



October 10, 2025

Subject: Office of Energy Infrastructure Safety’s Revised Draft Decision on the Bear Valley Electric Service, Inc.’s 2026-2028 Base Wildfire Mitigation Plan

Stakeholders,

The Office of Energy Infrastructure Safety (Energy Safety) hereby releases for a second round of public comment its Revised Draft Decision on the Bear Valley Electric Service, Inc.’s (BVES’s) 2026-2028 Base Wildfire Mitigation Plan (WMP).

Energy Safety previously released for public comments its draft decision on BVES’s 2026-2028 Base WMP on July 16, 2025.¹ Since then, Energy Safety has added two additional cross-utility collaboration areas for continued improvement and revised some area for continued improvement due date language. Energy Safety herein provides a comparative redline document showing the additions between the prior draft and the Revised Draft Decision (see red text with underline). The new areas for continued improvement and associated narratives can be found in Section 5, Risk Methodology and Assessment, and have been incorporated into Appendix C. The area for continued improvement due date language changes are throughout the document.

Stakeholders are invited to provide written comments only on the redline text. Energy Safety will not consider written comments that are unrelated to these revisions.

Opening comments must be submitted no later than October 22, 2025. Reply comments must be submitted no later than October 27, 2025.²

Comments must be submitted to Energy Safety’s e-filing system in the 2026-2028 Wildfire Mitigation Plans docket (#2026-2028-Base-WMPs).³ Energy Safety’s Policy Division Process Guidelines provides more information on submitting opening and reply comments.⁴

Sincerely,

/s/ Tony Marino

Tony Marino
Deputy Director | Electrical Infrastructure Directorate
Office of Energy Infrastructure Safety

¹ [Draft Decision on the BVES 2026-2028 Base WMP](#).

² Any deadline that falls on a Saturday, Sunday, holiday, or any other day when Energy Safety offices are closed shall be moved to the following business day.

³ Submit comments via the [2026-2028-Base-WMPs](#) docket on Energy Safety’s e-filing system.

⁴ ESPD Process Guidelines, Pages 2-3.



OFFICE OF ENERGY INFRASTRUCTURE SAFETY

REVISED DRAFT DECISION

BEAR VALLEY ELECTRICAL SERVICE, INC.

2026-2028 BASE WILDFIRE MITIGATION PLAN

October 2025

1. Executive Summary

The Bear Valley Electrical Service, Inc. (BVES) 2026-2028 Base Wildfire Mitigation Plan (WMP) is approved.

The Office of Energy Infrastructure Safety (Energy Safety) works to ensure electrical corporations construct, maintain, and operate electrical lines and equipment in a manner that will minimize the risk of catastrophic wildfire posed by those electrical lines and equipment. Pursuant to Public Utilities Code section 8386.3(a), this Decision serves as Energy Safety's assessment and approval of the BVES 2026-2028 Base WMP, dated April 18, 2025.

In its 2026-2028 Base WMP, BVES continued its commitment to improve mitigation activity selection and reduce wildfire risk by integrating new methodologies and technology. For example, BVES is moving from a qualitative to quantitative approach for its risk model and expects to completely transition to the new model in 2026. Energy Safety expects BVES to continue reporting updates or changes to its risk model as well as impacts on mitigation selection and targets.

Additionally, BVES proposes mitigation solutions designed for its specific needs. As BVES is dependent on other electrical corporations for power supply, it has little control over power disruptions. BVES plans to incorporate renewable energy sources, including solar energy collection with battery storage to directly feed its distribution system during these disruptions. This microgrid plan intends to support critical infrastructure in the BVES service territory, reducing the impact from deenergization.

However, BVES has areas where it needs to improve—specifically in process documentation. Several of BVES's vegetation management processes lack detailed, consistent, and formal documentation. Additionally, as BVES implements enhanced powerline safety settings, Energy Safety expects BVES to develop process documentation and evaluation criteria to readily identify gaps in operations and internal areas for improvement.

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2. Introduction

Energy Safety approves the BVES 2026-2028 Base Wildfire Mitigation Plan (2026-2028 Base WMP), R0.

BVES submitted its 2026-2028 Base WMP on April 18, 2025. This Base WMP covers a three-year period from 2026 through the end of 2028 (the WMP cycle). BVES prepared its Base WMP in accordance with the requirements set forth in the Energy Safety WMP Guidelines.

2.1 2026-2028 Base WMP Submission and Publication Summary

This section provides a list of the 2026-2028 Base WMP submissions and publications by BVES and Energy Safety. Information regarding the submission types can be found in the Energy Safety WMP Guidelines.

- 03/14/2025 - BVES submitted its 2026-2028 Base WMP Pre-Submission
- 03/28/2025 - Energy Safety issued the Pre-Submission Check Sufficiency Determination for the BVES 2026-2028 Base WMP Pre-Submission
- 04/18/2025 - BVES submitted its 2026 Maturity Survey
- 04/18/2025 - BVES submitted its 2026-2028 Base WMP

2.2 Consultation with California Department of Forestry and Fire Protection

The Office of the State Fire Marshal is part of the California Department of Forestry and Fire Protection (CAL FIRE). Public Utilities Code section 8386.3(a) requires Energy Safety to consult with the Office of the State Fire Marshal in reviewing electrical corporation WMPs. The Office of the State Fire Marshal provided meaningful consultation and input on the evaluation, but this Decision is solely an action of Energy Safety and not the Office of the State Fire Marshal or CAL FIRE.

2.3 Public Comment

In rendering its decision, Energy Safety considered comments on the BVES 2026-2028 Base WMP submitted pursuant to Public Utilities Code section 8386.3(d).

2.3.1 Comments on the BVES 2026-2028 Base WMP

Energy Safety invited members of the public to provide comments on the BVES 2026-2028 Base WMP. The following individuals and organizations submitted comments:

- Green Power Institute

Energy Safety considered all comments prior to issuing this Decision. Appendix D contains a summary of the comments Energy Safety concurred with and incorporated into this Decision.

2.4 Environmental Compliance

An approved WMP shall not be construed as relieving any electrical corporation from complying with all applicable local, state, or federal environmental requirements. A list of selected examples of state environmental requirements is available on Energy Safety's website for reference.¹ Electrical corporations should reach out to the primary agency responsible for an environmental requirement for any additional information.

2.5 Area for Continued Improvement Reporting

Reporting of required progress for areas for continued improvement in this Decision fall into the categories of due by next WMP Update or next Base WMP. Areas for continued improvement that require progress by the next WMP Update will be due no sooner than a 2027 WMP Update. The timing and period covered by the next Base WMP have yet to be decided. The schedule for upcoming WMP submissions is pending development due to ongoing implementation of 2025 California Legislative Service Chapter 119 (Senate Bill 254, Becker) ("SB 254").

SB 254, which became law on September 19, 2025, impacts WMP cycles, submission schedules, and technical requirements, and imposes new and amended statutory requirements on the existing WMP process. Energy Safety is working to implement the changes from SB 254 and expects to hold at least one public workshop to gather feedback from electrical corporations and stakeholders on potential changes. Energy Safety plans to issue a WMP submission schedule and to revise its WMP Guidelines to reflect the changes and new requirements.

¹ Examples of State Environmental Requirements.

3. **Introductory Sections of the WMP**

BVES provided the required information for the following sections in accordance with Chapter III of the WMP Guidelines:

- Section 1: Executive Summary
- Section 2: Responsible Persons
- Section 3: Overview of the WMP (Primary Goal, Plan Objectives, Prioritized List of Wildfire Risks and Risk Drivers, Performance Metrics, Projected Expenditures, and Climate Change)
- Section 4: Overview of the Service Territory (Service Territory, Catastrophic Wildfire History, and Frequently Deenergized Circuits)

4. Projected Expenditures

BVES provided the required information² regarding projected expenditures in accordance with Chapter III, Section 3.6 of the WMP Guidelines. BVES provided additional information regarding projected expenditures in accordance with the Energy Safety Data Guidelines;³ a summary of this information is presented below.

Table 4-1. BVES Projected Expenditure Comparison⁴

WMP Initiative Category	Bear Valley Electric Service		Liberty Utilities		PacifiCorp (No data)	
	Total Territory	% of Grand Total	Total Territory	% of Grand Total	Total Territory	% of Grand Total
Wildfire Mitigation Strategy	\$108.0K	0.13%	N/A	N/A	-	-
Vegetation Management and Inspections	\$11.2M	13.94%	\$34.7M	31.65%	-	-
Situational Awareness and Forecasting	\$1.6M	1.97%	\$1.5M	1.40%	-	-
Risk Methodology and Assessment	\$216.0K	0.27%	\$2.7M	2.46%	-	-
Grid Design, Operations, and Maintenance	\$66.5M	82.88%	\$66.3M	60.41%	-	-
Enterprise Systems	\$247.0K	0.31%	\$2.6M	2.38%	-	-
Emergency Preparedness, Collaboration and Public Awareness	\$398.0K	0.50%	\$1.9M	1.71%	-	-
Grand Total	\$80.3M	100.00%	\$109.8M	100.00%		

² Energy Safety's WMP evaluation and decision on a WMP is not an approval of, or agreement with, costs listed in the WMP.

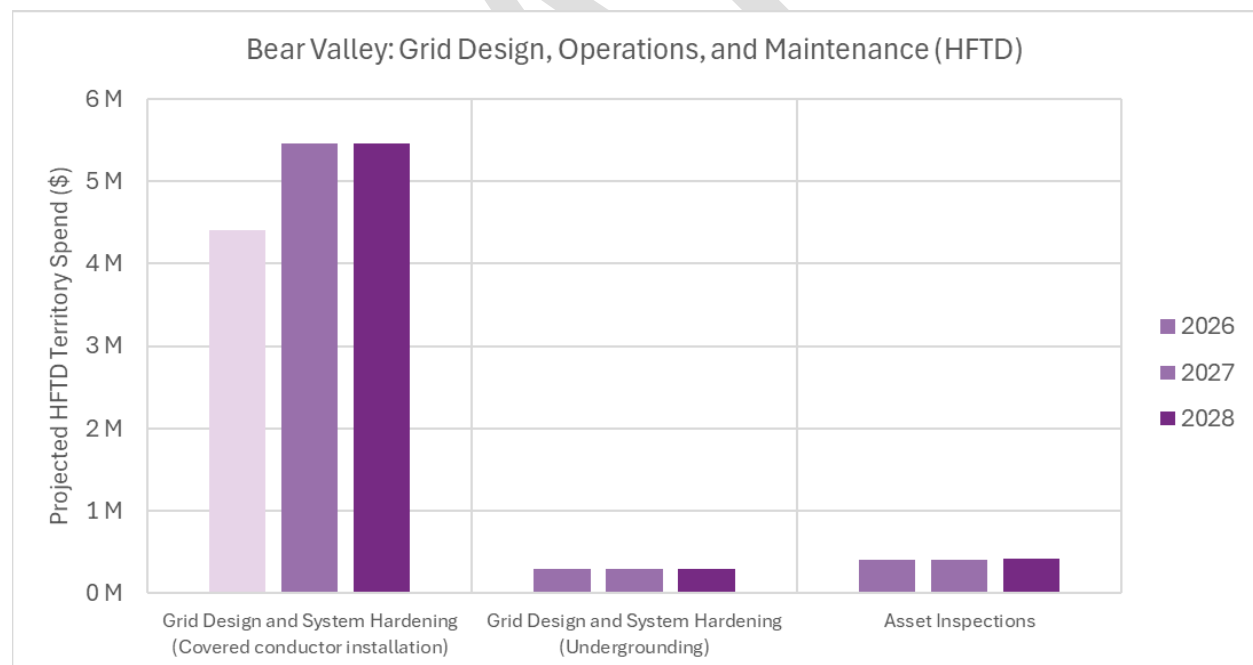
³ Data Guidelines, Pages 165-167.

⁴ Energy Safety will incorporate data from PacifiCorp into this table prior to publication of the Decision.

Table 4-2. BVES Projected Expenditure Comparison HFTD vs Non-HFTD⁵

WMP Initiative Category	Bear Valley Electric Service			Liberty Utilities			PacifiCorp (No data)		
	HFTD	Non-HFTD	% Spend in HFTD	HFTD	Non-HFTD	% Spend in HFTD	HFTD	Non-HFTD	% Spend in HFTD
Wildfire Mitigation Strategy	\$108.0K	\$0.0	100.00%	N/A	N/A	N/A	-	-	-
Vegetation Management and Inspections	\$11.2M	\$0.0	100.00%	\$34.7M	\$0.0	100.00%	-	-	-
Situational Awareness and Forecasting	\$1.6M	\$0.0	100.00%	\$1.5M	\$0.0	100.00%	-	-	-
Risk Methodology and Assessment	\$216.0K	\$0.0	100.00%	\$2.7M	\$0.0	100.00%	-	-	-
Grid Design, Operations, and Maintenance	\$66.5M	\$0.0	100.00%	\$66.3M	\$0.0	100.00%	-	-	-
Enterprise Systems	\$247.0K	\$0.0	100.00%	\$2.6M	\$0.0	100.00%	-	-	-
Emergency Preparedness, Collaboration and Public Awareness	\$398.0K	\$0.0	100.00%	\$1.9M	\$0.0	100.00%	-	-	-
Grand Total	\$80.3M	\$0	100.00%	\$109.8M	\$0	100.00%			

Figure 4-1. BVES Grid Design, Operations, and Maintenance Projected Expenditures in the HFTD by Year

⁵ Energy Safety will incorporate data from PacifiCorp into this table prior to publication of the Decision.

5. Risk Methodology and Assessment

Chapter III, Section 5 of the WMP Guidelines requires the electrical corporation to provide an overview of its risk methodology, key input data and assumptions, risk analysis, and risk presentation (i.e., the results of its assessment).⁶ The BVES 2026-2028 Base WMP met the requirements of the WMP Guidelines for this section.

5.1 Discussion

This section discusses Energy Safety's evaluation of the risk methodology and assessment section of the BVES 2026-2028 Base WMP.

5.1.1 Methodology

BVES stated it is in the process of implementing new risk models. BVES completed Phase 1 of its new risk model and mitigation decision making framework and is targeting Phase 2 implementation for its risk model by the end of 2025.⁷

BVES stated Phase 1 included implementation of a quantitative model that evaluates asset management, risk management, and financial modeling solutions, by using BVES's data and a suite of various wildfire analytics such as integrating situational awareness and historical fire scenarios.⁸ BVES further provided that the Phase 1 risk model evaluates three use cases to determine the wildfire mitigation strategy: 1) the California Public Utilities Commission's General Order (GO 165) minimum requirements, 2) BVES's current mitigation strategy (including vegetation management, installing fire wraps, and replacing conductors), and 3) proactive steel pole replacement.⁹

BVES stated Phase 2 will update data to reflect current information, include additional assets such as arrestors and connectors, separate asset types instead of grouping them as a pole asset, and refine public safety power shutoff (PSPS) probability calculations.¹⁰

This new risk model has cascading impacts throughout BVES's WMP that will require evaluation throughout the implementation of the 2026-2028 WMP cycle.

⁶ Pub. Util. Code §§ 8386(c)(3), (8), (12)-(13), (17)-(18).

⁷ BVES, 2026-2028 Base WMP, Pages 43, 51.

⁸ BVES, 2026-2028 Base WMP, Pages 37-38.

⁹ BVES, 2026-2028 Base WMP, Page 38.

¹⁰ BVES, 2026-2028 Base WMP, Page 38.

5.1.2 Risk Analysis Framework

BVES stated its protective equipment and device settings (PEDS) risk is in development with planned completion by quarter four of 2026.¹¹ Given the PEDS risk calculation is a new requirement in the 2026-2028 WMP Guidelines, which were finalized in February 2025, BVES did not have the data available nor the analysis established at the time of the WMP submission to present the calculations.¹²

Because BVES demonstrated it is in the process of developing a PEDS risk component to its model in the future, BVES must report in future WMP submissions on the progress it has made to calculate PEDS risk, including any methodology, plans, and anticipated changes in risk model output.

See area for continued improvement BVES-26B-01 Ongoing Implementation for Updates to Risk Models in Section 5.3.

5.1.3 Risk Scenarios

5.1.3.1 Alignment of Weather Scenarios

BVES listed only one extreme-event scenario within Table 5-3 relating to 2030 climate conditions concerned with fuel levels and moisture.¹³ Given this evaluation extends just two years past the 2026-2028 Base WMP cycle, it is important that BVES and other electrical corporations work together to understand what risks will exist across their systems.

Electrical corporations should look at forecasts that cover the lifetime of mitigations to best quantify and allocate maximum risk reduction over time. Additionally, many climate change scenarios presented in the WMPs are limited in evaluating impacts of a drying landscape based on increasing temperatures. This current evaluation may oversimplify various impacts of climate change, such as changing weather patterns resulting in extreme wind events and vegetation landscapes with an increase in invasive species population representations.

Given the ongoing need to advance climate change research, BVES must collaborate with other electrical corporations to establish further outlooks and metrics for wildfire risk model integration.

See area for continued improvement BVES-26B-02 Further Evaluation of Climate Change Impact on Extreme Scenarios in Section 5.3.

¹¹ BVES, 2026-2028 Base WMP, Page 70.

¹² WMP Guidelines, Pages 30-36.

¹³ BVES, 2026-2028 Base WMP, Page 56; Table 5-3 Summary of Extreme-Event Scenarios.

5.1.3.2 Detailed Model Documentation

In its 2026-2028 Base WMP, BVES described how it "uses probabilistic scenarios based on a 30-year history of fire weather...that are representative of historic conditions in the BVES service area."¹⁴ However, BVES did not provide details on what data it included as part of these scenarios, including the criteria used to determine which wind speeds, directions, and fuel moistures are representative for its service territory. Additionally, BVES stated that it "uses the SDG&E definitions of 'fire weather'" and that it is "working to update these definitions to be more specific to BVES's service area in future WMP updates."¹⁵ However, it is not clear exactly what definition BVES used, why it chose SDG&E's definition, how it used this definition to determine fire weather days when building and running scenarios, and why it was not adequately specific enough for BVES's service area. For extreme weather scenarios, BVES stated that it used a long-term extreme-event scenario developed by a third-party based on climate conditions¹⁶ but did not provide adequate detail into how that scenario was developed.

Generally, these definitions and methods for determining what to include in meteorological scenarios differ across electrical corporations, with lack of clarity around how scenarios are selected and why. A more standardized approach to the method of determining extreme event scenarios, as described in Section 5.3.2. of the WMP Guidelines, would ensure that the decision-making process is clear and would allow for more cross comparison between electrical corporations. In order to align the six California investor-owned utilities ("IOU") (including the SMJUs and the large electrical corporations) with a more consistent approach around choosing meteorological scenarios and running simulations, the IOUs must collaborate to compare various methodologies and determine a standardized approach. A standardized approach for determining extreme weather scenarios and extrapolating out past historical observances is particularly important so that the IOUs can more accurately capture potentially catastrophic wildfire conditions in the future.

See area for continued improvement BVES-26B-03 Collaboration on Meteorological Scenarios.

5.1.4 Risk Analysis Results and Presentation

In Table 5-5, BVES only included "Overhead Bare Wire Length" in the column "Top Risk Contributors" despite showing various factors that may contribute to risk when accounting for bare wire length in BVES Table 5-1, such as susceptibility to high winds and availability of

¹⁴ BVES 2026-2028 Base WMP, Page 55.

¹⁵ BVES 2026-2028 Base WMP, Page 55.

¹⁶ BVES 2026-2028 Base WMP, Page 56.

fuel.^{17,18} BVES did not demonstrate an understanding of the granularity of the various risk impacts along its system. By only listing bare conductor as the primary risk contributor, BVES omitted other risk driver considerations, such as vegetation and weather, that may impact bare conductors. BVES needs to continue developing granularity to understand the various risk drivers along its system.

