive approach that addresses various aspects of risk reduction and demonstrates a commitment to meeting WMP goals and adapting strategies as needed.

4.1.3.2 Funding Verification

Budget and Expenditure Summary: The Grid Design, Operations, and Maintenance category had a total planned budget of \$19,636.10 with actual expenditures of \$24,791.80, representing a 26.3% variance above budget.

Initiatives with Significant Variances: Of the 41 total initiatives in this category, 22 (53.7%) had absolute percent differences exceeding 10%. The most common reasons for variances included:

- Higher-than-anticipated labor and equipment costs for SCADA integration projects (GD_12, GD_13, GD_14, GD_15)
- Multi-year permitting delays resulting in cost escalations for the Radford Line project (GD_2, GD_5)
- Expanded scope of work for reactive maintenance and equipment replacements (GD_8, GD_33)
- Lower-than-expected contractor costs for inspection programs (GD_30, GD_32)

Key Trends and Funding Compliance: The category's funding patterns show increased allocation to infrastructure hardening in high fire-risk areas. Several initiatives achieved operational targets while utilizing less funding than planned, including the Evacuation Route Hardening Project (GD_6) which exceeded its target by 86% while underspending by 33%. SCADA automation initiatives experienced cost overruns averaging 78% due to communications equipment and labor requirements. The Radford Line projects (GD_2 and GD_5) experienced overruns exceeding 61% due to USFS permitting delays and Line Fire impacts. Most initiatives met or exceeded their operational targets despite funding variances.

4.2 VEGETATION MANAGEMENT AND INSPECTIONS

4.2.1 Initiative Summary Table

Table 44: Initiative Summary Table (Spend in Thousand \$)

Initiative Number, WMP Section Number, and Name	WMP – Initiative Target	EC-Claimed Progress ¹⁰	EC-Claimed Initiative Status	Sample Size ¹¹	Sample Validation Rate (%) ¹²	Verification Method	IE Finding on Initiative (Initiative Validation Rate) ^{13, 14}	WMP – Planned Spend (\$)	EC-Claimed Actual Spend (\$ and % from budget)	Satisfied Risk Reduction Goal? ¹⁵
VM_1, 8.2.2.1, Detailed Inspections	51 Circuit Miles	51 Circuit Miles	Complete	20.74 Circuit Miles	100%	Detailed Inspection Documentation (DR067, DR067.b)	Initiative Validated (100%)	\$13.90	\$25.30 (+82.0%)	Yes (4.36%)
VM_2, 8.2.2.1, Patrol Inspections	205 Circuit Miles Inspected	205 Circuit Miles Inspected	Complete	69.9 Circuit Miles	100%	Patrol Inspection Logs (DR069, DR069.b)	Initiative Validated (100%)	\$32.40	\$58.90 (+81.8%)	Yes (4.36%)
VM_3, 8.2.2.1, UAV HD Photography/Videography	205 Circuit Miles Inspected	205 Circuit Miles Inspected	Complete	22 Circuit Miles	100%	UAV HD Photography/Videography Documentation (DR077, DR077.b)	Initiative Validated (100%)	\$77.50	\$67.20 (-13.3%)	Yes (4.36%)
VM_4, 8.2.2.1, LiDAR Inspection	205 Circuit Miles Inspected	205 Circuit Miles Inspected	Complete	22 Circuit Miles	100%	Lidar Shapefiles (DR078)	Initiative Validated (100%)	\$79.60	\$71.80 (-9.8%)	Yes (4.36%)
VM_5, 8.2.2.1, 3rd Party Ground Patrol	205 Circuit Miles Inspected	205 Circuit Miles Inspected	Complete	22 Circuit Miles	100%	3 rd Party Ground Patrol Inspection Records (DR079)	Initiative Validated (100%)	\$64.30	\$21.40 (-66.7%)	Yes (4.36%)
VM_6, 8.2.2.1, Substation inspections	144 Substations Inspected	156 Substations Inspected	Complete	20 Substations	100%	Substation Inspection Records (DR080)	Initiative Validated (108%)	\$4.40	\$15.00 (+240.9%)	Yes (4.36%)
VM_7, 8.2.3.1, Pole clearing	Review and Update Procedure	Needs Met	Ongoing	N/A	100%	BVES Written Response (DR081) Vegetation Management QC Policy and Procedure (DR081) WMP Planning Meeting Invite (DR081)	Initiative Validated (100%)	\$0.00	\$0.00 (+0.0%)	No Goal Provided

¹⁰ N/A in the Claimed Progress column means that the EC did not provide any claimed progress on QDR4 or the EC ARC.
¹¹ N/A in the Sample Size column means that no target was provided by the EC, or the target was qualitative and did not have a sampling component.
¹² N/A in the Sample Validation column means that no sampling was reviewed; therefore, no validation rate was applied.
¹³ As detailed in Energy Safety's issued IE ARC Outline for WMP Compliance Year 2024 document, if the total initiative validation is greater or equal to 95%, the initiative is considered validated by the IE.
¹⁴ N/A in the Initiative Validation column means that the initiative was not reviewed and therefore could not be validated/invalidated.

¹⁵ Risk Reduction Goal can still be met or missed even if the Sample Size and Validation Rate column contains N/A. This is due to the initiative target goal being qualitative and therefore no sampling is required because the documentation initially provided fulfills the sampling requirement.

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Initiative Number, WMP Section Number, and Name	WMP – Initiative Target	EC-Claimed Progress ¹⁰	EC-Claimed Initiative Status	Sample Size ¹¹	Sample Validation Rate (%) ¹²	Verification Method	IE Finding on Initiative (Initiative Validation Rate) ^{13, 14}	WMP – Planned Spend (\$)	EC-Claimed Actual Spend (\$ and % from budget)	Satisfied Risk Reduction Goal? ¹⁵
VM_8, 8.2.3.2, Wood and slash management	Contractor Adhere to Waste Removal	Contractor Met Requirements	Ongoing	N/A	100%	BVES Written Response (DR082) Vegetation Management Contract (DR082) WMP Planning Meeting Invite (DR082)	Initiative Validated (100%)	\$520.40	\$453.80 (-12.8%)	Yes (3.62%)
VM_9, 8.2.3.3, Clearance	72 Circuit Miles	100 Circuit Miles	Complete	53 Circuit Miles	100%	Clearance Shapefiles (DR083)	Initiative Validated (139%)	\$2,212.80	\$1,935.40 (-12.5%)	Yes (3.02%)
VM_10, 8.2.3.4, Fall-in Mitigation	88 Trees	182 Trees	Complete	65 Trees	100%	Field Inspections Fall-In Mitigation Completion Log (DR068)	Initiative Validated (206%)	\$351.10	\$328.80 (-6.4%)	Yes (3.02%)
VM_11, 8.2.3.5, Substation Defensible Space	13 Substations	13 Substations	Complete	13 Substations	100%	Substation Clearing Logs (DR069)	Initiative Validated (100%)	\$15.50	\$14.30 (-7.7%)	Yes (3.02%)
VM_12, 8.2.3.6, High-risk Species	No Target	N/A	Ongoing	31	100%	High-Risk Species Documentation (DR070)	Initiative Validated (100%)	\$351.10	\$328.80 (-6.4%)	Yes (3.02%)
VM_13, 8.2.3.7, Fire-Resilient Rights-of-way	No Target	Work Completed on High Risk Right-of-Way	Complete	N/A	N/A	Project KMZ (DR044)	Initiative Validated (100%)	\$14.40	\$16.30 (+13.2%)	Yes (4.51%)
VM_14, 8.2.3.8, Emergency Response Vegetation Management	Review and update emergency response procedures	Quarterly target met	Ongoing	N/A	N/A	Procedures for VM_14 Emergency Response Vegetation Management (DR071)	Initiative Validated (100%)	\$28.80	\$37.90 (+31.6%)	Yes (3.02%)
VM_15, 8.2.4, Vegetation Management Enterprise System	Review and update VM Enterprise Procedures	Quarterly target met	Ongoing	N/A	N/A	Records of meetings, draft VM enterprise system procedures (DR072)	Initiative Validated (100%)	\$21.60	\$18.30 (-15.3%)	Yes (3.02%)
VM_16, 8.2.5, Vegetation Management Quality assurance/Quality Control	72 QC Reviews, 5 Program Audits	5 Program Audits	Complete	5 Program Audits	100%	Records of QC review log, audit reports (DR073)	Initiative Validated (100%)	\$50.90	\$66.10 (+29.9%)	Yes (4.36%)
VM_17, 8.2.6, Vegetation Management Open Work Orders	Maintain compliance with open workorders	N/A	Ongoing	N/A	N/A	Records of vegetation management workorder completion for 2024 (DR074)	Initiative Validated (100%)	\$35.70	\$41.90 (+17.4%)	Yes (3.02%)
VM_18, 8.2.7, Vegetation Management Workforce planning	Verification Current Staffing Level (Internal & Contractors) Meets Need	Needs Met	Ongoing	N/A	N/A	Weekly staff log-in (DR075)	Initiative Validated (100%)	\$6.40	\$7.80 (+21.9%)	Yes (3.62%)
VM_19, 8.2.2.7, AiDash	Annual Review	Target Met	Ongoing	N/A	N/A	-BVES Response -AiDash Proof (DR042)	N/A	\$40.00	\$40.00 (+0.0%)	No Goal Provided

4.2.2 Written Detail for Initiatives

4.2.2.1 Initiative Review – Findings & Method

VM_1 – 8.2.2.1 – Detailed Inspections – Non-Focus & Non-Field Verifiable

The Detailed Inspections initiative involves completing careful visual and diagnostic exams of individual pieces of equipment on BVES's system to identify any existing defects. The 2023–2025 WMP set a target to complete detailed inspections for 51 circuit miles in 2024, with an associated risk-reduction goal of 4.36%.

According to BVES's 2024 Q4 QDR, BVES reported completion of detailed inspections for 51 circuit miles. Records provided in response to Data Requests DR067 and DR067.b documented the completion of 51.35 circuit miles across the Lagonita, Pump House, Paradise, Castle Glen, and Pioneer circuits between February and October 2024. The 2024 ARC confirms that the risk-reduction goal was achieved.

The IE reviewed a sample of 20.74 circuit miles of detailed inspections and identified no issues during this review. Based on the inspection records provided and the IE's sample verification, the IE validates BVES's reported completion for this initiative.

Table 45: Detailed Inspections Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR067 & DR067.b Response	Summary
51 Circuit Miles Inspected	51 Circuit Miles Inspected	51 Circuit Miles Inspected	51.35 Circuit Miles Inspected	Initiative Validated

VM_2 – 8.2.2.1 – Patrol Inspections – Focus & Non-Field Verifiable

The Patrol Inspections initiative requires an annual visual inspection of all overhead facilities, designed to identify obvious problems, gross defects, and hazards. The 2023–2025 WMP set a 2024 target to complete patrol inspections for 205 circuit miles, with an associated risk-reduction goal of 4.36%.

According to its 2024 Q4 QDR, BVES completed patrol inspections for 205.52 circuit miles, meeting the target. The 2024 ARC confirms that the risk-reduction goal was achieved. In response to Data Requests DR069 and DR069.b, BVES provided logs detailing the circuits patrolled, the mileage, and completion dates.

The IE reviewed a sample of patrol inspections covering 69.9 circuit miles from the provided records. No issues were identified during this review. Based on the documentation provided

and the IE's sample verification, the IE validates BVES's reported completion for this initiative.

Table 46: Patrol Inspections Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR069 & DR069.b Response	Summary
205 Circuit Miles Inspected	205 Circuit Miles Inspected	205 Circuit Miles Inspected	205 Circuit Miles Inspected	Initiative Validated

VM_3 – 8.2.2.1 – UAV HD Photography/Videography – Non-Focus & Non-Field Verifiable

The UAV HD Photography/Videography Inspections initiative involves completing unmanned aerial vehicle inspections to identify facility degradations and issues that may not be visible from the ground. For 2024, the WMP set a target to inspect 205 circuit miles, with a risk-reduction goal of 4.36%.

The 2024 Q4 QDR reported the completion of inspections for 205 circuit miles, meeting the annual target, and the 2024 ARC confirms the risk-reduction goal was achieved. In support of this, BVES provided records of completion containing 54 attributes per inspection site, including inspector name, date, asset ID, and GPS coordinates.

The IE reviewed a sample of approximately 22 circuit miles of the records provided in response to Data Requests DR077 and DR077.b. The IE's review found no issues. Based on the documentation received and the reviews performed, the IE validates this initiative.

Table 47: UAV HD Photography/Videography Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR077 & DR077.b Response	Summary
205 Circuit Miles Inspected	205 Circuit Miles Inspected	205 Circuit Miles Inspected	205 Circuit Miles Inspected	Initiative Validated

VM_4 – 8.2.2.1 – LiDAR Inspection – Non-Focus & Non-Field Verifiable

The LiDAR Inspection initiative uses a system of lasers and software to develop surveys of the overhead systems to accurately determine vegetation clearances to conductors. The 2023–2025 WMP established a 2024 target to complete LiDAR inspections of 205 circuit miles, with an associated 4.36% risk-reduction goal.

The 2024 Q4 QDR reported the completion of LiDAR inspections for 205 circuit miles, meeting the target, and the 2024 ARC confirms the risk-reduction goal was achieved. In response to Data Request DR078, BVES provided shapefiles for encroachment and overhang of vegetation.

The IE reviewed a sample of 22 circuit miles from the records provided. No issues were identified in the review of the sample LiDAR outputs. Based on the documentation received and the reviews performed, the IE validates this initiative.

Table 48: LiDAR Inspection Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR078 Response	Summary
205 Circuit Miles Inspected	205 Circuit Miles Inspected	205 Circuit Miles Inspected	205 Circuit Miles Inspected	Initiative Validated

VM_5 – 8.2.2.1 – 3rd Party Ground Patrol Non-Focus & Non-Field Verifiable

The 3rd Party Ground Patrol Inspections initiative is an enhanced inspection that serves as an additional annual GO 165 patrol inspection to the one performed by BVES's internal staff. The 2023–2025 WMP set a 2024 target to complete inspections for 205 circuit miles, with a 4.36% risk-reduction goal.

The 2024 Q4 QDR reported the completion of inspections for 205 circuit miles, meeting the target, and the 2024 ARC confirms the risk-reduction goal was achieved. BVES provided records of completion that included GPS coordinates, inspection dates, inspector information, and visual photos for a total of 43 attributes per inspection site.

