State of California – A Natural Resources Agency
Gavin Newsom, Governor

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Caroline Thomas Jacobs, Director

To: Stakeholders for Bear Valley Electric Service's 2020 Annual Report on Compliance

November 23, 2022

Enclosed is the Draft 2020 Annual Report on Compliance (ARC) for Bear Valley Electric Service's (BVES) 2020 Wildfire Mitigation Plan (WMP).

On November 23, 2022, this draft ARC is hereby published for public review and comment. Opening comments must be submitted no later than December 13, 2022. Reply must be submitted no later than December 23, 2022.[1]

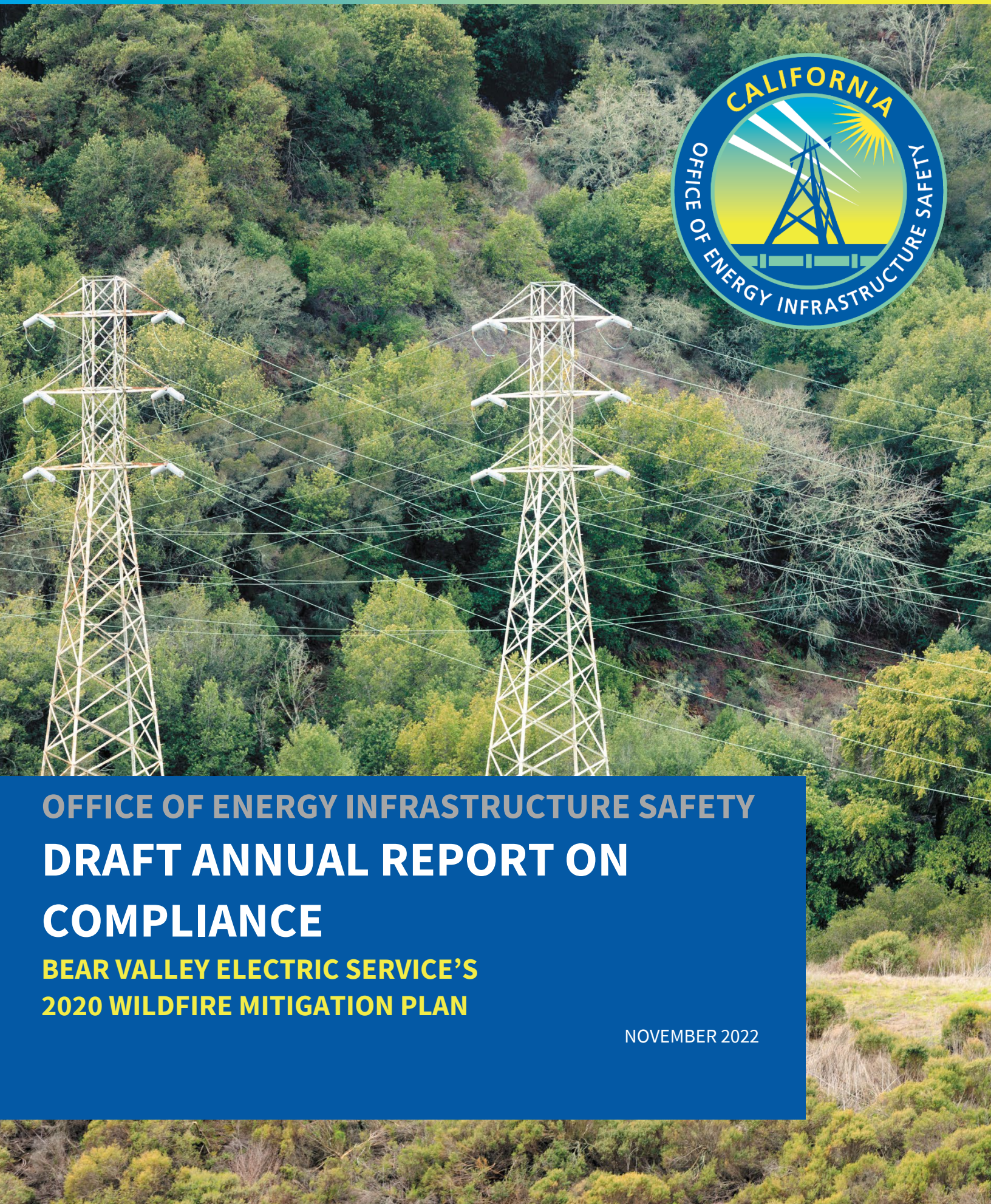
Comments must be submitted to Energy Safety's e-filing system in the 2020 ARC docket (#2020-ARC).[2]

Sincerely,

Koko Tomassian
Program Manager, Compliance Assurance Division
Office of Energy Infrastructure Safety
California Natural Resource Agency

[1] Dates falling on a Saturday or holiday as defined in Government Code Section 6700 have been adjusted to the next business day in accordance with Government Code Section 6707.

[2] Submit comments to the 2020-ARC docket via the Energy Safety e-filing system here: https://efiling.energysafety.ca.gov/EFiling/DocketInformation.aspx?docketnumber=2020-ARC (accessed November 23, 2022).



OFFICE OF ENERGY INFRASTRUCTURE SAFETY

DRAFT ANNUAL REPORT ON COMPLIANCE

BEAR VALLEY ELECTRIC SERVICE'S 2020 WILDFIRE MITIGATION PLAN

NOVEMBER 2022

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1.0 EXECUTIVE SUMMARY

The Office of Energy Infrastructure Safety (Energy Safety) is tasked with evaluating and either approving or denying Wildfire Mitigation Plans annually filed by electrical corporations pursuant to Public Utilities Code section 8386 et seq. The law also directs Energy Safety to ensure that the electrical corporations have complied with their plans.

Pursuant to Government Code section 15475.1, Energy Safety's primary objective is to ensure that electrical corporations reduce wildfire risk and comply with energy infrastructure safety measures. Therefore, as detailed in the Compliance Framework, Energy Safety's evaluation of BVES's performance to its 2020 WMP went beyond a "check-box" exercise of looking at whether BVES met its initiative targets and instead wholistically evaluated whether BVES's performance in 2020 reduced the risk of BVES equipment igniting a catastrophic wildfire.

Energy Safety's compliance review process is conducted through a variety of means including audits, field inspections, and analysis of data submitted by BVES to Energy Safety. Substantial compliance with a WMP includes meeting not only program targets and plan objectives, but also reducing risk. Energy Safety evaluated several performance metrics, as well as metrics that reveal the risk to the system of an electrical corporation's failure to identify and remediate conditions known to pose wildfire risk. Energy Safety also performed an analysis that compared the electrical corporation's performance during the 2020 WMP compliance period to trends from previous years. Finally, Energy Safety reviewed BVES's self-assessment in their Annual Compliance Review and the findings of its independent evaluator.

After considering all the sources of information before it, Energy Safety finds that BVES substantially complied with its 2020 WMP during the compliance period, January 1 to December 31, 2020.

Energy Safety finds that BVES met most of its quantitative initiative targets, including initiatives related to grid hardening, vegetation management, and inspections, and most of its top spend/top priority targets. While BVES is maturing in its ability to create standards and procedures, it did meet its overall 2020 WMP objective and made concrete progress toward reducing its ignition risk.

2.0 INTRODUCTION

This Annual Report on Compliance (ARC) presents the Office of Energy Infrastructure Safety's (Energy Safety's) statutorily mandated assessment of BVES's compliance with its 2020 Wildfire Mitigation Plan (WMP).[1] Mitigation of wildfire risk is a highly dynamic and circumstantial endeavor that varies as a function of climate, weather, topography, and fuel conditions. The factors impacting catastrophic wildfire risk vary both temporally and geographically. Just as the mitigations to address an electrical corporation's wildfire risk are specifically unique to the dynamics of its territory, location, infrastructure, and various other temporal factors, Energy Safety's assessment of compliance with WMPs is equally tailored to the electrical corporation's unique scenario and circumstances.

Bear Valley Electric Service (BVES) submitted its 2020 WMP on February 7, 2020. Energy Safety reviewed the plan and denied BVES's WMP on July 22, 2020. BVES resubmitted its WMP on September 18, 2020. Energy Safety issued a conditional approval on January 14, 2021.

2.1 Background

In 2019, following the devastating wildfires in 2017 and 2018, the California Legislature passed several bills increasing regulatory supervision of electrical corporations' efforts to reduce utility-related wildfires. Assembly Bill (AB) 1054 and AB 111 created Energy Safety and tasked it with reviewing WMPs submitted annually by electrical corporations and ensuring compliance with those plans.[2] Energy Safety's primary objective is to ensure that electrical corporations reduce wildfire risk and comply with energy infrastructure safety measures.[3]

2.2 Legal Authority

Energy Safety is responsible for overseeing compliance with electrical corporations' WMPs.[4] Energy Safety has broad authority to obtain and

[1] Pub. Util. Code, § 8386.3(c).
[2] The legislation which created Energy Safety mandated that the office be formed on January 1, 2020, as the Wildfire Safety Division (WSD) of the California Public Utilities Commission (CPUC) and transition to Energy Safety under the California Natural Resources Agency (CNRA) on July 1, 2021 – 18 months after being formed.
[3] Gov. Code, § 15475.1.
[4] Pub. Util. Code, § 8386.3(c).

review information and data and to inspect property, records, and equipment of every electrical corporation in furtherance of its duties, powers, and responsibilities.[5] In addition to performing an overall assessment of compliance[6] with the WMP, Energy Safety audits each electrical corporation's vegetation management work for compliance with WMP requirements[7] and performs other reviews and audits. Energy Safety may rely upon metrics[8] to evaluate WMP compliance, including performance metrics adopted by the California Public Utilities Commission (CPUC).[9] Annually, in consultation with Energy Safety, the CPUC adopts a wildfire mitigation plan compliance process.[10] The CPUC adopted the 2020 Compliance Process via Resolution WSD-012 on November 23, 2020.[11]

2.3 Annual Compliance Process Cadence

Pursuant to Public Utilities Code section 8385(a)(1), a "compliance period" means a period of approximately one year. In its Compliance Operational Protocols issued on February 16, 2021, Energy Safety defined the compliance period for 2020-2022 WMPs as January 1 to December 31 for each calendar year of the three-year WMP.[12]

Public Utilities Code section 326(a)(3) instructs that Energy Safety utilize visual inspection of electrical corporation infrastructure and wildfire mitigation programs as a means of assessing WMP compliance. Furthermore, Public Utilities Code section 8386.3(c) outlines the baseline statutory framework for assessing WMP compliance through a series of audits, reviews, and assessments performed by Energy Safety, independent evaluators, and the electrical corporations themselves. The statutory framework also lays out a defined timeframe for several of the compliance assessment components as follows:

- Three months after the end of an electrical corporation's compliance period, each electrical corporation must submit a report addressing the electrical corporation's compliance with the plan during the prior calendar year.[13] Pursuant to this requirement, BVES submitted its electrical corporation Annual Report on Compliance (EC ARC) for its 2020 WMP on March 31, 2021.
- Six months after the end of an electrical corporation's compliance period, an independent evaluator must submit an Independent Evaluator Annual Report on

[5] Gov. Code, § 15475.
[6] Pub. Util. Code § 8386.3(c)(4).
[7] Pub. Util. Code § 8386.3(c)(5)(A).
[8] Pub. Util. Code §§ 326(a)(2), 8389(b)(1).
[9] Pub. Util. Code § 8389(d)(4).
[10] Pub. Util. Code § 8389(d)(3).
[11] https://energysafety.ca.gov/wp-content/uploads/docs/compliance-process/20201008-compliance-staff-proposal_final.pdf.
[12] https://efiling.energysafety.ca.gov/Search.aspx?docket=2021-OPS_GUIDELINES.
[13] Pub. Util. Code, § 8386.3(c)(1).