Additionally, in Table 5-5, BVES provided two circuits that lacked a top risk contributor despite being listed as the second and eleventh highest risk circuits.¹⁹ BVES explained, via data request, that its Fire Safety Circuit Matrix does not show any risk for these two circuits, as the matrix focuses on bare overhead conductors and at least one of the circuits is fully covered.²⁰ Given that there are location specific ignition risks from other factors such as vegetation contacts or equipment failures, BVES must perform more comprehensive analysis to identify what risk drivers exist in order to select appropriate mitigation activities.

See area for continued improvement BVES-26B-01 Ongoing Implementation for Updates to Risk Models in Section 5.3.

5.1.5 Quality Assurance and Quality Control

BVES stated that its latest third-party developed risk model data was not informed by current or subject matter expert validated data.²¹ However, BVES plans to develop verification and validation documentation by fourth quarter 2025.²²

Validation is an important process for implementing and understanding risk models because it ensures the risk model provides useful and accurate outputs.²³ Prior to adopting its new risk models, BVES needs to establish and implement a validation process for those models.

See area for continued improvement BVES-26B-01 Ongoing Implementation for Updates to Risk Models in Section 5.3.

¹⁷ BVES, 2026-2028 Base WMP, Page 62; Table 5-5 Summary of Top-Risk Circuits, Segments, or Spans.

¹⁸ BVES, 2026-2028 Base WMP, Page 47; BVES Table 5-1 Fire Safety Circuit Matrix: Risk Factors.

¹⁹ BVES, 2026-2028 Base WMP, Page 62.

²⁰ Response to Data Request 002, Question 14.

²¹ BVES, 2026-2028 Base WMP, Page 37.

²² BVES, 2026-2028 Base WMP, Page 70; Table 5-6 Utility Risk Assessment Improvement Plan.

²³ WMP Guidelines, Page A-19; Definition for “validation and verification.”

5.1.6 Appendix B. Supporting Documentation for Risk Methodology and Assessment

5.1.6.1 Spatial Data

BVES presented the spatial data from its wildfire consequence model with discrepancies such that it displayed areas of low consequence risk directly adjacent to areas of high consequence risk.²⁴ The variation in fire spread and PSPS consequence should be minimal in proximate locations unless there are major defining topographical differences, which BVES did not specify.

Even accounting for model sensitivity to variables such as grid hardening and access and functional needs populations, these variations should have minimal impact on consequence risk given the proximity of the locations.²⁵ The discrepancy in consequence risks here may indicate an issue with BVES's risk modeling given the sensitivity to small changes.²⁶ BVES must establish a verification and validation process to identify and improve any known issues with its risk modeling.

See area for continued improvement BVES-26B-01 Ongoing Implementation for Updates to Risk Models in Section 5.3.

5.1.6.2 Documentation Details

While Appendix B of BVES's 2026-2028 Base WMP provided additional details and example calculations of its various risk modeling components, Appendix B still only provided high-level details. For instance, many of the details around assumptions and scaling factors within BVES's ignition likelihood model are not explained, including what data sources are used and how to understand ignition risk. In order to do a thorough and holistic review of BVES's risk models, BVES must work to develop more detailed documentation encompassing its risk models and the various datasets, assumptions, and approaches used.

See area for continued improvement BVES-26B-04 Development of Substantive Model Documentation.

5.2 Previous Areas for Continued Improvement

In the Energy Safety Decision for the BVES 2025 WMP Update, Energy Safety identified areas related to risk methodology and assessment where BVES must continue to improve its

²⁴ BVES, 2026-2028 Base WMP, Page B-346.

²⁵ Response to Data Request 004, Question 8.

²⁶ Response to Data Request 004, Question 8.

wildfire mitigation capabilities. This section summarizes the requirements imposed by those areas for continued improvement, BVES's response to those requirements, and Energy Safety's evaluation of the response.

5.2.1 BVES-23B-02. PSPS and Wildfire Risk Trade-off Transparency

For this area for continued improvement, Energy Safety required BVES to describe how it prioritizes PSPS risk in its risk-based decisions as well as how PSPS risk impacts the prioritization of its mitigation initiatives based on risk scores in its 2026-2028 Base WMP.²⁷

5.2.1.1 BVES-23B-02: BVES Response Summary

In its 2026-2028 Base WMP, BVES reported its ability to calculate PSPS risk is still in development with implementation of a new third-party risk modeling tool and that full implementation was not expected until the end of 2025.²⁸ Through running Fire Potential Index (FPI) daily, BVES stated that it observed a high correlation of risk between FPI and relative PSPS risk, and used that information to inform its hardening and enhanced powerline safety settings (EPSS) prioritization based on areas deemed most at risk of PSPS.²⁹

Additionally, BVES identified that it uses the consequence portion of its risk model to prioritize grid hardening initiatives, and that mitigating consequence closely correlates to reducing PSPS risk given the overlap between wildfire consequence and PSPS consequence factors.³⁰ BVES included a list of four of its circuits that are most at-risk for PSPS based on using a third-party model as a surrogate for PSPS risk that accounts for population and demographics.³¹ BVES stated that all four circuits have hardening planned within the 2026-2028 timeframe, which aligns with BVES's stated planned mitigation activities.³²

5.2.1.2 BVES-23B-02: Energy Safety Evaluation

BVES demonstrated improvement and forward growth regarding PSPS and wildfire trade-off transparency. However, BVES is still working to update and integrate its models, which include PSPS risk, by the end of 2025. BVES must continue to report on its progress and associated impacts from updating its models for its ~~2029-2031~~next Base WMP.

²⁷ Decision for BVES 2025 WMP Update, Pages 41-42.

²⁸ BVES, 2026-2028 Base WMP, Page D-378.

²⁹ BVES, 2026-2028 Base WMP, Page D-378.

³⁰ BVES, 2026-2028 Base WMP, Page D-378.

³¹ BVES, 2026-2028 Base WMP, Page D-378.

³² BVES, 2026-2028 Base WMP; Page D-378; Pages 97-98.

Section 5.3 sets forth the requirements for improvement in BVES-26B-01 Ongoing Implementation for Updates to Risk Models.

5.3 Areas for Continued Improvement for Future WMP Submissions

As discussed above, Energy Safety has identified areas pertaining to risk methodology and assessment where the electrical corporation must demonstrate improvement in a future, specified WMP submission. This section sets forth the requirements for improvement.

5.3.1 BVES-26B-01. Ongoing Implementation for Updates to Risk Models

Summary: BVES is in the process of updating its risk models with full implementation planned by the end of 2025.³³ Given the potential changes to risk model outputs, BVES needs to update its WMP and associated work plan to be the most up-to-date in understanding and reducing risk.

Requirements: In its [2027next](#) WMP Update, BVES must:

- Provide a description of how BVES's risk assessment and models include evaluation of asset age and health, system design parameters, and outage/ignition risks.
- Provide a description of how BVES is evaluating inclusion of egress/ingress risks into its risk modeling and risk assessments. This must include coordination with other electrical corporations and evaluations of potential approaches, which must include, at minimum, an explanation and analysis as to the use or rejection of such approaches.
- Provide a description of the progress BVES has made in its plan to implement PSPS risk into its risk models by the end of 2025, including any impact on risk scores, prioritization, and decision making.
- Provide a description of the progress BVES has made in its plan to implement PEDS risk into its risk models by the end of 2025, including any impact on risk prioritization such as decision-making and risk score output.
- Provide documentation for verification and validation of the new risk models. The documentation must include any findings from validation performed and the associated changes made to the risk model as a result of those findings.

³³ BVES, 2026-2028 Base WMP, Page 37.

- Provide analysis and granularity on the top risk contributors and associated risk drivers in addition to “overhead bare wire length” and “conductor failure,” to maximize BVES’s understanding of local risk drivers.
- Update the following tables based on the latest risk model outputs and risk drivers:
 - Table 5-5 Summary of Top-Risk Circuits, Segments, or Spans
 - Table 6-1 List of Prioritized Areas in and Electric Corporations Service Territory Based on Overall Utility Risk
 - Table 6-4 Summary of Risk Reduction for Top-Risk Circuits
- If differences exist among the three tables listed above (e.g., BVES’s risk model output vs. prioritization), BVES must explain why these discrepancies exist, and provide a roadmap for modeling improvements to incorporate any prioritization considerations into risk modeling to better align risk model output with mitigation selection.

Discussed in: Section 5 Risk Methodology and Assessment and Section 6 Wildfire Mitigation Strategy

5.3.2 BVES-26B-02. Further Evaluation of Climate Change Impact on Extreme Scenarios

Summary: Many large electrical corporations and small and multi-jurisdictional utilities (SMJUs), including BVES, are currently evaluating climate change impacts up to 2030, which is only two years past this 2026-2028 Base WMP cycle. This limits the understanding of net benefit over an asset’s lifetime, which exceeds electrical corporations’ current climate change evaluations. The climate change evaluations are also limited in scope and fail to evaluate impacts such as extreme weather event frequency and changes in vegetation species.

Requirements: In its ~~2029-2031~~next Base WMP, BVES must:

- Provide a joint report with the large electrical corporations and SMJUs evaluating the potential climate change impacts on wildfire risk over a fifty-year period to better understand potential risk reduction when implementing mitigations. This must include identification of variables impacted by climate change and how those variables impact wildfire risk modeling. At a minimum, these variables must include:
 - Extreme wind events
 - Extreme drought impacts
 - Vegetation pattern changes
 - Wildfire pyrome identification and boundary changes
- As part of the Risk Model Working Group and as directed by Energy Safety, contribute to discussions and reports on topics such as how the joint study impacted BVES’s risk modeling efforts and how BVES plans to implement any changes and findings discussed regarding climate change.

Discussed in: Section 5.1 Methodology and Section 6.1 Risk Evaluation

5.3.3 BVES-26B-03. Collaboration on Meteorological Scenarios

Summary: Weather scenarios used by the large electrical corporations and SMJUs in the calculation of probability and consequence scores vary significantly. The scenarios vary in the size of the historical record, how fire weather days are determined, and how the data is pruned for simulations.

BVES provided a high-level overview of the various scenarios and weather conditions it used, but definitions for the weather scenarios were vague, and the overview did not discuss how BVES is developing and using distributions that account for extreme weather or wind loads.

Requirements: In its ~~2029-2031~~next Base WMP, BVES must:

- Define the historical period and fire weather days used for developing meteorological scenarios. Describe criteria for selection and justify exclusion of years and days outside of the selected dataset if that data would include historical extreme wind gusts or other extreme conditions.
- Demonstrate how distributions developed with the adopted Monte Carlo simulation method within the consequence risk model account for extreme weather events that are not included within the referenced historical period. For example, demonstrate how SDG&E is matching the distribution of predicted fire size with historical distributions with significant tail risks.
- Collaborate with other electrical corporations via participation in the Risk Modeling Working Group (RMWG) to develop and summarize standardized extreme event scenarios, common calculation methods on the likelihood of occurrence, and a common approach to selecting weather scenarios (wind, moisture, fuels, etc.) to calculate consequences. Once developed, implement the standardized approaches into the WMP, or discuss why other approaches are taken if not using the agreed upon approaches.
- Evaluate and provide an analysis of the sensitivity of the total risk in its service territory, including the risk impact of extreme event scenarios. This sensitivity analysis must also evaluate the impact of mitigations on extreme events.

Discussed in: Section 5.1.3.2 Detailed Model Documentation

5.3.4 BVES-26B-04. Development of Substantive Model Documentation

Summary: Several of the electrical corporations, including BVES, did not provide detailed technical documentation for its models and data sets used for risk analysis, including probability of failure and probability of ignition models, consequence models, weather models, and fuel models.

Appendix B of the BVES 2026-2028 Base WMP provided high-level narratives of the model's purpose, assumptions, or calculation procedures. The narrative in the body of the WMP references Appendix B for additional information, but Appendix B did not provide the expected references and sufficient additional details.

Requirements: In its 2027next WMP Update, BVES must develop documentation on its risk analysis and modeling to capture the following information:

- A detailed description of its risk models, including assumptions or statistical approaches used for the risk models. This must include an explanation for any assumptions and scaling factors used;
- A detailed description of datasets used for modeling probability of ignition, consequence, weather, and fuels; including sources for data and why each dataset was included; and
- Description of the verification and validation approaches of each model, including any available results.

Discussed in: Section 5.1.6.2 Documentation Details

Appendix C provides a consolidated list of areas for continued improvement and requirements.

6. Wildfire Mitigation Strategy Development

Chapter III, Section 6 of the WMP Guidelines requires the electrical corporation to provide a high-level overview of the risk evaluation process that informs its selection of a portfolio of initiative activities, as well as its overall wildfire mitigation strategy.³⁴ The BVES 2026-2028 Base WMP met the requirements of the WMP Guidelines for this section.

6.1 Discussion

This section discusses Energy Safety's evaluation of the wildfire mitigation strategy development section of the BVES 2026-2028 Base WMP.

6.1.1 Risk Evaluation

As discussed in Section 5.1, BVES demonstrated continual improvements by focusing efforts to develop a new risk model and mitigation decision making framework with full implementation for its risk model by the end of 2025.³⁵

However, in Table 6-1, BVES only included an associated risk driver of "conductor failure."³⁶ Typically, an electrical corporation demonstrates an examination of a full suite of potential risk drivers along its system and prioritizes mitigations to minimize risk from those drivers by evaluating trends and the frequency of historical ignitions for each risk driver. However, BVES reported that it does not have any recorded ignitions.³⁷ BVES must supplement its wildfire risk analysis by considering other data, such as outage and wire-down events, as well as data from other electrical corporations.

BVES could investigate other potential risk drivers by evaluating risk events such as outages and wires-down and working with other electrical corporations to determine the likelihood of ignition if an outage occurs. For instance, based on BVES's risk event data, BVES had 21 unplanned outages in 2024 alone.³⁸ Only three listed conductor failure as the cause of the

³⁴ Pub. Util. Code §§ 8386(c)(3), (12)-(14).

³⁵ BVES, 2026-2028 Base WMP, Pages 43, 51.

³⁶ BVES, 2026-2028 Base WMP, Page 75; Table 6-1 List of Prioritized Areas in an Electrical Corporations Service Territory Based on Overall Utility Risk.

³⁷ BVES, 2026-2028 Base WMP, Page 24.

³⁸ BVES, QDR 2024, Table 5 Outages and Wires Down.

outage.³⁹ Six of the outages were due to vegetation contact, showing that vegetation may be a greater risk driver in some areas, yet that is not reflected within Table 6-1.⁴⁰

BVES stated it is working with third-party vendors that also work with other electrical corporations and through the vendors BVES could leverage expertise and additional data from the other electrical corporations to supplement BVES's wildfire risk analysis.⁴¹ BVES must improve the extent to which it is evaluating ignition risk to have a better understanding of potential risks across its system.

See area for continued improvement BVES-26B-01 Ongoing Implementation for Updates to Risk Models in Section 5.3.

6.1.2 Wildfire Mitigation Strategy

In Tables 5-5, 6-1, and 6-4, BVES used different prioritizations due to its risk models still being in development.^{42,43} BVES stated Table 6-4 was only informed by the Fire Safety Circuit Matrix, whereas Tables 5-5 and 6-1 also included consequence and PSPS Risk.⁴⁴ In order to understand risk, these tables need to align in methodology, because the risk scores should be influenced by the same factors and then used to prioritize the associated mitigations.

Given that these components are still undergoing development and verification, Energy Safety acknowledges that Table 6-4 cannot yet align with the prioritized mitigations in Table 5-5 and Table 6-1 and instead only reflects at this time how BVES is currently informing its mitigation prioritization. In its [2027next](#) WMP Update, BVES must update all tables as its risk models develop.

See area for continued improvement BVES-26B-01 Ongoing Implementation for Updates to Risk Models in Section 5.3.

6.2 Previous Areas for Continued Improvement

In the Energy Safety Decision for the BVES 2025 WMP Update, Energy Safety identified areas related to wildfire mitigation strategy development where BVES must continue to improve its wildfire mitigation capabilities. This section summarizes the requirements imposed by those

³⁹ BVES, QDR 2024, Table 5 Outages and Wires Down.

⁴⁰ BVES, QDR 2024, Table 5, Outages and Wires Down.

⁴¹ BVES, 2026-2028 Base WMP, Page 109.

⁴² Table 5-5 Summary of Top-Risk Circuits, Segments, or Spans; Table 6-1 List of Prioritized Areas in and Electric Corporations Service Territory Based on Overall Utility Risk; Table 6-4 Summary of Risk Reduction for Top-Risk Circuits.

⁴³ Response to Data Request 001, Question 14.

⁴⁴ Response to Data Request 001, Question 14.

areas for continued improvement, BVES's response to those requirements, and Energy Safety's evaluation of the response.

6.2.1 BVES-25U-01 (BVES-23-03). Cross-Utility Collaboration on Best Practices for Inclusion of Climate Change Forecasts in Consequence Modeling, Inclusion of Community Vulnerability in Consequence Modeling, and Utility Vegetation Management for Wildfire Safety

For this area for continued improvement, Energy Safety required BVES to continue collaborating with electrical corporations and document any WMP-related collaboration, including how efforts impact BVES's WMP. In addition, BVES was required to participate in Energy Safety-led activities relating to climate change, community vulnerability, and vegetation management, and to report on progress in its 2026-2028 Base WMP.⁴⁵

6.2.1.1 BVES-25U-01: BVES Response Summary

In its 2026-2028 Base WMP, BVES reported that it attended monthly meetings with other electrical corporations focusing on Energy Safety and WMP activities.⁴⁶ This included topics such as inspections, vegetation management, quality control, internal and contract resources, and remote sensing technologies.⁴⁷ BVES noted that it also participated in industry events to share best practices outside of Energy Safety driven activities.⁴⁸ Additionally, BVES stated its intentions to continue participating in Energy Safety-organized activities for climate change, community vulnerability, and vegetation management.⁴⁹

6.2.1.2 BVES-25U-01: Energy Safety Evaluation

BVES indicated that the monthly meetings and industry events informed EPSS, PPS response, customer impact mitigation, communication improvements, operational coordination, and situational awareness.⁵⁰ However, BVES did not provide detailed connections between these meetings and specific lessons learned. As such, BVES must continue to improve in this area for its 2027next WMP Update.

⁴⁵ Decision for BVES 2025 WMP Update, Page 42.

⁴⁶ BVES, 2026-2028 Base WMP, Page D-379.

⁴⁷ BVES, 2026-2028 Base WMP, Page D-379.

⁴⁸ BVES, 2026-2028 Base WMP, Page D-379.

⁴⁹ BVES, 2026-2028 Base WMP, Page D-380.

⁵⁰ Response to Data Request 003, Question 5.

Section 6.3 sets forth the requirements for improvement in BVES-26B-03 Impact of Cross-Utility Collaboration.

6.3 Areas for Continued Improvement for Future WMP Submissions

6.3.1 BVES-26B-035. Impact of Cross-Utility Collaboration

Summary: BVES did not provide a detailed report on lessons-learned and associated impacts to its 2026-2028 Base WMP relating to collaboration with large electrical corporations and SMJUs, as required in BVES-25U-01.⁵¹

Requirements: In its 2027next WMP Update, BVES must:

- Provide a list of specific lessons learned from collaboration with other large electrical corporations and SMJUs. This list must include:
 - A description of the lesson learned
 - The associated impact to BVES's wildfire mitigation activities as a result of the lesson learned
 - The numbers for the WMP sections impacted by the lesson learned
 - The electrical corporations that contributed to the finding
 - The date of any associated meetings relating to the lesson learned

Discussed in: Section 6.2.1.2 Risk Impact of Initiative Activities

Appendix C provides a consolidated list of areas for continued improvement and requirements.