The IE reviewed a sample of 22 circuit miles from records provided in response to Data Request DR079 and identified no issues. Based on the documentation received and the reviews performed, the IE validates this initiative.

Table 49: 3rd Party Ground Patrol Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR0 Response	Summary
205 Circuit Miles Inspected	205 Circuit Miles Inspected	205 Circuit Miles Inspected	205 Circuit Miles Inspected	Initiative Validated

VM_6 – 8.2.2.1 – Substation Inspections – Non-Focus & Non-Field Verifiable

The Substation Vegetation Inspections initiative involves monthly inspections of BVES's substations to mitigate the risk of equipment failures that could cause ignitions. For 2024, the WMP set a target to complete inspections for 144 substations and identified a 4.36% risk-reduction goal.

The 2024 Q4 QDR reported the completion of inspections for 156 substations, exceeding the target, and the 2024 ARC confirms the risk-reduction goal was achieved. BVES provided copies of the substation inspection sheets, which include categories such as area appearance, transformers, voltage regulators, and fire extinguishers.

The IE reviewed a sample of 20 substation inspection reports provided in response to Data Request DR080. No issues were identified in the review. Based on the documentation received and the reviews performed, the IE validates this initiative.

Table 50: Substation Inspections Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR080 Response	Summary
144 Substations	156 Substations	156 Substations	156 Substations	Initiative Validated

VM_7 – 8.2.3.1 – Pole Clearing – Non-Focus & Non-Field Verifiable

As described within the 2023 - 2025 WMP, pole clearing involves clearing a 10-foot radius at the base of a pole pursuant to PRC 4292. BVES's target for this initiative was to review and update procedures related to pole clearing. Per BVES's 2024 Q4 QDR Dated February 1, 2025, BVES did not reported the completion of updating QAQC procedures. As detailed within BVES's response to Data Request DR081, BVES provided 3 attachments:

1. A meeting invite that occurred on December 9, 2024, from 3:00pm to 4:00pm titled Initial WMP Planning Meeting
2. A document titled "BVES INC Vegetation Management and Vegetation Management QC Programs Policy and Procedures Rev1"
3. A statement confirming that at the above mentioned meeting invite, the BVES team discussed updated the VM-07 policy and has created a plan to change the policy and is working on an update that will be completed in 2025.

The IE's review of the provided documentation revealed no issues. Based on the documentation received and the reviews performed, the IE validates this initiative.

Table 51: Pole Clearing Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR081 Response	Summary
Review and Update Procedure	N/A	N/A	Reviewed and Updated Procedure	Initiative Validated

VM_8 – 8.2.3.2 – Wood and Slash Management – Non-Focus & Non-Field Verifiable

The Contractor Waste Removal Procedure Adherence initiative's purpose is to ensure contractors adhere to the established procedure for removing and disposing of all wood, slash, and other waste generated during vegetation management work. The 2023–2025 WMP set a target for contractors to adhere to the procedure and identified a 3.62% risk-reduction goal.

The 2024 Q4 QDR reported that the contractor adhered to the procedure; however, the 2024 ARC does not confirm if the risk-reduction goal was achieved. In response to Data Request DR082.b, BVES provided its Vegetation Management Contract, which details specific protocols for contractors, such as removing waste on a daily basis and keeping temporary brush piles to a maximum of 24 inches in depth. Additionally, BVES shared that on the meeting invite that occurred on December 9, 2024, from 3:00pm to 4:00pm titled Initial WMP Planning Meeting, BVES staff discussed updating the VM_08 policy.

The IE reviewed the policy and procedures document and identified no issues. Based on the documentation received and the reviews performed, the IE validates this initiative.

Table 52: Wood and Slash Management Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR082 Response	Summary
Contractor Adhered to Waste Removal	N/A	N/A	Protocols in place for contractors to adhere to waste removal	Initiative Validated

VM_9 – 8.2.3.3 – Clearance –Focus & Non-Field Verifiable

The Vegetation Clearance Activities initiative involves completing vegetation clearance on BVES's system, adhering to clearance specifications that meet or exceed GO 95

requirements. The 2023–2025 WMP set a target to complete clearance for 72 circuit miles and identified a 3.02% risk-reduction goal.

The 2024 Q4 QDR reported the completion of 99.5 circuit miles, exceeding the annual target, and the 2024 ARC confirms the risk-reduction goal was achieved. In response to Data Request DR083, BVES provided shapefiles for all clearance areas.

The IE reviewed a sample of 53 circuit miles (a 53% sample of the completed work) from the provided records. No issues were identified in the review. Based on the documentation received and the reviews performed, the IE validates this initiative

Table 53: Clearance Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR083 Response	Summary
72 Circuit Miles	100 Circuit Miles	100 Circuit Miles	100 Circuit Miles	Initiative Validated

VM_10 – 8.2.3.4 – Fall-in Mitigation –Focus & Field Verifiable

Fall-in mitigation removes or remediates trees that could strike energized conductors, reducing the likelihood of vegetation-related faults and wildfire ignitions.

As described within the 2023-2025 WMP, BVES set a 2024 completion target of 88 trees and projected a 3.02 % risk reduction goal for this initiative.

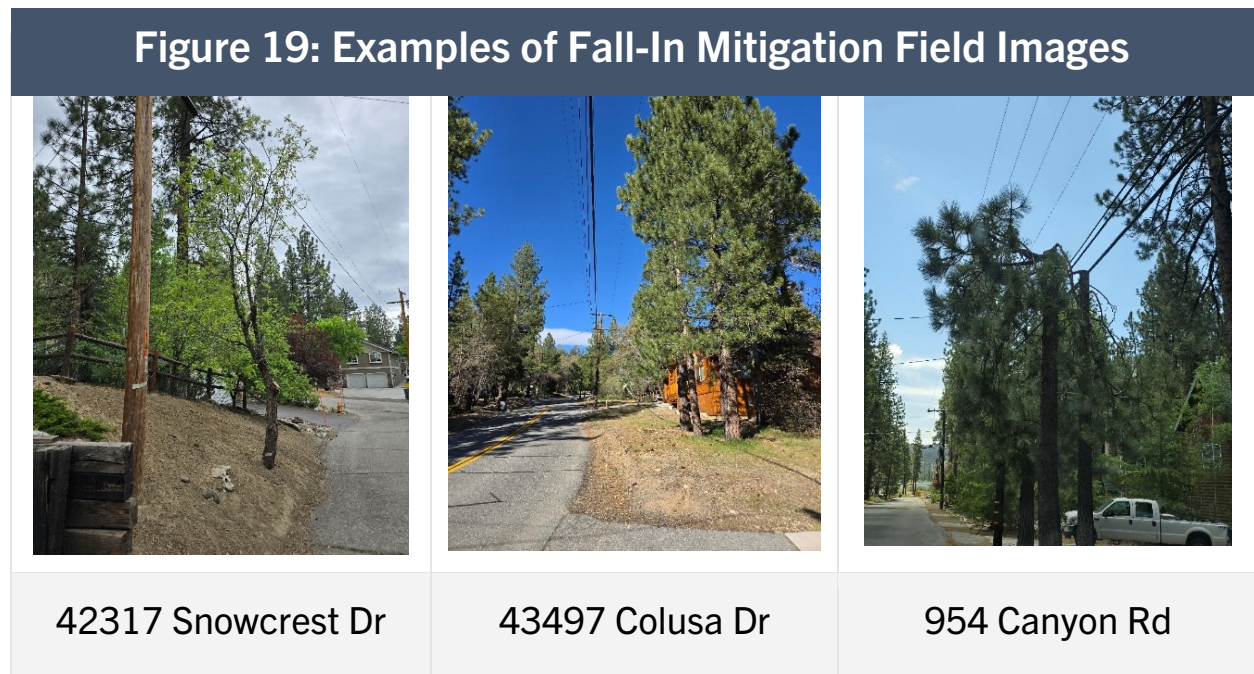
Per BVES’s 2024 Q4 QDR dated February 1, 2025, provided in the response to the Front Loaded Data Request, BVES reported completing 182 tree mitigations. The 2024 Annual Report on Compliance dated April 1, 2025, cites the same 182 trees and states that the 3.02 % risk-reduction goal was achieved.

To verify the reported completion figures, the IE issued Data Request DR068 requesting records of completion. BVES provided a log that included 130 locations and a total of 182 trees mitigated. Each entry listed the following attributes:

- Location
- Grid ID
- Cycle Year
- Species
- Quantity
- Lift / Climb
- Trim Style

- Foreman
- Start Date / Complete Date
- Comments

The Independent Evaluator randomly sampled 44 locations covering 65 trees, in BVES's service area. For illustrative examples of these observations, please refer to Figure 19: Examples of Fall-In Mitigation Field Images, provided below.



The IE captured geo-referenced photographs and assessed workmanship and coordinate accuracy. Three repeated issues were identified:

1. Work not performed or unverifiable at several sampled points
2. GIS data discrepancies between the log and field observations
3. Incomplete work or unclear mitigation on a small subset of trees

To improve accuracy in future fall-in mitigation reporting, the IE recommends that BVES amend its tree-removal workflow with a verification step that couples photographic evidence to each log entry and validates GIS coordinates prior to submission, similar to the pole-record accuracy improvements recommended in GD 1. Based on the field evidence reviewed, the IE has validated this initiative.

Table 54: Fall-in Mitigation Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR068 Response	Summary
88 Trees	182 Trees	182 Trees	182 Trees	Initiative Validated

VM_11 – 8.2.3.5 – Substation Defensible Space – Non-Focus & Non-Field Verifiable

The Substation Inspection and Clearing initiative involves the inspection and clearing of vegetation in and around BVES's substations to reduce ignition probability from contact with equipment. The 2023–2025 WMP set a 2024 target to complete this work for 13 substations and identified a 3.02% risk-reduction goal.

The 2024 Q4 QDR reported the completion of work at 13 substations, meeting the target, and the 2024 ARC confirms the risk-reduction goal was achieved. In response to Data Request DR069, BVES provided a log of clearing activities at substations including Bear City, Fawnskin, Pineknot, and Village, which occurred between June and November 2024.

The IE reviewed records for all 13 substations and identified no issues. Based on the documentation received and the reviews performed, the IE validates this initiative

Table 55: Substation Defensible Space Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR069 Response	Summary
13 Substations	13 Substations	13 Substations	13 Substations	Initiative Validated

VM_12 – 8.2.3.6 – High-risk Species – Non-Focus & Non-Field Verifiable

The High-Risk Species Removal initiative involves the removal of any fast-growing trees, such as Locusts and Poplars, that are hanging over or leaning towards bare lines. The 2023–2025 WMP did not set a quantitative target, as work is on an as-needed basis, but did identify a 3.02% risk-reduction goal.

While the 2024 Q4 QDR reported no completions, BVES provided records for 31 high-risk species removals in response to Data Request DR070. These records detailed the location, species, quantity, and completion date for each removal. The 2024 ARC does not confirm if the risk-reduction goal was achieved.

The IE reviewed the records for all 31 removals and identified no issues. The species were limited to Locusts and Poplar with 4 types of identification: 1) storm, 2) Call Out, 3) Routine Inspections, and 4) LiDAR. Based on the documentation received and the reviews performed, the IE validates this initiative completion.

The IE reviewed the sample of all 31 removals and no issues were identified in the review.

Table 57: High-risk Species Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR070 Response	Summary
As needed remediation	N/A	N/A	31 Removals	Initiative Validated

VM_13 – 8.2.3.7 – Fire-Resilient Rights-of-Way – Non-Focus & Non-Field Verifiable

The Fire-Resilient Right-of-Way (ROW) Clearance initiative applies to all ROWs in HFTD Tier 3 and to all ROWs in HFTD Tier 2 designated as having high strike potential. The 2023–2025 WMP did not set a quantitative target for this initiative but identified a 4.51% risk-reduction goal.

While the 2024 Q4 QDR reported no completions, BVES provided records in response to DR044 showing a 1.86-mile fire-resilient ROW clearance was completed on September 27, 2024. The 2024 ARC does not confirm if the risk-reduction goal was achieved.

The IE reviewed the KMZ file and photos provided by BVES for the completed clearance. No issues were identified in the review. Based on the documentation received and the reviews performed, the IE validates this initiative.

Table 58: Fire-Resilient Rights-of-Way Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR044 Response	Summary
N/A	N/A	N/A	1.86 miles	Initiative Validated

VM_14 – 8.2.3.8 – Emergency Response Vegetation Management – Non-Focus & Non-Field Verifiable

The Emergency Response Vegetation Management Procedure Review initiative's purpose is to review and update BVES's procedures for vegetation management during and after major events, such as a major storm or other disaster. The 2023–2025 WMP set a 2024 target to complete this review and identified a 3.02% risk-reduction goal.

Although the 2024 Q4 QDR reported no completion, BVES provided records in response to DR071 showing the review was completed. BVES provided records of completion of procedure review and updates. BVES provided the following records:

1. Emergency Response Vegetation Management QAQC Procedures (effective date: 4/14/24)
2. PSPS Post Season Report 2024
3. BVES INC PSPS Procedures
4. PSPS Procedure Review (meeting time, attendees, and activity)

The IE reviewed the provided documentation, which outlines procedures for contractor mobilization and annual training. No issues were identified in the review. Based on the documentation received and the reviews performed, the IE validates this initiative.

Table 59: Emergency Response Vegetation Management Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR071 Response	Summary
Review and update procedure	N/A	N/A	Reviewed and updated procedure	Initiative Validated

VM_15 – 8.2.4 – Vegetation Management Enterprise System – Non-Focus & Non-Field Verifiable

The VM Enterprise System Procedure Review initiative's purpose is to review and update procedures related to BVES's Vegetation Management enterprise systems. The 2023–2025 WMP set a 2024 target to complete this review and identified a 3.02% risk-reduction goal.

The 2024 Q4 QDR did not report completion. However, in response to DR072, BVES provided records of 11 meetings held between March and November 2024 with representatives of a new enterprise system to which BVES will migrate in 2025. The 2024 ARC does not confirm if the risk-reduction goal was achieved.

The IE reviewed the sample of meeting records and identified no issues. Based on the documentation received and the reviews performed, the IE validates this initiative.

Table 60: Detailed Inspections Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR072 Response	Summary
Review and update procedure	N/A	N/A	Reviewed and updated procedure	Initiative Validated

VM_16 – 8.2.5 – Vegetation Management Quality Assurance/Quality Control –Focus & Non-Field Verifiable

The VM Quality Control (QC) Reviews and Audits initiative involves completing QC reviews of vegetation work and program audits to promote consistent and effective vegetation management. The 2023–2025 WMP set a target to complete 72 VM QC reviews and 5 program audits, with an associated risk-reduction goal of 4.36%.