Compliance (IE ARC). The independent evaluators are engaged by each electrical corporation to review and assess the electrical corporation's compliance with its plan for the prior year. As a part of this report, the independent evaluator must determine whether the electrical corporation failed to fund any activities included in its plan.[14] BVES selected Sargent & Lundy (S&L) as its independent evaluator for compliance with the 2020 WMP. S&L issued its IE ARC for BVES's 2020 WMP on July 1, 2021.

- In parallel with the above assessments, Energy Safety audits vegetation management activities. The results of the audit must specify any failure of the electrical corporation to fully comply with the vegetation management requirements in the wildfire mitigation plan. Energy Safety then grants the electrical corporation a reasonable amount of time to correct and eliminate any deficiency specified in the audit.[15] Subsequently, Energy Safety issues a report describing any failure of the electrical corporation to substantially comply with the substantial portion of the vegetation management requirements in the electrical corporation's WMP.[16]
- Eighteen months after the electrical corporation submits its compliance report pursuant to section 8386.3(c)(1), or twenty-one months after the end of the compliance period, Energy Safety completes its annual compliance review to determine whether the electrical corporation substantially complied with its WMP.[17] Energy Safety memorializes its conclusions in this ARC.

3.0 ARC COMPLIANCE FRAMEWORK

Public Utilities Code prescribes that the overarching intended objective of electrical corporation wildfire mitigation planning efforts is to ensure that electrical corporations are constructing, maintaining, and operating their infrastructure in a manner that will minimize the risk of catastrophic wildfire.[18] The statutory objective of a WMP, and consequently the focus of Energy Safety's assessment of compliance, is wildfire risk reduction. An electrical corporation's obligations extend beyond meeting WMP targets. If the risk of catastrophic wildfire is not reduced, an electrical corporation has

[14] Pub. Util. Code, § 8386.3(c)(2)(B)(i).
[15] Pub. Util. Code, § 8386.3(c)(5)(C).
[16] Id.
[17] Pub. Util. Code, § 8386.3(c)(4); CPUC Resolution WSD-012 2020 WMP Compliance Process. November 2020. https://energysafety.ca.gov/wp-content/uploads/docs/compliance-process/20201008-compliance-staff-proposal_final.pdf.
[18] Pub. Util. Code, § 8386(a).

not satisfied the objective of its WMP. Therefore, Energy Safety's compliance evaluation of the 2020 WMPs went beyond an assessment of whether an electrical corporation met all stated targets (e.g., number of miles of covered conductor installed) to also examine whether the electrical corporation has reduced the risk of catastrophic wildfires. Energy Safety also evaluated whether there were systemic issues that hindered the electrical corporation's ability to meet targets and reduce wildfire risk.

Energy Safety's compliance evaluation examined the totality of data and findings before the department and applied rigorous analysis to determine whether an electrical corporation substantially complied with its WMP.

Energy Safety conducted its compliance assessment to answer the following questions:

1. Did the electrical corporation implement its WMP through completion of approved initiatives (i.e., did the electrical corporation meet its stated qualitative and quantitative targets)?
2. Did the electrical corporation achieve the stated objectives set forth in its 2020 WMP (see Section 4.2)?
3. Was the electrical corporation's performance consistent with achieving wildfire risk reduction?

3.1 Completion of Approved WMP Initiatives

To assess compliance with approved WMP initiatives, Energy Safety evaluated whether the electrical corporation met all stated quantitative and qualitative targets set by the electrical corporation in its plan. Energy Safety particularly focused on those initiatives directly associated with the achievement of WMP objectives as well as those that constituted a significant portion of financial expenditures by the electrical corporation as the expenditures demonstrated where the electrical corporation focused most of its resources to reduce wildfire risk. For 2020 only, Energy Safety also assessed whether the electrical corporation satisfied the conditions placed upon it through Energy Safety's conditional 2020 WMP approval (see Section 4.1).

Where an electrical corporation failed to meet a stated target, Energy Safety evaluated the rationale provided by the electrical corporation, if any, for such failure. Energy Safety also looked for systemic issues that may have caused underperformance, e.g., conflicting/inconsistent documentation, poor communication practices, or substandard quality control practices (see Section 3.3).

Finally, Energy Safety evaluated the quality of WMP initiative implementation. Even where an electrical corporation met a target for work volume, to comply with a WMP and ensure

reduction of risk, the work must be completed correctly and in an effective, high quality manner.

3.2 2020 WMP Objectives

To assess whether an electrical corporation achieved its 2020 WMP objectives, Energy Safety relied upon the information sources set forth in Section 3.4 below. Where an electrical corporation failed to meet a stated objective, Energy Safety evaluated the rationale, if any, provided by the electrical corporation. Energy Safety also looked for systemic issues that may have caused underperformance (see Section 3.3).

3.3 Achieving Wildfire Risk Reduction

The 2020 WMP is the base year in the first three-year WMP cycle (2020-2022). As such, Energy Safety was limited in making direct determinations on the effectiveness of the 2020 WMP in reducing wildfire risk in that same year as the benefits of some actions may take time to come to fruition. Energy Safety conducted a trend analysis on several outcome metrics (e.g., ignitions) from 2015-2020, normalized for weather and fuel conditions, to assess prior performance and to track any notable changes that occurred in 2020. Energy Safety will again evaluate these metrics at the end of the three-year WMP cycle to evaluate correlations between WMP implementation performance and outcomes.

Energy Safety further analyzed how the electrical corporation prioritized implementation of WMP initiatives to determine whether work was undertaken in the areas of highest risk. Not all areas in an electrical corporation's service territory present equal ignition risk or consequence. Therefore, it is not enough to meet a target; WMP initiatives must first be concentrated and deployed in the areas of highest risk to reduce as much risk as possible.

Finally, Energy Safety undertook a holistic evaluation of all relevant information sources and assessments, including field verifications, to bring to light systemic failings of the electrical corporation that may hinder its ability to reduce catastrophic wildfires. Such failings could contribute to increased risk on the system even if WMP targets are achieved. Therefore, Energy Safety looked for trends across analyses to weave together a deeper and more nuanced understanding of WMP compliance.

3.4 Information Sources Used for ARC Analysis

Energy Safety relied upon the following sources of information to conduct its analysis:

- Information provided by the electrical corporation i.e., the EC ARC, Quarterly Initiative Updates, compliance self-reporting.
- Information provided by the independent evaluator's review of the electrical corporation's compliance with its 2020 WMP (IE ARC).
- Findings from Energy Safety field inspections.
- Findings from Energy Safety's audits and assessments of the electrical corporation.
- Data submitted to Energy Safety by the electrical corporation[19] including responses to data requests.

3.4.1 EC ARC

Three months after the end of the compliance period, the electrical corporation must submit a report to Energy Safety addressing its compliance with its approved 2020 WMP.[20] The Compliance Operational Protocols outline the minimum requirements and structure for BVES's 2020 WMP compliance review report.[21] The report must include:

- An assessment of whether the electrical corporation achieved the risk reduction intent by implementing all of their approved WMP initiatives, i.e., the degree to which initiative activities have reduced ignition probabilities. If the electrical corporation failed to achieve the intended risk reduction, Energy Safety required the electrical corporation to provide a detailed explanation of why and a reference to where associated corrective actions were incorporated into their most recently submitted WMP.
- A full and complete listing of all change orders[22] and any other operational changes, such as initiative location changes, made to WMP initiatives, with an explanation of why the changes were necessary, and an assessment of whether the changes achieved the same risk reduction intent.
- Descriptions of all planned WMP initiative spend vs. actual WMP initiative spend and an explanation of any differentials between the planned and actual spends.
- A description of whether the implementation of WMP initiatives changed the threshold(s) for triggering a Public Safety Power Shutoff (PSPS) event and/or reduced the frequency, scale, scope and duration of PSPS events.

A summary of all defects identified by Energy Safety within the annual compliance period, the corrective actions taken and the completion and/or estimated completion date.[23]

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[19] Energy Safety receives data from the electrical corporation through three main paths: Quarterly Advice Letter submissions, Quarterly Data Request submissions, and Quarterly Initiative Updates.
[20] Pub. Util. Code, § 8386.3(c)(1).
[21] Wildfire Safety Division – Compliance Operational Protocols, pages 10-12.
[22] See CPUC Resolution WSD-002, pages 32-35, for detail regarding the 2020 WMP change order process.
[23] The defect summary component of the ARC contents does not supplant detailed defect correction responses, which shall be filed with WSD throughout the year as needed (see Appendix Part 2. Response and Corrective Action Timeline in the Operational Protocols for details).

3.4.2 IE ARC

Each year before March 1, Energy Safety, in consultation with the Office of the State Fire Marshall, must publish a list of qualified independent evaluators.[24] The electrical corporations must each engage an independent evaluator from the list to review and assess its compliance with the respective approved WMP.[25] The independent evaluator must issue a report, referred to as the Independent Evaluator Annual Report on Compliance (IE ARC), by July 1 of each year covering the previous calendar year. As a part of the report, the independent evaluator must determine whether the electrical corporation failed to fund any activities included in its plan.[26] [27] Energy Safety considered the independent evaluator's findings in this ARC, but the independent evaluator's findings are not binding on Energy Safety's final determination of WMP compliance.[28]

3.4.3 Inspections

Pursuant to Public Utilities Code section 326(a)(3), to ensure electrical corporations complied with their WMPs and operated their infrastructure in a manner that reduces wildfire risk, Energy Safety conducted detailed visual inspections of electrical infrastructure to verify work was performed by electrical corporations, as reported in approved WMPs, and to assess the condition of infrastructure.

Energy Safety began conducting inspections related to the 2020 WMPs in May 2020. Inspections covered core wildfire mitigation efforts related to vegetation management, system hardening, situational awareness, and emergency preparedness and response, in addition to general compliance with applicable General Order (GO) 95 requirements. The review and analysis of data compiled on findings from these inspections formed the basis of Energy Safety's observations and conclusions in Section 5.3.

3.4.4 Audits

Public Utilities Code section 8386.3(c)(5) requires Energy Safety to perform an audit to determine whether the electrical corporation "substantially complied with the substantial portion"[29] of its vegetation management requirements in its WMP. Energy Safety refers to this

[24] Pub. Util. Code § 8386.3 (c)(2)(A).
[25] Pub. Util. Code, § 8386.3(c)(2)(B).
[26] Id.
[27] The independent evaluator reviews performed for the 2020 WMPs were the first of their kind and completed in a considerably truncated timeframe.
[28] Pub. Util. Code, § 8386.3(c)(2)(B)(ii).
[29] Pub. Util. Code, § 8386.3(c)(5)(C).

audit as the "Substantial Vegetation Management" (SVM) audit. Pursuant to Public Utilities Code section 8386(c)(5), Energy Safety conducted an audit of BVES's compliance with the vegetation management requirements in its 2020 WMP.

3.4.5 Data

Energy Safety analyzed performance metrics and other data when assessing whether the electrical corporation complied with its 2020 WMP. Energy Safety required electrical corporations to submit spatial and non-spatial data through Quarterly Data Reports (QDRs), Quarterly Initiative Updates (QIUs), and Quarterly Advice Letters (QALs).