⁵¹ BVES, 2026-2028 Base WMP, Pages D-379-38.

7. Public Safety Power Shutoffs

Chapter III, Section 7 of the WMP Guidelines requires the electrical corporation to provide an overview narrative of planned initiative actions to reduce the impacts of Public Safety Power Shutoff (PSPS) events.⁵² The BVES 2026-2028 Base WMP met the requirements of the WMP Guidelines for this section.

7.1 Discussion

This section discusses Energy Safety's evaluation of the PSPS section of the BVES 2026-2028 Base WMP.

BVES highlighted that the greatest risk of PSPS to its service territory is the deenergization of Southern California Edison's (SCE's) transmission lines that feed BVES's service territory.⁵³ To minimize the impacts from a deenergization, BVES stated it is pursuing mitigation activities for solar energy and storage projects.⁵⁴ These mitigation activities are discussed further in Section 8 of this Decision.

As of the time of its 2026-2028 Base WMP submission, BVES had never initiated a PSPS. In its WMP, BVES notes several mitigation activities throughout other sections of its WMP intended to reduce the need for and impact of a PSPS event.^{55, 56} Specifically, BVES stated it plans to employ a Switch and Field Automation program that connects transmission and distribution switches to its Supervisory Control and Data Acquisition (SCADA) network.⁵⁷ In conjunction with its advanced weather monitoring, this program may provide shorter deenergization periods and faster power restoration.⁵⁸ Additionally, BVES listed lessons learned from other electrical corporations that influenced its PSPS thresholds for both wildfire and PSPS risk reduction.⁵⁹

⁵² Pub. Util. Code, § 8386(c)(8).

⁵³ BVES, 2026-2028 Base WMP, Page 102.

⁵⁴ BVES, 2026-2028 Base WMP, Page 102.

⁵⁵ At the time of this publication.

⁵⁶ BVES, 2026-2028 Base WMP, Pages 108-110.

⁵⁷ BVES, 2026-2028 Base WMP, Page 108.

⁵⁸ BVES, 2026-2028 Base WMP, Page 109.

⁵⁹ BVES, 2026-2028 Base WMP, Page 110.

8. Grid Design, Operations, and Maintenance

Chapter III, Section 8 of the WMP Guidelines requires the electrical corporation to include plans for grid design, operations, and maintenance programmatic areas in its WMP.⁶⁰ The BVES 2026-2028 Base WMP met the requirements of the WMP Guidelines for this section.

8.1 Summary of Anticipated Risk Reduction

BVES planned grid design and operations mitigation activities for 2026–2028 are expected to reduce wildfire and PSPS risk through a combination of covered conductor installation, pole hardening, system automation, and microgrid development. These mitigation activities are particularly important given BVES’s remote, mountainous service territory, where the entire system lies within the HFTD.

The Covered Conductor Replacement Project BVES described in its WMP aims to replace 28 circuit miles of bare wire with covered conductor by 2028, which will reduce the ignition risk from conductor-to-conductor contact.⁶¹ The replacement of bare wire with covered conductor may allow BVES to increase wind tolerance thresholds and improve system reliability in adverse weather conditions. Importantly, these installations are coordinated with system automation equipment—such as SCADA-enabled switches and TripSaver devices—that can sectionalize faults and isolate segments without triggering extended outages.

Pole replacements and reinforcements, including the Evacuation Route Hardening Project, will add further resilience by installing fire-resistant pole wraps and repairing or replacing deteriorated infrastructure.⁶² This mitigation activity is necessary to reduce additional risk by making the poles supporting the covered conductor installations more resilient.

System automation initiatives, including 30 new SCADA-enabled switches, six upgraded capacitor banks, and 30 TripSaver reclosers, are expected to reduce risk by enabling rapid fault detection and system reconfiguration in real time.⁶³

⁶⁰ Pub. Util. Code §§ 8386(c)(3), (6), (10), (14)-(15).

⁶¹ BVES, 2026-2028 Base WMP, Page 118.

⁶² BVES, 2026-2028 Base WMP, Pages 122, 124.

⁶³ BVES, 2026-2028 Base WMP, Pages 130, 132-133.

BVES's microgrid initiatives—the Bear Valley Solar Energy Project and the Bear Valley Energy Storage Project—aim to reduce PSPS impacts.⁶⁴ These projects will enable islanding of critical infrastructure during SCE supply interruptions, improving reliability and maintaining essential services during extreme events.

Covered conductor and pole hardening reduce the probability of ignitions. Automation and sectionalization reduce the extent of faults and PSPS events. Microgrids reduce customer impacts and system vulnerability as supply demand increases. In combination, these mitigation activities form a layered mitigation approach tailored to BVES's compact, high-risk service area.

8.2 Discussion

This section discusses Energy Safety's evaluation of the grid design, operations, and maintenance section of the BVES 2026-2028 Base WMP.

8.2.1 Grid Design and System Hardening

8.2.1.1 Covered conductor installation

BVES listed covered conductor installation as its primary grid hardening strategy.⁶⁵ BVES explained its reliance on covered conductor due to construction feasibility, rocky terrain, lower costs, simpler permitting, and shorter timeframes compared to undergrounding.⁶⁶ Given its compact service territory, as well as the geography and topography challenges to undergrounding, the selected use of covered conductor as a mitigation is reasonable. By 2028, Energy Safety calculated that BVES would achieve about 47 percent hardening. At this rate, full hardening could take decades to achieve. Therefore, BVES should consider accelerating its covered conductor installation given it is the focus of its grid hardening efforts.

8.2.1.2 Emerging grid hardening technology installations and pilots

BVES did not indicate planned evaluations or pilots for technologies already deployed by other electrical corporations, which may limit innovation and cross-utility knowledge sharing. Given that BVES's primary mitigation strategy within its service territory is covered conductor, the implementation of emerging technologies with the tools to alert the electrical corporations to grid hazards and faults may complement this strategy.

⁶⁴ BVES, 2026-2028 Base WMP, Page 128.

⁶⁵ BVES, 2026-2028 Base WMP, Page 112.

⁶⁶ BVES, 2026-2028 Base WMP, Page D-382.

See area for continued improvement BVES-26B-06 Protection Device Setting Enhancements to Support Performance in Section 8.4.

8.2.1.3 Microgrids

BVES stated it is pursuing two major microgrid projects: the Bear Valley Solar Energy Project and the Bear Valley Energy Storage Project.⁶⁷ BVES stated it expects these projects will reduce PSPS risk by enabling BVES to sectionalize critical infrastructure during SCE supply interruptions.⁶⁸ These projects should reduce BVES's dependency on SCE by reducing the impact when SCE initiates a PSPS event impacting the transmission lines that feed BVES's system.⁶⁹

BVES lacked detailed contingency planning or deployment triggers for transitioning to sectionalized operation and ensuring grid stability. Energy Safety expects BVES to continue evolving its planning surrounding these projects even after they are operational to ensure grid stability.

See area for continued improvement BVES-26B-04 Microgrid Operational Planning and Stability Protocols in Section 8.4.

8.2.1.4 Installation of system automation equipment

BVES provided details on three mitigation activities for system automation intended to enhance situational awareness and grid responsiveness: SCADA, capacitor bank upgrades, and TripSaver automation.⁷⁰

BVES made improvements in SCADA, capacitor banks, and TripSaver since the 2023-2025 Base WMP cycle.⁷¹ Energy Safety expects BVES to continue its advancements in cross system communication and operational policy development.

See area for continued improvement BVES-26B-05 Enhanced Powerline Safety Settings Policy, Planning, and Implementation in Section 8.4.

⁶⁷ BVES, 2026-2028 Base WMP, Page 127.

⁶⁸ BVES, 2026-2028 Base WMP, Pages 128-129.

⁶⁹ BVES, 2026-2028 Base WMP, Page 259.

⁷⁰ BVES, 2026-2028 Base WMP, Pages 128-130.

⁷¹ BVES, 2023-2026 Base WMP, Page 131.

8.2.2 Asset Inspections

8.2.2.1 Distributed Detailed Inspections

BVES stated that during the 2026-2028 base WMP cycle it will inspect bare conductors every three years and covered conductors every five years.⁷² These targets exceed the GO 165 minimum requirements for bare conductors but not for covered conductors.

BVES stated that from 2021 to 2023 it did not track pole data during detailed inspections for inspections that resulted in no findings; as such, BVES estimated the number of inspections performed to calculate the find rate provided in Table 8-2 of its 2026-2028 Base WMP.⁷³ Not tracking pole data for detailed inspections means BVES was not tracking the total number of inspections performed, which may result in an inaccurate find rate. BVES stated that as of January 1, 2025, it records pole data for all detailed distribution inspections.⁷⁴

8.2.2.2 UAV Photography and Thermography

BVES stated it will complete aerial photography and infrared inspections of its entire overhead system annually.⁷⁵ This mitigation activity target exceeds GO 165 minimum requirements and will likely reduce additional risk by identifying conditions for repair that are undetectable through other inspection types.

8.2.2.3 Third-Party Ground Patrol

BVES stated it plans to hire a contractor to perform a patrol inspection of its entire overhead system annually.⁷⁶ Given BVES's internal personnel perform a separate annual patrol inspection, this annual target exceeds GO 165 minimum requirements and likely reduces additional risk by identifying conditions that developed after or were missed by the standard patrol inspection.⁷⁷

8.2.3 Equipment Maintenance and Repair

BVES identified capacitor banks and reclosers as having the highest failure rates of all equipment discussed in its WMP.⁷⁸

⁷² BVES, 2026-2028 Base WMP, Page 142.

⁷³ Response to Data Request 006, Question 5.

⁷⁴ Response to Data Request 007, Question 1.

⁷⁵ BVES, 2026-2028 Base WMP, Page 144.

⁷⁶ BVES, 2026-2028 Base WMP, Page 146.

⁷⁷ BVES, 2026-2028 Base WMP, Page 143.

⁷⁸ BVES, 2026-2028 Base WMP, Pages 149, 154.

BVES stated in its 2026-2028 Base WMP that it plans to replace all manually operated fixed capacitor banks and all remaining oil-filled reclosers (which are the only type of reclosers that have failed in the past three years) by the end of 2026.⁷⁹ In a response to a data request, BVES clarified that it will replace the four oil reclosers by the end 2025.⁸⁰ However, BVES did not provide the same parallel targets for recloser replacement in its 2023-2025 or 2026-2028 Base WMP.

Given that oil-filled reclosers account for all BVES recloser failures in the past three years, and BVES did not include recloser replacement targets in the contemporaneous WMP, Energy Safety expects BVES to provide information as to its status on recloser replacement in its 2027next WMP Update.

See area for continued improvement BVES-26B-06 Oil-Filled Recloser Replacement in Section 8.4.

8.2.4 Quality Assurance and Quality Control

BVES provided its plans to perform Quality Assurance/Quality Control (QA/QC) on covered conductor installations, tree attachment removals, grid design work, and all of its inspection programs.⁸¹ Additionally, BVES stated that starting in 2026, five percent of detailed patrol inspections will be reviewed by a qualified inspector who will be different from the original inspector that performed the work.⁸² These mitigation activities demonstrate forward progress in its QA/QC program for asset inspections.

BVES provided a QA/QC pass rate target of 90 percent for all its audited activities, for each year of its 2026-2028 WMP.⁸³ Given the addition of the inspection audit and early stage of its QA/QC process, BVES must review the actual pass rates, re-evaluate targets, and develop a plan to address activities with lower find rates after its first year implementing the new system.

Based on the time needed for such a re-evaluation and the need to adjust the program within the WMP three-year cycle, Energy Safety expects BVES to demonstrate in its 2028 next Base WMP Update that it is considering these changes.

See area for continued improvement BVES-26B-07 QA/QC Documentation and BVES-26B-08 QA/QC Target Evaluation in Section 8.4.

⁷⁹ BVES, 2026-2028 Base WMP, Pages 149, 154.

⁸⁰ Response to Data Request 003, Question 2.

⁸¹ BVES, 2026-2028 Base WMP, Page 158.

⁸² BVES, 2026-2028 Base WMP, Page 160.

⁸³ BVES, 2026-2028 Base WMP, Page 158.

8.2.5 Work Orders

BVES reported no overdue work orders at the time of its WMP submission.⁸⁴ By timely correcting risky conditions identified on its system, BVES minimizes wildfire risk from delayed or deferred maintenance.

8.3 Previous Areas for Continued Improvement

In the Energy Safety Decision for the BVES 2025 WMP Update, Energy Safety identified areas related to grid design, operations, and maintenance where BVES must continue to improve its wildfire mitigation capabilities. This section summarizes the requirements imposed by those areas for continued improvement, BVES's response to those requirements, and Energy Safety's evaluation of the response.

8.3.1 BVES-23B-07. Risk Informed Prioritization of Grid Hardening Installation

For this area for continued improvement, Energy Safety required BVES to explain how it focused covered conductor and other grid hardening projects in the areas of highest risk based on the most recent and available third-party provided Wildfire Risk Reduction Model (WRRM) output in its 2026-2028 Base WMP.⁸⁵

8.3.1.1 BVES-23B-07: BVES Response Summary

In its 2026-2028 Base WMP, BVES reported that it is using the FireSight model (formerly referred to as WRRM) to prioritize its grid hardening initiatives.⁸⁶ FireSight incorporates ignition risk and has a correlation with PSPS risk reduction. Based on this model, BVES developed a grid hardening plan that targets all areas identified as highest risk—defined as those in the 98th percentile for acres burned—by the end of 2028.⁸⁷

BVES also stated it adjusted its grid hardening targets based on several factors, including terrain, proximity to first responders, and circuit length.⁸⁸ Furthermore, BVES considered PSPS vulnerability and exposure, which was incorporated into its prioritization process.⁸⁹

⁸⁴ BVES, 2026-2028 Base WMP, Page 164.

⁸⁵ Decision for BVES 2023-2025 Base WMP Update, Pages 42-43.

⁸⁶ BVES, 2026-2028 Base WMP, Page D-381.

⁸⁷ BVES, 2026-2028 Base WMP, Page D-381.

⁸⁸ BVES, 2026-2028 Base WMP, Page D-381.

⁸⁹ BVES, 2026-2028 Base WMP, Page D-381.

8.3.1.2 **BVES-23B-07: Energy Safety Evaluation**

BVES demonstrated that grid hardening activities are prioritized using the FireSight model and confirmed covered conductor work is directed at the highest-risk areas based on the most recent model outputs. Additionally, BVES provided a grid hardening plan for the 2026-2028 WMP cycle. The explanation provided aligns with Energy Safety's expectations for risk-informed prioritization. As such, BVES sufficiently responded to this area for continued improvement. No further reporting is required for this area for continued improvement.

8.3.2 **BVES-23B-08. Covered Conductor Mitigation Selection**

For this area for continued improvement, Energy Safety required BVES to demonstrate the analysis for comparing alternative initiatives, mitigations, and combinations of mitigations to covered conductor in its 2026-2028 Base WMP.⁹⁰

8.3.2.1 **BVES-23B-08: Response Summary**

BVES stated that it uses the FireSight model to prioritize grid hardening initiatives, with a focus on both ignition risk and PSPS risk reduction.⁹¹ BVES considered two primary grid hardening options in high fire threat areas: installing covered conductors or undergrounding overhead facilities.⁹² BVES concluded that covered conductor is a more feasible and effective solution due to the challenging terrain in its service area, which includes rocky soils and dense root systems that complicate undergrounding efforts.⁹³ Covered conductor installation also requires less planning, design, and permitting, enabling faster deployment and risk reduction.⁹⁴ Additionally, undergrounding is significantly more expensive—estimated at five to ten times the cost of overhead construction—and requires permitting from multiple agencies, while covered conductor projects generally remain within the existing footprint and face fewer regulatory hurdles.⁹⁵

BVES emphasized that while undergrounding provides the highest risk reduction, covered conductor substantially reduces both ignition and PSPS risk at a much lower cost.⁹⁶ BVES noted that PSPS thresholds for circuits with covered conductors have not been reached in its service area over the past ten years and that there have been no recorded ignitions or

⁹⁰ Decision for BVES 2023-2025 Base WMP Update, Page 43.

⁹¹ BVES, 2026-2028 Base WMP, Page D-382.

⁹² BVES, 2026-2028 Base WMP, Page D-381.

⁹³ BVES, 2026-2028 Base WMP, Page D-382.

⁹⁴ BVES, 2026-2028 Base WMP, Page D-382.

⁹⁵ BVES, 2026-2028 Base WMP, Page D-382.

⁹⁶ BVES, 2026-2028 Base WMP, Page D-383.

outages caused by covered conductor failures.⁹⁷ For these reasons, BVES considers covered conductors to be a reasonable mitigation strategy for its system.

8.3.2.2 BVES-23B-08: Energy Safety Evaluation

BVES provided a qualitative justification for its choice of installing covered conductor.⁹⁸ Based on the historical ignition data provided by BVES for its service territory, BVES demonstrated that the additional challenges associated with the implementation of undergrounding may not result in significant risk reduction when compared to covered conductor installation.⁹⁹ As such, BVES sufficiently responded to this area for continued improvement. No further reporting is required for this area for continued improvement.

8.3.3 BVES-25U-02. Covered Conductor Inspections and Maintenance

For this area for continued improvement, Energy Safety required BVES to provide a timeline to include surface damage and water intrusion checks in its detailed inspection processes, and a timeline for developing a strategy to address water intrusion its 2026-2028 Base WMP.¹⁰⁰

8.3.3.1 BVES-25U-02: Response Summary

BVES stated that it provided inspectors instructions to look for discoloration, bubbling, change in sag, cover separation, and abrasions. BVES stated that it will revise its written procedures by the end of June 2025 to address these issues.¹⁰¹ Additionally, BVES stated the covered conductor it currently installs includes water blockers to prevent water intrusion.¹⁰²

8.3.3.2 BVES-25U-02: Energy Safety Evaluation

BVES sufficiently responded to this area for continued improvement. No further reporting is required for this area for continued improvement.

8.3.4 BVES-25U-03. Asset Inspection QA/QC Program

For this area for continued improvement, Energy Safety required BVES to update its written QA/QC procedures for each type of asset inspection. The written process was required to

⁹⁷ BVES, 2026-2028 Base WMP, Page D-383.

⁹⁸ BVES, 2026-2028 Base WMP, Page D-383.

⁹⁹ BVES, 2026-2028 Base WMP, Page D-383.

¹⁰⁰ Decision for BVES 2025 WMP Update, Page 42.

¹⁰¹ BVES, 2026-2028 Base WMP, Page D-384.

¹⁰² BVES, 2026-2028 Base WMP, Page D-385.

include audits, specify a statistically relevant sample size, require audits to be performed by someone other than the original inspector, and track audit pass rates its 2026-2028 Base WMP.¹⁰³

8.3.4.1 BVES-25U-03: Response Summary

BVES stated it is in the process of updating its written QA/QC procedures and will issue the revised documents by the end of June 2025.¹⁰⁴

8.3.4.2 BVES-25U-03: Energy Safety Evaluation

BVES did not meet the required progress but committed to meeting it by the end of June 2025. As such, BVES must continue to improve in this area for its ~~2029-2031~~^{next} Base WMP. Section 8.4 sets forth the requirements for improvement in BVES-26B-07 QA/QC Documentation.