The 2024 Q4 QDR reported the completion of the 5 program audits, which consist of four quarterly audits and one annual audit, but does not confirm if the risk-reduction goal was achieved. In response to DR073, BVES provided QC review logs and all 5 program audit reports. The provided Q2 2024 audit, for example, reported on progress, budget, and QC checks performed.

The IE reviewed the QC review logs and all 5 program audit reports and identified no issues. Based on the documentation received and the reviews performed, the IE validates this initiative.

Table 61: Detailed Inspections Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR073 Response	Summary
72 VM QC Reviews and 5 Program Audits	5 Program Audits	5 Program Audits	161 VM QC Reviews and 5 Program Audits	Initiative Validated

VM_17 – 8.2.6 – Vegetation Management Open Work Orders – Non-Focus & Non-Field Verifiable

The Corrective Action Timeframe Compliance initiative’s purpose is to maintain compliance with corrective action timeframes for vegetation management work orders, following GO 95 Rule 18 requirements. The 2023–2025 WMP set a target to maintain compliance and identified a 3.02% risk-reduction goal.

BVES reported no completion information in its 2024 Q4 QDR. However, in response to DR074, BVES provided records confirming that no vegetation management work orders were open past their due date in 2024. The 2024 ARC does not confirm if the risk-reduction goal was achieved.

The IE reviewed the sample of records, which show start and end dates for all 2024 work orders. No issues were identified in the review. Based on the documentation received and the reviews performed, the IE validates this initiative.

Table 62: Detailed Inspections Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR074 Response	Summary
Compliance with Corrective action Timeframe	N/A	N/A	Compliance with Corrective action Timeframe	Initiative Validated

VM_18 – 8.2.7 – Vegetation Management Workforce Planning – Non-Focus & Non-Field Verifiable

The Staffing Level Verification initiative’s purpose is to verify that the current vegetation management staffing level meets business needs. The 2023–2025 WMP set a target to complete this verification and identified a 3.62% risk-reduction goal.

BVES reported no completion information in its 2024 Q4 QDR. In response to DR075, BVES provided weekly logs and stated that it did not have notable staffing changes and did not need additional resources in 2024. The 2024 ARC does not confirm if the risk-reduction goal was achieved.

The IE reviewed the sample weekly logs, which showed a steady staff count with little variation. No issues were identified in the review. Based on the documentation received and the reviews performed, the IE validates this initiative.

Table 63: Detailed Inspections Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR075 Response	Summary
Verify staffing levels	N/A	N/A	Verified staffing levels	Initiative Validated

VM_19, 8.2.2.7 - AiDash – Non-Focus & Non-Field Verifiable

As of 2023, BVES has begun utilizing AiDash to complement its existing Vegetation Management programs per page 214 of the WMP. BVES states that AiDash will not be used as a standalone platform but will rather be used to validate and escalate inspections of their existing programs. AiDash provides a review of vegetation management around electrical lines and equipment based upon satellite imaging – BVES will conduct a satellite inspection once per year to update AiDash. BVES did not set a risk reduction goal for this initiative.

Per Table 8-14 of the WMP, no 2024 target is listed for VM_19. VM_19 is referenced in section 8.2.2.7 on page 214 of the WMP and provides a brief description on what it is, when it will trigger, and any potential updates to the program. In response to BVES_DR042, BVES informed the IE that the AiDash software is unable to produce reports, and they provided a screenshot of the AiDash portal as verification that the software is implemented. Considering that there is no target for this initiative, the IE has validated the initiative by verifying utilization of the AiDash software. In future WMP cycles, it would be beneficial for BVES to provide year-over-year goals for the AiDash program, specifically the goals it has for complementing the currently in place programs. BVES could benefit from providing outlining formalized procedures for escalation protocols due to inspection prioritization if AiDash identifies circuit miles as priority due to potential issues.

Table 64: AiDash

2024 Target	2024 ARC	2024 Q4 QDR	DR042 Response	Summary
Annual Review	N/A	Target Met	Annual Review Conducted	Initiative Validated

4.2.2.2 Funding Verification – Findings

VM_1 - 8.2.2.1 Detailed Inspections

Strategic Overview and Risk Mitigation

This initiative involved detailed vegetation inspections across 51 circuit miles in BVES's territory, intended to identify vegetation-related hazards that could lead to outages and wildfire ignitions.

Financial Performance Analysis

- Planned Spend: \$13,905.00
- Actual Expenditure: \$25,258.76
- Variance: +\$11,353.76 (+82.0% overspend)
- BVES Justification: Higher-than-anticipated labor hours dedicated to detailed vegetation inspections drove the financial variance.

Operational Impact and Risk Reduction

BVES completed detailed vegetation inspections for the targeted 51 circuit miles. Despite meeting mileage targets, inspection documentation lacked comprehensive details, including specific findings, precise locations, and risk assessments necessary for validating thoroughness and efficacy.

Assessment and Conclusion

While BVES met the quantitative inspection target, the significant overspend was associated with increased labor hours. However, insufficient detail in inspection records created uncertainty regarding the effectiveness of hazard identification and subsequent risk mitigation. As a result, the full intended risk reduction for these detailed inspections could not be confidently validated.

VM_10 - 8.2.3.4 Fall-in mitigation

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 44.

VM_11 - 8.2.3.5 Substation defensible space

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 44.

VM_12 - 8.2.3.6 High-risk species

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 44.

VM_13 - 8.2.3.7 Fire-resilient rights-of-way**Strategic Overview and Risk Mitigation**

This initiative focuses on creating and maintaining fire-resilient rights-of-way (ROW), involving specific vegetation management practices designed to reduce fire intensity and spread. The objective is to minimize the consequences of any potential ignition by creating fire-resilient zones.

Financial Performance Analysis

- Planned Budget: \$14,420.00
- Actual Expenditure: \$16,294.04
- Variance: +\$1,874.04 (+13.19% overspend)
- BVES Justification: The overspend was attributed to higher-than-anticipated costs, though the overall activities and objectives for the initiative were met. The initial budget was relatively small, so even minor cost changes had a significant impact on the variance.

Operational Impact and Risk Reduction

The contractor successfully completed work on high-risk ROWs as planned. These efforts contributed to improving fire-resilience, which is vital for reducing the likelihood of vegetation-related ignition within critical right-of-way zones.

Assessment and Conclusion

The overspend was justified, and the initiative met its operational goals. BVES made progress on high-risk ROWs, enhancing fire resilience and mitigating vegetation-related ignition risks. The initiative successfully contributed to reducing overall wildfire risk.

VM_14 - 8.2.3.8 Emergency response vegetation management**Strategic Overview and Risk Mitigation**

This initiative addresses vegetation management in response to emergency situations, such as elevated fire threats and post-wildfire service restoration. It includes activities based on weather conditions and immediate emergency response needs.

Financial Performance Analysis

- Planned Budget: \$28,800.00
- Actual Expenditure: \$37,900.00
- Variance: +\$9,100.00 (+31.6% overspend)
- BVES Justification: The overspend was due to higher-than-forecasted labor hours for vegetation management during emergency response, which is typical in reactive situations where the scope of work can vary.

Operational Impact and Risk Reduction

BVES met its target for reviewing and updating emergency vegetation management procedures, while also responding to actual emergency situations as needed. Documentation confirms the effectiveness of the work conducted during high-risk events, such as Red Flag warnings.

Assessment and Conclusion

The overspend was justified given the reactive nature of emergency response. BVES continued to refine and implement vegetation management procedures, contributing to wildfire risk reduction and improving its readiness for emergency situations.

VM_15 - 8.2.4 Vegetation management enterprise system

Strategic Overview and Risk Mitigation

This initiative involves operating and supporting a centralized vegetation management system, integrating data from inspections and vegetation work. The system ensures accurate tracking and management of vegetation management activities, which is critical for maintaining proper vegetation clearance and reducing wildfire risks.

Financial Performance Analysis

- Planned Budget: \$21,630.00
- Actual Expenditure: \$18,325.87
- Variance: -\$3,304.13 (-15.28% underspend)
- BVES Justification: The underspend was due to fewer labor hours required than initially estimated for system support and updates, resulting in cost efficiencies.

Operational Impact and Risk Reduction

BVES successfully completed quarterly procedural reviews and updates to the system. The iRestore system continues to provide accurate data for vegetation management, supporting BVES's efforts in wildfire risk reduction through effective asset tracking.

Assessment and Conclusion

The initiative achieved its goals while operating under budget, reflecting efficient management and cost control. The continued use and enhancement of the vegetation management system directly support risk reduction by ensuring accurate and timely tracking of vegetation hazards.

VM_16 - 8.2.5 Vegetation Management Quality assurance / quality control

Strategic Overview and Risk Mitigation

This initiative involves the establishment of a comprehensive Quality Assurance and Quality Control (QA/QC) program to audit vegetation management activities conducted by BVES's contractors and employees. The program includes regular reviews of vegetation management work and provides key data for decision-making and workforce management.

Financial Performance Analysis

- Planned Spend: \$50,900.00
- Actual Expenditure: \$66,100.00
- Variance: +\$15,200.00 (+29.86% overspend)
- BVES Justification: BVES stated the overspend was due to an increase in labor hours dedicated to the QA/QC process, driven by a higher volume of reviews than initially forecasted.

Operational Impact and Risk Reduction

BVES exceeded its target for VM QC reviews, completing 161 reviews compared to the target of 72. Additionally, five program audits were completed, meeting the annual requirement. These activities provided enhanced oversight of vegetation management work, which directly mitigates the risk of vegetation-related ignitions.

Assessment and Conclusion

The overspend was justified by the increased effort required to conduct a higher volume of vegetation management reviews and audits. The initiative successfully exceeded its quantitative target, contributing positively to the quality of vegetation management and

reducing wildfire ignition risks. The risk reduction commitment was met, with enhanced QA/QC efforts supporting overall program effectiveness.

VM_17 - 8.2.6 Vegetation Management Open work orders

Strategic Overview and Risk Mitigation

This initiative focuses on managing open vegetation work orders, ensuring that corrective actions identified during inspections are addressed promptly to reduce ignition risks.

Financial Performance Analysis

- Planned Spend: \$35,705.47
- Actual Expenditure: \$41,887.86
- Variance: +\$6,182.39 (+17.3% overspend)
- BVES Justification: BVES justified the overspend by citing the need for higher labor hours to manage and close open work orders.

Operational Impact and Risk Reduction

BVES successfully met its target of maintaining compliance with corrective action timeframes, as confirmed by quarterly reports. The initiative ensured the timely completion of corrective actions, efficiently addressing vegetation-related hazards.

Assessment and Conclusion

The overspend was justified by the increased labor hours required to process and close work orders. The initiative directly contributed to reducing vegetation-related ignition risks by ensuring that identified issues were promptly resolved. The risk reduction commitment was upheld through diligent work order management.

VM_18 - 8.2.7 Vegetation Management Workforce planning

Strategic Overview and Risk Mitigation

This initiative verifies that BVES's staffing levels, both internal and through contractors, are adequate to execute vegetation management tasks effectively, ensuring sufficient resources to address vegetation risks.

Financial Performance Analysis

- Planned Spend: \$6,400.00
- Actual Expenditure: \$7,800.00
- Variance: +\$1,400.00 (+21.9% overspend)

- BVES Justification: BVES attributed the overspend to higher labor costs for workforce planning activities than initially estimated.

Operational Impact and Risk Reduction

BVES successfully verified that staffing levels met business needs for vegetation management work. The initiative is ongoing, with staffing requirements regularly reviewed to ensure sufficient resources for wildfire risk mitigation.

Assessment and Conclusion

The overspend was justified by the increased effort needed to assess and confirm workforce adequacy. By verifying staffing levels, BVES ensured the effective execution of its vegetation management program, directly supporting the reduction of vegetation-related ignition risks. The risk reduction commitment was met, ensuring sufficient qualified personnel were available for wildfire risk mitigation efforts.

VM_19 - 8.2.2.1 AiDash

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 44.

VM_2 - 8.2.2.1 Patrol Inspections

Strategic Overview and Risk Mitigation

This initiative involved visual patrol inspections of vegetation along rights-of-way, covering 205 circuit miles, aimed at identifying obvious vegetation hazards to mitigate wildfire ignition risk due to vegetation contact with energized electrical assets.

Financial Performance Analysis

- Planned Spend: \$32,445.00
- Actual Expenditure: \$58,937.11
- Variance: +\$26,492.11 (+81.7% overspend)
- BVES Justification: The overspend resulted from significantly higher labor hours dedicated to vegetation patrol inspections than originally forecasted.

Operational Impact and Risk Reduction

BVES successfully completed patrol inspections for the targeted 205 circuit miles. The IE reviewed a sample covering 69.9 circuit miles and found no issues, confirming the adequacy of the inspections in identifying obvious vegetation hazards.

Assessment and Conclusion

Despite a financial overspend driven by increased labor hours, BVES met the operational target for patrol inspections. The successfully completed inspections contributed positively to reducing vegetation-related ignition risks, validating the initiative's overall effectiveness in wildfire risk mitigation.

VM_3 - 8.2.2.1 UAV HD Photography/Videography

Strategic Overview and Risk Mitigation

This initiative utilized UAV HD photography and videography to inspect 205 circuit miles, focusing on identifying and addressing vegetation conditions near power lines to mitigate the risk of wildfire ignition from vegetation contact.

Financial Performance Analysis

- Planned Spend: \$77,500.00
- Actual Expenditure: \$67,151.98
- Variance: +\$10,348.02 (+15.4% underspend)
- BVES Justification: BVES initially reported lower contractor costs, leading to anticipated savings.

Operational Impact and Risk Reduction

BVES successfully completed UAV HD photography and videography inspections for all 205 circuit miles, meeting the intended target. Documentation provided, including responses to Data Requests DR077 and DR077.b, confirmed full coverage of the targeted circuit miles. A sample of 22 circuit miles was reviewed and found to be without issues, validating the effectiveness and scope of the inspections.

Assessment and Conclusion

BVES met the operational target of inspecting 205 circuit miles. Despite the underspend, the initiative successfully contributed to BVES's vegetation management strategy and risk mitigation goals, aiding in the identification of vegetation hazards that could lead to wildfire ignition.

VM_4 - 8.2.2.1 LiDAR Inspection

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 44.