4.0 BVES'S 2020 WMP

The 2020 WMP Guidelines were issued on December 16, 2019, via *Administrative Law Judge's Ruling on Wildfire Mitigation Plan Templates and Related Material and Allowing Comment*.[30] The 2020 WMP Guidelines outlined the requirements and expectations for the 2020 WMP submissions including reporting templates, metrics, timelines, structure, and minimum levels of detail. The 2020 WMP Guidelines were designed to:

- Increase standardization of information collected on electrical corporations' wildfire risk exposure.
- Enable systematic and uniform review of information each electrical corporation submits.
- Move electrical corporations toward an effective long-term wildfire mitigation strategy, with systematic tracking of improvements over time.[31]

The 2020 WMP Guidelines structured the submission into five sections, as follows:

1. Persons responsible for executing the plan.
2. Metrics and underlying data.
3. Baseline ignition probability and wildfire risk exposure.
4. Inputs to the plan and directional vision including objectives.
5. Listing of wildfire mitigation initiatives for each year of the three-year plan period.

4.1 Conditional Approval

In its disposition of BVES's 2020 WMP, Energy Safety issued a conditional approval that identified and classified certain deficiencies requiring varying responsive action. Energy

[30] CPUC Rulemaking R.18-10-007.
[31] CPUC Resolution WSD-002, page 2.

Safety evaluated BVES's fulfillment of its 2020 WMP conditions in this ARC. Energy Safety's assessment regarding resolution of conditions placed on BVES's 2020 WMP are further discussed in Section 5.7.

Energy Safety released Resolution WSD-002, *Guidance Resolution on 2020 Wildfire Mitigation Plans Pursuant to Public Utilities Code Section 8386* (Guidance Resolution). The Guidance Resolution applied to the electrical corporations collectively and contained deficiencies and associated conditions (remedies).[32] Deficiency Guidance-5 noted that electrical corporations combined various initiatives into broader programs and reported data at the programmatic level. This aggregation made it difficult to track progress against individual initiatives, among other issues. The associated condition to Deficiency Guidance-5 required electrical corporations to disaggregate initiatives in their quarterly filings.[33]

As a result of the required disaggregation, some electrical corporation data submissions, including quarterly filings and Quarterly Initiative Updates (QIUs), reference a different number of initiatives than that set forth in the electrical corporation's WMP. In this ARC, Energy Safety reported the number of initiatives as they were presented in the underlying reference document.

4.2 2020 WMP Objectives

The 2020 WMP Guidelines required each electrical corporation to describe the specific objectives of its 2020 WMP in section 4.1.[34] The 2020 WMP Guidelines also specified that objectives must be described with respect to the following timeframes:

1. Before the upcoming wildfire season (as declared by CALFIRE).
2. Before the next annual update.
3. Within the next three years.
4. Within the next 10 years.[35]

In determining whether BVES substantially complied with its 2020 WMP, Energy Safety considered and weighed the plan's objectives. For the purposes of this ARC, Energy Safety only considered BVES's objectives with respect to the first two timeframes.

The overarching objectives of BVES's 2020 WMP is to prevent the threat of utility-caused wildfires by identifying mitigation measures and, in the event of a wildfire affecting BVES's

[32] The Guidance Resolution did not apply to the Independent Transmission Operators, Horizon West and Trans Bay Cable, as they received a full approval of their respective 2020 WMPs.
[33] CPUC Resolution WSD-002, page 24.
[34] 2020 WMP Guidelines, page 43.
[35] Id.

service area, to provide emergency response and restoration actions.[36] BVES's overarching objectives also include minimizing the need to activate PSPS events.

1. Before the upcoming wildfire season:

- Continue with ongoing initiatives approved in the 2019 WMP.[37]
- Develop new data collection tracking templates that align with programmatic targets and implementation schedules.[38]
- Continue PSPS communication programs and emergency response planning public outreach.[39]

2. Before the next annual update:

- Identify a detailed plan to align geospatial information system (GIS) maps with Wildfire Safety Division's (WSD) GIS standards.[40]
- Monitor implementation of approved near-term mitigation measures.
- Evaluate effectiveness of implemented mitigation measures, using metrics identified in this Plan.
- Revisit technologies and strategies to determine feasibility and efficacy over the longer term.

4.3 BVES's 2020 WMP Initiatives

The 2020 WMP Guidelines required each electrical corporation to group its discussion of wildfire mitigation initiatives into the 10 categories listed in Table 1, below.

BVES's 2020 WMP included a total of 40 initiatives allocated across the 10 categories.[41] Table 1 below provides a summary of BVES's allocation of WMP initiatives across categories, its reported planned spend in each category for 2020, and the percentage of the total 2020 WMP budget the spend in each category comprised.

Several of the categories in Table 1 below have initiatives but no associated planned spend because in its 2020 WMP, BVES provided information on initiatives that were still under

[36] BVES 2020 WMP, page 54.
[37] BVES WMP Refiling (September 18, 2020), page 55.
[38] Id.
[39] Id.
[40] Id.
[41] See Section 4.1 for an explanation of the source of some reporting discrepancies in initiative numbers and targets.

development. BVES stated that within the next three years, it would develop cost estimates to develop these initiatives and present the estimated costs as part of its WMP filing.[42]

Table 1: BVES's 2020 WMP Initiatives by Category[43]

Initiative Category	No. of Initiatives	2020 Planned Spend ($K)[44]	% of 2020 WMP Budget
Risk assessment and mapping	6	$0	0%
Situational awareness and forecasting	7	$350	2%
Grid design and system hardening	10	$11,432	76%
Asset management and inspections	4	$436	2%
Vegetation management and inspections	2	$2,745	18%
Grid operations and protocols	4	$84	1%
Data governance	1	$46	0%
Resource allocation methodology	0	$0	0%
Emergency planning and preparedness	5	$0	0%
Stakeholder cooperation and community engagement	1	$0	0%
Total	40	$15,093	100%

[42] Table 21 of BVES's 2020 WMP, BVES states that there are no specifically designated expenses or risk reductions associated with the Risk Assessment and Mapping initiatives. Similarly, BVES stated that the initiatives in Table 29 of its 2020 WMP were not specifically budgeted programs.

[43] These figures represent the 40 WMP initiatives provided in BVES's Refiled 2020 WMP Tables 21 through Table 30 in which BVES stated that it would perform work in 2020 or planned to perform work within the next three years. The table also includes the aggregated planned spend of each category of initiatives. These figures may differ in sections that refer to Quarterly Initiative Updates or Quarterly Advice Letters.

[44] For initiatives that BVES stated that it did not have a specific information on expense, but planned to develop in the next three years, Energy Safety included them in this table with a planned expense of zero dollars.

Some initiatives provided quantitative targets (e.g., miles completed for system hardening initiatives). Other initiatives included qualitative measures (e.g., integration of all vegetation data into a singular database as a data governance initiative).

Table 2 provides an overview of BVES's planned 2020-2022 WMP spend.[45]

Table 2: Total Planned Spend 2020-2022 Table

Planned 2020-2022 WMP Spend[46]	
2020	$15.1 million
2021	$21.2 million
2022	$14.6 million
2020-2022 Plan Period	**$50.9 million**

Energy Safety also reviewed the planned spend for each WMP initiative to assess how BVES prioritized its risk mitigation efforts as a function of the percentage of total budget allocated across WMP categories and initiatives. *Table 3* below shows BVES's top 10 initiatives in terms of cost as presented in its 2020 WMP, which comprise 94% of the total 2020 spend.

Table 3: BVES's 2020 WMP Top 10 Planned Spend Initiatives

Initiative #	Initiative	2020 Planned Spend ($)	% of 2020 WMP Budget[47]
5.3.3.7	Expulsion Fuse Replacement	$ 2,600,000	17%
5.3.5.2[48]	Detailed inspections of vegetation around distribution electric lines and equipment	$ 2,600,000	17%
5.3.3.6[49]	Distribution pole replacement and reinforcement, including with composite poles	$ 2,444,130	16%
5.3.3.3	Covered Conductor Installation	$ 1,832,933	12%
5.3.3.18	Other (Palomino Substation)	$ 1,587,675	11%
5.3.3.9	Installation of system automation equipment	$ 953,159	6%
5.3.3.22	Other (BVPP Reliability Upgrades)	$ 925,485	6%
5.3.3.20	Other (Tree attachment replacement)	$ 732,018	5%

[45] CPUC Resolution WSD-013, page 5.
[46] Any variances in WMP spend data are a function of BVES reporting costs differently across various submissions to Energy Safety.
[47] Attachment to 2020 BVES EC ARC, "BVES_2020 ARC_20210331.xlsx".
[48] This initiative budget includes the spend associated with initiatives 5.3.5.11 and 5.3.5.20.
[49] This initiative budget includes the spend associated with initiatives 5.3.4.6 and 5.3.3.13.

Initiative #	Initiative	2020 Planned Spend ($)	% of 2020 WMP Budget[47]
5.3.2.2	Continuous Monitoring Sensors	$ 250,000	2%
5.3.4.7	LiDar inspections of distribution electric lines and equipment	$ 240,000	2%
Total		$ 14,165,400	94%

5.0 COMPLIANCE ASSESSMENTS

In the following sections, Energy Safety provides the findings from the compliance source inputs it relied upon in making its annual determination of compliance in this ARC.

5.1 BVES Self-Assessed Compliance Reporting

BVES timely submitted its BVES EC ARC on March 31, 2021, in accordance with statutory requirements. Energy Safety considered this BVES EC ARC with respect to its adherence to Energy Safety instructions and guidance.

BVES's EC ARC did not report non-compliance findings. However, BVES failed to complete the Radford line project, and stated that permitting delays were the reason. Similarly, BVES stated that it installed only eight out of 10 weather stations.[50] BVES did not submit any change orders to Energy Safety.

BVES revealed that it had deviations in initiative budgets and reported instances in which spend varied by more than 10% of what BVES initially planned. For many of those variances, the reason was due to work being performed in a different year, as many of BVES's programs are multi-year initiatives. However, the report included several initiatives for which BVES reported no planned spend in the EC ARC even though those initiatives had planned spend in its 2020 WMP. Some examples include LiDAR inspections and weather forecasting, which had planned budgets of $240,000 and $45,000, respectively, in the 2020 WMP but had no listed budget in BVES's EC ARC.[51,52] In several cases where there was a deviation in spend, BVES did not list a reason.

In the BVES EC ARC, BVES also provided a list of circuits where it reduced wildfire risk. For each of those circuits, BVES determined the amount of risk that was reduced and aggregated those risk reductions into a cumulative risk score that represented its risk reduction efforts

[50] BVES Annual Report on Compliance, page 3.
[51] BVES 2020 WMP, page 153.
[52] BVES 2020 WMP, page 119.

systemwide.[53] This analysis provided insight into how BVES viewed the risk to its system, as well as how BVES evaluated the impact of its 2020 WMP initiatives in reducing risk. Specifically, BVES stated that it reduced risk by approximately 10%. Out of 26 circuits that BVES listed, it reduced risk for nine of them.

Regarding its PSPS risk, BVES stated that it had neither implemented a PSPS nor had any of its PSPS thresholds changed as a result of its WMP work. However, BVES stated that the greatest probability of being impacted by PSPS was the loss of SCE energy imports when SCE implements a PSPS.[54] As a result, BVES proposed to install energy storage to mitigate the impact of SCE's PSPS.

5.2 Independent Evaluator Review

BVES selected Sargent & Lundy (S&L) as the independent evaluator to assess its compliance with the 2020 WMP. BVES provided a list of initiative activities to S&L. S&L then modified that list of activities to match specific 2020 initiative numbers, which is why not all BVES initiative numbers match S&L's initiative numbers as seen in Table 4 below.[55] S&L issued its BVES IE ARC on July 1, 2021. Energy Safety carefully weighed the quality and utility of the BVES IE ARC when evaluating BVES's compliance with its approved 2020 WMP.