8.3.5 BVES-25U-04. Reliability Impacts of Fast Trip Settings

For this area for continued improvement, Energy Safety required BVES to provide details from a consultant-led study evaluating its device settings policy and a timeline for incorporating the recommendations in its 2026-2028 Base WMP.¹⁰⁵

8.3.5.1 BVES-25U-04: Response Summary

BVES reported that it engaged a power distribution consultant in 2024 to evaluate its device settings policy and recommend improvements to reduce ignition risk.¹⁰⁶ The study, completed in January 2025, assessed ten circuits and identified gaps in protection coverage and clearing times.¹⁰⁷ The consultant recommended implementing an EPSS philosophy that prioritizes fast tripping, as well as phase and ground sensitivity and thresholds.¹⁰⁸ Specific recommendations included enabling ground overcurrent protection on all 4.16 kV circuits, standardizing fast curves to the time current curve 101 profile, disabling reclose attempts, replacing oil reclosers with electronic units for flexibility, and installing additional downline reclosers where needed to meet both protection and load security margins.¹⁰⁹

¹⁰³ Decision for BVES 2025 WMP Update, Pages 43-44.

¹⁰⁴ BVES, 2026-2028 Base WMP, Page D-386.

¹⁰⁵ Decision for BVES 2025 WMP Update, Page 44.

¹⁰⁶ BVES, 2026-2028 Base WMP, Page D-388.

¹⁰⁷ BVES, 2026-2028 Base WMP, Page D-388.

¹⁰⁸ BVES, 2026-2028 Base WMP, Pages D-388-389.

¹⁰⁹ BVES, 2026-2028 Base WMP, Page D-389.

BVES stated it intends to adopt all recommendations from the consultant's study.¹¹⁰ BVES outlined a timeline for EPSS implementation.¹¹¹ BVES plans to finalize its EPSS operational policy by the end of the second quarter 2025 and complete a circuit-by-circuit implementation plan by the end of third quarter 2025. Full implementation will begin in fourth quarter 2025, with completion targeted for the end of 2027.

8.3.5.2 BVES-25U-04: Energy Safety Evaluation

BVES submitted the consultant's study and recommendations, provided an implementation timeline, and offered justification for any recommendations that may be modified or deferred based on operational constraints.¹¹² While execution is ongoing, BVES demonstrated an understanding of the reliability implications of fast trip settings. As such, BVES sufficiently responded to this area for continued improvement. No further reporting is required for this area for continued improvement.

8.4 Areas for Continued Improvement for Future WMP Submissions

As discussed above, Energy Safety has identified areas pertaining to grid design, operations, and maintenance where the electrical corporation must demonstrate improvement in a future, specified WMP submission. This section sets forth the requirements for improvement.

8.4.1 BVES-26B-046. Microgrid Operational Planning and Stability Protocols

Summary: BVES outlined the development of two major microgrid projects: the Bear Valley Solar Energy Project and the Bear Valley Energy Storage Project.¹¹³ BVES must have specific details regarding operational transition triggers, stability considerations, and planning for sectionalized grid operations for safe and successful implementation of these two projects.

Requirements: In its ~~2029-2031~~next Base WMP, BVES must address the following:

- Microgrid Operational Protocols: Clearly define the operational triggers and thresholds for transitioning to sectionalized operation during PSPS events or other emergencies

¹¹⁰ BVES, 2026-2028 Base WMP, Page D-390.

¹¹¹ BVES, 2026-2028 Base WMP, Pages D-389-390.

¹¹² BVES, 2026-2028 Base WMP, Pages D-389-390.

¹¹³ BVES, 2026-2028 Base WMP, Pages 127-128.

- Grid Stability and Load Management Strategy:
 - Provide detailed planning on how grid stability, frequency regulation, and voltage control will be ensured during sectionalized operations
 - Provide anticipated demand and generation balancing scenarios
 - Explain how BVES intends to maintain operational safety and reliability in the anticipated demand and generation balancing scenarios
- Contingency Scenarios and Restoration Planning:
 - Outline contingency scenarios for partial failure of microgrid components (e.g., battery unavailability, inverter faults)
 - Provide a restoration plan to return from sectionalized mode to normal grid operation once SCE's power supply is restored
- Performance Monitoring Plan: Describe how BVES will monitor the performance of microgrid operation and respond to any operational anomalies

Discussed in: Section 8.2.1.7 Microgrids

8.4.2 BVES-26B-057. Enhanced Powerline Safety Settings Policy, Planning, and Implementation

Summary: BVES currently lacks a formal operational policy and circuit-specific implementation plan for EPSS. Although BVES stated that it implemented EPSS and achieved an associated 8.51 percent wildfire risk reduction, it did not provide evidence of a utility-wide policy, consistent application criteria, or systematic planning for circuit-by-circuit implementation.¹¹⁴ There was no discussion of how circuit prioritization is conducted based on risk, nor how gaps in equipment, connectivity, or control systems are identified and addressed. BVES also does not describe how EPSS operational decisions (e.g., enabling settings based on Fire Potential Index) are made or standardized.

Requirements: In its [2027next](#) WMP Update, BVES must:

- Demonstrate how it developed an EPSS Operational Policy, including:
 - Determination of which circuits should be capable of EPSS
 - Standardized decision criteria for invoking EPSS (i.e., when Fire Potential Index is high)
 - Operational guidance for implementing EPSS, including communication protocols and device-level connectivity expectations
- Demonstrate how it developed a Circuit-by-Circuit EPSS Implementation Plan, including:

¹¹⁴ BVES, 2026-2028 Base WMP, Page 114.

- Identification of circuit-level equipment, software, hardware, and connectivity gaps that inhibit EPSS deployment
 - A risk-based prioritization framework to close identified gaps
 - Recommended EPSS protection settings for each circuit

Discussed in: Section 8.2.1.8 Installation of System Automation Equipment

8.4.3 BVES-26B-068. Oil-Filled Recloser Replacement

Summary: BVES stated that three of its twenty-four reclosers failed over the past three years.¹¹⁵ All of the failed reclosers were oil-filled, which BVES has been systematically replacing.¹¹⁶ BVES stated there are four remaining oil-filled reclosers on its system and it plans to replace all of these reclosers by the end of 2025.¹¹⁷ However, BVES set no recloser replacement targets in its 2023-2025 or 2026-2028 Base WMPs.

Requirements: In its 2027next WMP Update, BVES must provide documentation demonstrating that all oil-filled reclosers on its system have been replaced. If any oil-filled reclosers have not yet been replaced, BVES must provide a plan and projected timeline for replacement.

Discussed in: Section 8.2.3 Equipment Maintenance and Repair

8.4.4 BVES-26B-079. QA/QC Documentation

Summary: BVES-25U-03 required BVES to update its written asset inspection QA/QC procedures.¹¹⁸ In response to BVES-25U-03, BVES stated that it plans to issue updated QA/QC documentation by the end of June 2025.¹¹⁹

Requirements: In its 2027next WMP Update, BVES must submit its updated asset inspection QA/QC documentation as attachments.

Discussed in: 8.2.4 Quality Assurance and Quality Control

8.4.5 BVES-26B-0810. QA/QC Target Evaluation

Summary: BVES stated that it plans to implement significant changes to its QA/QC process in 2026, including field auditing five percent of detailed and patrol inspections.¹²⁰ BVES set pass

¹¹⁵ BVES 2026-2028 Base WMP, Page 154.

¹¹⁶ BVES 2026-2028 Base WMP, Page 154.

¹¹⁷ Response to Data Request 003 Question 02.

¹¹⁸ Decision for BVES 2025 WMP Update, Pages 43-44.

¹¹⁹ BVES 2026-2028 Base WMP, Page D-386-387.

¹²⁰ BVES, 2026-2028 Base WMP, Page D-386.

rate targets of 90 percent for all its QA/QC programs for each year of its 2026-2028 WMP. Given the significant changes, Energy Safety finds that projections of actual pass rates in 2026 are highly uncertain and may not be supported by historic pass rate data.

Requirements: In its 2028 next Base WMP Update, BVES must:

- Provide the actual 2026 and 2027 pass rates of each audited activity listed in Table 8-4
- Provide the actual 2026 and 2027 pass rates of its detailed and patrol inspection field audits
- For each audited activity with an actual pass rate below 95 percent in 2026, provide an analysis of the most common findings and BVES's plan to reduce the number of findings
- Provide a plan and implementation timeline that adjusts its next Base WMP2028 pass rate targets to reflect BVES's current maturity as demonstrated by the actual pass rates in 2026 and 2027 and to drive quality improvements in the audited activities

Discussed in: 8.2.4 Quality Assurance and Quality Control

Appendix C provides a consolidated list of areas for continued improvement and requirements.

9. Vegetation Management and Inspections

Chapter III, Section 9 of the WMP Guidelines requires the electrical corporation to include plans for vegetation management in its WMP.¹²¹ The BVES 2026-2028 Base WMP met the requirements of the WMP Guidelines for this section.

9.1 Summary of Anticipated Risk Reduction

BVES's planned vegetation management activities may reduce ignition risk from vegetation contact and potentially slow propagation of wildfire.

BVES provided targets for several annual inspection activities for all overhead conductors in its service territory: two patrol inspections, one UAV-based photography inspection, one satellite inspection, and one LiDAR¹²² inspection.¹²³ BVES also provided targets for detailed inspections that cover the entire service territory on a five-year cycle.¹²⁴ BVES's inspection redundancy, use of multiple techniques, and thorough coverage of its territory are likely to identify vegetation-related hazards and reduce the likelihood of ignition from contact with vegetation.

Additionally, the clearance distances stated in BVES's WMP meet or exceed regulatory requirements¹²⁵ and are likely effective in remediating grow-in hazards. BVES further reported that it plans for 100 percent of wood and slash created by vegetation management work to be hauled away from the work location and for the removal work to be field inspected by BVES's arborist.¹²⁶ These mitigation activities are likely to reduce the risk of ignition and may potentially slow the propagation of a wildfire.

BVES further stated it plans to perform annual routine defensible space activities around substations at the end of the second quarter each year and will check for the need to retreat vegetation during a monthly inspection.¹²⁷ Monthly inspections and timely remediation of issues are likely to reduce the probability of ignition near substations.

¹²¹ Pub. Util. Code §§ 8386(c)(3), (9).

¹²² LiDAR = Light Detection and Ranging.

¹²³ BVES, 2026-2028 Base WMP, Page 183.

¹²⁴ BVES, 2026-2028 Base WMP, Page 183.

¹²⁵ BVES, 2026-2028 Base WMP, Pages 181, 204.

¹²⁶ BVES, 2026-2028 Base WMP, Pages 209, 376.

¹²⁷ BVES, 2026-2028 Base WMP, Page 210.

9.2 Discussion

This section discusses Energy Safety's evaluation of the vegetation management and inspections section of the BVES 2026-2028 Base WMP.

9.2.1 Satellite Imaging Inspection Program

According to one study of the satellite technology that BVES uses, the technology can accurately identify issues related to side vegetation growth and is 62 percent accurate with regard to undergrowth.¹²⁸ The study also points out that data collected from satellites can be used to monitor vegetation health characteristics.¹²⁹ BVES claimed that satellite inspection results provide a criticality score, hazard tree risk, and grow-in risk for each circuit segment.¹³⁰

BVES stated it collects satellite data once per year.¹³¹ To better maximize the benefits presented in the study and to align with BVES's stated plan, BVES should consider collecting data multiple times per year to identify changes to encroachment distances and tree health that may warrant immediate remediation.¹³² Currently, with only one data collection opportunity per year, BVES's satellite imaging inspection program may not be an efficient use of resources and would benefit from additional forward-looking planning.

9.2.2 Pruning and Removal

BVES stated it is evaluating its current pre-inspection process to potentially support a change from a three-year pruning cycle to a two-year pruning cycle.¹³³ The pre-inspection documents hazard trees and clearance encroachments on circuits scheduled for pruning.¹³⁴ BVES's pursuit of achieving shorter pruning cycles demonstrates forward-looking growth and resource-use efficiency as shorter pruning cycles may increase the effectiveness and efficiency of BVES's vegetation management mitigation initiative.

¹²⁸ Remote Sensing Technology, Page 43.

¹²⁹ Remote Sensing Technology, Page 42.

¹³⁰ BVES, 2026-2028 Base WMP, Page D-393.

¹³¹ BVES, 2026-2028 Base WMP, Page 202.

¹³² BVES, 2026-2028 Base WMP, Page 295.

¹³³ BVES, 2026-2028 Base WMP, Page 203.

¹³⁴ BVES, 2026-2028 Base WMP, Page 203.

9.2.3 Pole Clearing

BVES's 2026-2028 Base WMP did not include a target for pole clearing performed in compliance with Public Resources Code (PRC) section 4292.¹³⁵ BVES asserted that it proactively inspects and replaces all non-exempt equipment and nearly all of its poles are now exempt due to removal of explosive fuses; however, BVES's inspection checklists do not list non-exempt equipment for its detailed or patrol inspections.¹³⁶ It is unclear how BVES inspectors are able to consistently identify non-exempt equipment during these inspections. BVES cannot ensure that all poles in the State Responsibility Areas (SRA) of its service territory meet PRC § 4292 requirements if BVES does not know which poles have non-exempt equipment.¹³⁷ As such, BVES does not demonstrate that it either complies with or is exempt from the requirements of PRC § 4292. This demonstrates a lack of technical and programmatic feasibility as well as effectiveness and may result in greater ignition risk at the base of poles that hold non-exempt equipment.

BVES must take steps to improve its recordkeeping of PRC § 4292 non-exempt equipment and ensure compliance.

See area for continued improvement BVES-26B-09 Pole Clearing Program and Target for Compliance with Public Resource Code section in Section 9.4.

9.2.4 Integrated Vegetation Management

Integrated vegetation management (IVM) activities may reduce the rate and extent of wildfire spread, increase pollinator habitat, provide grazing opportunities for foragers, and promote native ecosystems.¹³⁸ BVES stated while it does not have a specific mitigation activity associated with IVM, it intends to integrate IVM into its vegetation management processes.¹³⁹ BVES referenced plans to begin discussions with a non-profit consultant and the United States Forest Service (USFS), as well as partnering with Southern California mountain community groups to remove non-native, fast-growing plant species.¹⁴⁰

Separately, BVES stated it established a right tree, right place (RTRP) program.¹⁴¹ However, when compared to other electrical corporations' RTRP programs, BVES's program lacks

¹³⁵ WMP Guidelines, Page 104.

¹³⁶ Pub. Res. Code § 4292.

¹³⁷ BVES, 2026-2028 Base WMP, Page 206.

¹³⁸ United States Environmental Protection Agency IVM Fact Sheet, Page 1.

¹³⁹ BVES, 2026-2028 Base WMP, Page 210.

¹⁴⁰ Response to Data Request 001, Question 2.

¹⁴¹ Response to Data Request 001, Question 2.

maturity.¹⁴² For example, BVES did not include customer-facing pamphlets or guides with recommendations for powerline compatible tree species. Including customer-facing pamphlets or guides, or other customer-facing documentation may increase customer access to BVES's RTRP program. In its ~~2029-2031~~next Base WMP, BVES must detail how it is maturing its existing RTRP program.

See area for continued improvement BVES-26B-10 Maturing Integrated Vegetation Management Activities in Section 9.4.

9.2.5 Activities Based on Weather Conditions

BVES provided examples of activity adjustments based on weather conditions such as increasing operational patrols, restricting the use of spark-producing tools, making 120 gallons of water and 200 feet of hose available at job sites, and assigning a fire watch at work locations.¹⁴³ Of note, BVES stated it began using FPI in January 2024 to inform activity modifications "during fire threat weather."¹⁴⁴ BVES's operational adjustments in response to red flag warning, fire weather watch forecasts, and FPI demonstrate continued progress that may reduce wildfire risk.

9.2.6 Quality Assurance and Quality Control

BVES listed ten vegetation management QA/QC activities. The activities include a desktop and field review of remote sensing findings, and QC of routine clearance and removal work.¹⁴⁵ However, BVES stated it performs QC primarily of the current year's completed clearance and removal work.¹⁴⁶ Clearance and removal work mainly occurs as a result of BVES's three-year, routine pruning cycle, with other sporadic work prescribed by detailed, patrol, LiDAR, and satellite inspections.¹⁴⁷ Approximately one-third of BVES's circuit miles make up the ground-based QC population each year; all other circuit miles inspected, but not worked, are not subject to ground-based QC.

¹⁴² [PG&E's right tree right place program](#); [PG&E's "Trees and Shrubs for Powerline Friendly Landscaping" guide](#). [Liberty's right tree right place program](#); [Liberty's "Small Trees for Small Spaces" species-specific tree planting guide](#); [PacifiCorp's tree pruning and planting program](#); [PacifiCorp's "Small Trees for Small Places" species-specific tree planting guide](#).

¹⁴³ BVES, 2026-2028 Base WMP, Pages 212-213.

¹⁴⁴ BVES, 2026-2028 Base WMP, Pages 212-213.

¹⁴⁵ BVES, 2026-2028 Base WMP, Pages 219-221, D-391; Response to Data Request 001, Question 07; Response to Data Request 004, Question 04; Response to Data Request 002, Question 02.

¹⁴⁶ Response to Data Request 001, Question 07; Response to Data Request 005, Question 04; BVES, 2026-2028 Base WMP, Pages 218-220.

¹⁴⁷ BVES, 2026-2028 Base WMP, Page 186.

BVES stated that it “...does not do additional audits of all circuit miles. With the numerous inspections that cover the entire territory every circuit mile is inspected multiple times per year.”¹⁴⁸ Nevertheless, BVES may benefit from a QC of inspected circuit miles, by affording the opportunity for highly qualified staff or contractors to give feedback on those inspections and find non-compliant issues missed by inspectors or remote sensing technologies.

In 2023, Liberty Utilities introduced a QA check that randomly samples all distribution and transmission circuit miles annually to check for compliance.¹⁴⁹ Random sampling reduces selection bias – in this case, BVES is biasing selection to locations where work was completed – and ensures that all inspections are subject to statistically valid quality oversight. To further reduce risk, BVES should consider adopting an audit that randomly samples all inspected circuit miles.

9.2.7 Vegetation Management Procedures

BVES’s documentation for its vegetation management procedures lacks detail, is not consistent with its WMP, and does not demonstrate formalized procedures. For example, the documentation required by the WMP Guidelines,¹⁵⁰ and provided to Energy Safety via a data request, included a contract proposal, procedures for programs other than vegetation management, and documents that do not match statements made in its WMP.¹⁵¹ Formal procedures are crucial to ensure consistent, compliant, and safe operations. BVES must formalize its vegetation management procedures and ensure continuity with its WMP.

See area for continued improvement BVES-26B-11 Vegetation Management Procedures in Section 9.4.

9.3 Previous Areas for Continued Improvement

In the Energy Safety Decision for the BVES 2025 WMP Update, Energy Safety identified areas related to vegetation management and inspections where BVES must continue to improve its wildfire mitigation capabilities. This section summarizes the requirements imposed by those areas for continued improvement, BVES’s response to those requirements, and Energy Safety’s evaluation of the response.

¹⁴⁸ Response to Data Request 007, Question 02.

¹⁴⁹ Liberty, 2023-2025 Base WMP, Page 244.

¹⁵⁰ WMP Guidelines, Pages 103-116.

¹⁵¹ Response to Data Request 001, Question 05.