VM_5 - 8.2.2.1 3rd Party Ground Patrol

Strategic Overview and Risk Mitigation

This initiative involved independent third-party ground patrol inspections of vegetation along rights-of-way, targeting the identification and mitigation of vegetation hazards posing potential ignition risks. Inspections covered a total of 205 circuit miles.

Financial Performance Analysis

- Planned Spend: \$64,300.00
- Actual Expenditure: \$21,400.00
- Variance: -\$42,900.00 (-66.7% underspend)
- BVES Justification: BVES attributed the significant underspend to favorable contracting outcomes, with the scope of inspections fully completed at costs substantially below initial estimates.

Operational Impact and Risk Reduction

BVES successfully completed the third-party ground patrol inspections across the entire 205 circuit miles as planned. A review of a sample of 22 circuit miles by the IE confirmed no deficiencies in inspection quality or completeness, validating the efficacy of the inspections despite significantly lower costs.

Assessment and Conclusion

BVES effectively achieved the initiative's objectives at a considerably lower cost than initially budgeted. The successful completion of thorough, independent third-party inspections substantially supported the reduction of vegetation-related ignition risks, demonstrating efficient use of allocated resources without compromising inspection quality or risk mitigation effectiveness.

VM_6 - 8.2.2.1 Substation inspections

Strategic Overview and Risk Mitigation

This initiative focuses on vegetation inspections across BVES's 13 substations, targeting 144 inspections annually. These inspections ensure proper clearance and address potential vegetation-related issues within substation perimeters to reduce ignition risk.

Financial Performance Analysis

- Planned Spend: \$4,378.00
- Actual Expenditure: \$15,016.10
- Variance: +\$10,638.10 (+242.9% overspend)

- BVES Justification: The overspend was attributed to higher labor hours required for the inspections than initially forecasted. The target for substation inspections was successfully achieved.

Operational Impact and Risk Reduction

BVES completed 156 substation inspections, exceeding the target of 144. The inspections aimed to ensure vegetation clearance and address potential ignition risks within the substations.

Assessment and Conclusion

The substantial overspend, along with the higher labor hours, was attributed to the increased work required for the substation inspections. Despite the financial overrun, BVES met its operational target, completing 156 inspections. The initiative contributed to vegetation risk mitigation within substations by identifying potential hazards related to vegetation contact.

VM_7 - 8.2.3.1 Pole clearing

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 44.

VM_8 - 8.2.3.2 Wood and slash management

Strategic Overview and Risk Mitigation

This initiative ensures proper waste removal procedures for wood and slash generated during vegetation management activities. The objective is to reduce fuel loads and potential ignition sources through effective waste management. The WMP section for this initiative is 8.2.3.2.

Financial Performance Analysis

- Planned Spend: \$520,400.00
- Actual Expenditure: \$453,800.00
- Variance: -\$66,600.00 (-12.8% underspend)
- BVES Justification: BVES secured a favorable contractor agreement, resulting in lower-than-projected costs. All wood and slash were properly removed according to contractual requirements.

Operational Impact and Risk Reduction

BVES confirmed that contractors met all waste removal requirements, with documented adherence to contractual protocols, including daily waste removal from the rights-of-way.

BVES collaborates with the U.S. Forest Service (USFS) to manage and remove vegetation waste in accordance with local forest management guidelines and agreements. Contractor adherence to these requirements was fully validated through contract review and internal procedures checks.

Assessment and Conclusion

BVES met the initiative's operational targets for proper wood and slash removal while achieving financial savings through advantageous contract negotiations. The effective waste management procedures adhered to by contractors reduced vegetation-related ignition risks and contributed positively to wildfire mitigation efforts. The underspend of 12.8% indicates efficient management without compromising contractual compliance or scope of work.

VM_9 - 8.2.3.3 Clearance

Strategic Overview and Risk Mitigation

This initiative focused on maintaining proper clearance distances between vegetation and power lines to prevent contact and minimize the risk of ignition. The WMP section for this initiative is 8.2.3.3.

Financial Performance Analysis

- Planned Spend: \$2,212,800.00 (OPEX)
- Actual Expenditure: \$1,935,411.40 (OPEX)
- Variance: -\$277,388.60 (-12.5% underspend)
- BVES Justification: BVES contracted the work at a lower cost than initially budgeted, leading to an underspend. All clearance activities were completed as planned.

Operational Impact and Risk Reduction

BVES surpassed the target by clearing 99.5 circuit miles, exceeding the original 72-mile goal. This expansion of vegetation clearance around power lines effectively mitigated the risk of vegetation-related ignitions.

Assessment and Conclusion

BVES successfully exceeded its quantitative target by clearing more circuit miles than initially planned, while also achieving operational efficiency under budget. This initiative contributed effectively to reducing the risk of vegetation contact with power lines, playing a key role in wildfire prevention efforts.

4.2.3 Synthesis of Findings

4.2.3.1 Initiative Review

BVES's service area is densely populated with trees, with much of its service area resting in HFTD Tier 2 and Tier 3. Given this environment, vegetation management and inspections are a key component of BVES's WMP toolkit. Despite the resource constraints that can be associated with a smaller utility, BVES has effectively managed its program, meeting or exceeding every completion goal set for 2024.

To account for its environment with limited resources, BVES has shown advancement by complementing traditional foot patrols with modern inspection technologies. In 2024, the utility completed 205 circuit miles of LiDAR (VM_4) vegetation management inspections and similar circuit miles of UAV HD inspections (VM_3). Exploring and layering these methodologies beyond standard patrols provides BVES with a comprehensive and dynamic view of its service area, building its ability to proactively identify and mitigate vegetation risks.

While the execution of the work is robust, there are opportunities to improve documentation and record accuracy. For example, for the Fall-in Mitigation initiative (VM_10), the IE team's field verification noted some data inaccuracies, such as mitigation types being mislabeled (e.g., a trim recorded as a removal) and slight inaccuracies in tree coordinates. Furthermore, several procedural initiatives required further verification through subsequent data requests. Improvements to VM inspection data accuracy and reporting will further benefit BVES's VM program by creating a more precise and actionable record.

4.2.3.2 Funding Verification

Budget and Expenditure Summary: The Vegetation Management and Inspections category had a total planned budget of \$3,920.80 with actual expenditures of \$3,549.00, representing a 9.5% variance below budget.

Initiatives with Significant Variances: Of the 19 total initiatives in this category, 13 (68.4%) had absolute percent differences exceeding 10%. The most common reasons for variances included:

- Favorable contract negotiations resulting in underspends for third-party inspections (VM_5 at -66.7%)
- Higher-than-forecasted labor hours for detailed inspections and patrol activities (VM_1 at +82%, VM_2 at +81.7%)
- Exceptional overspend for substation vegetation inspections (VM_6 at +242.9%) due to underestimated effort requirements

- Efficient contracting for clearance activities allowing expanded scope at lower cost (VM_9 underspent by 12.5%)

Key Trends and Funding Compliance: The vegetation management funding shows achievement of operational outcomes through varied spending patterns. The initiative exceeded multiple operational targets with overall category underspending. Clearance activities completed 100 circuit miles against a 72-mile target. Quality assurance reviews increased from 72 targeted to 161 completed, with a 29.9% budget increase. The variance in inspection labor costs indicates initial underestimation of effort required for vegetation assessments, while contractor rates enabled broader coverage within budget.

4.3 SITUATIONAL AWARENESS AND FORECASTING

4.3.1 Initiative Summary Table

Table 64: Initiative Summary Table (Spend in Thousand \$)

Initiative Number, WMP Section Number, and Name	WMP – Initiative Target ¹⁶	EC-Claimed Progress ¹⁷	EC-Claimed Initiative Status	Sample Size ¹⁸	Sample Validation Rate (%) ¹⁹	Verification Method ²⁰	IE Finding on Initiative (Initiative Validation Rate) ^{21, 22}	WMP – Planned Spend (\$)	EC-Claimed Actual Spend (\$ and % from budget)	Satisfied Risk Reduction Goal? ²³
SAF_1, 8.3.2, Advanced Weather Monitoring and Weather Stations	N/A	N/A	Complete	20 Weather Stations	100%	Weather station maintenance records (DR061)	Initiative Validated (100%)	\$7.30	\$8.60 (+17.8%)	Yes (38%)
SAF_2, 8.3.3, Install Fault Indicators	N/A	30 FIs	Complete	30 FIs	100%	Records of FI installation (DR062)	Initiative Validated (100%)	\$260.00	\$270.70 (+4.1%)	No Goal Provided
SAF_3, 8.3.3, Online Diagnostic System	1 Circuit	1 Circuit	Complete	1 Circuit	100%	Installation records of completion (DR063)	Initiative Validated (100%)	\$77.30	\$17.20 (-77.7%)	Yes (3.62%)
SAF_4, 8.3.4, HD ALERTWildfire Cameras	N/A	N/A	Complete	N/A	N/A	Statement of record from BVES	Initiative Validated (100%)	\$0.00	\$0.00 (+0.0%)	No Goal Provided
SAF_5, N/A, Technosylva Contractor Program	Ongoing Monitoring & Maintenance	Quarterly Target Met	Ongoing	N/A	N/A	-Weather Forecasting Maintenance Response (DR065) -Staff Training Notes -Technosylva Forecast Correspondence (DR065.b)	Initiative Validated (100%)	\$70.60	\$82.20 (+16.4%)	Yes (3.76%)
SAF_6, N/A, Fire Potential Index	Ongoing Monitoring & Maintenance	Quarterly Target Met	Ongoing	N/A	N/A	-FPI Maintenance Response (DR066)	Initiative Validated (100%)	\$53.20	\$57.70 (+8.5%)	Yes (3.46%)
SAF_7, 8.3.3, GreenGrid iSIU	Ongoing Monitoring	Quarterly Target Met	Ongoing	N/A	N/A	N/A	N/A	\$0.00	\$0.00 (+0.0%)	No Goal Provided

¹⁶ N/A in the Initiative Target column means that the EC did not provide a target in the WMP.

¹⁷ N/A in the Claimed Progress column means that the EC did not provide any claimed progress on QDR4 or the EC ARC.

¹⁸ N/A in the Sample Size column means that no target was provided by the EC, or the target was qualitative and did not have a sampling component.

¹⁹ N/A in the Sample Validation column means that no sampling was reviewed; therefore, no validation rate was applied.

²⁰ N/A in the Verification Method column means that the initiative was not reviewed.

²¹ As detailed in Energy Safety's issued IE ARC Outline for WMP Compliance Year 2024 document, if the total initiative validation is greater or equal to 95%, the initiative is considered validated by the IE.

²² N/A in the Initiative Validation column means that the initiative was not reviewed and therefore could not be validated/invalidated.

²³ Risk Reduction Goal can still be met or missed even if the Sample Size and Validation Rate column contains N/A. This is due to the initiative target goal being qualitative and therefore no sampling is required because the documentation initially provided fulfills the sampling requirement.

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Initiative Number, WMP Section Number, and Name	WMP – Initiative Target ¹⁶	EC-Claimed Progress ¹⁷	EC-Claimed Initiative Status	Sample Size ¹⁸	Sample Validation Rate (%) ¹⁹	Verification Method ²⁰	IE Finding on Initiative (Initiative Validation Rate) ^{21, 22}	WMP – Planned Spend (\$)	EC-Claimed Actual Spend (\$ and % from budget)	Satisfied Risk Reduction Goal? ²³
	& Maintenance									
RMA_1, 8.3.5.1, Technosylva Contractor Program	Maintain Realtime Risk Mapping	Quarterly Target Met	Ongoing	N/A	N/A	-2023v2022 FireSight Training -Technosylva Meeting Notes -TSYL Model Documentation (DR039)	Initiative Validated (100%)	\$88.60	\$180.40 (+103.6%)	No Goal Provided

4.3.2 Written Detail for Initiatives

4.3.2.1 Initiative Review – Findings & Method

SAF_1 – 8.3.2 – Advanced Weather Monitoring and Weather Stations – Non-Focus & Non-Field Verifiable

The Weather Station Maintenance initiative involves the maintenance and calibration of BVES's 20 weather stations based on manufacturer's recommendations to ensure accurate environmental monitoring. While a completion target was not identified in the 2023–2025 WMP, BVES did discuss a maintenance plan to service 2–3 stations per month within its WMP and identified a 38% risk-reduction goal.

The 2024 Q4 QDR reported no completions, BVES provided records in response to DR061 showing all 20 weather stations received maintenance in 2024. The provided records list the station name, location, work performed, and completion date, with most maintenance occurring on April 15, 2024. The 2024 ARC confirms the risk-reduction goal was achieved.

The IE reviewed all 20 weather station maintenance logs and identified no issues. Based on the documentation received and the reviews performed, the IE validates this initiative.

Table 65: Advanced Weather Monitoring and Weather Stations

2024 Target	2024 ARC	2024 Q4 QDR	DR061 Response	Summary
N/A	N/A	N/A	20 Weather Stations	Initiative Validated

SAF_2 – 8.3.3 – Install Fault Indicators –Focus & Non-Field Verifiable

The Fault Indicator Installation initiative involves the installation of fault indicators (FIs) to improve system monitoring and reduce the time needed to locate and identify faults. The 2023–2025 WMP did not set a target for 2024, however BVES did plan to install 30 fault indicators in 2023. No risk-reduction goal was applicable.

The 2024 Q4 QDR reported the completion of 30 fault indicators. In response to Data Requests DR062 and DR062.b, BVES provided records confirming the installation of 30 indicators across 10 sites on five circuits: Goldmine, Shay, Baldwin, Holcomb, and North Shore.

The IE reviewed the records for all 10 installation sites and identified no issues. Based on the documentation received and the reviews performed, the IE validates this initiative.

Table 66: Install Fault Indicators

2024 Target	2024 ARC	2024 Q4 QDR	DR062 & DR062.b Response	Summary
N/A	30 Fls	30 Fls	30 Fls	Initiative Validated

SAF_3 – 8.3.3 – Online Diagnostic System – Non-Focus & Non-Field Verifiable

The Grid Monitoring System Installation initiative involves the installation of a grid monitoring system on a BVES circuit to pinpoint irregularities that may lead to hardware failures or ignition sources. The 2023–2025 WMP set a target to complete the installation on one circuit and identified a 3.62% risk-reduction goal.

The 2024 Q4 QDR reported that the installation was complete, meeting the annual target, and the 2024 ARC confirms the risk-reduction goal was achieved. In response to Data Request DR063, BVES provided installation records for the Boulder 4kV circuit and various monitoring output reports, including voltage, load, and environmental data.

The IE reviewed the provided installation records and identified no issues. Based on the documentation received and the reviews performed, the IE validates this initiative.