S&L reviewed BVES's WMP activities and concluded its report with eight missed targets and seven process and documentation findings tied to specific initiatives.[56] Table 4 summarizes S&L's missed targets, and Table 5 summarizes S&L's process and documentation findings.

Table 4: Summary of Initiatives With Missed Targets Identified by S&L

2020 Initiative Number	Initiative Name	IE Finding	IE Detail Finding	Energy Safety Evaluation/Conclusion
5.3.2.1	Advanced weather monitoring and weather stations	BVES did not meet its WMP quantitative goal for this initiative.	BVES planned to install 10 weather stations but was only able to install eight due to mitigating circumstances. BVES did not meet its 2020 goal.	Energy Safety agrees with S&L

[53] BVES Annual Report on Compliance, page 2.
[54] BVES Annual Report on Compliance, page 5.
[55] BVES IE ARC, pages 81-84.
[56] BVES IE ARC, pages 75-78.

2020 Initiative Number	Initiative Name	IE Finding	IE Detail Finding	Energy Safety Evaluation/Conclusion
5.3.3.1	Capacitor maintenance and replacement program	BVES did not meet its WMP quantitative goal for this initiative.	BVES documents indicated that BVES performed no capacitor inspections, maintenance, or replacement.	Energy Safety does not agree with this finding. Energy Safety finds there was no specific initiative associated with capacitor maintenance and replacement.
5.3.3.11	Mitigation of impact on customers and other residents affected during PSPS event	BVES did not meet its WMP qualitative goal for this initiative.	Per the WMP, an energy storage project is in development and planned for 2022. S&L's review found no evidence that planning or project development activities associated with this initiative were performed in 2020.	Energy Safety agrees with S&L
5.3.3.12	Other corrective action (Radford Line covered conductor replacement project)	BVES did not meet its WMP quantitative goal for this initiative.	BVES's Q4 QIU indicated a target of 2.82 circuit miles to be hardened in 2020; however, project construction did not commence in 2020. BVES reported that the project is pending with the U.S. Forestry Service for approval of the permit to perform the scope of work. Due to this, BVES was not able to complete its goal of 2.82 circuit miles in 2020.	Energy Safety agrees with S&L (See Table 6, Initiative 5.3.3.12 for further detail)
5.3.4.7	LiDAR inspections of distribution electric lines and equipment	BVES did not meet its WMP quantitative goal for this initiative.	The WMP target was two LiDAR inspections. One was performed due to BVES having a better understanding of LiDAR surveys and the data included.	Energy Safety agrees with S&L

2020 Initiative Number	Initiative Name	IE Finding	IE Detail Finding	Energy Safety Evaluation/Conclusion
5.3.7.4	Tracking and analysis of near miss data	BVES did not meet its WMP qualitative goal for this initiative.	The Q4 2020 QIU indicates a 2020 target goal of "Program in place and continued compliance with program" for "WMP metrics tracking." BVES does not have a specific wildfire mitigation data governance initiative focused on tracking and analysis of near-miss data that maps to the tracking and level of detail required.	Energy Safety agrees with S&L that there is no specific initiative for tracking and analysis of near-miss data. Therefore, Energy Safety finds that this is not a missed initiative due to BVES's 2019 IR inspection performance and inspection cycle.
5.3.3.19	Safety and technical upgrades to Palomino Substation	BVES did not meet its WMP quantitative goal for this initiative.	Per the WMP, BVES planned to complete civil work, electrical work, testing, and place in service by December 2020. S&L inspection of the Palomino substation found it still under construction as of June 2021; therefore, BVES did not meet its goal of the substation being placed in service by December 2020.	Energy Safety agrees with S&L
5.3.4.4	Infrared inspections of distribution electric lines and equipment	BVES did not meet its WMP target of 70.27 miles to be inspected.	This activity was paused in 2020 due to a change in survey cycle. The next inspection will be in 2024.	Energy Safety agrees with S&L that BVES did not perform IR inspections. However, based on BVES's IR inspection performance and inspection cycle, Energy Safety does not consider this to be a missed initiative.

Table 5: Summary of Documentation and Procedural Deficiencies Identified by S&L[57]

2020 Initiative Number	Initiative Name	IE Finding	IE Detail Finding	Energy Safety Evaluation/ Conclusion
5.3.3.7	Expulsion fuse replacement	BVES does not have a documented procedure governing the performance and control of conventional fuse replacements.	There is no document procedure governing this initiative.	Energy Safety agrees with S&L
5.3.3.12	Other corrective action (Radford Line covered conductor replacement project)	BVES reports contradicted each other.	S&L reviewed BVES's Q4 QIU and found it to report that, for this initiative, 2.82 circuit miles were targeted to be hardened in 2020, with completion of that goal having been also reported. This does not align with BVES's Q4 QAL report, which indicated that the project was awaiting U.S. Forestry Service approval.	Energy Safety agrees with S&L
5.3.4.15	Substation inspections	BVES does not have a formal system in place to track open substation items to closure or manage substation inspection findings requiring action in general.	BVES does not have a formal system in place to track open substation items to closure or manage substation inspection findings requiring action in general.	Energy Safety agrees with S&L

[57] Table 6 excludes five deficiencies that lack an initiative number or name or are deficiencies that do not apply to any one particular initiative activity.

2020 Initiative Number	Initiative Name	IE Finding	IE Detail Finding	Energy Safety Evaluation/ Conclusion
5.3.5.17	Substation inspections	BVES does not have a formal system in place to track open substation items to closure or manage substation inspection findings requiring action in general.	BVES does not have a formal system in place to track open substation items to closure or manage substation inspection findings requiring action in general.	Energy Safety agrees with S&L
5.3.7.1	Centralized repository for data	BVES has a formal system, but it has not been maintained due to lack of personnel.	The GIS database is incomplete and requires updates that are now in progress. Additionally, this initiative will require active BVES support and management to ensure that GIS data is available, current, and accessible in the future.	Energy Safety agrees with S&L
5.3.5.20	Vegetation management to achieve clearances around electric lines and equipment (pole brushing)	Some instances of vegetation overgrowth were noted during site inspection.	During the site inspections, field personnel noted that in some instances, vegetation did not meeting typical industry best practices for clearances, although still met the GO 95 requirements.	Energy Safety agrees with S&L[58]
5.3.3.6	Distribution pole replacement and reinforcement,	BVES was unable to produce documentation for all poles that were replaced or reinforced in 2020.	A full list of poles that were replaced in 2020 was not readily available and	Energy Safety agrees with S&L

[58] Energy Safety uses General Order 95 as the basis for determining vegetation management compliance.

2020 Initiative Number	Initiative Name	IE Finding	IE Detail Finding	Energy Safety Evaluation/ Conclusion
	including with composite poles (pole replacement and reinforcement)		therefore could not be reviewed.	

In addition to missed targets and process and documentation deficiencies, S&L found that BVES had a lack of granular documentation and formal control procedures for its WMP activities and that most target categories lacked written programs.[59] This meant that BVES relied heavily on informal procedures and team communication to track its WMP-related work.

S&L made the following findings that are not associated with any particular initiative:[60]

1. With few exceptions, BVES does not have formal written QA/QC programs for controlling WMP activities.
2. For most initiatives, BVES did not appear to have a formal written process to control and maintain quality records and other documentation.
3. Many of the BVES qualitative initiative goals/targets were not well defined or measurable with clearly scheduled milestone dates.
4. Seven tasks' actual spend was below the budget projections for capital spend.
5. 12 tasks' actual spend was below the budget projections for operational spend.

S&L issued its BVES IE ARC on July 1, 2021. and BVES did not provide a response. A subsequent communication between Energy Safety and BVES confirmed that BVES did not disagree with any of S&L's findings.[61] Energy Safety considered BVES IE ARC when evaluating BVES's compliance with its approved 2020 WMP.

5.3 Inspections

Energy Safety conducted a total of 43 inspection activities of BVES's infrastructure in 2020. A summary of inspections is presented in Table 6 below.

[59] BVES IE ARC, page 75.
[60] BVES IE ARC, page 78.
[61] Email from BVES, August 18, 2021.

Table 6: BVES's 2020 Inspection Results

Metrics Considered	Totals
Total Activities	43
Total Defects	4
Defect Rate	9.3%
Total Defect Resolutions	4
Defect Resolution Rate (Total Defect Resolutions/Total Defects)	100.0%

5.3.1 Field Inspection Defect Findings

Energy Safety found the following four defects:

- Exposed ground wires.
- Loose guy wires.
- Vegetation touching a utility pole.
- Communications wires touching guy wires.

Energy Safety considered all of the findings to involve minor risk and did not present an immediate high likelihood of causing an ignition. BVES timely corrected all four defects and provided photographic confirmation of its corrective actions.[62]

5.4 Audits

Energy Safety conducted two audits on BVES's 2020 WMP activities. Descriptions of the audits and associated findings are presented in the following sections.

5.4.1 Substantial Vegetation Management (SVM) Audit

On August 26, 2022, Energy Safety issued its SVM audit of BVES. In the audit, Energy Safety evaluated BVES's quantitative commitments[63] and verifiable statements.[64] Energy Safety then reviewed available information and requested additional documentation to support the assessment of whether BVES fully met its quantitative commitments and executed its verifiable statements. Energy Safety found BVES was not compliant with three out of the 20 vegetation initiatives audited in its 2020 WMP, as detailed in Table 7 below.[65]

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[62] BVES email, Tom Tzu-Tong Chou to Chihsien Wu of Energy Safety on November 16, 2020.
[63] E.g., miles of lines to inspect, minimum work quality thresholds, etc.
[64] E.g., holding public meetings with communities regarding future vegetation management activities, training personnel on utilities protocols, etc.
[65] BVES SVM audit, page 1, (https://efiling.energysafety.ca.gov/).

Table 7: Energy Safety's Analysis of BVES's 2020 WMP Vegetation Management Initiatives

2020 WMP Initiative Number	2020 WMP Initiative Name	Determination[66]
5.3.5.1	Additional Efforts to Manage Community and Environmental Impacts	Compliant
5.3.5.2	Detailed Inspections of Vegetation Around Distribution Electric Lines and Equipment	**Non-compliant**
5.3.5.3	Detailed Inspections of Vegetation Around Transmission Electric Lines and Equipment	Not Applicable
5.3.5.4	Emergency Response Vegetation Management Due to Red Flag Warning or Other Urgent Conditions	Not Applicable
5.3.5.5	Fuel Management and Reduction of "Slash" From Vegetation Management Activities	Compliant
5.3.5.6	Improvement of Inspections	Compliant
5.3.5.7	LiDAR Inspection of Vegetation Around Distribution Electric Lines and Equipment	Compliant
5.3.5.8	LiDAR Inspection of Vegetation Around Transmission Electric Lines and Equipment	Not Applicable
5.3.5.9	Other Discretionary Inspections of Vegetation Around Distribution Electric Lines and Equipment Beyond	Not Applicable

[66] As used in this context, "Compliant" means the utility was able to provide Energy Safety document(s) to support statements made in its 2020 WMP. "Noncompliant" means the utility was not able to provide Energy Safety document(s) to support commitments and statements made in its 2020 WMP. Energy Safety's analysis did not assess the quality of how said WMP statement was executed. "Not applicable" means Energy Safety cannot conduct an analysis for this initiative. Energy Safety's analysis did not assess the quality of how said WMP statement was executed.