9.3.1 BVES-25U-05. Vegetation Management Remote Sensing Evaluation

For this area for continued improvement, Energy Safety required BVES to, in its 2026-2028 Base WMP, list the data outputs from its satellite and LiDAR inspections, describe how BVES will use those data outputs to improve vegetation management-related outcomes over the 2026-2028 WMP cycle, and evaluate and compare the costs, benefits, and effectiveness of various combinations of ground and remote sensing inspections.¹⁵²

9.3.1.1 BVES-25U-05: BVES Response Summary

BVES described how satellite and LiDAR inspection results improve vegetation management-related outcomes. BVES detailed how satellite data is used in prioritizing vegetation management.¹⁵³ BVES further explained that it uses LiDAR data to identify possible vegetation clearance encroachments.¹⁵⁴

BVES determined that LiDAR is the most effective single technique, and that combining ground-based, LiDAR, and satellite-based inspections is the most effective overall strategy.¹⁵⁵

9.3.1.2 BVES-25U-05: BVES Energy Safety Evaluation

BVES's explanation of satellite and LiDAR data outputs provides the detail needed to determine appropriate uses of these outputs. BVES's description of its use of satellite and LiDAR data outputs to inform and improve vegetation management-related outcomes are consistent with the content, detail, and accuracy of the data. BVES's comparison of the costs, benefits, and effectiveness of various patrol techniques demonstrates BVES's process for selecting inspection techniques.

As such, BVES sufficiently responded to this area for continued improvement. No further reporting is required for this area for continued improvement.

¹⁵² Decision for BVES 2025 WMP Update, Page 45.

¹⁵³ BVES, 2026-2028 Base WMP, Page D-392.

¹⁵⁴ BVES, 2026-2028 Base WMP, Page D-393.

¹⁵⁵ BVES, 2026-2028 Base WMP, Page D-393; Response to Data Request-003, Question 04.

9.3.2 BVES-23B-16. Vegetation Management Quality Control Personnel Qualifications

For this area for continued improvement, Energy Safety required BVES to present a plan to improve the qualifications of its vegetation management QC check personnel in its 2026-2028 Base WMP.¹⁵⁶

9.3.2.1 BVES-23B-16: BVES Response Summary

In its 2026-2028 Base WMP, BVES provided plans to improve the qualifications of its vegetation management QC check personnel by holding annual training opportunities for field operations and engineering staff led by the Wildfire Mitigation and Reliability Engineer and Forester.¹⁵⁷ Further, BVES hired and plans to continue using a third-party arborist to perform QC of 100 percent of pruning and removal activities. The third-party arborist QC check is in addition to the 72 annual QC checks by BVES staff.¹⁵⁸

9.3.2.2 BVES-23B-16: Energy Safety Evaluation

BVES's plans for new clearance and vegetation management training for non-vegetation management staff demonstrate continued progress. The training will likely increase the ability of staff performing annual QC checks to identify trees that threaten electrical infrastructure. Adding a third-party arborist QC check of 100 percent of pruning and removal activities also demonstrates continued progress and should allow BVES to identify and correct deficiencies rapidly and identify systemic procedural issues.

As such, BVES sufficiently responded to this area for continued improvement. No further reporting is required for this area for continued improvement.

9.4 Areas for Continued Improvement for Future WMP Submissions

As discussed above, Energy Safety has identified areas pertaining to vegetation management and inspections where the electrical corporation must demonstrate improvement in a future, specified WMP submission. This section sets forth the requirements for improvement.

¹⁵⁶ Decision for BVES 2025 WMP Update, Page 44.

¹⁵⁷ BVES, 2026-2028 Base WMP, Page 227.

¹⁵⁸ BVES, 2026-2028 Base WMP, Pages 218-219; Response to Data Request 001 Question 07.

9.4.1 **BVES-26B-0911. Pole Clearing Program and Target for Compliance with PRC § 4292**

Summary: BVES's 2026-2028 Base WMP did not include a target for pole clearing performed in compliance with Public Resource Code (PRC) section 4292, as required by the WMP Guidelines.¹⁵⁹ BVES does not demonstrate that it has the procedures in place to comply with PRC § 4292 during the 2026-2028 plan cycle or is exempt from the requirements of PRC § 4292.

Requirements: In its ~~2027~~next WMP Update, BVES must:

- Provide documentation that demonstrates BVES will annually comply with the requirements of PRC § 4292. This documentation may include some or all of the following:
 - Procedures for documenting all non-exempt equipment in the SRA including, but not limited to, universal fuses, open link fuses, enclosed cutouts, solid blade disconnects, in-line disconnects, non-porcelain lightning arresters, split bolt connectors, and vise connectors (e.g., in a database)
 - Procedures for inspections that identify non-exempt equipment in the SRA
 - Procedures for creating and maintaining firebreaks around poles with non-exempt equipment in the SRA
 - Procedures for documenting the creation and maintenance of firebreaks around poles with non-exempt equipment in the SRA
 - Procedures that ensure the timely identification and removal of non-exempt equipment in the SRA
 - Documentation that BVES is exempt from the requirements of PRC § 4292
 - Documentation of procedures and systems in place that prevent the installation of new non-exempt equipment in the SRA
- Define quantitative targets for 2027 and 2028 for BVES's pole clearing activities that are performed in compliance with PRC 4292 and meet the requirements of the Energy Safety WMP Guidelines.¹⁶⁰
 - If BVES can demonstrate that it does not have any non-exempt equipment in the SRA, it may define these targets as "Not Applicable."
 - If BVES is unable to define quantitative targets for 2027 and 2028 at the time of its ~~2027~~next WMP Update, BVES must provide a plan with an implementation

¹⁵⁹ WMP Guidelines, Page 104.

¹⁶⁰ WMP Guidelines, Page 104.

timeline for identifying quantitative targets for pole clearing activities that are performed in compliance with PRC § 4292.

Discussed in: Section 9.2.4 Pole Clearing

9.4.2 **BVES-26B-~~10~~12. Maturing Integrated Vegetation Management Activities**

Summary: BVES stated it “does not have any dedicated initiatives under [IVM] but does intend to move to making a dedicated effort toward this activity and to evolve it into an initiative.”¹⁶¹ BVES has a right tree, right place program, but the program is not yet mature. BVES must detail actions it has taken and plans to take to develop and incorporate IVM principles and activities.

Requirements: In its ~~2029-2031~~next Base WMP BVES must provide:

- A description of the actions it has taken and will take on IVM as a result of its collaboration with any third-party organization, the USFS, and Southern California mountain community groups.¹⁶²
- A discussion of how BVES navigated and plans to navigate challenges while developing and implementing its IVM activities.
- A description of the actions it has taken and it will take as a result of working with the City of Big Bear Lake and Big Bear Fire Department to formalize and increase customer access to its right tree, right place program. This description must:
 - Explain how feedback from customers, local governments, and/or environmental groups has guided and will guide program maturation.
 - Discuss how BVES navigated challenges while formalizing and increasing customer access to its right tree, right place program and how BVES will apply any lessons learned from navigating those challenges.
- Provide attachments and/or links to its right tree, right place products (e.g., guides, doorhangers, websites, etc.).

Discussed in: Section 9.2.7 Integrated Vegetation Management

9.4.3 **BVES-26B-~~11~~13. Vegetation Management Procedures**

Summary: In its 2026-2028 Base WMP BVES’s vegetation management procedures are not formalized and are inconsistently documented. The procedures are not all stand-alone

¹⁶¹ BVES, 2026-2028 Base WMP, Page 211.

¹⁶² Response to Data Request 001, Question 02.

documents. Some procedures are in the form of a contract, or do not match what BVES presented in the WMP.

Requirements: In its ~~2029-2031~~^{next} Base WMP BVES must:

- Ensure its vegetation management procedures are formal and consistently documented and that procedural statements in its WMP are incorporated into formal documentation.
- Provide formal documented procedures that include procedural statements from its WMP for the following vegetation management activities:
 - Activities Based on Weather Conditions
 - Post-Fire Service Restoration
 - Pole clearing on the Radford line
 - Quality Assurance and Quality Control

Discussed in: Section 9.2.14 Vegetation Management Procedures

Appendix C provides a consolidated list of areas for continued improvement and requirements.

10. Situational Awareness and Forecasting

Chapter III, Section 10 of the WMP Guidelines requires the electrical corporation to include plans for situational awareness in its WMP.^{163, 164} The BVES 2026-2028 Base WMP met the requirements of the WMP Guidelines for this section.

10.1 Summary of Anticipated Risk Reduction

BVES stated it developed an annual maintenance and calibration plan for its weather stations.¹⁶⁵ The maintenance plan includes a monthly review of weather station data to timely identify issues and then perform out of cycle repairs.¹⁶⁶ This mitigation activity will ensure the confidence of climatological information that informs risk-based decisions across several mitigation initiatives including PSPS and Emergency Preparedness.

10.2 Discussion

This section discusses Energy Safety's evaluation of the situational awareness section of the BVES 2026-2028 Base WMP.

10.2.1 Environmental Monitoring Systems

BVES stated it does not plan to implement new environmental monitoring systems. However, BVES continues to attend industry meetings and events to stay aware of potential advancements; this demonstrates a continuous improvement process and a willingness to adapt and evolve to emerging technologies to reduce wildfire risk.¹⁶⁷

10.2.2 Grid Monitoring Systems

BVES provided details of its current grid monitoring systems, including 162 fault indicators that receive yearly service.¹⁶⁸ Sixty of the 162 are connected to its SCADA system providing

¹⁶³ Pub. Util. Code §§ 8386(c)(2)-(5).

¹⁶⁴ WMP Guidelines, Pages 125-139.

¹⁶⁵ BVES, 2026-2028 Base WMP, Page 229, 245.

¹⁶⁶ BVES, 2026-2028 Base WMP, Page 245.

¹⁶⁷ BVES, 2026-2028 Base WMP, Page 233.

¹⁶⁸ BVES, 2026-2028 Base WMP, Page 233.

BVES with the ability to rapidly isolate the fault in a system, thus creating the potential for quicker response by repair crews to the problem segment.¹⁶⁹

10.2.3 Ignition Detection Systems

BVES asserted that by the end of 2025 it will install 17 high-definition (HD) instant situational insights for Utility (iSIU) cameras with 15 connected to the ALERTCalifornia web-based platform.¹⁷⁰ These cameras provide visibility in remote areas of the service territory that lack regular traffic, which otherwise could allow a fire to spread over a large area before human detection.¹⁷¹ BVES's decision to place the cameras in the more isolated parts of its service territory in order to improve access to real time information demonstrates a commitment to, and understanding of, the importance and impacts of situational awareness.

10.2.4 Weather Forecasting

BVES provided information regarding its contract for weekly bespoke meteorological forecasts, with surge capacity during elevated fire danger and PSPS events, to inform BVES of timely weather changes.¹⁷² Additionally, BVES estimated it can withstand 20 percent (three to four) of its weather stations out of service at any given time.¹⁷³ BVES stated its third-party modeling system and contracted weather consultant have access to weather stations operating within its service territory that are owned by other parties.¹⁷⁴ These redundancies may reduce the impact of any sustained BVES weather station outage.

10.2.5 Fire Potential Index

In addition to the required information regarding FPI in Section 10 of its WMP, BVES also provided an extensive overview of its FPI development and use, in Appendix G.¹⁷⁵ BVES stated its intent to improve the accuracy of FPI as it relates to its third-party risk modeling platform.¹⁷⁶ As the data accuracy increases, the functionality of the risk modeling platform will improve and provide more reliable predictions.

¹⁶⁹ BVES, 2026-2028 Base WMP, Page 235.

¹⁷⁰ BVES, 2026-2028 Base WMP, Page 237-238.

¹⁷¹ BVES, 2026-2028 Base WMP, Page 238.

¹⁷² BVES, 2026-2028 Base WMP, Page 243.

¹⁷³ BVES, 2026-2028 Base WMP, Page 245.

¹⁷⁴ BVES, 2026-2028 Base WMP, Page 245.

¹⁷⁵ BVES, 2026-2028 Base WMP, Page 246, G-397 (1-40).

¹⁷⁶ BVES, 2026-2028 Base WMP, Page 249.

11. Emergency Preparedness, Collaboration, and Community Outreach

Chapter III, Section 11 of the WMP Guidelines requires the electrical corporation to provide an overview of its emergency plan and describe its communication strategy with public safety partners, essential customers, and other stakeholder groups regarding wildfires, outages due to wildfires, and PSPS and service restoration.¹⁷⁷ The BVES 2026-2028 Base WMP met the requirements of the WMP Guidelines for this section.

11.1 Discussion

This section discusses Energy Safety's evaluation of the emergency preparedness, collaboration, and public awareness section of the BVES 2026-2028 Base WMP.

11.1.1 Emergency Preparedness and Recovery Plan

BVES provided a thorough response to the requirements for this section. BVES provided the link for its Annual Report on Compliance with GO 166 from 2024 as well as including its most recently approved Emergency & Disaster Response Plan and Public Safety Power Shutoff Plan in the appendices.¹⁷⁸

11.1.2 External Collaboration and Coordination

BVES stated there are no Tribal lands within its service territory.¹⁷⁹ However, in its PSPS Plan, BVES asserted it would include Tribal agencies in critical facility notifications and emergency coordination efforts should this change.¹⁸⁰

¹⁷⁷ Pub. Util. Code § 8386(c)(7), (11), (16), (19)-(21).

¹⁷⁸ BVES, 2026-2028 Base WMP, Page 254.

¹⁷⁹ BVES, 2026-2028 Base WMP, Page 269.

¹⁸⁰ BVES, 2026-2028 Base WMP, Page G-34.

11.1.3 Public Communication, Outreach, and Education Awareness

BVES acknowledged several gaps and limitations in this area and provided strategies on how to improve communication and outreach.¹⁸¹ Specifically, BVES cited telecommunication concerns due to the remoteness of the area that may cause delays in emergency alerts and connectivity issues causing challenges with outreach engagement.¹⁸² The solutions BVES presented involved expanding satellite-based alerts and employing radio partnerships to broadcast real-time safety messages.¹⁸³

BVES demonstrates a proactive approach and outlines ongoing efforts to improve service and outreach by identifying and proposing solutions to these communication and other challenges it faces in its service territory.¹⁸⁴

¹⁸¹ BVES, 2026-2028 Base WMP, Page 287-289.

¹⁸² BVES, 2026-2028 Base WMP, Pages 288, 289.

¹⁸³ BVES, 2026-2028 Base WMP, Pages 288, 289.

¹⁸⁴ BVES, 2026-2028 Base WMP, Pages 287-289.

12. Enterprise Systems

Chapter III, Section 12 of the WMP Guidelines requires the electrical corporation to provide an overview of inputs to, operation of, and support for various enterprise systems it uses for vegetation management, asset management and inspection, grid monitoring, ignition detection, weather forecasting, and risk assessment initiatives.¹⁸⁵ The BVES 2026-2028 Base WMP met the requirements of the WMP Guidelines for this section.

12.1 Discussion

This section discusses Energy Safety's evaluation of the enterprise systems section of the BVES 2026-2028 Base WMP.

BVES provided details demonstrating progress in expanding the scope and functionality of its enterprise systems since its 2023-2025 Base WMP submission. Additionally, BVES aligns its enterprise systems with wildfire mitigation priorities. The emphasis on third-party tools and platforms demonstrates a commitment toward field-based intelligence and operational responsiveness.¹⁸⁶ The targets presented in its 2026-2028 Base WMP support this commitment over the three-year cycle.¹⁸⁷ Of specific note, BVES described its developing integration of geospatial and AI-enabled tools for risk analysis, reliability, and vegetation management programs.¹⁸⁸

BVES, however, did not clarify how it coordinates its multiple databases at a programmatic or data governance level.¹⁸⁹ Lack of coordination among various databases may result in inefficiencies caused by data redundancy or data silos that could limit the benefit of these tools over time. These data management practices are factors that BVES should consider as it advances and integrates new programs.

BVES specifically discussed that it is implementing IVMS, a new vegetation management enterprise system.¹⁹⁰ However, BVES did not provide a clear process to migrate photographic data between its old and new system. Lack of a clear process for data migration may result in resource efficiency, data loss, data redundancy, and data transfer integrity risks. BVES must

¹⁸⁵ Pub. Util. Code § 8386(c)(10), (14), (18).

¹⁸⁶ BVES, 2026-2028 Base WMP, Pages 293-296.

¹⁸⁷ BVES, 2026-2028 Base WMP, Pages 291-292.

¹⁸⁸ BVES, 2026-2028 Base WMP, Page 292.

¹⁸⁹ BVES, 2026-2028 Base WMP, Pages 295-296.

¹⁹⁰ BVES, 2026-2028 Base WMP, Page 294.

consider these risks as it develops its enterprise systems and ensures historic information is not lost during changes or upgrades to programs.

See area for continued improvement BVES-26B-12 Data Migration Integrity in Section 12.2.

12.2 Areas for Continued Improvement for Future WMP Submissions

As discussed above, Energy Safety has identified areas pertaining to enterprise systems where the electrical corporation must demonstrate improvement in a future, specified WMP submission. This section sets forth the requirements for improvement.

12.2.1 ~~BVES-26B-12~~¹⁴. Data Migration Integrity

Summary: BVES must consider risks to data transfer integrity when migrating data during upgrades and new system introduction. Specifically, BVES does not demonstrate how it will preserve photographic data integrity during its data migration between new and old vegetation management applications.¹⁹¹ The potential loss of this legacy information may negatively impact future analysis due to gaps in information and lack of comparative data.

Requirements: In its ~~2027~~^{next} WMP Update, BVES must provide a status report of its data migration between its old and new vegetation management platforms, including:

- A summary of all data validation or reconciliation efforts conducted before, during, and after the transition
- A list of all data that BVES was unable to transfer to the new vegetation management platform
- Procedures that BVES has used and will use to ensure that work location photos are archived and available for use

Discussed in: Section 9 and Section 12.1

Appendix C provides a consolidated list of areas for continued improvement and requirements.

¹⁹¹ Response to Data Request 004, Question 03.

13. Lessons Learned

Chapter III, Section 13 of the WMP Guidelines requires the electrical corporation to discuss the lessons learned it uses to drive continual improvement in its WMP.¹⁹² The BVES 2026-2028 Base WMP met the requirements of the WMP Guidelines for this section.

13.1 Discussion

This section discusses Energy Safety's evaluation of the lessons learned section of the BVES 2026-2028 Base WMP.

BVES listed several lessons learned impacting its 2026-2028 Base WMP, with some dating back five years. By incorporating lessons learned BVES could avoid mistakes made by BVES and other electrical corporations, improve efficiency, and effectively use resources. For instance:

- Based on delays during the Radford line hardening activities, BVES stated it learned to engage with the permitting agencies sooner during the planning and to follow up often throughout the process.¹⁹³ By building in contingencies and accounting for potential delays may allow BVES to establish accurate timelines for risk reducing mitigation activities.
- BVES stated that it implemented FPI in 2024 and described the impacts FPI has on operations, namely that FPI provides more granularity in evaluating day-to-day actions to mitigate fire risk.¹⁹⁴ Additionally, BVES attributed its transition to a quantitative risk modeling method to a lesson learned in 2023.¹⁹⁵ It stated this transition allows BVES to prioritize grid hardening efforts with more precision.¹⁹⁶ This precision may lead to more impactful mitigation activity selection across BVES's service territory.
- BVES stated it applies PSPS-related lessons learned from other IOUs.¹⁹⁷ Specifically, BVES stated it has increased PSPS preparation, communication standardization, and awareness of best practices.¹⁹⁸ BVES's ability to leverage knowledge it lacks from

¹⁹² Pub. Util. Code §§ 8386(a) & (c)(5), (22).

¹⁹³ BVES, 2026-2028 Base WMP, Page 299.

¹⁹⁴ BVES, 2026-2028 Base WMP, Page 299.

¹⁹⁵ BVES, 2026-2028 Base WMP, Page 302.

¹⁹⁶ BVES, 2026-2028 Base WMP, Page 302.

¹⁹⁷ BVES, 2026-2028 Base WMP, Page 301.