Table 67: Online Diagnostic System

2024 Target	2024 ARC	2024 Q4 QDR	DR063 Response	Summary
1 circuit	1 circuit	1 circuit	1 circuit	Initiative Validated

SAF_4 – 8.3.4 – HD ALERTWildfire Cameras – Non-Focus & Non-Field Verifiable

The HD Camera Situational Awareness initiative utilizes 17 HD cameras as a key component in situational awareness, providing a full view of the valley covering all BVES circuits. The 2023–2025 WMP did not set a target for this initiative, and no risk-reduction goal was applicable.

This is a data-gathering and monitoring initiative with no specific annual completion target. In response to DR064 and DR064.b, BVES confirmed it does not perform maintenance on the HD cameras and that they provide a full view of all BVES circuits.

The IE reviewed the data request responses and identified no issues. Based on the documentation received and the reviews performed, the IE validates this initiative.

Table 68: HD ALERTWildfire Cameras

2024 Target	2024 ARC	2024 Q4 QDR	DR064 & DR064.b Response	Summary
N/A	N/A	N/A	N/A	Initiative Validated

SAF_5, N/A - Weather Forecasting – Non-Focus & Non-Field Verifiable

Data was gathered to assess initiative SAF_5, specifically BVES' staff efficiency in utilizing their advanced fire threat weather forecasting tools. In response to BVES_DR065, BVES provided a statement that they do not perform maintenance on the weather forecasting tools and instead utilize a contractor Technosylva to maintain and provide updates. Wildfire risk is monitored daily and reports summarizing wildfire risk are sent to key personnel. In response to BVES_DR065.b, BVES provided email correspondence that demonstrated what the Technosylva daily reports look like and how they are distributed to key BVES personnel. BVES also provided "FPI Data Training Notes" from January 17, 2024, that had an actionable item labeled "FPI Training." These notes also demonstrated that regular monthly check-in meetings were conducted. Based upon this analysis and the documentation provided by BVES, the IE has validated this initiative.

Table 69: Weather Forecasting

2024 Target	2024 ARC	2024 Q4 QDR	065/.b Response	Summary
Ongoing Monitoring & Maintenance	N/A	Quarterly Target Met	Ongoing Monitoring & Maintenance	Initiative Validated

SAF_6, N/A - Fire Potential Index – Non-Focus & Non-Field Verifiable

Data was assessed for SAF_6 and BVES' fire potential index, specifically the ongoing monitoring and maintenance. In response to BVES_DR066, BVES provided a written response that they do not internally maintain or monitor a fire potential index. Instead, BVES utilizes a subcontractor, Technosylva, that provides a platform for the fire potential index and this subcontractor maintains and updates as needed. Other documentation, such as meeting agendas and collaboration logs, demonstrate that BVES meets regularly with

Technosylva to provide updates for this model. Based upon this analysis and the documentation provided by BVES, the IE has validated this initiative.

Table 70: Fire Potential Index

2024 Target	2024 ARC	2024 Q4 QDR	DR066 Response	Summary
Ongoing Monitoring & Maintenance	N/A	Quarterly Target Met	Ongoing Monitoring & Maintenance	Initiative Validated

SAF_7, N/A - GreenGrid iSIU – Non-Focus & Non-Field Verifiable

In review of initiative SAF_7, no mention of an initiative by this initiative tracking ID is found in the 2023-2025 WMP. SAF_7 is mentioned on Table 1 of QDR4 but it is not mentioned in the 2024 EC ARC. QDR4 Table 1 claims a target of “ongoing maintenance and monitoring” with a claimed status of “ongoing.” However, due to there being no target outlined nor section containing information for this initiative in the WMP, which serves as the guiding document for annual review, review of this initiative cannot be completed. BVES did not set a risk reduction goal for this initiative.

Based upon this analysis, the IE has determined that SAF_7 is not applicable to the 2024 review period. If BVES implements an objective, target, and/or section for SAF_7 in future WMP cycles, the IE will opt to review based upon implementation per a future WMP cycle.

Table 71: GreenGrid iSIU

2024 Target	2024 ARC	2024 Q4 QDR	N/A Response	Summary
Ongoing Monitoring & Maintenance	N/A	Quarterly Target Met	N/A	N/A

RMA_1 – [8.3.5.1] Technosylva Contractor Program – Non-Focus & Non-Field Verifiable

RMA_1 outlines BVES’ existing modeling approach. BVES has retained Technosylva, a risk modeling contractor, to perform the risk modeling assessments within their service territory. This Risk Modeling Program is implemented and ongoing throughout the 2023-2025 WMP cycle. BVES did not set a risk reduction goal for this initiative.

Section 8.3.5.3 of the WMP lists no improvements for the existing modeling approach as referenced on table 8-31. RMA_1 contains no target for 2024 and is not mentioned in the WMP outside of section 8.3.5.1. RMA_1 was included on an initiative list that BVES provided the IE and was titled “Technosylva Contractor Program” and had a goal in QDR4 Table 1 as “maintain realtime risk mapping.”

In response to BVES_DR039, BVES provided a copy of the WMP risk model documentation outlined by Technosylva. This document provides technical documentation, substantiation, and data governance of the models used in the risk calculations for the WMP. BVES also included meeting minutes where Technosylva and the FPI were discussed. These minutes demonstrate that BVES would begin to update GIS information and send it to Technosylva for their modeling.

Based upon this analysis and the documentation provided, the IE has validated this initiative.

Table 72: Technosylva Contractor Program

2024 Target	2024 ARC	2024 Q4 QDR	DR039 Response	Summary
Maintain Realtime Risk Mapping	N/A	Quarterly Target Met	Realtime Risk Mapping Maintained	Initiative Validated

4.3.2.2 Funding Verification – Findings

RMA_1 - 6 Technosylva Contractor. Program implemented and ongoing.

Strategic Overview and Risk Mitigation

This initiative involved developing and using tools and processes to assess wildfire and PSPS risks across BVES's service territory through the Technosylva contractor program. The initiative specifically targeted wildfire hazard reduction via improved real-time risk mapping capabilities.

Financial Performance Analysis

- Planned Spend: \$88,600.00
- Actual Expenditure: \$180,400.00
- Variance: +\$91,800.00 (+103.6% overspend)
- BVES Justification: Additional contracted expenses exceeded initial projections due to further development of the Utility Risk Model with the contractor Direxyon.

Operational Impact and Risk Reduction:

BVES successfully maintained real-time risk mapping throughout the year, consistently meeting quarterly targets. The additional expenditure funded significant enhancements to the Utility Risk Model, improving BVES's capabilities in wildfire risk assessment and operational responsiveness, as confirmed by documentation from Technosylva.

Assessment and Conclusion

The significant overspend was justified by the expanded scope in developing a more robust Utility Risk Model. The improvements directly supported better risk assessment and wildfire hazard mitigation, reinforcing BVES's situational awareness capabilities.

SAF_1 - 8.3.2 Advanced weather monitoring and weather stations**Strategic Overview and Risk Mitigation**

This initiative entailed regular maintenance and calibration of BVES's network of 20 weather stations installed in 2021. These stations provide essential data for accurate weather forecasting and mitigating wildfire risk.

Financial Performance Analysis

- Planned Spend: \$7,300.00
- Actual Expenditure: \$8,600.00
- Variance: +\$1,300.00 (+17.1% overspend)
- BVES Justification: Increased expenses due to higher labor and replacement parts costs.

Operational Impact and Risk Reduction

BVES completed all required maintenance and calibration tasks for all 20 weather stations throughout the year, as documented in detailed maintenance records. These efforts ensured the ongoing accuracy and reliability of critical weather data, supporting enhanced situational awareness and wildfire risk management.

Assessment and Conclusion

The slight overspend was adequately justified by the increased costs for labor and replacement parts. BVES effectively maintained the reliability of its weather station, thereby supporting its wildfire risk mitigation goals through accurate and reliable environmental monitoring.

SAF_2 - 8.3.3 Install Fault Indicators

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 64.

SAF_3 - 8.3.3 Online Diagnostic System

Strategic Overview and Risk Mitigation This initiative involved installing continuous monitoring sensors on circuits to provide real-time diagnostic information on grid health, enabling early detection of potential equipment failures and reducing ignition risks.

Financial Performance Analysis

- Planned Spend: \$77,300.00
- Actual Expenditure: \$17,200.00
- Variance: -\$60,100.00 (-77.7% underspend)
- BVES Justification: Lower-than-anticipated contractor costs for system installation.

Operational Impact and Risk Reduction

BVES successfully installed the online diagnostic system on one targeted circuit (Boulder Circuit) as planned. The completed system provides valuable insights into grid conditions, effectively enhancing BVES's capability to detect and mitigate potential ignition risks proactively.

Assessment and Conclusion

BVES successfully installed the online diagnostic system on one targeted circuit (Boulder Circuit) as planned. The completed system provides valuable insights into grid conditions, effectively enhancing BVES's capability to detect and mitigate potential ignition risks proactively.

SAF_4 - 8.3.4 HD ALERTWildfire Cameras

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 64.

SAF_5 - 8.3.5 Weather forecasting

Strategic Overview and Risk Mitigation

This initiative utilized Technosylva's software capabilities to provide real-time wildfire behavior modeling, predictive wildfire spread analysis, weather, and wildfire risk forecasting to inform PSPS (Public Safety Power Shutoff) actions, and asset risk analysis using historical weather climatology.

Financial Performance Analysis

- Planned Spend: \$70,600.00
- Actual Expenditure: \$82,200.00
- Variance: +\$11,600.00 (+16.5% overspend)
- BVES Justification: The overspend resulted from contracted expenses exceeding initial projections due to higher-than-anticipated service levels provided by Technosylva .

Operational Impact and Risk Reduction

BVES successfully executed ongoing daily monitoring and regular updates, achieving the targeted maintenance and utilization of advanced weather forecasting tools. Documentation showed regular daily reports from Technosylva distributed to key personnel and monthly training sessions conducted to maintain staff proficiency in leveraging these forecasting capabilities.

Assessment and Conclusion

The overspend was justified by enhanced contracted services, which provided comprehensive daily wildfire risk analysis and regular staff training. The initiative effectively supported improved wildfire risk assessment, forecasting accuracy, and proactive response capabilities.

SAF_6 - 8.3.6 Fire potential index

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 64.

SAF_7 - 8.3.3 GreenGrid iSIU

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 64.

WMSD_1 - Various Wildfire Mitigation Strategy Development

Strategic Overview and Risk Mitigation

(WMP), including periodic updates and strategies for mitigating wildfire risks. The WMP serves as the cornerstone of all wildfire risk reduction activities.

Financial Performance Analysis

- Planned Spend: \$30,500.00
- Actual Expenditure: \$37,600.00
- Variance: +\$7,100.00 (+23.3% overspend)
- BVES Justification: The overspend was attributed to higher-than-forecasted labor hours dedicated to the development and updates of the WMP, which involved intensive planning, analysis, and documentation.

Operational Impact and Risk Reduction

BVES successfully met the quarterly target of updating and developing the WMP, which is crucial for identifying risks and planning mitigation measures across its service territory. The WMP guides all subsequent risk reduction efforts, and its continued development ensures that BVES is aligned with evolving wildfire mitigation strategies.

Assessment and Conclusion

The overspend was justified by the additional effort required to refine and update the WMP. The initiative is foundational to BVES's overall wildfire mitigation strategy, directly contributing to the effective identification of risks and the planning of mitigation measures. The initiative was validated based on the completion of all targets.

4.3.3 Synthesis of Findings

4.3.3.1 Initiative Review

Based on the information provided, the EC did not miss any targets for the initiatives reviewed in this category. For SAF_7, although mentioned in QDR4, this initiative was not included in the 2023-2025 WMP which serves as the guiding document, therefore it was determined to be not applicable for the 2024 review period. All other initiatives in this category demonstrated compliance through documentation provided by Bear Valley.

The initiatives reviewed focus on Bear Valley's use of advanced fire threat weather forecasting tools, fire potential index monitoring, and risk modeling, which contribute to Bear Valley's overall wildfire risk reduction efforts by providing data, analysis, and forecasting to inform decision-making and operations. The IE determined compliance based on the documentation provided by Bear Valley demonstrating the implementation and ongoing monitoring of these initiatives. Further documentation provided by Bear Valley, such as email correspondence, meeting minutes, and technical model documentation, indicates that Bear Valley has adequate recordkeeping and data management practices related to these initiatives, and no significant issues were identified regarding data accuracy or management.

The IE does not offer any recommendations based on the review. No major areas of concern were identified in this category, and the initiatives are well-implemented and integrated into Bear Valley's overall wildfire mitigation efforts. The documentation provided did not indicate any specific plans by the EC to improve future performance in the areas assessed, as the initiatives are well-established and ongoing.

4.3.3.2 Funding Verification

Budget and Expenditure Summary: The Situational Awareness and Forecasting category had a total planned budget of \$587.50 with actual expenditures of \$654.40, representing an 11.4% variance above budget.

Initiatives with Significant Variances: Of the 9 total initiatives in this category, 5 (55.6%) had absolute percent differences exceeding 10%. The most common reasons for variances included:

- Favorable contractor rates resulting in underspend for Online Diagnostic System (SAF_3 at -77.7%)
- Enhanced development requirements driving overspend for the Technosylva Contractor Program (RMA_1 at +103.6%)
- Higher-than-anticipated fault indicator installations (SAF_2) with 30 units installed despite no 2024 target
- Increased weather forecasting contract costs (SAF_5 at +16.5%) for monitoring capabilities

Key Trends and Funding Compliance: The category's funding reflects investment in risk modeling and monitoring capabilities. The Utility Risk Model received increased funding through the Technosylva partnership. Cost savings in the Online Diagnostic System deployment occurred while maintaining functionality. The installation of fault indicators beyond planned targets provides additional grid monitoring capabilities. Funding patterns show a mix of increased investments in analytics and cost savings in field deployments.