	Inspections Mandate by Rules and Regulations	
5.3.5.10	Other Discretionary Inspections of Vegetation Around Transmission Electric Lines and Equipment Beyond Inspections Mandate by Rules and Regulations	Not Applicable
5.3.5.11	Patrol Inspections of Vegetation Around Distribution Electric Lines and Equipment	Compliant
5.3.5.12	Patrol Inspections of Vegetation Around Transmission Electric Lines and Equipment	Not Applicable
5.3.5.13	Quality Assurance/ Quality Control of Inspections	Compliant
5.3.5.14	Recruiting and Training of Vegetation Management Personnel	**Non-compliant**
5.3.5.15	Remediation of At-Risk Species	Compliant
5.3.5.16	Removal and Remediation of Trees with Strike Potential to Electric Lines and Equipment	Compliant
5.3.5.17	Substation Inspections	Compliant
5.3.5.18	Substation Vegetation Management	Compliant
5.3.5.19	Vegetation Inventory System	Compliant
5.3.5.20	Vegetation Management to Achieve Clearance Around Electric Lines and Equipment	**Non-compliant**

On August 26, 2022, Energy Safety published its 2020 SVM audit[67] that identified two findings: BVES did not have a vegetation management plan in place and did not hire a utility forester

[67] BVES 2020 SVM Audit is published on Energy Safety's e-filing system in the 2020 WMP Substantial Vegetation Management Audits docket and available here: https://efiling.energysafety.ca.gov/EFiling/DocketInformation.aspx?docketnumber=2020-SVM (accessed on September 27, 2022).

as it indicated in the 2020 WMP.[68] The two findings were tied to initiatives 5.3.5.2 and 5.3.5.14 respectively. Since initiative 5.3.5.20 relied upon the activities in initiatives 5.3.5.2 and 5.3.5.14, Energy Safety determined that initiative 5.3.5.20 was also non-compliant. Energy Safety specified two required corrective actions for BVES to either resolve or explain its failures, and it required BVES to provide a Corrective Action Response. On September 26, 2022, BVES timely provided its Corrective Action response and included supporting documentation.[69]

After reviewing BVES's response to the Corrective Action, on September 29, 2022, Energy Safety issued its final SVM Report finding that BVES sufficiently addressed both of the Corrective Actions. As a result of the Corrective Actions, Energy Safety found that BVES substantially complied with the substantial portion of the vegetation management requirements in its 2020 WMP.[70]

5.4.2 Performance Audit of WMP Expenditures

On June 29, 2020, Energy Safety engaged Crowe, LLC to conduct an independent audit of WMP expenditures by the six investor-owned electrical corporations that submitted 2019 and 2020 WMPs.[71] The purpose of Crowe's audit was to examine expenditures in the execution of investor-owned electrical corporation WMP programs and initiatives relative to their prior General Rate Cases (GRCs). Crowe assessed the relationship between expenses and/or investments identified in the 2019 and 2020 WMPs and operating and capital expenditures approved in previous GRCs.

One objective of this audit was to determine whether BVES's actual expenditures to date, and documented future planned expenditures, comported with the activities approved in the 2019 and 2020 WMPs and for which BVES received funding in its GRC or similar applications submitted to the CPUC between 2017 and 2020.[72] The audit did not contain negative findings related to this objective.

[68] BVES 2020 SVM Audit. pages 10-25.
[69] BVES 2020 SVM Audit Corrective Action Plan is published on Energy Safety's e-filing system in the 2020 WMP Substantial Vegetation Management Audits docket and available here: https://efiling.energysafety.ca.gov/Lists/DocketLog.aspx?docketnumber=2020-SVM (accessed on September 27, 2022).
[70] Pub. Util. Code, § 8386.3(c)(5)(C).
[71] The six investor-owned electrical corporations are: Pacific Gas and Electric, Southern California Edison, San Diego Gas & Electric, PacifiCorp, Liberty Utilities, and Bear Valley Electric Service.
[72] Performance Audit of Bear Valley Electric Service Wildfire Mitigation Plan Expenditures Final Report, page 3.

5.5 Data Analysis

Relying upon data timely submitted by BVES, Energy Safety analyzed BVES's 2020 WMP initiative performance. Energy Safety undertook these analyses to ensure that BVES completed work in areas of high wildfire risk and completed its 2020 initiatives as stated in its WMP.

5.5.1 Initiative Performance Analysis

Energy Safety analyzed whether BVES achieved its WMP initiative targets. To conduct this analysis, Energy Safety relied upon BVES's Q4 2020 Quarterly Initiative Update (QIU) submission from March 31, 2021, BVES's EC ARC, and BVES's Q4 2020 QAL.

Energy Safety requires electrical corporations to submit a QIU to track progress on implementation of their WMP initiatives. The purpose of the QIU is for both the electrical corporation and Energy Safety to have a holistic understanding of the electrical corporation's annual targets and projected quarterly progress towards completion of each initiative through the course of the WMP compliance period. In addition to projected progress, electrical corporations report actual progress for each initiative quarterly; this information enables Energy Safety to track the electrical corporation's compliance with its initiative targets throughout the year.

Energy Safety reviewed the Q4 2020 QIU report submitted by BVES on April 1, 2021, to verify the completion of BVES's 2020 WMP initiatives and its adherence to the Compliance Operational Protocols.

5.5.1.1 Results

BVES reported its progress on 57 initiatives in its 2020 Q4 QIU, as shown in Table 8.[73] As previously mentioned in Section 4.2, because of the required disaggregation of initiatives, the QIU references a different number of initiatives than that set forth in the its WMP, which originally reported 40 initiatives.

[73] This number is based on Energy Safety's evaluation of the 86 initiative activities listed in the 2020 Q4 QIU. Energy Safety excluded from this table any initiative activities for which BVES stated that it did not have a unique WMP initiative.

Table 8. BVES 2020 Initiatives[74]

BVES 2020 Initiatives	Numbers
Initiatives with Quantitative Targets	29
Initiatives with Qualitative Targets	28
Total Initiatives	57

Table 9 reports on the 29 quantitative initiatives that are contained in the 2020 Q4 QIU. This chart shows how BVES performed for initiatives with quantitative targets, i.e., how many fuses were replaced during 2020 compared to how many it planned to replace.

Table 9: BVES 2020 Quantitative Target Initiatives[75]

Initiative No.	Utility Initiative Name	WMP Target	QIU Reported Progress	QAL Reported Progress	EC ARC Reported Progress	Over/Under (QIU Target)
5.3.2.1	Weather Station Installation Program	10	8	90%[76]	N/A	-2
5.3.2.2	ALERT Wildfire HD Camera Installation Program	1	1	On Track/Completed	N/A	0

[74] Derived from BVES's 2020 Q4 QIU, submitted March 5, 2021.
[75] Derived from BVES's 2020 Q4 QIU, submitted March 5, 2021.
[76] Per 2020 WMP Table 22, this is based on bringing total weather station count to twenty.

Initiative No.	Utility Initiative Name	WMP Target	QIU Reported Progress	QAL Reported Progress	EC ARC Reported Progress	Over/Under (QIU Target)
5.3.2.3	Fault Indicator Program[77]	0	0	N/A	N/A	0
5.3.3.3	Covered Conductor Replacement Program	4.5	7.83	On Track/Completed	N/A	3.33
5.3.3.6	Pole Loading & Replacement Program	200	213	On Track/Completed	N/A	13
5.3.3.7	Fuse Replacement Program	2000	2001	On Track/Completed	N/A	1
5.3.3.9	Grid Automation Program	25	25	On Track/Completed	N/A	0
5.3.3.12	Radford Covered Conductor Project	2.82	2.82[78]	Not Started	N/A	0
5.3.4.1	Detailed Inspection Program	100	100	N/A	N/A	0
5.3.4.4	Contract Exacter Services	0	0	On Track	N/A	0
5.3.4.6	Intrusive Pole Inspection Program	100	100	On Track	N/A	0

[77] This was a planned initiative with a target of zero for 2020.In its 2020 WMP BVES stated it would monitor Wire Down Technology.
[78] This figure is misreported in the 2020 Q4 QIU.

Initiative No.	Utility Initiative Name	WMP Target	QIU Reported Progress	QAL Reported Progress	EC ARC Reported Progress	Over/Under (QIU Target)
5.3.4.7[79] (5.3.5.7)	LiDAR Inspection Program	211	211	Ongoing	N/A	0
5.3.4.9	Third Party Ground Patrol	211	211	N/A	N/A	0
5.3.4.11	Patrol Inspection Program	211	211[80]	Completed/ Ongoing	N/A	0
5.3.4.13[81] (5.3.3.13)	Pole Loading & Replacement Program	1600	191	On Track	N/A	-1409
5.3.4.15	Patrols & Detailed Inspection Program - Substation Inspection & GO174	144	144	N/A	N/A	0
5.3.5.2[82] (5.3.5.11) (5.3.5.13) (5.3.5.16)	Enhanced Vegetation Management Program	100	100	Completed/ Ongoing	N/A	0
5.3.5.1	Enhanced Vegetation Management Program	144	144	Completed/ Ongoing	N/A	0
5.3.9.1	Resource Allocation Methodology	100	100	Complete/ Ongoing	N/A	0

[79] This row combines multiple initiatives in which BVES uses the same initiative name and uses identical completion metrics.
[80] BVES IE ARC, page 86.
[81] This row combines multiple initiatives in which BVES uses the same initiative name and uses identical completion metrics.
[82] This row combines multiple initiatives in which BVES uses the same initiative name and uses identical completion metrics.

Initiative No.	Utility Initiative Name	WMP Target	QIU Reported Progress	QAL Reported Progress	EC ARC Reported Progress	Over/Under (QIU Target)
5.3.9.2	Community Outreach Program	100	114	N/A	N/A	14
5.3.9.3[83] (5.3.9.4) (5.3.9.5) (5.3.9.6)	Emergency Preparedness & Response Program	0	0	Complete	N/A	0

Regarding the construction of the Radford Line, while BVES's 2020 Q4 QIU lists a quantitative 2020 target of 2.82 miles , BVES stated in its 2020 WMP that "there was risk that the Radford Line Covered Conductor Replacement Project may be deferred until 2021."[84] For that reason, BVES divided the bidding of the project so that the construction costs of the Radford Line Project would be associated with 2021 and the design costs would be associated with 2020.[85,86] Additionally, BVES stated in its 2020 WMP that it would complete the construction of the Radford Line Replacement Project in 2021.[87]

Regarding initiative 5.3.3.13 (Pole Loading & Replacement Program), BVES stated that it was implementing the initiative over a five-year period and planned to increase its annual evaluation rate to 1,600 poles per year.[88] As of July 31 2020, BVES had assessed 2,525 poles, but 1,050 failed BVES's inspection criteria. Of those, 547 were replaced and 113 were remediated.[89]

Regarding initiative 5.3.3.20 (Tree Attachment Removal), BVES stated in its 2020 WMP that it planned to remove all 1,207 legacy tree attachment service connections that were in its service territory at the time it filed its 2019 WMP.[90] In order to meet this objective BVES stated that it planned to remove approximately 220 tree attachments per year. BVES stated in its

[83] This row combines multiple initiatives in which BVES uses the same initiative name and uses identical completion metrics.
[84] BVES 2020 WMP, page 131.
[85] BVES 2020 WMP, page 139.
[86] BVES 2020 WMP, page 131.
[87] BVES 2020 WMP, page 131.
[88] BVES 2020 WMP, pages 128-129.
[89] BVES 2020 WMP, page 129.
[90] BVES 2020 WMP, page 127.

2020 Q4 QAL that it had removed 493 tree attachments.[91] BVES also stated in its initial 2020 WMP filing from February 7, 2020 that it had removed 273 tree attachments.[92] Therefore, Energy Safety finds that BVES removed approximately 220 tree attachments in the 2020 compliance period.