¹⁹⁸ BVES, 2026-2028 Base WMP, Page 301.

other IOUs demonstrates a commitment to considering industry (and regional) best practices to address unknowns.

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14. Cross-Category Area for Continued Improvement

During its evaluation, Energy Safety observed themes across WMP categories in the BVES 2026-2028 Base WMP.

14.1 Previous Area for Continued Improvement

In the Energy Safety Decision for the BVES 2025 WMP Update, Energy Safety identified areas related to cross-category themes where BVES must continue to improve its wildfire mitigation capabilities. This section summarizes the requirements imposed by those areas for continued improvement, BVES's response to those requirements, and Energy Safety's evaluation of the response.

14.1.1 BVES-23B-01. Target Verification Methods

For this area for continued improvement, Energy Safety required BVES to include all methods used to verify progress of year-to-year targets and clearly note its verification methods that are effective for supporting progress of each target in its 2026-2028 Base WMP.¹⁹⁹

14.1.1.1 BVES-23B-01: BVES Response Summary

In its 2026-2028 Base WMP, BVES provided a table in Appendix D listing all the required elements of the area for continued improvement.²⁰⁰

14.1.1.2 BVES-23B-01: Energy Safety Evaluation

BVES provided a table in Appendix D listing all targets for 2026-2028 and its verification methods. As such, BVES sufficiently responded to this area for continued improvement. No further reporting is required for this area for continued improvement.

¹⁹⁹ Decision for BVES 2025 WMP Update, Page 41.

²⁰⁰ BVES, 2026-2028 Base WMP, Pages 370-377.

15. Conclusion

The BVES 2026-2028 Wildfire Mitigation Plan is approved.

Catastrophic wildfires remain a serious threat to the health and safety of Californians. Electrical corporations, including BVES, must continue to make progress toward reducing wildfire risk.

Energy Safety expects BVES to effectively implement its wildfire mitigation activities to reduce wildfire and outage program risk.

BVES must meet the commitments in its approved WMP and address areas for continued improvement identified within this Decision to ensure it meaningfully reduces wildfire and outage program risk within its service territory over the plan cycle.

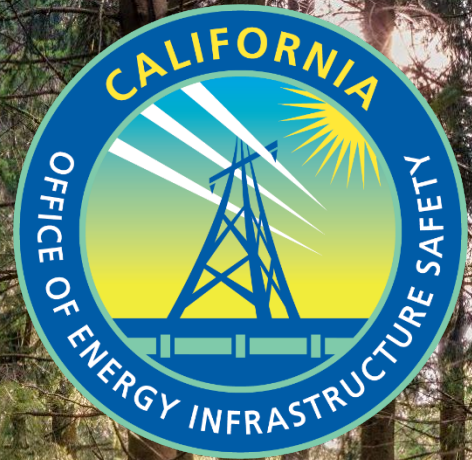
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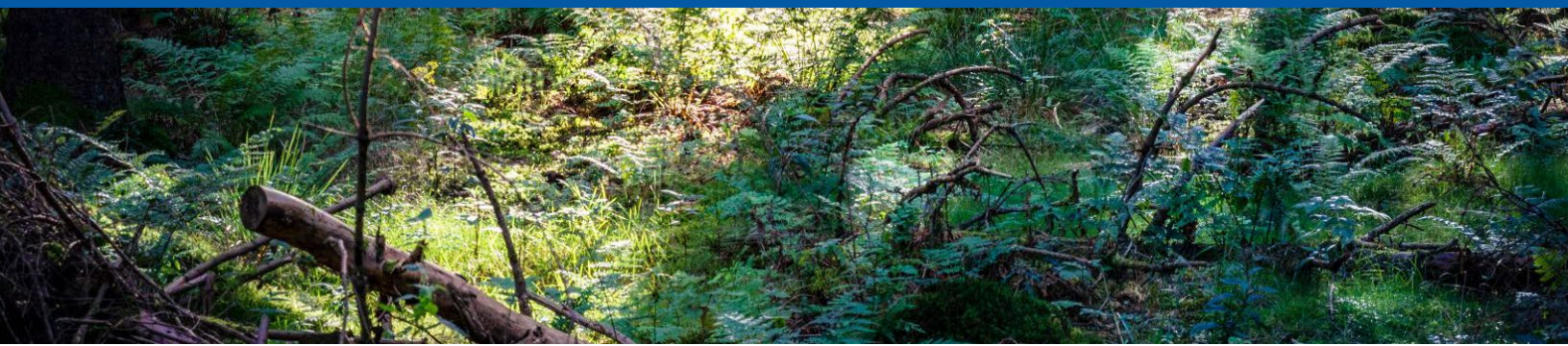
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Appendix B.

Status of Previous Areas for Continued Improvement

Energy Safety Decision for the BVES 2025 WMP Update identified areas for continued improvement. Areas for continued improvement are areas in which BVES must continue to improve its WMP. As part of the 2026-2028 Base WMP evaluation, Energy Safety reviewed the progress reported by BVES in addressing previously identified areas for continued improvement.

Areas for continued improvement identified in Energy Safety Decisions for the BVES 2025 WMP Update and that required progress reporting in the BVES 2026-2028 Base WMP are listed in Table B-1. The status column indicates whether each has been fully addressed. If not, the column notes where to find more information in this Decision.

Table B-1. BVES Previous Areas for Continued Improvement

ID	Title	Status
BVES-23B-01	Target Verification Methods	BVES has sufficiently responded to this area for continued improvement. No further reporting is required for this area for continued improvement. See Section 14.1.1 for Energy Safety's evaluation of this area for continued improvement.
BVES-23B-02	PSPS and Wildfire Risk Trade-Off Transparency	BVES has not sufficiently addressed the required progress. BVES must continue to improve in this area for its 2029- <u>2031next</u> Base WMP. See Section 5.2.1 for Energy Safety's evaluation of this area for continued improvement. Section 5.3 sets forth the requirements for improvement.
BVES-25U-01 (BVES-23-03)	Cross-Utility Collaboration on Best Practices for Inclusion of Climate Change Forecasts in Consequence Modeling, Inclusion of Community Vulnerability in Consequence Modeling, and Utility Vegetation Management for Wildfire Safety	BVES has not sufficiently addressed the required progress. BVES must continue to improve in this area for its 2027 <u>next</u> WMP Update. See Section 6.2.1 for Energy Safety's evaluation of this area for continued improvement. Section 6.3 sets forth the requirements for improvement.
BVES-23B-07	Risk Informed Prioritization of Grid Hardening Installation	BVES has sufficiently responded to this area for continued improvement. No further reporting is required for this area for continued improvement. See Section 8.3.1 for Energy Safety's evaluation of this area for continued improvement.
BVES-23B-08	Covered Conductor Mitigation Selection	BVES has sufficiently responded to this area for continued improvement. No further reporting is required for this area

ID	Title	Status
		for continued improvement. See Section 8.3.2 for Energy Safety's evaluation of this area for continued improvement.
BVES-25U-02 (BVES-23-11)	Covered Conductor Inspections and Maintenance	BVES has sufficiently responded to this area for continued improvement. No further reporting is required for this area for continued improvement. See Section 8.3.3 for Energy Safety's evaluation of this area for continued improvement.
BVES-25U-03 (BVES-23-13)	Asset Inspection QA/QC Program	BVES has not sufficiently addressed the required progress. BVES must continue to improve in this area for its 2029- 2031 <u>next</u> Base WMP. See Section 8.3.4 for Energy Safety's evaluation of this area for continued improvement. Section 8.4 sets forth the requirements for improvement.
BVES-25U-04 (BVES-23-15)	Device Setting Improvement	BVES has sufficiently responded to this area for continued improvement. No further reporting is required for this area for continued improvement. See Section 8.3.5 for Energy Safety's evaluation of this area for continued improvement.
BVES-23B-16	Vegetation Management Quality Control Personnel Qualifications	BVES has sufficiently responded to this area for continued improvement. No further reporting is required for this area for continued improvement. See Section 9.3.1 for Energy Safety's evaluation of this area for continued improvement.
BVES-25U-05	Vegetation Management Remote Sensing Evaluation	BVES has sufficiently responded to this area for continued improvement. No further reporting is required for this area for continued improvement. See Section 9.3.2 for Energy Safety's evaluation of this area for continued improvement.

Appendix C.

Consolidated List of Areas for Continued Improvement and Requirements

This appendix is a consolidated list of the areas for continued improvement and required progress.

Risk Methodology and Assessment

BVES-26B-01. Ongoing Implementation for Updates to Risk Models

Summary: BVES is in the process of updating its risk models with full implementation planned by the end of 2025.¹ Given the potential changes to risk model outputs, BVES needs to update its WMP and associated work plan to be the most up-to-date in understanding and reducing risk.

Requirements: In its 2027next WMP Update, BVES must:

- Provide a description of how BVES's risk assessment and models include evaluation of asset age and health, system design parameters, and outage/ignition risks.
- Provide a description of how BVES is evaluating inclusion of egress/ingress risks into its risk modeling and risk assessments. This must include coordination with other electrical corporations and evaluations of potential approaches, which must include, at minimum, an explanation and analysis as to the use or rejection of such approaches.
- Provide a description of the progress BVES has made in its plan to implement PSPS risk into its risk models by the end of 2025, including any impact on risk scores, prioritization, and decision making.
- Provide a description of the progress BVES has made in its plan to implement PEDS risk into its risk models by the end of 2025, including any impact on risk prioritization such as decision-making and risk score output.

¹ BVES, 2026-2028 Base WMP, Page 37.

- Provide documentation for verification and validation of the new risk models. The documentation must include any findings from validation performed and the associated changes made to the risk model as a result of those findings.
- Provide analysis and granularity on the top risk contributors and associated risk drivers in addition to “overhead bare wire length” and “conductor failure,” to maximize BVES’s understanding of local risk drivers.
- Update the following tables based on the latest risk model outputs and risk drivers:
 - Table 5-5 Summary of Top-Risk Circuits, Segments, or Spans
 - Table 6-1 List of Prioritized Areas in and Electric Corporations Service Territory Based on Overall Utility Risk
 - Table 6-4 Summary of Risk Reduction for Top-Risk Circuits
- If differences exist among the three tables listed above (e.g., BVES’s risk model output vs. prioritization), BVES must explain why these discrepancies exist, and provide a roadmap for modeling improvements to incorporate any prioritization considerations into risk modeling to better align risk model output with mitigation selection.

Discussed in: Section 5 Risk Methodology and Assessment and Section 6 Wildfire Mitigation Strategy

BVES-26B-02. Further Evaluation of Climate Change Impact on Extreme Scenarios

Summary: Many large electrical corporations and small and multi-jurisdictional utilities (SMJUs), including BVES, are currently evaluating climate change impacts up to 2030, which is only two years past this 2026-2028 Base WMP cycle. This limits the understanding of net benefit over an asset’s lifetime, which exceeds electrical corporations’ current climate change evaluations. The climate change evaluations are also limited in scope and fail to evaluate impacts such as extreme weather event frequency and changes in vegetation species.

Requirements: In its ~~2029-2031~~next Base WMP, BVES must:

- Provide a joint report with the large electrical corporations and SMJUs evaluating the potential climate change impacts on wildfire risk over a fifty-year period to better understand potential risk reduction when implementing mitigations. This must include identification of variables impacted by climate change and how those variables impact wildfire risk modeling. At a minimum, these variables must include:
 - Extreme wind events
 - Extreme drought impacts
 - Vegetation pattern changes
 - Wildfire pyrome identification and boundary changes
- As part of the Risk Model Working Group and as directed by Energy Safety, contribute to discussions and reports on topics such as how the joint study impacted BVES’s risk

modeling efforts and how BVES plans to implement any changes and findings discussed regarding climate change.

Discussed in: Section 5.1 Methodology and Section 6.1 Risk Evaluation

BVES-26B-03. Collaboration on Meteorological Scenarios

Summary: Weather scenarios used by the large electrical corporations and SMJUs in the calculation of probability and consequence scores vary significantly. The scenarios vary in the size of the historical record, how fire weather days are determined, and how the data is pruned for simulations.

BVES provided a high-level overview of the various scenarios and weather conditions it used, but definitions for the weather scenarios were vague, and the overview did not discuss how BVES is developing and using distributions that account for extreme weather or wind loads.

Requirements: In its 2029-2031 next Base WMP, BVES must:

- Define the historical period and fire weather days used for developing meteorological scenarios. Describe criteria for selection and justify exclusion of years and days outside of the selected dataset if that data would include historical extreme wind gusts or other extreme conditions.
- Demonstrate how distributions developed with the adopted Monte Carlo simulation method within the consequence risk model account for extreme weather events that are not included within the referenced historical period. For example, demonstrate how SDG&E is matching the distribution of predicted fire size with historical distributions with significant tail risks.
- Collaborate with other electrical corporations via participation in the Risk Modeling Working Group (RMWG) to develop and summarize standardized extreme event scenarios, common calculation methods on the likelihood of occurrence, and a common approach to selecting weather scenarios (wind, moisture, fuels, etc.) to calculate consequences. Once developed, implement the standardized approaches into the WMP, or discuss why other approaches are taken if not using the agreed upon approaches.
- Evaluate and provide an analysis of the sensitivity of the total risk in its service territory, including the risk impact of extreme event scenarios. This sensitivity analysis must also evaluate the impact of mitigations on extreme events.

Discussed in: Section 5.1.3.2 Detailed Model Documentation

BVES-26B-04. Development of Substantive Model Documentation

Summary: Several of the electrical corporations, including BVES, did not provide detailed technical documentation for its models and data sets used for risk analysis, including probability of failure and probability of ignition models, consequence models, weather models, and fuel models.

Appendix B of the BVES 2026-2028 Base WMP provided high-level narratives of the model's purpose, assumptions, or calculation procedures. The narrative in the body of the WMP references Appendix B for additional information, but Appendix B did not provide the expected references and sufficient additional details.

Requirements: In its 2027next WMP Update, BVES must develop documentation on its risk analysis and modeling to capture the following information:

- A detailed description of its risk models, including assumptions or statistical approaches used for the risk models. This must include an explanation for any assumptions and scaling factors used;
- A detailed description of datasets used for modeling probability of ignition, consequence, weather, and fuels; including sources for data and why each dataset was included; and
- Description of the verification and validation approaches of each model, including any available results.

Discussed in: Section 5.1.6.2 Documentation Details

Wildfire Mitigation Strategy

BVES-26B-035. Impact of Cross-Utility Collaboration

Summary: BVES did not provide a detailed report on lessons-learned and associated impacts to its 2026-2028 Base WMP relating to collaboration with large electrical corporations and SMJUs, as required in BVES-25U-01.²

Requirements: In its 2027next WMP Update, BVES must:

- Provide a list of specific lessons learned from collaboration with other large electrical corporations and SMJUs. This list must include:
 - A description of the lesson learned
 - The associated impact to BVES's wildfire mitigation activities as a result of the lesson learned

² BVES, 2026-2028 Base WMP, Pages D-379-38.

- The numbers for the WMP sections impacted by the lesson learned
- The electrical corporations that contributed to the finding
- The date of any associated meetings relating to the lesson learned

Discussed in: Section 6.2.1.2 Risk Impact of Initiative Activities

Grid Design, Operations, and Maintenance

BVES-26B-046. Microgrid Operational Planning and Stability Protocols

Summary: BVES outlined the development of two major microgrid projects: the Bear Valley Solar Energy Project and the Bear Valley Energy Storage Project.³ BVES must have specific details regarding operational transition triggers, stability considerations, and planning for sectionalized grid operations for safe and successful implementation of these two projects.

Requirements: In its ~~2029-2031~~next Base WMP, BVES must address the following:

- Microgrid Operational Protocols: Clearly define the operational triggers and thresholds for transitioning to sectionalized operation during PSPS events or other emergencies
- Grid Stability and Load Management Strategy:
 - Provide detailed planning on how grid stability, frequency regulation, and voltage control will be ensured during sectionalized operations
 - Provide anticipated demand and generation balancing scenarios
 - Explain how BVES intends to maintain operational safety and reliability in the anticipated demand and generation balancing scenarios
- Contingency Scenarios and Restoration Planning:
 - Outline contingency scenarios for partial failure of microgrid components (e.g., battery unavailability, inverter faults)
 - Provide a restoration plan to return from sectionalized mode to normal grid operation once SCE's power supply is restored
- Performance Monitoring Plan: Describe how BVES will monitor the performance of microgrid operation and respond to any operational anomalies

Discussed in: Section 8.2.1.7 Microgrids

³ BVES, 2026-2028 Base WMP, Pages 127-128.

BVES-26B-057. Enhanced Powerline Safety Settings Policy, Planning, and Implementation

Summary: BVES currently lacks a formal operational policy and circuit-specific implementation plan for EPSS. Although BVES stated that it implemented EPSS and achieved an associated 8.51 percent wildfire risk reduction, it did not provide evidence of a utility-wide policy, consistent application criteria, or systematic planning for circuit-by-circuit implementation.⁴ There was no discussion of how circuit prioritization is conducted based on risk, nor how gaps in equipment, connectivity, or control systems are identified and addressed. BVES also does not describe how EPSS operational decisions (e.g., enabling settings based on Fire Potential Index) are made or standardized.

Requirements: In its [2027next](#) WMP Update, BVES must:

- Demonstrate how it developed an EPSS Operational Policy, including:
 - Determination of which circuits should be capable of EPSS
 - Standardized decision criteria for invoking EPSS (i.e., when Fire Potential Index is high)
 - Operational guidance for implementing EPSS, including communication protocols and device-level connectivity expectations
- Demonstrate how it developed a Circuit-by-Circuit EPSS Implementation Plan, including:
 - Identification of circuit-level equipment, software, hardware, and connectivity gaps that inhibit EPSS deployment
 - A risk-based prioritization framework to close identified gaps
 - Recommended EPSS protection settings for each circuit

Discussed in: Section 8.2.1.8 Installation of System Automation Equipment

BVES-26B-068. Oil-Filled Recloser Replacement

Summary: BVES stated that three of its twenty-four reclosers failed over the past three years.⁵ All of the failed reclosers were oil-filled, which BVES has been systematically replacing.⁶ BVES stated there are four remaining oil-filled reclosers on its system and it plans to replace all of

⁴ BVES, 2026-2028 Base WMP, Page 114.

⁵ BVES 2026-2028 Base WMP, Page 154.

⁶ BVES 2026-2028 Base WMP, Page 154.

these reclosers by the end of 2025.⁷ However, BVES set no recloser replacement targets in its 2023-2025 or 2026-2028 Base WMPs.

Requirements: In its [2027next](#) WMP Update, BVES must provide documentation demonstrating that all oil-filled reclosers on its system have been replaced. If any oil-filled reclosers have not yet been replaced, BVES must provide a plan and projected timeline for replacement.

Discussed in: Section 8.2.3 Equipment Maintenance and Repair

BVES-26B-079. QA/QC Documentation

Summary: BVES-25U-03 required BVES to update its written asset inspection QA/QC procedures.⁸ In response to BVES-25U-03, BVES stated that it plans to issue updated QA/QC documentation by the end of June 2025.⁹

Requirements: In its [2027next](#) WMP Update, BVES must submit its updated asset inspection QA/QC documentation as attachments.

Discussed in: 8.2.4 Quality Assurance and Quality Control

BVES-26B-0810. QA/QC Target Evaluation

Summary: BVES stated that it plans to implement significant changes to its QA/QC process in 2026, including field auditing five percent of detailed and patrol inspections.¹⁰ BVES set pass rate targets of 90 percent for all its QA/QC programs for each year of its 2026-2028 WMP. Given the significant changes, Energy Safety finds that projections of actual pass rates in 2026 are highly uncertain and may not be supported by historic pass rate data.