4.4 EMERGENCY PREPAREDNESS

4.4.1 Initiative Summary Table

Table 73: Initiative Summary Table (Spend in Thousand \$)

Initiative Number, WMP Section Number, and Name	WMP – Initiative Target	EC-Claimed Progress	EC-Claimed Initiative Status	Sample Size ²⁴	Sample Validation Rate (%) ²⁵	Verification Method ⁱ	IE Finding on Initiative (Initiative Validation Rate) ^{26, 27}	WMP – Planned Spend (\$)	EC-Claimed Actual Spend (\$ and % from budget)	Satisfied Risk Reduction Goal? ²⁸
EP_1, 8.4.2.1, Emergency Preparedness Plan	Review & Evaluate Emergency Plan	Quarterly Target Met	Ongoing	N/A	N/A	-PSPS Procedure Review (DR045) -EDRP Review for Changes -QAQC Preparedness Plan Procedures (DR045.b)	Initiative Validated (100%)	\$4.80	\$5.20 (+8.3%)	Yes (3.62%)
EP_2, 8.4.3.1, External Collaboration & Coordination	Meetings with Community Partners	Quarterly Target Met	Ongoing	N/A	N/A	-Emergency Response & Disaster Plan (DR010) -PSPS & WMP Collab Log (DR009)	Initiative Validated (100%)	\$22.00	\$31.60 (+43.6%)	Yes (3.62%)
EP_3, 8.4.4, Public Emergency Comms. Strategy	Review and Evaluate Emergency Communication Program	Quarterly Target Met	Ongoing	N/A	N/A	-Emergency Response & Disaster Plan (DR011) -Emergency Communication Review (DR011.b)	Initiative Validated (100%)	\$4.30	\$4.70 (+9.3%)	Yes (3.62%)
EP_4, 8.4.5.1, Preparedness & Planning for Service Restoration	Update Service Restoration Plan	Quarterly Target Met	Ongoing	N/A	N/A	-PSPS Service Restoration Meetings (DR012)	Initiative Validated (100%)	\$5.80	\$6.30 (+8.6%)	Yes (3.62%)
EP_5, 8.4.6, Customer Support in Wildfire & PSPS Emergencies	Review & Evaluate PSPS Program	Quarterly Target Met	Ongoing	N/A	N/A	-Customer Outreach Planning Program (DR013)	Initiative Validated (100%)	\$3.60	\$3.90 (+8.3%)	Yes (3.62%)

²⁴ N/A in the Sample Size column means that no target was provided by the EC, or the target was qualitative and did not have a sampling component.

²⁵ N/A in the Sample Validation column means that no sampling was reviewed; therefore, no validation rate was applied.

²⁶ As detailed in Energy Safety's issued IE ARC Outline for WMP Compliance Year 2024 document, if the total initiative validation is greater or equal to 95%, the initiative is considered validated by the IE.

²⁷ N/A in the Initiative Validation column means that the initiative was not reviewed and therefore could not be validated/invalidated.

²⁸ Risk Reduction Goal can still be met or missed even if the Sample Size and Validation Rate column contains N/A. This is due to the initiative target goal being qualitative and therefore no sampling is required because the documentation initially provided fulfills the sampling requirement.

4.4.2 Written Detail for Initiatives

4.4.2.1 Initiative Review – Findings & Method

EP_1, 8.4.2.1 - Emergency Preparedness Plan – Non-Focus & Non-Field Verifiable

Data was gathered to assess initiative EP_1 which outlines BVES' emergency preparedness plan, specifically the improvement of staff training for a response to an emergency event. EP_1 aims to prepare staff through a combination of classroom instruction, table-top exercises, and functional drills where ultimately the emergency preparedness plan is reviewed through the FEMA six step process.

In response to BVES_DR045, BVES provided a log of the two PSPS trainings that took place in Q2: 1) Table-Top Training Exercise and 2) Full-Scale Training Exercise. In response to BVES_DR045.b, BVES provided two documents: 1) QA/QC Procedures for EP_1 and 2) EDRP Review for Changes. The QA/QC documentation verified via signature and date that the emergency preparedness plan had been presented to CPUC as part of the annual GO-166 report and briefing. The written response provided in EDRP Review for Changes by BVES confirmed that the Emergency & Disaster Response Plan had been implemented through the FEMA six step process and that no changes were determined to be necessary. Based upon the documentation provided, the IE has validated this initiative.

Table 74: Emergency Preparedness Plan Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR045/.b Response	Summary
Review & Evaluate Emergency Plan	N/A	Quarterly Target Met	Emergency Plan Reviewed & Evaluated	Initiative Validated

EP_2, 8.4.3.1 - External Collaboration and Coordination – Non-Focus & Non-Field Verifiable

Data was gathered to assess initiative EP_2 and review BVES' external collaboration and coordination. BVES outlined a goal of continued engagement with local stakeholders to prepare for and respond to fire-related events per table 8-33 of the WMP. Several different communities were targeted, examples include: the AFN/Joint IOU Collaborative Council, the City of Big Bear Lake, and the local/state fire municipalities.

Data collected in response to BVES_DR010 regarding the initiative thoroughly outlined the Emergency & Disaster Response Plan BVES currently has in place but did not adequately demonstrate that BVES was meeting the goals of this initiative to increase coordination with

local stakeholders. The IE opted to review documentation submitted by BVES in response to BVES_DR009 which sufficiently demonstrated that BVES was meeting the goal of this initiative and was actively engaging with local stakeholders during all four (4) quarters through actions such as, but not limited to:

- Attend quarterly access and functional needs/joint IOUS collaborative council meetings
- Entering into confidentiality agreements to share AFN and Medical Baseline populations with the City of Big Bear Lake and Local Fire Municipalities.
- Working with contractors to conduct a WMP/PSPS survey bi-annually to evaluate effectiveness of its outreach efforts.

Through BVES provided documentation and findings from this analysis of EP_2, the IE has validated this initiative.

Table 75: External Collaboration and Coordination

2024 Target	2024 ARC	2024 Q4 QDR	DR010 Response	Summary
Meetings with Community Partners	N/A	Quarterly Target Met	Meetings Held	Initiative Validated

EP_3, 8.4.4 Public Emergency Communication Strategy – Non-Focus & Non-Field Verifiable

Data was gathered to assess initiative EP_3 and review BVES' public emergency communication strategy. In response to BVES_DR011, BVES provided a copy of the Emergency Response and Disaster Plan which outlines the full emergency communication strategy that BVES employs. The IE opted to send a subsequent request, BVES_DR011.b, which asked BVES to provide documentation that demonstrates a bi-annual review was conducted on the communication strategy as referenced on page 273 of the WMP. BVES provided documentation that shows they conducted two training exercises: PSPS Table-Top Training and PSPS Full-Scale Training.

On table 8-33 of the WMP, BVES has an objective for EP_3 to develop lines and layers of communication with stakeholders and customers, this is exemplified by the documentation provided in both data requests pertaining to this initiative.

On table 8-35, which outlines targets by year for Emergency Preparedness initiatives, BVES states a 2024 target to review and evaluate communication strategy two times per year. In response to BVES_DR011.b, the documentation provided clearly shows that two training

exercises were undertaken in 2024, however, it is unclear if review of the actual communication plan itself was conducted during these events. In further analysis of documentation provided to a separate data response, DR045.b, BVES provided a response that the Emergency Disaster Response Plan had undergone its annual maintenance process, and no changes were determined to be necessary. Section 5 of the Emergency Disaster Response Plan outlines the “Emergency & Disaster Response Communication Plan” and Section 6 outlines “Customer Support in Emergencies.” It can realistically be determined that, based upon the response provided in DR045.b, BVES has reviewed the communication strategy.

BVES is upholding the objective for EP_3 as outlined on table 8-33 of the WMP target outlined on table 8-35 of the WMP for the 2024 review period. BVES has adequately demonstrated that they have an Emergency Communication Strategy Plan in place and are active in training related to it, and the engagement of various community stakeholders. The documentation related to DR045.b-EP_1 is sufficient in demonstrating that BVES did review the public emergency communication strategy. Based upon this analysis and the documentation provided, the IE has validated this initiative.

Table 76: Public Emergency Communication Strategy

2024 Target	2024 ARC	2024 Q4 QDR	DR011/.b Response	Summary
Review and Evaluate Emergency Communication Program	N/A	Quarterly Target Met	Emergency Communication Plan Reviewed & Evaluated	Initiative Validated

EP_4, 8.4.5 -Preparedness and Planning for Service Restoration – Non-Focus & Non-Field Verifiable

WMP-EP-4 pertains to BVES’ customer support during wildfire and PSPS emergencies, and outlines a 3-year objective to conduct annual table-top and functional exercises. The WMP contains no explicit target for 2024 outside of these objectives. There is no section that contains the unique utility initiative tracking ID of WMP-EP-4, therefore the only information pertaining to it is derived from 9-3.

In response to BVES_DR012, BVES provided documentation outlining two training activities undertaken during 2024. One of the trainings was a 2024 PSPS Table-Top Training Exercise that occurred in May of 2024 and the other was a 2024 PSPS Full-Scale Training Exercise that took place in June of 2024 – both prior to fire season. Both trainings included internal staff members from BVES and the Big Bear Fire Department, Bear Valley Unified School

District, Big Bear Chamber of Commerce, Big Bear Department of Water and Power, and Bear Valley Hospice.

Based upon this analysis and the documentation provided, the IE has validated this initiative.

Table 77: Preparedness and Planning for Service Restoration

2024 Target	2024 ARC	2024 Q4 QDR	DR012 Response	Summary
Update Service Restoration Plan	N/A	Quarterly Target Met	Service Restoration Plan Updated	Initiative Validated

EP_5, 8.4.6 -Customer Support in Wildfire and PSPS Emergencies – Non-Focus & Non-Field Verifiable

Data was gathered to assess initiative EP_5 and review BVES' customer support in wildfire and PSPS emergencies, specifically the yearly review and evaluation of the PSPS program. BVES has sufficiently demonstrated that it has a thorough and impactful emergency response plan to implement during emergency and PSPS events.

Data collected in response to BVES_DR013 regarding the initiative was evaluated to determine progress made towards initiative goals. In the documentation provided from BVES, it did not directly reflect that the goal of review and evaluation was being met. The document outlined the customer outreach planning program and included various entities, specifically related to AFN populations and planning, and joint electrical utilities. This documentation does relate to the initiative but does not adequately support the goal that a yearly review has been conducted on the emergency/PSPS plan and how it relates to customer support. The IE opted to review BVES_DR045/045.b which included a written response from BVES stating that the yearly review had been presented and conducted in accordance with the FEMA six step process and that no major actions were taken to adjusting the program.

Based upon the findings from this analysis and the documentation provided by BVES, the IE has validated this initiative.

Table 78: Customer Support in Wildfire & PSPS Emergencies

2024 Target	2024 ARC	2024 Q4 QDR	DR013 Response	Summary
Review & Evaluate PSPS Program	N/A	Quarterly Target Met	PSPS Program Reviewed & Evaluated	Initiative Validated

4.4.2.2 Funding Verification – Findings

EP_1 - 8.4.2 Emergency preparedness plan

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 73.

EP_2 - 8.4.3 External collaboration and coordination

Strategic Overview and Risk Mitigation

This initiative focuses on BVES's coordination efforts with public safety partners at the state, county, city, and tribal levels, preparing for and responding to wildfire and PSPS events. Effective collaboration ensures more efficient and coordinated emergency responses, directly contributing to the mitigation of wildfire risk.

Financial Performance Analysis

- Planned Budget: \$22,040.00
- Actual Expenditure: \$31,607.89
- Variance: +\$9,567.89 (+43.4% overspend)
- BVES Justification: The overspend was due to higher-than-anticipated costs associated with attending Joint IOU workshops and wildfire mitigation-related conferences.

Operational Impact and Risk Reduction

BVES met its qualitative target for external collaboration by holding numerous meetings with community partners, mutual aid groups, and participating in collaborative workshops. These efforts were essential for ensuring a well-coordinated response to wildfire risks and PSPS events.

Assessment and Conclusion

The overspend was justified by the increased costs for external workshops and conferences. Despite the financial overrun, BVES successfully exceeded its collaboration target, forging strong partnerships that enhance community preparedness and resilience. The initiative was validated as it contributed effectively to reducing wildfire vulnerability through coordinated efforts with public safety partners.

EP_3 - 8.4.4 Public emergency communication strategy

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 73.

EP_4 - 8.4.5 Preparedness and planning for service restoration

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 73.

EP_5 - 8.4.6 Customer support in wildfire and PSPS emergencies

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 73.

4.4.3 Synthesis of Findings

4.4.3.1 Initiative Review

The Emergency Preparedness (EP) category demonstrates Bear Valley's commitment to wildfire risk reduction through comprehensive planning, training, and stakeholder engagement. Overall, Bear Valley has met its target across the five EP initiatives, showing a proactive approach to emergency preparedness and response. The EC did not miss any targets in this category, consistently meeting or exceeding its objectives for staff training, external collaboration, public communication, and customer support during emergencies. The level of overall wildfire risk reduction achieved is substantial, based on Bear Valley's approach, including regular staff training exercises, active engagement with local stakeholders, and the implementation of an Emergency & Disaster Response Plan (EDRP). Recordkeeping and data management within this category seem generally adequate, with slight areas for improvement, particularly in explicitly documenting annual reviews and evaluations for communication strategies and PSPS programs. To enhance data accuracy and management, Bear Valley should be diligent in providing context and thorough responses to all data requests and individual initiatives, even if the EC believes the request has been addressed in a separate response.

Bear Valley exemplified extensive collaboration with various stakeholders, including AFN populations, educational institutions, and emergency services, demonstrating a commitment to community-wide preparedness. While Bear Valley has consistently met its current targets, there is limited information on how the EC intends to improve future performance, focusing mainly on the upkeep and review of currently implemented processes and protocols. The annual reviews conducted utilize the FEMA six-step process which provides a framework for continuous improvement, but more detailed documentation of this review process could be provided to ensure a thorough review has taken place. Overall, Bear Valley has demonstrated a well-implemented emergency preparedness program, meeting its current objectives across all EP initiatives.

4.4.3.2 Funding Verification

Budget and Expenditure Summary: The Emergency Preparedness category had a total planned budget of \$40.50 with actual expenditures of \$51.70, representing a 27.7% variance above budget.

Initiatives with Significant Variances: Of the 5 total initiatives in this category, 1 (20%) had an absolute percent difference exceeding 10%. The primary reason for variance was:

- Higher-than-anticipated costs for attending Joint IOU workshops and wildfire mitigation conferences (EP_2 at +43.4%)
- Increased participation in external collaboration and coordination activities
- Expanded travel and meeting expenses beyond initial estimates
- Additional unplanned stakeholder engagement sessions

Key Trends and Funding Compliance: The emergency preparedness funding shows increased expenditure on external collaboration activities, including meetings with community partners, fire departments, and participation in joint utility workshops. All initiatives met their targets for developing and maintaining emergency response procedures, conducting training exercises, and coordinating with external agencies. The budget overrun supported additional preparedness activities.