Energy Safety examined the 2020 Q4 QIU to review the status of BVES's 28 qualitative initiatives at the end of 2020 and to determine whether BVES had a corrective action plan detailing how any remaining work would be completed. However, most of BVES's qualitative initiatives did not have specific budgets or milestones because they were only in the planning stages in 2020. For example, BVES stated that the status of initiative 5.3.1.1 was "planned" in the QIU and "not started" in the QAL. BVES stated in their 2020 WMP that initiative 5.3.1.1 did not have specifically designated expenses or risk reductions because it would be developing that initiative within the next three years. Another example is Initiative 5.3.3.11 – Energy Storage Project, which BVES stated was still in the planning stage.[93] Those qualitative initiatives that were presented as either multiyear projects or were still in under consideration are not reflected further in this report.

5.6 Wildfire and Risk Reduction Outcomes

Energy Safety uses a metric, the red flag warnings circuit mile days (RFWCMD) for overhead assets, to depict wildfire risk normalized for the size of an electrical corporation's service territory. Use of this metric allowed for comparisons across reporting years and enabled assessment of performance in 2020 relative to previous trends from 2015-2019. As noted in Figure 1 below, the RFWCMD experienced in 2017 represents the largest value (i.e., worst fire weather and greatest exposure) over the six-year 2015-2020 reporting period. This increase in RFWCMDs compared to 2015 underscored the importance of effective wildfire mitigation planning and execution of mitigation efforts.

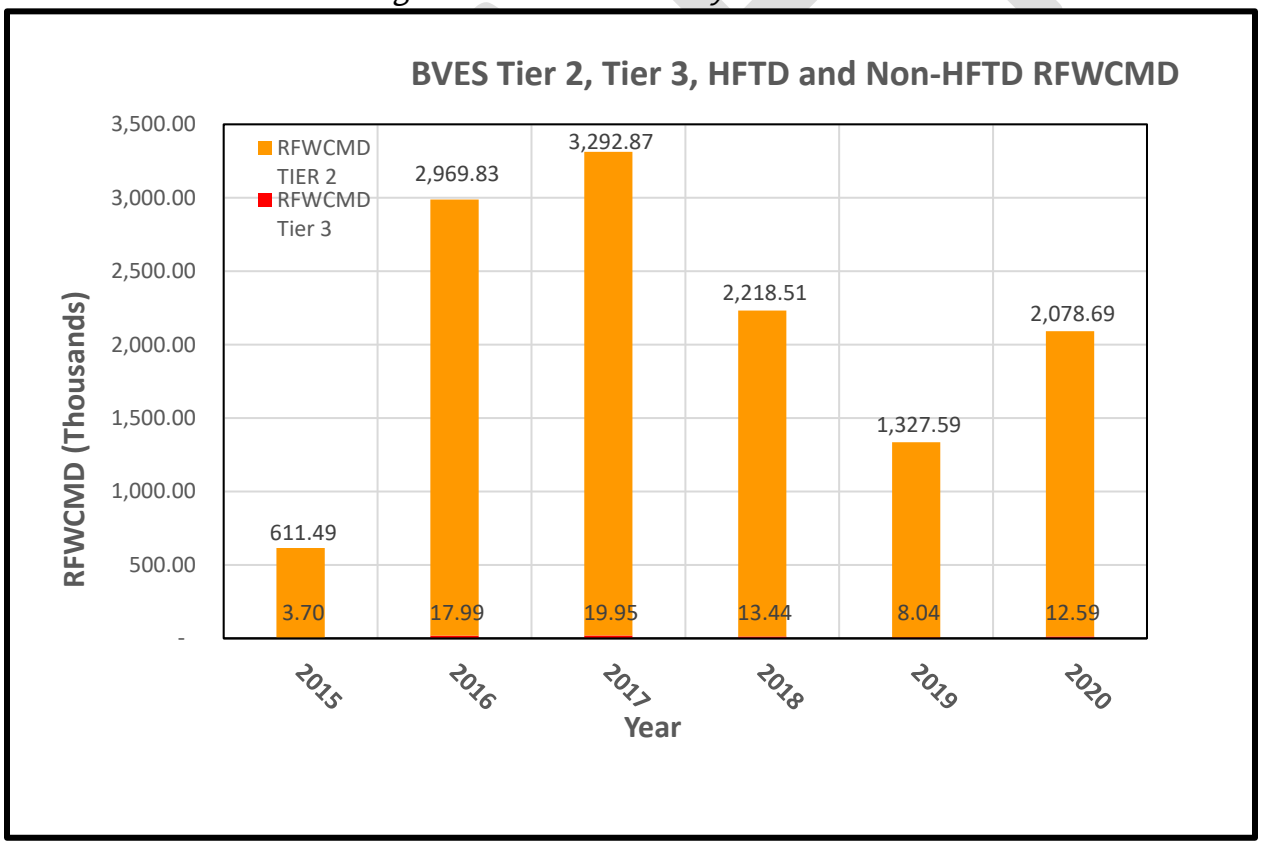
Energy Safety requires electrical corporations to report data, such as ignitions in the HFTD, that will enable Energy Safety to, over time, assess whether an electrical corporation's wildfire mitigation planning activities successfully achieve the primary objective of a WMP – reducing catastrophic wildfire risk and reliance on PSPS. As noted earlier in this document, it is not enough to solely evaluate whether an electrical corporation met its targets for implementing specific initiatives if ultimately the electrical corporation did not reduce the risk of catastrophic wildfires.

[91] BVES 2020 Q4 QAL Initative Report.
[92] BVES Initial 2020 WMP, page 12.
[93] BVES 2020 WMP, page 125.

In 2020, Energy Safety evaluated a variety of metrics (calculations based on data provided) to set a baseline that can be measured against in future years, including several metrics adopted in the 2020 WMP Guidelines.[94] In addition to these metrics, Energy Safety also utilized the knowledge and expertise gained since the adoption of the 2020 WMP Guidelines to present additional metrics correlated to BVES's wildfire risk. Where data was available and applicable, Energy Safety evaluated different permutations of ignition risk metrics to also account for geographical risk factors, as indicated by HFTD tiers, and causal information.

Energy safety relied upon data reported in an electrical corporation's 2020 WMP as well as Quarterly Data Report (QDR) submissions from May 3, 2021. Energy Safety also performed analysis that compared the electrical corporation's performance during the 2020 WMP compliance period to trends from previous years.[95] Metrics analyzed are discussed in the following sections.

Figure 1: BVES RFWCMD by HFTD Tier[96]



[94] See Attachment 4 of CPUC Resolution WSD-001, titled "WMP Metrics".
[95] Energy Safety looked at previous year performances dating back to 2015, where available and reported in BVES's data submissions, or any year thereafter for which data was available and reported.
[96] 2020 Q4 BVES Quarterly Data Report, Table 6.

BVES has seen a general increase in extreme fire weather events since 2015 with a significant spike in 2016 and 2017. The RFWCMD experienced in 2020 represents less fire weather exposure than the peak that BVES experienced in 2017, but is still a 57% increase over 2019.

5.6.1 Ignition Risk

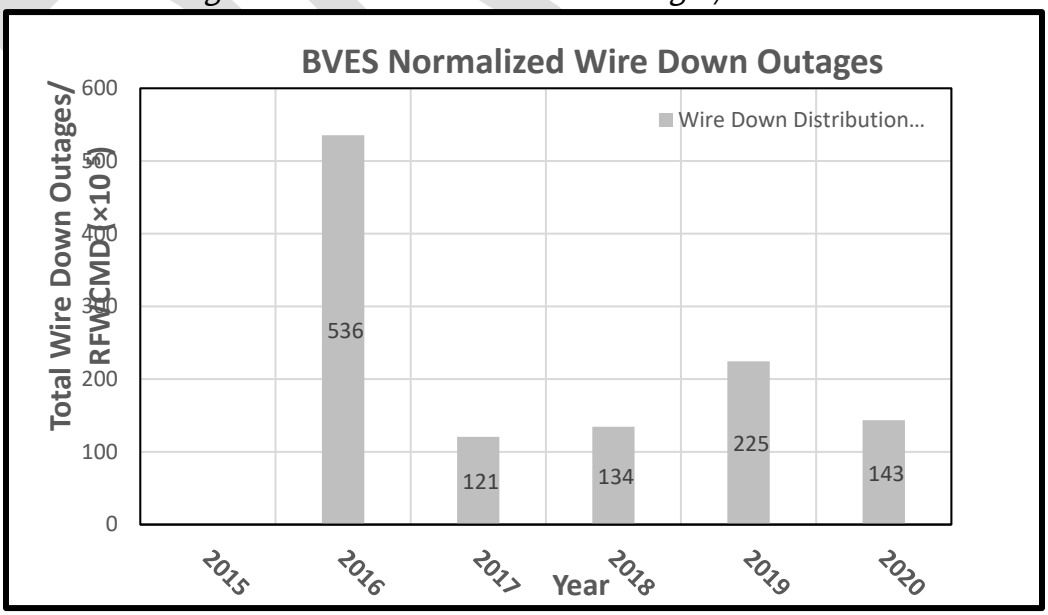
Energy Safety evaluated ignition risk as a function of various metrics reported in BVES's QDR submission. BVES reported these risk metrics in QDR Table 7.1 and QDR Table 7.2 of its QDR submission. Ignition risk metrics considered include:

1. **Ignitions** – incidents in which electrical corporation infrastructure was involved.
2. **Wire down events** – incidents in which overhead electrical lines fall to the ground or land on objects.
3. **Vegetation-caused outages** – outages experienced in which the cause was determined to be vegetation contact with electrical lines.
4. **Unplanned outages** – all unplanned outages experienced.

5.6.1.1 Wire Down Event Data

QDR Table 7.1, metrics 1 through 16 include data on BVES's distribution and transmission wire down outages from 2015 through 2020, which are normalized for RFWCMD and plotted below in Figure 2. Wire down outages can be a precursor to ignitions; therefore, Energy Safety will look for a downward trend over time.

Figure 2: BVES Total Wire Down Outages/RFWCMD[97]



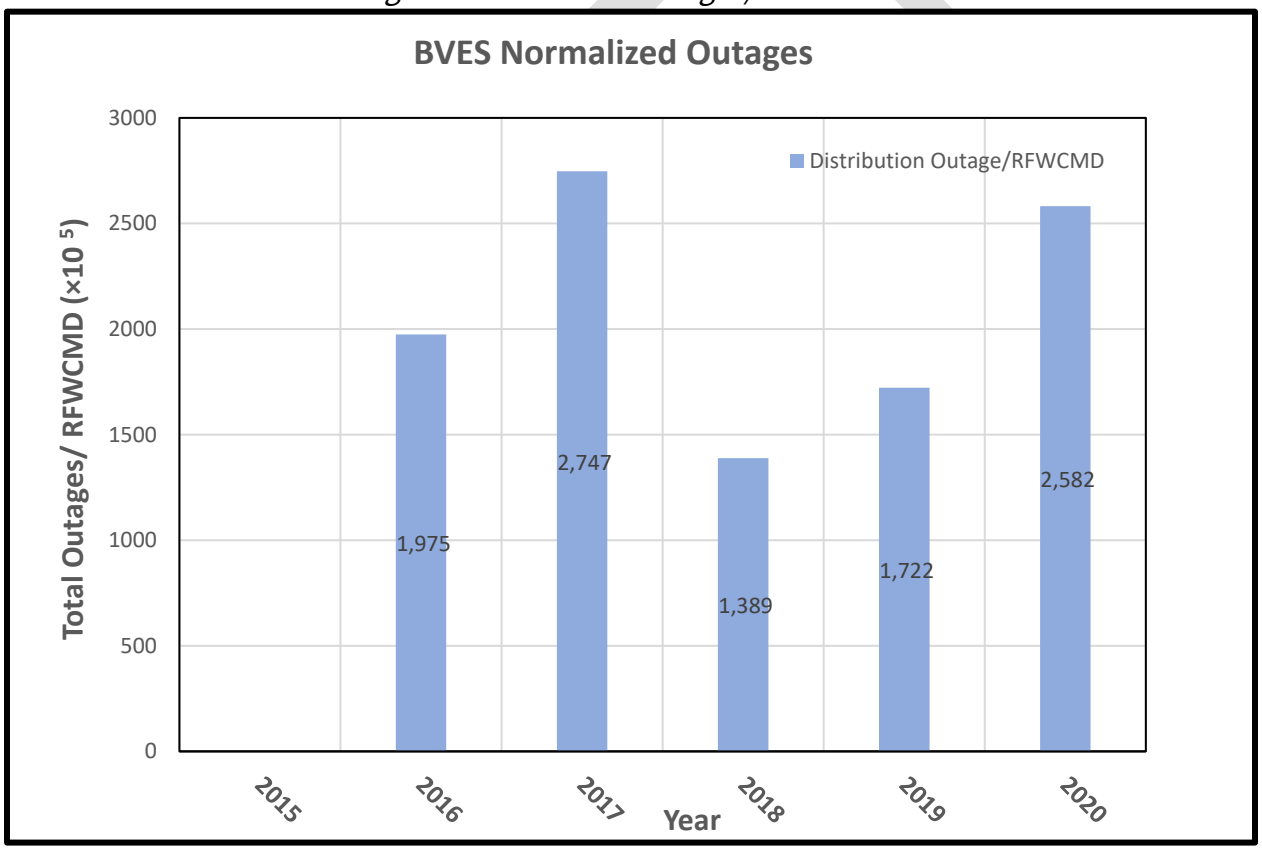
[97] 2020 Q4 BVES Quarterly Data Report, Table 6 and Table 7.2.