Requirements: In its [2028next Base WMP Update](#), BVES must:

- Provide the actual 2026 [and 2027](#) pass rates of each audited activity listed in Table 8-4
- Provide the actual 2026 [and 2027](#) pass rates of its detailed and patrol inspection field audits
- For each audited activity with an actual pass rate below 95 percent in 2026, provide an analysis of the most common findings and BVES's plan to reduce the number of findings

⁷ Response to Data Request 003 Question 02.

⁸ Decision for BVES 2025 WMP Update, Pages 43-44.

⁹ BVES 2026-2028 Base WMP, Page D-386-387.

¹⁰ BVES, 2026-2028 Base WMP, Page D-386.

- Provide a plan and implementation timeline that adjusts its ~~next Base WMP2028~~ pass rate targets to reflect BVES's current maturity as demonstrated by the actual pass rates in 2026 ~~and 2027~~ and to drive quality improvements in the audited activities

Discussed in: 8.2.4 Quality Assurance and Quality Control

Vegetation Management and Inspections

BVES-26B-~~0911~~. Pole Clearing Program and Target for Compliance with PRC § 4292

Summary: BVES's 2026-2028 Base WMP did not include a target for pole clearing performed in compliance with Public Resource Code (PRC) section 4292, as required by the WMP Guidelines.¹¹ BVES does not demonstrate that it has the procedures in place to comply with PRC § 4292 during the 2026-2028 plan cycle or is exempt from the requirements of PRC § 4292.

Requirements: In its ~~2027~~~~next~~ WMP Update, BVES must:

- Provide documentation that demonstrates BVES will annually comply with the requirements of PRC § 4292. This documentation may include some or all of the following:
 - Procedures for documenting all non-exempt equipment in the SRA including, but not limited to, universal fuses, open link fuses, enclosed cutouts, solid blade disconnects, in-line disconnects, non-porcelain lightning arresters, split bolt connectors, and vise connectors (e.g., in a database)
 - Procedures for inspections that identify non-exempt equipment in the SRA
 - Procedures for creating and maintaining firebreaks around poles with non-exempt equipment in the SRA
 - Procedures for documenting the creation and maintenance of firebreaks around poles with non-exempt equipment in the SRA
 - Procedures that ensure the timely identification and removal of non-exempt equipment in the SRA
 - Documentation that BVES is exempt from the requirements of PRC § 4292
 - Documentation of procedures and systems in place that prevent the installation of new non-exempt equipment in the SRA

¹¹ WMP Guidelines, Page 104.

- Define quantitative targets for 2027 and 2028 for BVES’s pole clearing activities that are performed in compliance with PRC 4292 and meet the requirements of the Energy Safety WMP Guidelines.¹²
 - If BVES can demonstrate that it does not have any non-exempt equipment in the SRA, it may define these targets as “Not Applicable.”
 - If BVES is unable to define quantitative targets for 2027 and 2028 at the time of its ~~2027~~next WMP Update, BVES must provide a plan with an implementation timeline for identifying quantitative targets for pole clearing activities that are performed in compliance with PRC § 4292.

Discussed in: Section 9.2.4 Pole Clearing

BVES-26B-~~10~~12. Maturing Integrated Vegetation Management Activities

Summary: BVES stated it “does not have any dedicated initiatives under [IVM] but does intend to move to making a dedicated effort toward this activity and to evolve it into an initiative.”¹³ BVES has a right tree, right place program, but the program is not yet mature. BVES must detail actions it has taken and plans to take to develop and incorporate IVM principles and activities.

Requirements: In its ~~2029-2031~~next Base WMP BVES must provide:

- A description of the actions it has taken and will take on IVM as a result of its collaboration with any third-party organization, the USFS, and Southern California mountain community groups.¹⁴
- A discussion of how BVES navigated and plans to navigate challenges while developing and implementing its IVM activities.
- A description of the actions it has taken and it will take as a result of working with the City of Big Bear Lake and Big Bear Fire Department to formalize and increase customer access to its right tree, right place program. This description must:
 - Explain how feedback from customers, local governments, and/or environmental groups has guided and will guide program maturation.
 - Discuss how BVES navigated challenges while formalizing and increasing customer access to its right tree, right place program and how BVES will apply any lessons learned from navigating those challenges.

¹² WMP Guidelines, Page 104.

¹³ BVES, 2026-2028 Base WMP, Page 211.

¹⁴ Response to Data Request 001, Question 02.

- Provide attachments and/or links to its right tree, right place products (e.g., guides, doorhangers, websites, etc.).

Discussed in: Section 9.2.7 Integrated Vegetation Management

BVES-26B-~~11~~13. Vegetation Management Procedures

Summary: In its 2026-2028 Base WMP BVES's vegetation management procedures are not formalized and are inconsistently documented. The procedures are not all stand-alone documents. Some procedures are in the form of a contract, or do not match what BVES presented in the WMP.

Requirements: In its ~~2029-2031~~next Base WMP BVES must:

- Ensure its vegetation management procedures are formal and consistently documented and that procedural statements in its WMP are incorporated into formal documentation.
- Provide formal documented procedures that include procedural statements from its WMP for the following vegetation management activities:
 - Activities Based on Weather Conditions
 - Post-Fire Service Restoration
 - Pole clearing on the Radford line
 - Quality Assurance and Quality Control

Discussed in: Section 9.2.14 Vegetation Management Procedures

Enterprise Systems

BVES-26B-~~12~~14. Data Migration Integrity

Summary: BVES must consider risks to data transfer integrity when migrating data during upgrades and new system introduction. Specifically, BVES does not demonstrate how it will preserve photographic data integrity during its data migration between new and old vegetation management applications.¹⁵ The potential loss of this legacy information may negatively impact future analysis due to gaps in information and lack of comparative data.

Requirements: In its ~~2027~~next WMP Update, BVES must provide a status report of its data migration between its old and new vegetation management platforms, including:

- A summary of all data validation or reconciliation efforts conducted before, during, and after the transition

¹⁵ Response to Data Request 004, Question 03.

- A list of all data that BVES was unable to transfer to the new vegetation management platform
- Procedures that BVES has used and will use to ensure that work location photos are archived and available for use

Discussed in: Section 9 and Section 12.1

Appendix D.

Public Comments

Public Comments on the BVES 2026-2028 Base WMP

Energy Safety invited members of the public to provide comments on the BVES 2026-2028 Base WMP. The following individuals and organizations submitted comments:

- Green Power Institute (GPI)

Comments received on the BVES 2026-2028 Base WMP can be viewed in the 2026-2028 Base WMP (2026-2028-Base-WMPs) docket log.

Energy Safety concurred with and incorporated the following comments into this Decision for the BVES 2026-2028 Base WMP:

- GPI commented that detailed risk modeling is less critical for BVES due to its uniformly high-risk area and instead recommends a risk assessment approach that considers asset age, design parameters, and ignition/outage risks.
 - Energy Safety concurs with including asset and system data in risk assessments and added these requirements into the area for continued improvement BVES-26B-01 Ongoing Implementation for Updates to Risk Models.
- GPI commented that BVES should expand its limited ingress/egress risk analysis by learning from other IOUs and participating in the risk model working group.
 - Energy Safety concurs and requires BVES to include ingress/egress in its risk modeling and encouraged collaboration with IOUs. This topic is added in the area for continued improvement BVES-26B-01 Ongoing Implementation for Updates to Risk Models.
- GPI commented that BVES's focus on covered conductor installation is a cost-effective alternative to undergrounding but recommended accelerating the hardening timeline.
 - Energy Safety concurs that BVES should consider an accelerated timeline for the covered conductor installation mitigation activity and included in this Decision.
- GPI commented that BVES should consider renewable energy sources to support its service territory due to ad hoc and planned deenergization.
 - Energy Safety concurs and requires BVES to report on its microgrid operation protocol(s) as part of the area for continued improvement BVES-26B-04 Microgrid Operational Planning and Stability Protocols.

- GPI commented that BVES should benchmark its emerging EPSS capability against Pacific Gas & Electric's program.
 - Energy Safety concurs and requires BVES to coordinate with other electrical corporations in the area for continued improvement BVES-26B-05 Protection Device Setting Enhancements.

Public Comments on the Draft Decision for the BVES 2026-2028 Base WMP

This section will contain a summary of members of the public comments on Energy Safety's draft Decision for the BVES 2026-2028 Base WMP.

Appendix E.

Maturity Survey Results

The Energy Safety Electrical Corporation Wildfire Mitigation Maturity Model (Maturity Model) and 2025 Electrical Corporation Wildfire Mitigation Maturity Survey (Maturity Survey) together provide a quantitative method to assess electrical corporation wildfire risk mitigation capabilities and examine how electrical corporations propose to continuously improve in key areas of their WMP.

The Maturity Model consists of 38 individual capabilities, each relevant to an electrical corporation's ability to mitigate wildfire and PSPS risk within its service territory. Maturity levels range from 0 (below minimum requirements) to 4 (beyond best practice). The 38 capabilities are aggregated into seven categories. The seven categories are:

- A. Risk Assessment and Mitigation Strategy
- B. Situational Awareness and Forecasting
- C. Grid Design, Inspections, and Maintenance
- D. Vegetation Management and Inspections
- E. Grid Operations and Protocols
- F. Emergency Preparedness
- G. Community Outreach and Engagement

BVES's responses to the Maturity Survey, listed by category, are depicted in the figure below.

Figure E-1. BVES 2025 Responses to the Maturity Survey

		1. Capability				2. Capability				3. Capability				4. Capability				5. Capability				6. Capability			
		2025	2026	2027	2028	2025	2026	2027	2028	2025	2026	2027	2028	2025	2026	2027	2028	2025	2026	2027	2028	2025	2026	2027	2028
A. Risk Assessment and Mitigation Strategy		1. Statistical weather, climate, and wildfire modeling				2. Calculation of wildfire and PSPS hazard and exposure to societal values				3. Calculation of community vulnerability to wildfire and PSPS				4. Calculation of risk and risk components				5. Risk event tracking and integration of lessons learned				6. Risk-informed wildfire mitigation strategy			
	Minimum of Sub-Cap.	2.0	2.0	2.0	2.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	0.0	2.0	2.0	2.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
	Average of Sub-Cap.	3.3	3.3	3.3	3.3	3.7	3.7	3.9	3.9	3.9	3.9	3.9	3.9	3.1	3.6	3.6	3.6	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
B. Situational Awareness and Forecasting		7. Ignition likelihood estimation				8. Weather forecasting ability				9. Wildfire spread forecasting				10. Data collection for near-real-time conditions				11. Wildfire detection and alarm systems				12. Centralized monitoring of real-time conditions			
	Minimum of Sub-Cap.	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	0.0	0.0	0.0	0.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	0.0	0.0	0.0	0.0
	Average of Sub-Cap.	3.4	3.4	3.4	3.4	3.2	3.2	3.2	3.2	2.6	2.6	2.6	2.6	3.7	3.7	3.7	3.7	3.5	3.5	3.5	3.5	3.2	3.2	3.2	3.2
C. Grid Design, Inspections, and Maintenance		13. Asset inventory and condition database				14. Asset inspections				15. Asset maintenance and repair				16. Grid design and resiliency				17. Asset and grid personnel training and quality							
	Minimum of Sub-Cap.	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	3.0	3.0	3.0	3.0	2.0	2.0	2.0	2.0	4.0	4.0	4.0	4.0				
	Average of Sub-Cap.	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	3.8	3.8	3.8	3.8	3.7	3.7	3.7	3.7	4.0	4.0	4.0	4.0				
D. Vegetation Management and Inspections		18. Vegetation inventory				19. Vegetation inspections				20. Vegetation treatment				21. Vegetation personnel training and quality				22. Best Management Practices for Transmission Rights-Of-Ways (ROWs)							
	Minimum of Sub-Cap.	4.0	4.0	4.0	4.0	3.0	3.0	3.0	3.0	2.0	2.0	2.0	2.0	3.0	3.0	3.0	3.0	0.0	0.0	0.0	0.0				
	Average of Sub-Cap.	4.0	4.0	4.0	4.0	3.7	3.7	3.7	3.7	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	0.0	0.0	0.0	0.0				
E. Grid Operations and Protocols		23. Protective equipment and device settings				24. Incorporation of ignition risk factors in grid control				25. PSPS operating model				26. Protocols for PSPS re-energization				27. Ignition prevention and suppression							
	Minimum of Sub-Cap.	0.0	1.0	2.0	2.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0				
	Average of Sub-Cap.	2.5	3.2	3.7	3.7	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0				
F. Emergency Preparedness		28. Wildfire and PSPS emergency & disaster preparedness plan				29. Collaboration and coordination with public safety partners				30. Public emergency communication strategy				31. Preparedness and planning for service restoration				32. Customer support in wildfire and PSPS emergencies				33. Learning after wildfires and PSPS events			
	Minimum of Sub-Cap.	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	2.0	2.0	2.0	2.0	0.0	0.0	0.0	0.0	1.0	4.0	4.0	4.0	1.0	1.0	1.0	1.0
	Average of Sub-Cap.	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	3.6	3.6	3.6	3.6	3.0	3.0	3.0	3.0	1.0	4.0	4.0	4.0	1.5	1.5	2.0	2.0
G. Community Outreach and Engagement		34. Public outreach and education awareness				35. Public engagement in electrical corporation wildfire mitigation planning				36. Engagement with AFN and socially vulnerable populations				37. Collaboration on local wildfire mitigation planning				38. Cooperation and best practice sharing with other electrical corporations							
	Minimum of Sub-Cap.	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	2.0	2.0	2.0	2.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0				
	Average of Sub-Cap.	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	3.3	3.3	3.3	3.3	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0				

Appendix F. Definitions

Unless otherwise expressly stated, the following words and terms, for the purposes of this Decision, have the meanings shown in this chapter.

Terms Defined in Other Codes

Where terms are not defined in this Decision and are defined in the Government Code, Public Utilities Code, or Public Resources Code, such terms have the meanings ascribed to them in those codes.

Terms Not Defined

Where terms are not defined through the methods authorized by this section, such terms have ordinarily accepted meanings such as the context implies.

Definition of Terms

Term	Definition
Access and functional needs population (AFN)	Individuals, including, but not limited to, those who have developmental or intellectual disabilities, physical disabilities, chronic conditions, or injuries; who have limited English proficiency or are non-English speaking; who are older adults, children, or people living in institutionalized settings; or who are low income, homeless, or transportation disadvantaged, including, but not limited to, those who are dependent on public transit or are pregnant. (Gov. Code, § 8593.3(f)(1).)
Asset (utility)	Electric lines, equipment, or supporting hardware.
Benchmarking	A comparison between one electrical corporation's protocols, technologies used, or mitigations implemented, and other electrical corporations' similar endeavors.
Burn likelihood	The likelihood that a wildfire with an ignition point will burn at a specific location within the service territory based on a probabilistic set of weather profiles, vegetation, and topography.

Term	Definition
Catastrophic wildfire	A fire that caused at least one death, damaged over 500 structures, or burned over 5,000 acres.
Circuit miles	The total length in miles of separate transmission and/or distribution circuits, regardless of the number of conductors used per circuit (i.e., different phases).
Circuit segment	A specific portion of an electrical circuit that can be separated or disconnected from the rest of the system without affecting the operation of other parts of the network. This isolation is typically achieved using switches, circuit breakers, or other control mechanisms.
Consequence	The adverse effects from an event, considering the hazard intensity, community exposure, and local vulnerability.
Contact from object ignition likelihood	The likelihood that a non-vegetative object (such as a balloon or vehicle) will contact utility-owned equipment and result in an ignition.
Contact from vegetation likelihood of ignition	The likelihood that vegetation will contact utility-owned equipment and result in an ignition.
Contractor	Any individual in the temporary and/or indirect employ of the electrical corporation whose limited hours and/or time-bound term of employment are not considered “full-time” for tax and/or any other purposes.
Critical facilities and infrastructure	<p>Facilities and infrastructure that are essential to public safety and that require additional assistance and advance planning to ensure resiliency during PSPS events. These include the following:</p> <p>Emergency services sector:</p> <ul style="list-style-type: none"> • Police stations • Fire stations • Emergency operations centers

Term	Definition
	<ul style="list-style-type: none"> Public safety answering points (e.g., 9-1-1 emergency services) <p>Government facilities sector:</p> <ul style="list-style-type: none"> Schools Jails and prisons <p>Health care and public health sector:</p> <ul style="list-style-type: none"> Public health departments Medical facilities, including hospitals, skilled nursing facilities, nursing homes, blood banks, health care facilities, dialysis centers, and hospice facilities (excluding doctors' offices and other non-essential medical facilities) <p>Energy sector:</p> <ul style="list-style-type: none"> Public and private utility facilities vital to maintaining or restoring normal service, including, but not limited to, interconnected publicly owned electrical corporations and electric cooperatives Water and wastewater systems sector: Facilities associated with provision of drinking water or processing of wastewater, including facilities that pump, divert, transport, store, treat, and deliver water or wastewater <p>Communications sector:</p> <ul style="list-style-type: none"> Communication carrier infrastructure, including selective routers, central offices, head ends, cellular switches, remote terminals, and cellular sites <p>Chemical sector:</p> <ul style="list-style-type: none"> Facilities associated with manufacturing, maintaining, or distributing hazardous materials and chemicals (including Category N-Customers as defined in D.01-06-085) <p>Transportation sector:</p>

Term	Definition
	<ul style="list-style-type: none"> Facilities associated with transportation for civilian and military purposes: automotive, rail, aviation, maritime, or major public transportation <p>(D.19-05-042 and D.20-05-051)</p>
Customer hours	Total number of customers, multiplied by average number of hours (e.g., of power outage).
Dead fuel moisture	The moisture content of dead organic fuels, expressed as a percentage of the oven dry weight of the sample, that is controlled entirely by exposure to environmental conditions.
Detailed inspection	In accordance with General Order (GO) 165, an inspection where individual pieces of equipment and structures are carefully examined, visually and through routine diagnostic testing, as appropriate, and (if practical and if useful information can be so gathered) opened, and the condition of each is rated and recorded.
Disaster	A serious disruption of the functioning of a community or a society at any scale due to hazardous events interacting with conditions of exposure, vulnerability, and capacity, leading to one or more of the following: human, material, economic, and environmental losses and impacts. The effect of the disaster can be immediate and localized but is often widespread and could last a long time. The effect may test or exceed the capacity of a community or society to cope using its own resources. Therefore, it may require assistance from external sources, which could include neighboring jurisdictions or those at the national or international levels. (United Nations Office for Disaster Risk Reduction [UNDRR].)
Discussion-based exercise	Exercise used to familiarize participants with current plans, policies, agreements, and procedures or to develop new plans, policies, agreements, and procedures. Often includes seminars, workshops, tabletop exercises, and games.
Electrical corporation	Every corporation or person owning, controlling, operating, or managing any electric plant for compensation within California, except where the producer generates electricity on or distributes it

Term	Definition
	through private property solely for its own use or the use of its tenants and not for sale or transmission to others.
Emergency	Any incident, whether natural, technological, or human caused, that requires responsive action to protect life or property but does not result in serious disruption of the functioning of a community or society. (FEMA/UNDRR.)
Enhanced inspection	Inspection whose frequency and thoroughness exceed the requirements of a detailed inspection, particularly if driven by risk calculations.
Equipment caused ignition likelihood	The likelihood that utility-owned equipment will cause an ignition through either normal operation (such as arcing) or failure.
Exercise	An instrument to train for, assess, practice, and improve performance in prevention, protection, response, and recovery capabilities in a risk-free environment. (FEMA.)
Exposure	The presence of people, infrastructure, livelihoods, environmental services and resources, and other high-value assets in places that could be adversely affected by a hazard.
Fire hazard index	A numerical rating for specific fuel types, indicating the relative probability of fires starting and spreading, and the probable degree of resistance to control; similar to burning index, but without effects of wind speed. ¹⁶
Fire potential index (FPI)	Landscape scale index used as a proxy for assessing real-time risk of a wildfire under current and forecasted weather conditions.
Fire season	The time of year when wildfires are most likely for a given geographic region due to historical weather conditions, vegetative characteristics, and impacts of climate change. Each electrical corporation defines the fire season(s) across its service territory

¹⁶ Glossary of Wildland Fire.