4.5 COMMUNITY OUTREACH AND ENGAGEMENT

4.5.1 Initiative Summary Table

Table 79: Initiative Summary Table (Spend in Thousand \$)

Initiative Number, WMP Section Number, and Name	WMP – Initiative Target	EC-Claimed Progress	EC-Claimed Initiative Status	Sample Size ²⁹	Sample Validation Rate (%) ³⁰	Verification Method	IE Finding on Initiative (Initiative Validation Rate) ^{31, 32}	WMP – Planned Spend (\$)	EC-Claimed Actual Spend (\$ and % from budget)	Satisfied Risk Reduction Goal? ³³
COE_1 ,8.5.2, Public Outreach & Education Awareness Program	360	1013	Complete	17	100%	-PSPS Tracking 2024 (DR006)	Initiative Validated (281%)	\$92.70	\$148.30 (+60.0%)	No Goal Provided
COE_2 ,8.5.3, Engagement with Access and Functional Needs Populations	12	26	Complete	12	100%	-AFN Date Tracker 2024 (DR007)	Initiative Validated (216%)	\$30.90	\$59.90 (+93.9%)	No Goal Provided
COE_3 ,8.5.4, Collaboration on Local Wildfire Mitigation Planning	Engage with Local Support	Target Met	Ongoing	N/A	N/A	-2024 Collaboration (DR008)	Initiative Validated (100%)	\$23.30	\$31.30 (+34.3%)	No Goal Provided
COE_4 ,8.5.5, Best Practice Sharing with Other Utilities	15	135	Complete	15	100%	-PSPS and WMP Collaboration Log (DR009)	Initiative Validated (900%)	\$15.20	\$16.60 (+9.2%)	No Goal Provided

²⁹ N/A in the Sample Size column means that no target was provided by the EC, or the target was qualitative and did not have a sampling component.

³⁰ N/A in the Sample Validation column means that no sampling was reviewed; therefore, no validation rate was applied.

³¹ As detailed in Energy Safety's issued IE ARC Outline for WMP Compliance Year 2024 document, if the total initiative validation is greater or equal to 95%, the initiative is considered validated by the IE.

³² N/A in the Initiative Validation column means that the initiative was not reviewed and therefore could not be validated/invalidated.

³³ Risk Reduction Goal can still be met or missed even if the Sample Size and Validation Rate column contains N/A. This is due to the initiative target goal being qualitative and therefore no sampling is required because the documentation initially provided fulfills the sampling requirement.

4.5.2 Written Detail for Initiatives

4.5.2.1 Initiative Review – Findings & Method

COE_1, 8.5.2 - Public Outreach and Education Awareness Program – Non-Focus & Non-Field Verifiable

Data was gathered to assess the initiative WMP COE_1 and review BVES' Public Outreach and Education Awareness to wildfires and other emergency events. BVES has a goal of continued engagement with local stakeholders to prepare for and respond to fire-related events. BVES has a target goal of 360 outreach events and reports an actual holding of 1,013 events. Data collected in response to BVES_DR006 regarding the initiative was evaluated to determine progress made towards meeting the initiative goals. Per this documentation, BVES confirms 1,013 events taking place across all four (4) quarters. These events included multiple communication types through radio, advertising platforms, and social media.

In DR006.b, the IE requested copies of the individual Facebook posts, radio PSAs, and advertisement confirmation for 16 of the events spanning across all four quarters. BVES responded by providing screenshots of posts from their Facebook ranging from April to December of 2024. The EC also included copies of the radio PSA invoice that listed all of the dates and time, as well as the script number, that aired on the radio.

Through a combination of traditional and digital channels, BVES has disseminated information, reaching a diverse audience across various platforms. Next year, the IE will review documentation that demonstrates BVES' evaluation on the effectiveness of this community outreach as referenced on table 8-53 of the WMP. Based upon this analysis and the documentation provided by BVES, the IE has validated this initiative.

Table 80: Public Outreach and Education Awareness Program Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR006 Response	Summary
360 Outreach and Educational Events	1,013 Outreach and Educational Events	1,013 Outreach and Educational Events	1,013 Outreach and Educational Events	Initiative Validated

COE_2, 8.5.3 -Engagement With Access and Functional Needs Populations – Non-Focus & Non-Field Verifiable

Data was gathered to assess initiative WMP COE_2 to review Engagement with AFN populations pertaining to wildfires and other emergency events. BVES has a goal of

continued engagement with local stakeholders to prepare for and respond to fire-related events. Effective strategies can increase awareness and community resiliency to wildfires and Public Safety Power Shutoff (PSPS) events before, during, and following an emergency. Several communication activities were noted in BVES plan. BVES is active in the engagement process and uses multiple engagement strategies to connect with AFN populations. Data collected in response to BVES_DR007 regarding this initiative was evaluated to determine progress made towards meeting the initiative goals. In DR007.b, BVES provided email correspondence that demonstrated an updated AFN list was being updated and entered in the PSPS portal. The IE found that throughout the year, BVES continually evaluated and updated their AFN list and made effort to reach these populations through email, phone, and alternative contacts. Findings from this analysis of Engagement with AFN populations demonstrate BVES have met the target for COE_2. Based upon this analysis and the documentation provided, the IE has validated this initiative.

Table 81: Engagement with Access & Functional Needs Populations

2024 Target	2024 ARC	2024 Q4 QDR	DR007 Response	Summary
12 AFN Customer Needs Verified	26 AFN Customer Needs Verified	26 AFN Customer Needs Verified	26 AFN Customer Needs Verified	Initiative Validated

COE_3, 8.5.4 - Collaboration on Local Wildfire Mitigation Planning – Non-Focus & Non-Field Verifiable

Data was gathered to assess the initiative COE_3 and its related sections: 8.4.6 Customer Support in Wildfire and PSPS Emergencies and 8.5.2 Public Outreach and Education Awareness Program. BVES stated a target of “review and maintain the program” for 2024 per table 8-55 of the WMP.

In response to BVES_DR008, BVES provided documentation to identify dates during 2024 where BVES facilitated or attended meeting with stakeholders. Numerous meetings across all four (4) quarters took place and the meetings were held to discuss wildfire mitigation planning and collaborate with local, regional, state, and federal partners in both the public and private sectors. Examples include:

- Meetings with the Big Bear Fire Department
- Meetings with the Big Bear Valley Mountain Mutual Aid Association
- Inland Empire Fire Safety Alliance

- San Bernadino County Annual PSPS Initial Planning Meeting and Workshop
- State Fire Season Meetings
- PSPS Working Group and Workshops

BVES collaborated with public safety partners, municipal agencies, and stakeholders in annual de-energization planning and held sessions in May and October of 2024 to review scenarios and roles.

Based upon the documentation provided by BVES, the IE has validated this initiative.

Table 82: Collaboration on Local Wildfire Mitigation Planning

2024 Target	2024 ARC	2024 Q4 QDR	DR008 Response	Summary
Engage with Local Support	N/A	Target Met	Engaged with Local Support	Initiative Validated

COE_4, 8.5.5 - Best Practice Sharing With Other Utilities – Non-Focus & Non-Field Verifiable

Data was gathered to assess the initiative COE_4 to review BVES Working Groups/Conferences and their best sharing practices with other Electrical Utilities. BVES is involved with and participates in several working groups, and they use those groups to gather and share lessons for best practice. Data collected in response to BVES_DR009 regarding this initiative was evaluated to determine progress made towards meeting the initiative goals. BVES provided a list of all collaboration activities for the 2024 review year. The documentation displayed collaborative events taking place during all four quarters of the year with “weekly casmu meetings” occurring the most frequently and were attended by BVES, Liberty Utilities, and PacifiCorp. Other collaborators included electrical utilities such as PG&E and SDG&E, as well as local and statewide municipal groups like the San Bernadino County Fire Department and CalFire. In response to DR009.b, BVES provided meeting agendas and minutes for events the EC attended across all four quarters of 2024. The agendas contained information that was to be discussed during the meeting and the entities involved. The meeting minutes provided a recap for what was discussed during the meetings. Based upon the documentation provided by BVES, the IE has validated this initiative.

Table 83: Best Practice Sharing with Other Utilities

2024 Target	2024 ARC	2024 Q4 QDR	DR009 Response	Summary
15 Work Groups and/or Conferences	135 Work Groups and/or Conferences	135 Work Groups and/or Conferences	135 Work Groups and/or Conferences	Initiative Validated

4.5.2.2 Funding Verification – Findings

COE_1 - 8.5.2 Public outreach and education awareness program

Strategic Overview and Risk Mitigation

This initiative encompasses BVES’s development and deployment of public outreach and education programs focused on wildfire preparedness, PSPS events, service restoration, and vegetation management. It aims to increase community resilience and awareness to reduce PSPS vulnerability and other wildfire-related disruptions.

Financial Performance Analysis

- Planned Spend: \$92,700.00
- Actual Expenditure: \$148,317.02
- Variance: +\$55,617.02 (+60.0% overspend)
- BVES Justification: The overspend was attributed to higher-than-anticipated advertising and public relations service costs, which exceeded the original budget. These costs were necessary to enhance outreach efforts.

Operational Impact and Risk Reduction

BVES exceeded its target by conducting 1,013 public outreach and education events, surpassing the original target of 360. The expanded outreach efforts resulted in greater public engagement on wildfire safety, PSPS events, and vegetation management, thereby increasing community awareness and preparedness.

Assessment and Conclusion

The substantial overspend was justified by the expanded scope of the outreach campaign, which significantly exceeded the original target. By conducting a greater number of events than planned, BVES enhanced public understanding of wildfire risks and preparedness measures, contributing positively to reducing PSPS vulnerability. The initiative was validated based on its achievement of targets and the demonstrated impact on community resilience.

COE_2 - 8.5.3 Engagement with access and functional needs populations**Strategic Overview and Risk Mitigation**

This initiative focuses on engaging customers with access and functional needs (AFN) to ensure they are properly supported and informed during wildfire events and Public Safety Power Shutoff (PSPS) events. The initiative aims to enhance community preparedness and resilience, thereby reducing PSPS vulnerability among these critical populations.

Financial Performance Analysis

- Planned Budget: \$30,900.00
- Actual Expenditure: \$59,889.70
- Variance: +\$28,989.70 (+93.8% overspend)
- BVES Justification: BVES attributed the overspend to higher-than-forecasted costs for advertising and public relations services, specifically aimed at increasing engagement with AFN populations.

Operational Impact and Risk Reduction

BVES exceeded its target of 12 AFN customer verifications by completing 26 verifications. This significantly enhanced engagement with AFN populations, ensuring they received the necessary support and information during wildfire events and PSPS events. The higher level of engagement likely contributed to improving resilience and preparedness in this vulnerable group.

Assessment and Conclusion

The overspend was justified by the increased expenditure on outreach activities for AFN populations. BVES exceeded its target for AFN verifications, effectively increasing engagement with this group and contributing to the goal of reducing PSPS vulnerability. The initiative was validated based on the successful verification of AFN customers and the increased outreach efforts.

COE_3 - 8.5.4 Collaboration on local wildfire mitigation planning**Strategic Overview and Risk Mitigation**

This initiative focuses on collaborating with local communities and stakeholders to develop and integrate wildfire mitigation planning, including participation in wildfire safety elements within general plans, community wildfire protection plans (CWPPs), and multi-hazard mitigation plans.

Financial Performance Analysis

- Planned Budget: \$23,310.00
- Actual Expenditure: \$31,294.55
- Variance: +\$7,984.55 (+34.3% overspend)
- BVES Justification: The overspend was attributed to higher-than-expected labor hours dedicated to the collaborative planning efforts with local stakeholders.

Operational Impact and Risk Reduction

BVES met its target of engaging with local fire departments, forestry services, and other stakeholders to discuss and collaborate on wildfire mitigation planning efforts. The initiative is ongoing, and the engagement with local support teams contributed to aligning BVES's efforts with broader community-level wildfire mitigation strategies.

Assessment and Conclusion

The overspend was justified by the increased engagement with local stakeholders and the additional labor required for these collaborative efforts. By meeting its target for engagement, BVES contributed to aligning its mitigation strategies with broader community wildfire planning, thereby enhancing overall resilience to wildfire hazards. The initiative was validated based on the continued collaboration and alignment with local wildfire mitigation strategies.

COE_4 - 8.5.5 Best practice sharing with other utilities

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 79.

4.5.3 Synthesis of Findings

4.5.3.1 Initiative Review

Bear Valley has demonstrated compliance with their approach to community outreach and engagement (COE) in their wildfire mitigation efforts, exceeding targets in several areas. Notable, Bear Valley significantly surpassed their public outreach goal, conducting 1,013 events against a target of 360, indicating a strong commitment to community education and awareness. The EC did not miss any reported targets across the COE initiatives, showcasing consistent performance. The overall wildfire risk reduction achieved through these COE efforts appears substantial, as evidenced by the comprehensive engagement strategies employed across various stakeholder groups, including AFN populations, local fire department, and regional safety groups. This determination is based on the depth and

frequency of outreach activities, which likely contribute to improved community preparedness and resilience.

Regarding recordkeeping and data accuracy, Bear Valley maintains detailed records of their engagement activities, including specific dates, types of events, and stakeholder interactions. However, opportunity for improvement in evaluating the effectiveness of those outreach efforts, particularly for the public education initiative (COE_1). The IE recommends that Bear Valley implement more robust methods to assess the impact of their communications on community awareness and behavior change. This could be accomplished through the implementation of a bi-annual research and analytics report that focuses on the overall effectiveness of the EC's messaging campaigns. Measuring statistics such as the customer's ability to recall specific message topics, message channels, understanding of EC's messaging goal, and what sources customers turn to for information about emergency events, can all help Bear Valley adapt and hone their outreach programs. Statistical data can then be extrapolated to provide recommendations that the EC could utilize to focus on ways of improving effective communication and outreach with their customers. The EC's engagement with AFN populations demonstrates good practice in continually updating contact lists and utilizing multiple communication channels, which could serve as a model for other initiatives.

A notable strength is Bear Valley's active participation in various working groups and conferences, facilitating knowledge sharing with other utilities and agencies. This collaborative approach, exemplified by weekly CAMSU meetings and engagements with entities like CAL FIRE, suggests a commitment to continuous improvement and industry best practices. Looking forward, Bear Valley's intention to review the effectiveness of their community outreach, as mentioned in the WMP, indicates a proactive stance towards enhancing future programs.

4.5.3.2 Funding Verification

Budget and Expenditure Summary: The Community Outreach and Engagement category had a total planned budget of \$162.10 with actual expenditures of \$256.10, representing a 58.0% variance above budget.