The above figure shows the normalized number of wire down outages. While the number of events increased from 2017 to 2019, there was a 36% reduction in normalized wire down outages from 2019 to 2020.

5.6.1.2 Outage Data

QDR Table 7.1, metrics 17 through 32, include data on distribution and transmission outages of all cause types from 2015 through 2020. Unplanned or unscheduled outages correlate with a potential for ignitions on the system. Figure 3 below plots BVES's transmission and distribution outages normalized for RFWCMD.

Figure 3: BVES Total Outages/RFWCMD[98]



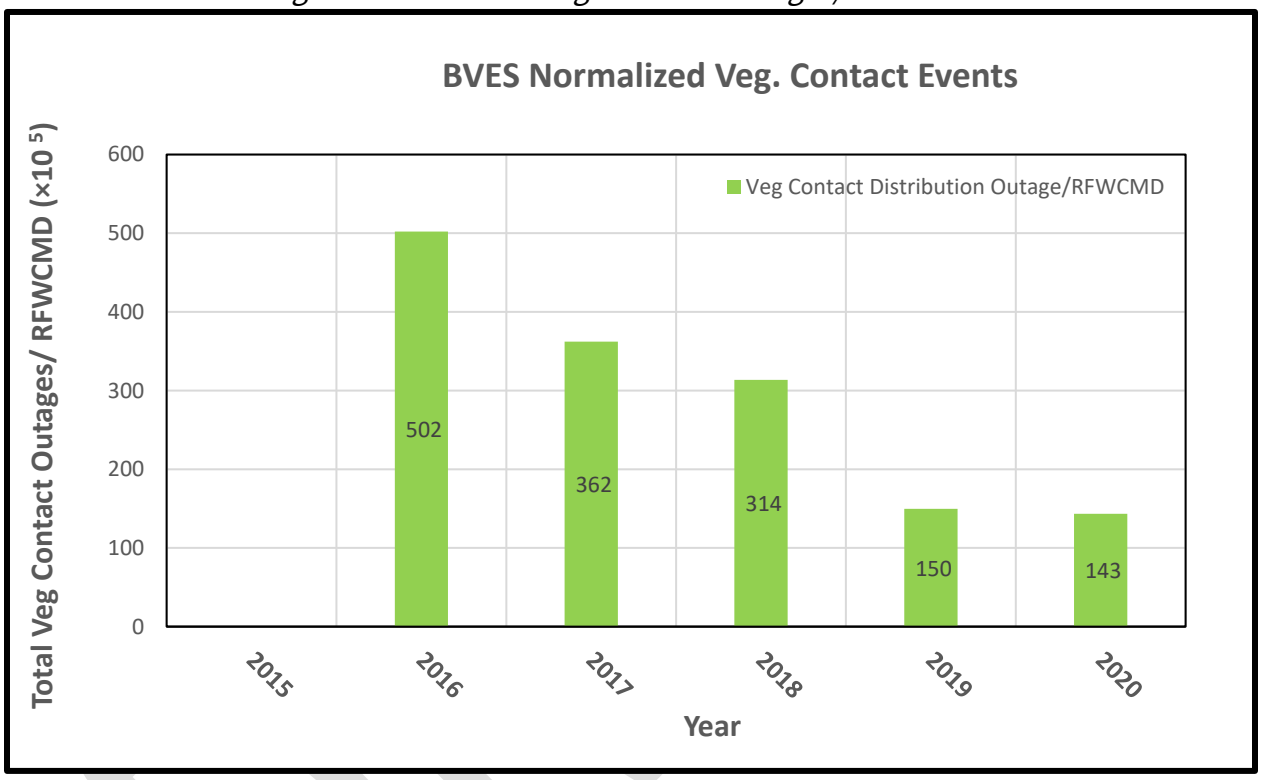
The above figure shows the normalized number of outages that occurred in BVES's territory since 2016. The normalized number of outages steadily increased from 2018 to 2020. However, the normalized number of outages related to vegetation and wire down events decreased between 2019 and 2020.

[98] 2020 Q4 BVES Quarterly Data Report, Table 6.

5.6.1.2.1 Vegetation-Caused Outage Data

QDR Table 7.1, metrics 17a and 25a include data on transmission and distribution outages that are caused by vegetation contact from 2015 through 2020. Figure 4 below plots BVES's transmission and distribution vegetation contact-caused outages normalized for RFWCMD.

Figure 4: BVES Total Veg. Contact Outages/RFWCMD[99]



The above figure shows BVES's vegetation-related outages. Starting in 2016, BVES experienced a steady decline in vegetation related outages.

5.6.2 Identified and Unresolved Risk

To ensure safe operations and the reduction of wildfire risk, Energy Safety expects that electrical corporations maintain electrical lines and equipment through: (1) inspection of those lines and equipment to identify conditions that increase wildfire risk, and (2) expedient remediation of conditions identified during inspections to reduce known wildfire risks. Unresolved conditions leave known wildfire risk on the system.

[99] 2020 Q4 BVES Quarterly Data Report, Table 6.

In Table 1 of its QDR (QDR Table 1), BVES reported data on findings from inspections it performed in accordance with its 2020 WMP.[100] The inspection data provided in QDR Table 1 includes detail on:

- Asset classification (i.e., transmission or distribution).
- Inspection type (i.e., detailed inspection, patrol inspection, other inspection).
- Location (i.e., in or out of HFTD areas).
- Priority of findings (i.e., Level 1, Level 2, or Level 3).[101]
- Number of circuit miles inspected for each inspection type.

The priority levels of inspection finding data reported in QDR Table 1 are derived from the CPUC's GO 95, Rule 18, which outlines requirements for electrical corporation maintenance programs and resolution of safety hazards. Rule 18 identifies three priority levels, described below:

1. **Level 1** – an immediate risk of high potential impact to safety or reliability requiring immediate corrective action.
2. **Level 2** – any other risk of at least moderate potential impact to safety or reliability requiring corrective action no later than 36 months.
3. **Level 3** – any risk of low potential impact to safety or reliability requiring corrective action within 60 months with some exceptions.[102]

In addition to data on inspection findings, Energy Safety assessed data on BVES's progress on fixing the unresolved conditions. Energy Safety requested data from BVES on the number and type of conditions it fixed during the 2020 WMP compliance period.[103] The data on conditions fixed by BVES is of the same detail and includes the same assumptions as the inspection finding data in QDR Table 1.[104]

Table 10 below provides an overview of the circuit miles BVES inspected in 2020, broken out by inspection type.

Table 10: Miles of Inspection Completed by BVES in 2020[105]

Inspection Type	Distribution Miles Inspected
Patrol	235 (30%)

[100] QDR Table 1, Metric 1 titled, "Grid Condition Findings".
[101] CPUC's GO 95, Rule 18 identifies and defines priority levels, and associated corrective action timeframes, applicable to identified noncompliance issues. Level 1 findings are of highest concern and Level 3 are of lowest concern.
[102] CPUC GO 95, Rule 18(B)(1)(a).
[103] Energy Safety Data Request DR 093 sent on May 10, 2022.
[104] BVES response to Energy Safety Data Request DR 093 received on May 20, 2022.
[105] 2020 Q4 BVES QDR, Table 1.

Detailed	46 (6%)
Other	498 (64%)
Total	**779 (100%)**

BVES used methods such as LiDAR for most inspections; relatively few circuit miles were inspected via detailed inspections.

Table 11 below indicates the number of inspection findings and fixes, broken out by priority level, BVES made on its distribution infrastructure.

Table 11: Conditions Found and Fixed on BVES's Distribution Infrastructure in 2020[106]

	Level 1	Level 2	Level 3	Total
Conditions Found	8	137	933	**1078**
Conditions Fixed	7	58	302	**367**
Difference	**1 More Found**	**79 More Found**	**631 More Found**	**711 More Found**

BVES has no transmission assets and thus reported no transmission-related findings or fixes.

5.7 Disposition of 2020 WMP Conditions

In 2020, Energy Safety issued a conditional approval of BVES'S 2020 WMP. The conditional approval identified the severity of each issue (listed below) and set forth required remediations.

1. **Class A** – aspects of the WMP are lacking or flawed.
2. **Class B** – insufficient detail or justification provided in WMP.
3. **Class C** – gaps in baseline or historical data, as required in 2020 WMP Guidelines.

Class A deficiencies were of the highest concern and required electrical corporations to submit a remedial compliance plan (RCP) within 45 days of approval. Class B deficiencies were of moderate concern and required electrical corporations to submit to quarterly reporting, with the first of such reports being due 90 days after approval. Finally, Class C deficiencies were of least concern and required electrical corporations to submit additional detail and information or otherwise come into compliance in its 2021 annual WMP update. Accordingly, Energy Safety only considers BVES's resolution of its Class A and Class B

[106] 2020 Q4 BVES QDR, Table 1 and Table 2.

conditions in this ARC. Responses to and resolution of Class C deficiencies will be evaluated with respect to Energy Safety's assessment of BVES's 2021 WMP update.

On July 22, 2020, Energy Safety intially denied BVES's 2020 WMP and directed BVES to resubmit .[107] BVES resubmitted its WMP and submitted its Remedial Compliance Plan (RCP) on September 18, 2020. In its RCP, BVES stated that the deficiencies that were identified by Energfy Safety were addressed in its refiled WMP.[108]

Upon approving the refiled 2020 WMP, Energy Safety identified 13 total deficiencies specific to BVES's WMP.[109] Energy Safety also noted that BVES sufficiently addressed seven of eleven "guidance" deficiencies that were outlined in Energy Safety's August 26, 2020 Final Action Statement.[110] Energy Safety approved BVES's refiled 2020 WMP, provided that BVES follow the conditions laid out by Energy Safety for each deficiency.