Term	Definition
	based on a recognized fire agency definition for the specific region(s) in California.
Fireline intensity	The rate of heat release per unit time per unit length of fire front. Numerically, it is the product of the heat yield, the quantity of fuel consumed in the fire front, and the rate of spread. ¹⁷
Frequency	The anticipated number of occurrences of an event or hazard over time.
Frequent PSPS events	Three or more PSPS events per calendar year per line circuit.
Fuel continuity	The degree or extent of continuous or uninterrupted distribution of fuel particles in a fuel bed thus affecting a fire's ability to sustain combustion and spread. This applies to aerial fuels as well as surface fuels. ¹⁸
Fuel density	Mass of fuel (vegetation) per area that could combust in a wildfire.
Fuel management	Act or practice of controlling flammability and reducing resistance to control of wildland fuels through mechanical, chemical, biological, or manual means, or by fire, in support of land management objectives. ¹⁹
Fuel moisture content	Amount of moisture in a given mass of fuel (vegetation), measured as a percentage of its dry weight.
Full-time employee (FTE)	Any individual in the ongoing and/or direct employ of the electrical corporation whose hours and/or term of employment are considered “full-time” for tax and/or any other purposes.
GO 95 nonconformance	Condition of a utility asset that does not meet standards established by GO 95.

¹⁷ Glossary of Wildland Fire.

¹⁸ Glossary of Wildland Fire.

¹⁹ Glossary of Wildland Fire.

Term	Definition
Grid hardening	Actions (such as equipment upgrades, maintenance, and planning for more resilient infrastructure) taken in response to the risk of undesirable events (such as outages) or undesirable conditions of the electrical system to reduce or mitigate those events and conditions, informed by an assessment of the relevant risk drivers or factors.
Grid topology	General design of an electric grid, whether looped or radial, with consequences for reliability and ability to support PSPS (e.g., ability to deliver electricity from an additional source).
Hazard	A condition, situation, or behavior that presents the potential for harm or damage to people, property, the environment, or other valued resources.
Hazard tree	A tree that is, or has portions that are, dead, dying, rotten, diseased, or otherwise has a structural defect that may fail in whole or in part and damage utility facilities should it fail
High Fire Threat District (HFTD)	Areas of the state designated by the CPUC as having elevated wildfire risk, where each utility must take additional action (per GO 95, GO 165, and GO 166) to mitigate wildfire risk. (D.17-01-009.)
High Fire Risk Area (HFRA)	Areas that the electrical corporation has deemed at high risk from wildfire, independent of HFTD designation.
Highly rural region	Area with a population of less than seven persons per square mile, as determined by the United States Bureau of the Census. For purposes of the WMP, “area” must be defined as a census tract.
High-risk species	Species of vegetation that (1) have a higher risk of either coming into contact with powerlines or causing an outage or ignition, or (2) are easily ignitable and within close proximity to potential arcing, sparks, and/or other utility equipment thermal failures. The status of species as “high-risk” must be a function of species-specific characteristics, including growth rate; failure rates of limbs, trunk, and/or roots (as compared to other species); height at maturity; flammability; and vulnerability to disease or insects.

Term	Definition
High wind warning (HWW)	Level of wind risk from weather conditions, as declared by the National Weather Service (NWS). For historical NWS data, refer to the Iowa State University archive of NWS watches/warnings.
HWW overhead (OH) circuit mile day	Sum of OH circuit miles of utility grid subject to a HWW each day within a given time period, calculated as the number of OH circuit miles under a HWW multiplied by the number of days those miles are under said HWW. For example, if 100 OH circuit miles are under a HWW for one day, and 10 of those miles are under the HWW for an additional day, then the total HWW OH circuit mile days would be 110.
Ignition likelihood	The total anticipated annualized number of ignitions resulting from electrical corporation-owned assets at each location in the electrical corporation's service territory. This considers probabilistic weather conditions, type and age of equipment, and potential contact of vegetation and other objects with electrical corporation assets. This should include the use of any method used to reduce the likelihood of ignition. For example, the use of protective equipment and device settings (PEDS) to reduce the likelihood of an ignition upon an initiating event.
Incident command system (ICS)	A standardized on-scene emergency management concept specifically designed to allow its user(s) to adopt an integrated organizational structure equal to the complexity and demands of single or multiple incidents, without being hindered by jurisdictional boundaries.
Initiative activity	See mitigation activity.
Initiative construction standards	The standard specifications, special provisions, standards of practice, standard material and construction specifications, construction protocols, and construction methods that an electrical corporation applies to activities undertaken by the electrical corporation pursuant to a WMP initiative in a given compliance period.
Level 1 finding	In accordance with GO 95, an immediate safety and/or reliability risk with high probability for significant impact.

Term	Definition
Level 2 finding	In accordance with GO 95, a variable safety and/or reliability risk (non-immediate and with high to low probability for significant impact).
Level 3 finding	In accordance with GO 95, an acceptable safety and/or reliability risk.
Limited English proficiency (LEP) population	Population with limited English working proficiency based on the International Language Roundtable scale.
Line miles	The number of miles of transmission and/or distribution conductors, including the length of each phase and parallel conductor segment.
Live fuel moisture content	Moisture content within living vegetation, which can retain water longer than dead fuel.
Locally relevant	In disaster risk management, generally understood as the cope at which disaster risk strategies and initiatives are considered the most effective at achieving desired outcomes. This tends to be the level closest to impacting residents and communities, reducing existing risks, and building capacity, knowledge, and normative support. Locally relevant scales, conditions, and perspectives depend on the context of application.
Match-drop simulation	Wildfire simulation method forecasting propagation and consequence/impact based on an arbitrary ignition.
Memorandum of Agreement (MOA)	A document of agreement between two or more agencies establishing reciprocal assistance to be provided upon request (and if available from the supplying agency) and laying out the guidelines under which this assistance will operate. It can also be a cooperative document in which parties agree to work together on an agreed-upon project or meet an agreed objective.
Mitigation	Undertakings to reduce the loss of life and property from natural and/or human-caused disasters by avoiding or lessening the impact of a disaster and providing value to the public by creating safer

Term	Definition
	communities. Encompasses mitigation categories, mitigation initiatives, and mitigation activities within the WMP.
Mitigation activity	A measure that contributes to or accomplishes a mitigation initiative designed to reduce the consequences and/or probability of wildfire or outage event. For example, covered conductor installation is a mitigation activity under the mitigation initiative of Grid Design and System Hardening.
Mitigation category	The highest subset in the WMP mitigation hierarchy. There are five Mitigation Categories in total: Grid Design, Operations, and Maintenance; Vegetation Management and Inspections; Situational Awareness and Forecasting; Emergency Preparedness; and Enterprise Systems. Contains mitigation initiatives and any subsequent mitigation activities.
Mitigation initiative	Efforts within a mitigation category either proposed or in process, designed to reduce the consequences and/or probability of wildfire or outage event. For example, Asset Inspection is a mitigation initiative under the mitigation category of Grid Design, Operations, and Maintenance.
Model uncertainty	The amount by which a calculated value might differ from the true value when the input parameters are known (i.e., limitation of the model itself based on assumptions). ²⁰
Mutual aid	Voluntary aid and assistance by the provision of services and facilities, including but not limited to electrical corporations, communication, and transportation. Mutual aid is intended to provide adequate resources, facilities, and other support to an electrical corporation whenever its own resources prove inadequate to cope with a given situation.
National Incident Management System (NIMS)	A systematic, proactive approach to guide all levels of government, nongovernment organizations, and the private sector to work together to prevent, protect against, mitigate, respond to, and recover from the effects of incidents. NIMS provides stakeholders

²⁰ Adapted from: Substantiating a Fire Model for a Given Application.

Term	Definition
	across the whole community with the shared vocabulary, systems, and processes to successfully deliver the capabilities described in the National Preparedness System. NIMS provides a consistent foundation for dealing with all incidents, ranging from daily occurrences to incidents requiring a coordinated federal response.
Operations-based exercise	Type of exercise that validates plans, policies, agreements, and procedures; clarifies roles and responsibilities; and identifies resource gaps in an operational environment. Often includes drills, functional exercises (FEs), and full-scale exercises (FSEs).
Outage program risk	The measure of reliability impacts from wildfire mitigation related outages at a given location.
Overall utility risk	The comprehensive risk due to both wildfire and PSPS incidents across a utility's territory; the aggregate potential of adverse impacts to people, property, critical infrastructure, or other valued assets in society.
Overall utility risk, PSPS risk	See Outage program risk.
Parameter uncertainty	The amount by which a calculated value might differ from the true value based on unknown input parameters. (Adapted from Society of Fire Protection Engineers [SFPE] guidance.)
Patrol inspection	In accordance with GO 165, a simple visual inspection of applicable utility equipment and structures designed to identify obvious structural problems and hazards. Patrol inspections may be carried out in the course of other company business.
Performance metric	A quantifiable measurement that is used by an electrical corporation to indicate the extent to which its WMP is driving performance outcomes.
Population density	Population density is calculated using the American Community Survey (ACS) one-year estimate for the corresponding year or, for years with no such ACS estimate available, the estimate for the immediately preceding year.

Term	Definition
Preparedness	A continuous cycle of planning, organizing, training, equipping, exercising, evaluating, and taking corrective action in an effort to ensure effective coordination during incident response. Within the NIMS, preparedness focuses on planning, procedures and protocols, training and exercises, personnel qualification and certification, and equipment certification.
Priority essential services	Critical first responders, public safety partners, critical facilities and infrastructure, operators of telecommunications infrastructure, and water electrical corporations/agencies.
Property	Private and public property, buildings and structures, infrastructure, and other items of value that may be destroyed by wildfire, including both third-party property and utility assets.
Protective equipment and device settings (PEDS)	The electrical corporation's procedures for adjusting the sensitivity of grid elements to reduce wildfire risk, other than automatic reclosers (such as circuit breakers, switches, etc.). For example, PG&E's "Enhanced Powerline Safety Settings" (EPSS).
PEDS outage consequence	The total anticipated adverse effects from an outage occurring while increased sensitivity settings on a protective device are enabled at a specific location, including reliability and associated safety impacts.
PEDS outage exposure potential	The potential physical, social, or economic impact of an outage occurring when PEDS are enabled on people, property, critical infrastructure, livelihoods, health, local economies, and other high-value assets.
PEDS outage likelihood	The likelihood of an outage occurring while increased sensitivity settings on a protective device are enabled at a specific location given a probabilistic set of environmental conditions.
PEDS outage risk	The total expected annualized impacts from PEDS enablement at a specific location.
PEDS outage vulnerability	The susceptibility of people or a community to adverse effects of an outage occurring when PEDS are enabled, including all characteristics that influence their capacity to anticipate, cope with,

Term	Definition
	resist, and recover from the related adverse effects (e.g., high AFN population, poor energy resiliency, low socioeconomics).
PSPS consequence	The total anticipated adverse effects of a PSPS for a community. This considers the PSPS exposure potential and inherent PSPS vulnerabilities of communities at risk.
PSPS event	The period from notification of the first public safety partner of a planned public safety PSPS to re-energization of the final customer.
PSPS exposure potential	The potential physical, social, or economic impact of a PSPS event on people, property, critical infrastructure, livelihoods, health, local economies, and other high-value assets.
PSPS likelihood	The likelihood of an electrical corporation requiring a PSPS given a probabilistic set of environmental conditions.
PSPS risk	The total expected annualized impacts from PSPS at a specific location. This considers two factors: (1) the likelihood a PSPS will be required due to environmental conditions exceeding design conditions, and (2) the potential consequences of the PSPS for each affected community, considering exposure potential and vulnerability.
PSPS vulnerability	The susceptibility of people or a community to adverse effects of a PSPS event, including all characteristics that influence their capacity to anticipate, cope with, resist, and recover from the adverse effects of a PSPS event (e.g., high AFN population, poor energy resiliency, low socioeconomics).
Public safety partners	First/emergency responders at the local, state, and federal levels; water, wastewater, and communication service providers; community choice aggregators (CCAs); affected publicly owned electrical corporations/electrical cooperatives; tribal governments; Energy Safety; the Commission; the California Office of Emergency Services; and CAL FIRE.
Qualitative target	Specific, measurable, achievable, realistic, and timely outcomes for the overall WMP strategy, or mitigation initiatives and activities that

Term	Definition
	a utility can implement to satisfy the primary goals and subgoals of the WMP program.
Quantitative target	A forward-looking, quantifiable measurement of work to which an electrical corporation commits to in its WMP. Electrical corporations will show progress toward completing targets in subsequent reports, including data submissions and WMP Updates.
RFW OH circuit mile day	Sum of OH circuit miles of utility grid subject to RFW each day within a given time period, calculated as the number of OH circuit miles under RFW multiplied by the number of days those miles are under said RFW. For example, if 100 OH circuit miles are under RFW for one day, and 10 of those miles are under RFW for an additional day, then the total RFW OH circuit mile days would be 110.
Risk	A measure of the anticipated adverse effects from a hazard considering the consequences and frequency of the hazard occurring. ²¹
Risk component	A part of an electric corporation's risk analysis framework used to determine overall utility risk.
Risk evaluation	The process of comparing the results of a risk analysis with risk criteria to determine whether the risk and/or its magnitude is acceptable or tolerable. (ISO 31000:2009.)
Risk event	<p>An event with probability of ignition, such as wire down, contact with objects, line slap, event with evidence of heat generation, or other event that causes sparking or has the potential to cause ignition. The following all qualify as risk events:</p> <ul style="list-style-type: none"> • Ignitions • Outages not caused by vegetation • Outages caused by vegetation • Wire-down events • Faults

²¹ Adapted from: Introduction to International Disaster Management.

Term	Definition
	<ul style="list-style-type: none"> • Other events with potential to cause ignition
Risk management	Systematic application of management policies, procedures, and practices to the tasks of communication, consultation, establishment of context, and identification, analysis, evaluation, treatment, monitoring, and review of risk. (ISO 31000.)
Rule	Section of Public Utilities Code requiring a particular activity or establishing a particular threshold.
Rural region	In accordance with GO 165, area with a population of less than 1,000 persons per square mile, as determined by the U.S. Bureau of the Census. For purposes of the WMP, “area” must be defined as a census tract.
Seminar	An informal discussion, designed to orient participants to new or updated plans, policies, or procedures (e.g., to review a new external communications standard operating procedure).
Sensitivity analysis	Process used to determine the relationships between the uncertainty in the independent variables (“input”) used in an analysis and the uncertainty in the resultant dependent variables (“output”). (SFPE guidance.)
Situational Awareness	An on-going process of gathering information by observation and by communication with others. This information is integrated to create an individual's perception of a given situation. ²²
Slash	Branches or limbs less than four inches in diameter, and bark and split products debris left on the ground as a result of utility vegetation management. ²³
Span	The space between adjacent supporting poles or structures on a circuit consisting of electric lines and equipment. "Span level" refers to asset-scale granularity.

²² Glossary of Wildland Fire.

²³ Pub. Res. Code § 4525.7.

Term	Definition
Tabletop exercise (TTX)	A discussion-based exercise intended to stimulate discussion of various issues regarding a hypothetical situation. Tabletop exercises can be used to assess plans, policies, and procedures or to assess types of systems needed to guide the prevention of response to, or recovery from a defined incident.
Trees with strike potential	Trees that could either, in whole or in part, “fall in” to a power line or have portions detach and “fly in” to contact a power line in high-wind conditions.
Uncertainty	The amount by which an observed or calculated value might differ from the true value. For an observed value, the difference is “experimental uncertainty”; for a calculated value, it is “model” or “parameter uncertainty.” (Adapted from SFPE guidance.)
Urban region	In accordance with GO 165, area with a population of more than 1,000 persons per square mile, as determined by the U.S. Bureau of the Census. For purposes of the WMP, “area” must be defined as a census tract.
Utility-related ignition	An event that meets the criteria for a reportable event subject to fire-related reporting requirements. ²⁴
Validation	Process of determining the degree to which a calculation method accurately represents the real world from the perspective of the intended uses of the calculation method without modifying input parameters based on observations in a specific scenario. (Adapted from ASTM E 1355.)
Vegetation management (VM)	The assessment, intervention, and management of vegetation, including pruning and removal of trees and other vegetation around electrical infrastructure for safety, reliability, and risk reduction.

²⁴ D.14-02-015, page C-3.

Term	Definition
Verification	Process to ensure that a model is working as designed, that is, that the equations are being properly solved. Verification is essentially a check of the mathematics. (SFPE guidance.)
Vulnerability	The propensity or predisposition of a community to be adversely affected by a hazard, including the characteristics of a person, group, or service and their situation that influences their capacity to anticipate, cope with, resist, and recover from the adverse effects of a hazard.
Wildfire consequence	The total anticipated adverse effects from a wildfire on a community that is reached. This considers the wildfire hazard intensity, the wildfire exposure potential, and the inherent wildfire vulnerabilities of communities at risk.
Wildfire exposure potential	The potential physical, social, or economic impact of wildfire on people, property, critical infrastructure, livelihoods, health, environmental services, local economies, cultural/historical resources, and other high-value assets. This may include direct or indirect impacts, as well as short- and long-term impacts.
Wildfire hazard intensity	The potential intensity of a wildfire at a specific location within the service territory given a probabilistic set of weather profiles, vegetation, and topography.
Wildfire likelihood	The total anticipated annualized number of fires reaching each spatial location resulting from utility-related ignitions at each location in the electrical corporation service territory. This considers the ignition likelihood and the likelihood that an ignition will transition into a wildfire based on the probabilistic weather conditions in the area.
Wildfire mitigation strategy	Overview of the key mitigation initiatives at enterprise level and component level across the electrical corporation's service territory, including interim strategies where long-term mitigation initiatives have long implementation timelines. This includes a description of the enterprise-level monitoring and evaluation strategy for assessing overall effectiveness of the WMP.

Term	Definition
Wildfire risk	The total expected annualized impacts from ignitions at a specific location. This considers the likelihood that an ignition will occur, the likelihood the ignition will transition into a wildfire, and the potential consequences—considering hazard intensity, exposure potential, and vulnerability—the wildfire will have for each community it reaches.
Wildfire spread likelihood	The likelihood that a fire with a nearby but unknown ignition point will transition into a wildfire and will spread to a location in the service territory based on a probabilistic set of weather profiles, vegetation, and topography.
Wildfire vulnerability	The susceptibility of people or a community to adverse effects of a wildfire, including all characteristics that influence their capacity to anticipate, cope with, resist, and recover from the adverse effects of a wildfire (e.g., AFN customers, Social Vulnerability Index, age of structures, firefighting capacities).
Wildland-urban interface (WUI)	The line, area, or zone where structures and other human development meet or intermingle with undeveloped wildland or vegetation fuels (National Wildfire Coordinating Group).
Wire down	Instance where an electric transmission or distribution conductor is broken and falls from its intended position to rest on the ground or a foreign object.
Work order	A prescription for asset or vegetation management activities resulting from asset or vegetation management inspection findings.
Workshop	Discussion that resembles a seminar but is employed to build specific products, such as a draft plan or policy (e.g., a multi-year training and exercise plan).