Initiatives with Significant Variances: Of the 4 total initiatives in this category, 3 (75%) had absolute percent differences exceeding 10%. The most common reasons for variances included:

- Higher-than-anticipated advertising and public relations costs for public outreach (COE_1 at +60%)
- Increased costs for AFN customer engagement activities (COE_2 at +93.8%)
- Expanded labor hours for local collaboration efforts (COE_3 at +34.3%)

- Decision to expand outreach activities beyond initial targets

Key Trends and Funding Compliance: The category's overspend corresponds with overachievement of operational targets. BVES conducted 1,013 public outreach events against a target of 360 (181% overachievement), and verified 26 AFN customers against a target of 12 (117% overachievement). The increased expenditure on advertising and contracted public relations services supported expanded community engagement through multiple communication channels including radio, social media, and advertising platforms. The funding patterns show increased investment in community preparedness activities.

5. EVALUATION OF QA/QC PROGRAMS

Quality Assurance and Quality Control (QA/QC) are essential in ensuring the thoroughness and reliability of an EC's operations. This section presents a comprehensive assessment of Bear Valley's QA/QC program, utilizing a structured approach based on five key dimensions:

- Roles and Responsibilities
- Quality Culture
- Quality Management System (QMS)
- Quality Inspections and Audits
- QA/QC Technology Adoption

By examining these critical areas, the IE aims to provide a holistic view of the EC's quality practices, highlighting areas of strength, identifying industry-leading best practices, and pinpointing opportunities for enhancement. Each category was scored on a scale ranging from 0-4 and the score demonstrated the EC's maturity in QA/QC implementation: 0 – Not Implemented; 1 – Initiated; 2 – Applied; 3 – Routine; 4 – Mastered. The evaluation framework allows a thorough analysis of how quality is integrated into the EC's structure, culture, systems, and processes.

Roles and Responsibilities

BVES received a score of '3 – Routine' for Roles and Responsibilities. The utility's WMP delineates QA/QC responsibilities for Grid Design and Vegetation Management in sections 8.1.6 and 8.2.5, specifying who performs audits and the related timelines. These sections align with BVES' Quality Management Plan and Vegetation Management QC Policy. The Quality Management Plan elaborates on specific QA/QC roles within the utility related to Grid Assets, outlining a 25-step process and identifying involved staff at every step of the process. The Vegetation Management QC Policy details role-specific responsibilities and QC methodologies for work scopes.

During the DR001 SME Interview on 05.30.25, BVES explained that due to its small size, it relies on verbal communication for cross-departmental QA/QC matters rather than written protocols. The utility's involvement in all installation and QA/QC processes enables strong contractor accountability. When issues arise, BVES directly addresses them with the contractor, leveraging established relationships to ensure work meets standards. While BVES could benefit from a standardized, documented escalation protocol, the current approach is suitable given the utility's size and scope.

QA/QC duties are effectively allocated to relevant departments and roles, embedded in utility documentation and procedural oversight. However, limited cross-department QA/QC integration beyond operational areas and the absence of formal accountability tracking place BVES firmly in the 'Routine' category rather than 'Mastered'.

Quality Culture

BVES received a score of '2 – Applied' in Quality Culture. BVES demonstrates a clear commitment to QA/QC and the utility has clearly defined roles for personnel responsible for implementing QA/QC protocols and processes.

Evidence suggests that BVES has successfully integrated its quality vision across the organization. This is exemplified by regular meetings involving both internal employees and contractors. During DR001 SME Interview, BVES emphasized that QA/QC has become an integral part of all aspects of the utility's operations, with essentially all processes and installations undergoing QC review.

To support this focus on quality, BVES has reallocated personnel resources, with certain staff members taking on expanded QA/QC responsibilities to ensure comprehensive implementation. The utility's commitment to quality is further reinforced through various meetings. These include an annual company-wide meeting, a separate meeting for all contractors, weekly internal project and management meetings, and monthly joint safety meetings. These gatherings serve to emphasize the importance of WMP work and associated QA/QC measures, as well as to discuss WMP status, QA/QC implementation, and any issues or concerns related to utility-wide activities.

The quality culture at BVES is also well-documented, as evidenced by the BVES INC Quality Management Plan and BVES INC Vegetation Management Policy and Procedures. Both documents begin by highlighting the significance of QA/QC programs and their crucial role in achieving BVES's vision, underscoring the utility's commitment to embedding quality principles throughout its operations.

Quality Management System (QMS)

BVES received a score of '2 – Routine' for Quality Management System. The WMP highlights two key databases utilized by BVES: iRestore for Grid Design processes and Kintone for Vegetation Management processes. During the DR001 SME Interview on May 30, 2025, BVES provided detailed information on both systems.

iRestore serves as a comprehensive point-based data system that contains records for all poles within BVES's service territory. Field inspectors can access detailed information for each individual pole during inspections, including previous inspection history, completed work, and any issues related to the pole, crossarm, transformer, or other equipment. The system allows inspectors to input priority levels for any identified issues, along with photos and notes. This database effectively functions as BVES's quality QA/QC tracking system for grid-related items.

Kintone operates as the internal QC system for vegetation management. The QC administrator uses this platform to create maps of recently trimmed or maintained vegetation areas and assign QC inspections to inspectors. Field inspectors are provided with a predetermined list of criteria to evaluate, including vegetation distance from power lines, pole clearance, and other parameters aligned with the vegetation management QA/QC handbook. All QC forms and tracking are managed within this database.

In their WMP, BVES initially stated a goal to integrate Kintone into iRestore to centralize all QA/QC measures across departments. However, due to challenges with iRestore, BVES has decided to abandon this plan. Instead, the company now intends to implement a new vegetation management database in 2025.

Quality Inspections and Audits

BVES received a score of '3 – Routine' for Quality Inspections and Audits. BVES' entire service territory is located within Tier 2 and Tier 3 HFTD, ensuring that all QAQC inspections occur in these high-risk areas. According to DR001 SME Interview, BVES' small size allows for close daily collaboration with contractors, enabling simultaneous work execution and QA/QC processes.

Quality control has become integral to BVES operations, with virtually all work undergoing QC review. The utility confirms that QA/QC processes are implemented as outlined in their WMP, with 100% of covered conductor installations and tree attachment removals subject to QA/QC review. BVES conducts 20 Grid Design/Maintenance and 72 vegetation QA/QC inspections annually, meeting the 10% sample size requirement specified in the WMP. QA/QC scheduling aligns with WMP targets, primarily based on mileage. The compact service territory allows BVES to respond to issues within 10-15 minutes in most locations.

BVES has established comprehensive QA/QC protocols for both Grid Design and Vegetation Management. The Asset & Inspection Quality Management plan for grid design and maintenance outlines a detailed 25-step process, with 15 steps directly related to "in-process QC" or "closeout QC," and the remaining steps covering work planning and order closure.

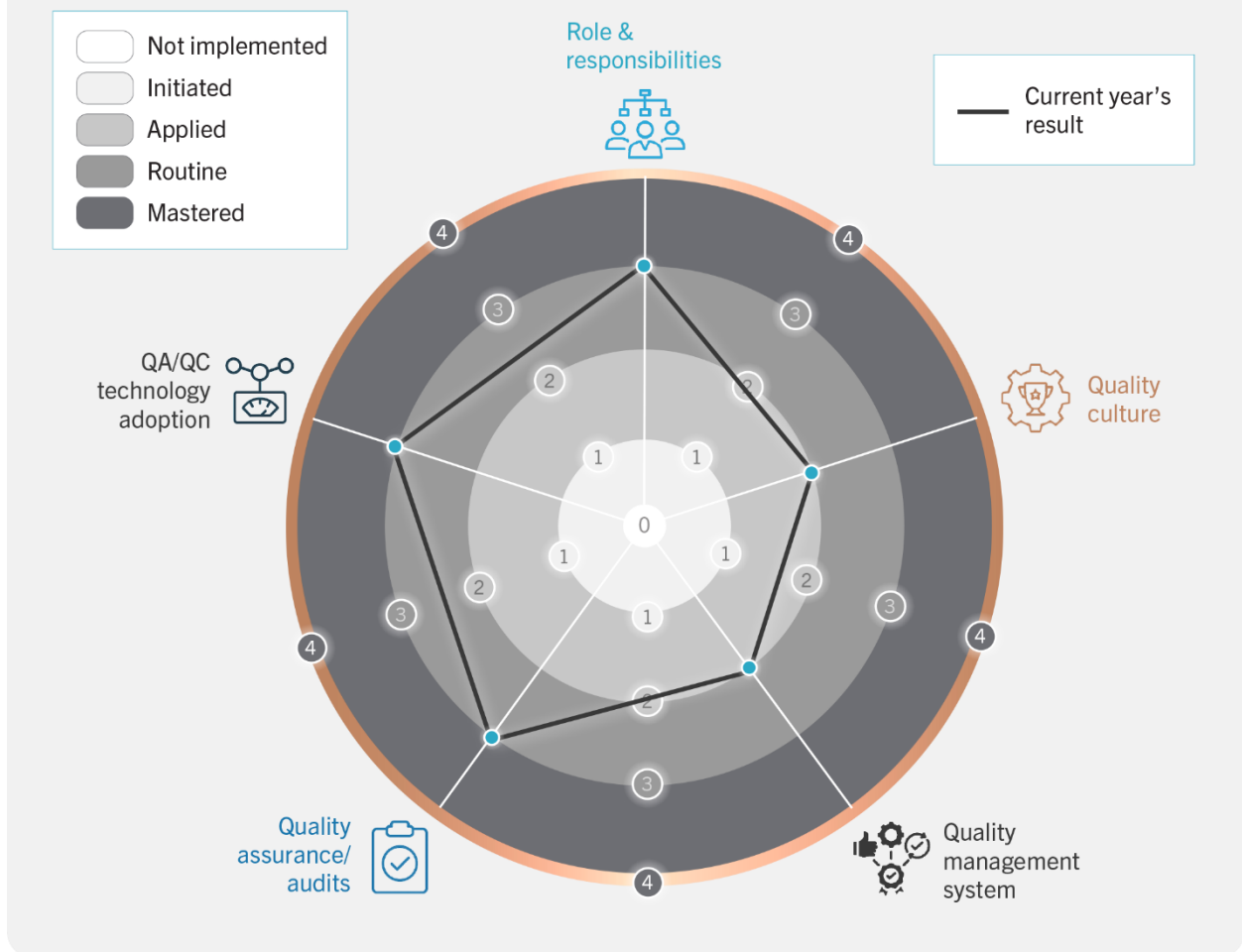
The Vegetation Management (VM) QA Policy document mandates an annual VM audit in January, providing a thorough review of the program. Any identified issues require a corrective action report by May 1 of the same year. Additionally, the policy stipulates quarterly VM program assessments, with reports submitted to designated personnel for review. VM QC checks are clearly scheduled, with several occurring twice per month, ensuring consistent oversight of vegetation management activities.

QA/QC Technology Adoption

BVES received a score of '3 – Routine' for QA/QC Technology Adoption. Documentation across various initiatives demonstrates the implementation of automation devices, including switches, field devices, and fuse TripSavers, all of which integrate with SCADA. BVES annually contracts for UAV and LiDAR inspections. Upon receiving the results, qualified BVES personnel review the findings and, if necessary, reassess asset condition priorities. The contractor immediately notifies BVES of any level 1 findings, allowing for prompt correction or reclassification to level 2 or 3. These inspection methods are cross-validated against other asset inspections to evaluate their quality and effectiveness.

Additionally, BVES employs iRestore and Kintone databases to conduct QA/QC audits on Grid Design and Maintenance, as well as Vegetation Management. These databases serve as centralized repositories for all inspection and related QC audits within their respective departments, facilitating easy access to specific asset information.

Figure 20: QA/QC Maturity Sunburst Chart



6. CONCLUSION

Throughout the 2025 Independent Evaluator process, BVES demonstrated a strong commitment to the WMP program. They participated with professionalism and cooperation, working diligently to provide the IE with the necessary data for a successful evaluation process. BVES continues to build upon and implement the objectives and goals outlined in the 2024 WMP.

BVES has provided substantial documentation and SME interviews to demonstrate that they have largely met the majority of the objectives and goals set forth in the WMP. In instances where the utility missed specific targets, they provided ample contextual evidence to suggest that the missed targets were not simply failures, but rather calculated reallocations of resources to achieve similar levels of wildfire risk management.

Historically, grid hardening efforts and vegetation management have proven to be highly effective in mitigating wildfire risk, and BVES has exceeded in several areas related to these categories. The utility has demonstrated its commitment to grid hardening through actions such as a 119% over-completion rate for distribution pole replacements on evacuation routes, a 31% over-completion rate for general distribution pole replacements, and the installation of 14% more covered conductors than originally targeted. Additionally, all asset inspections were completed on target for 2024, ensuring that potential issues or failures were identified and the process for mitigating them was initiated and often completed. Similarly, for vegetation management efforts, BVES met their 2024 target for asset inspections. One of the largest ignition risks is the potential for trees, branches, and other shrubbery to fall into power lines. BVES not only met but exceeded their original target for the removal or remediation of trees that posed a fall-in risk by 106%.

A major focus in the 2024 WMP was an increased level of community engagement regarding PSPS events and wildfire education. BVES aimed to reach 360 public outreach events through various platforms, including radio, social media, and advertising, and exceeded this target by accomplishing 1,013 events, a 181% over-completion rate. BVES also exceeded its goal of meeting with other utilities to discuss best practices and efforts to minimize PSPS events and wildfire-related incidents.

BVES has demonstrated a strong commitment to the WMP and has made significant progress in achieving the objectives and goals outlined for 2024. Through their actions and the evidence provided, BVES has shown that they are dedicated to mitigating wildfire risk through their implementation of initiatives across all five categories of the WMP. The utility's ability to exceed many of the established targets, while providing reasonable explanations for missed goals, underscores their diligence and strategic approach to wildfire risk reduction. Bear Valley's continued efforts to build upon and implement the WMP objective will be crucial in ensuring the safety and resilience of the community they serve.

7. ATTACHMENTS

The attachments listed below can be found on a separate Microsoft Excel file titled “BVES 2025 IE ARC Appendix.”

7.1 CATALOG OF INITIATIVES

7.2 DATA REQUESTS

7.3 SME INTERVIEWS

7.4 LIST OF “FAIL-TO-FUND” INITIATIVES

7.5 PICTURES OF NON-CONFORMANCE (N/A)