In 2021, Energy Safety issued its Final Action Statement on the 2021 Wildfire Mitigation Plan Update for BVES. Energy Safety did not identify any Class A deficiencies in its January 14, 2021 approval of BVES 2020 WMP. In that Statement, Energy Safety determined that the following 2020 Class-B deficiencies were unresolved shown in Table 12:

Table 12: Class B Deficiencies from BVES's 2020 WMP[111]

#	Deficiency/ Condition No.	Deficiency Title	Energy Safety Determination
1	Guidance-1	Lack of risk spend efficiency information	Energy Safety issued a new corresponding Deficiency in WSD-013. No action required for Guidance -1.
2	Guidance-2	Lack of alternatives analysis for chosen initiatives	Energy Safety issued a new corresponding Deficiency in WSD-013. No action required for Guidance-2.
3	Guidance-10	Data issues – general	See report titled "Wildfire Safety Division Quality Control Report on GIS Data Submitted by Bear Valley Electric Service, Inc. on September 9, 2020" for status.

[107] Action Statement on Bear Valley Electric Service Inc.'s 2020 Wildfire Mitigation Plan, page 6.
[108] BVES 2020 WMP RCP, page 2.
[109] WSD-013, Appendix A.
[110] WSD-013, Appendix F, page F1.
[111] Action Statement on Bear Valley Electric Service, Inc.'s 2021 Wildfire Mitigation Plan Update, Appendix-1 – Appendix-3.

#	Deficiency/ Condition No.	Deficiency Title	Energy Safety Determination
4	Guidance-12	Lack of detail on long-term planning	Energy Safety issued a new corresponding Deficiency in WSD-013. No action required for Guidance-12.
5	BVES-R2	Details on risk spend efficiency and future modeling plans	Conditions not met: progress being monitored
6	BVES-R6	Controls to ensure targets and goals are met	Conditions not met: wrapped into a new issue for 2021
7	BVES-R11	Data capabilities and planning for data governance, sharing, and repository	Conditions not met: progress being monitored

6.0 DISCUSSION

Energy Safety considered the totality of the evidence before it in determining whether an electrical corporation substantially complied with its WMP. Energy Safety finds that BVES substantially complied with its 2020 WMP. Energy Safety presents its assessment of BVES's performance relative to each of the evaluation criteria set forth in the Compliance Framework.

6.1 Completion of 2020 Initiatives

Energy Safety finds that BVES was able to achieve most of its quantitative initiative targets in 2020.

BVES met its targets for several important initiatives.

- Initiative 5.3.3.3 – Covered Conductor. This project represented a large portion of BVES's budget (12%) and covers almost eight circuit miles of BVES's overhead system. Additionally, implementing this initiative addresses wildfire risks related to objects directly contacting overhead lines.
- Initiative 5.3.3.6 – Pole Replacement And Remediation. Implementing this initiative addresses wildfire risks related to pole failures. BVES replaced or remediated 213 poles in 2020, which is beyond its target of 200 poles. Per S&L's report, BVES's budget for this program was approximately $925,000.
- Initiative 5.3.3.7 – Expulsion Fuse Replacement. BVES exceeded its target for this initiative, which made up a major portion of BVES's 2020 WMP budget (17%).

Replacing expulsion fuses reduces the chance that an outage at any of the 2,001 replaced device locations will result in an ignition.

- Initiative 5.3.3.9 – Installation Of System Automation Equipment. This project made up approximately 7% of BVES's 2020 WMP budget. Implementing this initiative allows BVES to better monitor and control its system remotely, connect to weather stations, and respond to wildfire threats.
- Initiative 5.3.3.20 – Tree Attachment Removal. This project made up approximately 5% of BVES's 2020 WMP budget. BVES stated that it planned to remove approximately 220 tree attachments per year in order to meet its target of removing all of the tree attachments in its service territory. BVES stated in its 2020 Q4 QAL that it had removed 493 tree attachments.[112] BVES also stated in its initial 2020 WMP filing from February 7, 2020 that it had removed 273 tree attachments.[113] Therefore, Energy Safety finds that BVES removed at least 273 tree attachments in the 2020 compliance period.
- Initiative 5.3.3.12 – Radford Line Replacement Project: While BVES did not begin construction of this overhead line in 2020, it did complete its 2020 objective to complete the design for the covered conductor conversion in 2020. BVES stated that this line not only had the highest wildfire risk of BVES's overhead facilities, it was also located in a densely vegetated area that is difficult to patrol. Therefore, completing this covered conductor replacement project was important for reducing wildfire risk in BVES's service territory.
- Initiative 5.3.4.4 - Infrared inspections of distribution electric lines and equipment: While BVES did not complete any infrared (IR) inspections in 2020. BVES has stated in its 2020 Q4 QAL that it had already inspected 100% of its system, which is matches the change expressed in a comment in BVES's 2020 WMP.[114] As mentioned by S&L, BVES chose to extend its inspection cycle from three years to five years. Despite that change, BVES would not have conducted IR inspections even under a three year cycle.

Additionally, Energy Safety finds that BVES successfully complied with its vegetation management initiatives. On August 26, 2022, in its SVM Audit, Energy Safety initially found that BVES failed to comply with three vegetation-related initiatives. However, for those three initiatives, BVES was able to satisfactorily explain why it either actually did meet its target or why initiative completion was delayed. Specifically, BVES was able to document that it had implemented an internal vegation management plan and had been implementing that plan since 2018.[115] Additionally, BVES stated that while it was not able to have a contracted forester work in 2020, it was able to execute a contract for a forester in December 2020 that

[112] BVES 2020 Q4 QAL Initative Report.
[113] BVES Initial 2020 WMP, page 12.
[114] BVES 2020 WMP, page 151.
[115] Energy Safety's Report on 2020 SVM Audit of BVES, page 3.

was not able to start serving BVES until March 2021.[116] BVES stated that it would start the contracting process sooner than it normally does to maintain a forester on staff.[117]

BVES was unable to meet its targets for the following initiatives. However, Energy Safety finds the explanations for the missed targets to be reasonable.

- 5.3.3.13 – Pole Loading and Replacement: BVES stated in its 2020 WMP that this initiative was part of a 5-year program to assess 1,600 poles annually. As of July 2020, BVES had assessed over 2,500 poles. BVES informed S&L that its assessments were ahead of schedule due to the number of assessments that BVES performed in 2018 and 2019. However, approximately 40% of the poles inspected failed to meet BVES's inspection criteria. Therefore, BVES chose to dedicate its resources towards remediating those poles that failed it's assessment.
- 5.3.2.1 – Weather Stations: BVES installed eight of 10 planned weather stations. This project was necessary to provide additional weather information to BVES. BVES stated that it was unable to reach its target due to delays in getting permission from the US Forest Service and San Bernardino County to access one of the sites. The other station was delayed due to BVES's decision to change the weather station power source to a solar and battery configuration.[118]

Energy Safety finds that two additional initiative targets were not met; however, the missed targets did not drastically impede BVES's ability to reduce wildfire risk on its system because the of the limited geographical foot print of these initiatives. Additionally, the BVPP Reliability Upgrade Project is meant to mitigate the reliability impacts of SCE implementing a PSPS event, rather than attempting to reduce the possibility of causing an ignition.[119]

- Initiative 5.3.3.18 – Palomino Substation Upgrade. BVES stated in its 2020 WMP that it expected the Palomino substation to be in service by December 2020.[120] However, BVES later reported in its 2020 Q4 QAL that it was still in the process of converting the Palomino substation and expected the project to be completed in 2021. S&L that BVES was progressing with its substation upgrade project but it was not yet completed.[121] This substation has a relatively limited foot print and is not in a heavily forested area, therefore Energy Safety did not find that BVES's failure to complete this project drastically impacted its wildfire risk.

[116] Energy Safety's Report on 2020 SVM Audit of BVES, page 3.
[117] Energy Safety's Report on 2020 SVM Audit of BVES, pages 3-4
[118] BVES IE ARC, page 26.
[119] BVES 2020 WMP, page 73.
[120] BVES 2020 WMP, page 123.
[121] BVES IE ARC, page 31.

- Initiative 5.3.3.22 – BVPP Reliability Upgrades. BVES proposed this project in its 2020 WMP as a component of its ongoing effort to improve its system reliability.[122] However, this initiative does not appear in BVES's subsequent 2020 QIU or QAL. This plan is focused on providing reliability upgrades to mitigate the impact of an SCE PSPS (e.g. electronic controls, emissions monitoring systems, and catalyst reliability), rather than reducing the chance of causing an ignition.[123]

As mentioned in Section 5.5.1, Energy Safety examined BVES's 2020 Q4 QIU to review the status of BVES's 28 qualitative initiatives at the end of 2020 and to determine whether BVES had a corrective action plan detailing how any remaining work would be completed. Most of BVES's qualitative initiatives did not have specific budgets or milestones because they were multi-year programs that were only in the planning stages in 2020. Energy Safety accepts this explanation; however, in the future, Energy Safety expects BVES to provide clear, verifiable annual targets for qualitative initiatives.

Given that BVES met most of its targets, including for those initiatives that were highest priority for wildfire mitigation, and given that the impacts of its failures did not substantially hinder BVES's ability to mitigate its wildfire risk, Energy Safety finds that, overall, BVES completed its 2020 initiatives.

6.2 Achieving 2020 WMP Objectives

BVES's 2020 WMP objectives were generally broad and lacked specific measurable outcomes. Nevertheless, given that 2020 is the base year for the first three-year cycle and is therefore setting the baseline against which to measure BVES, Energy Safety finds that BVES has fulfilled many of its 2020 WMP objectives.

Energy Safety's analysis of BVES's performance of its objectives is broken into three sections. First, Energy Safety analyzed objectives set to be achieved before the upcoming (2020) wildfire season. It then performed its analysis on performance prior to the next annual update (2021). Finally, Energy Safety also reviewed its performance against its overarching objectives which were:

[122] BVES 2020 WMP, page 125. Despite those setbacks, BVES was able to meet its targets related to replacing expulsion fuses, implementing grid automation, installing covered conductor, and replacing/reinforcing its distribution poles. Therefore, Energy Safety finds that BVES made significant progress in achieving its objective. Fulfilling this objective is particularly important considering that the entirety of BVES's service territory is in HFTD.
[123] BVES 2020 WMP, page 144.

- "to prevent the threat of utility-caused wildfires by identifying mitigation measures and, in the event of a wildfire affecting the BVES service area, to provide emergency response and restoration actions regardless of cause."[124]
- "to minimize the need to activate PSPS events. Specifically, the WMP aims to fulfill the requirements detailed in PUC Section 8386, as modified by AB 1054 and AB 111." [125]

BVES achieved its overarching objectives by undertaking grid hardening of its system including meeting targets related to replacing expulsion fuses, implementing grid automation, installing covered conductor, and replacing/reinforcing its distribution poles.

BVES has not had any ignitions in its territory, nor has it had any PSPS events. Regarding its objective related to PSPS and emergency response planning, BVES stated that it was able to revise its PSPS plan, thus meeting its short term objective.[126] Additionally, BVES deployed an application called iRestore utilized by the local emergency response district that bridges further collaboration in reducing ignition risk or wildfire spread and integrated that application in 2020.[127] BVES also developed an outage management procedure, which applies to all outages including PSPS. BVES also reported that it engaged in 114 outreach activities out of a planned number of 100.[128] Therefore BVES met this objective.

BVES could improve on its specific objectives related to the initial two timeframes. Many of these objectives are tied to qualitative initiatives in the 2020 WMP. As mentioned above, for most of those qualitative initiatives, BVES set out a 3-year target and therefore did not have annual targets. In future WMPs, Energy Safety expects that objectives will be tied to specific targets.

Energy Safety recognizes that BVES has room for improvement in its documentation, planning, and execution of its WMP. More details on this are provided in Section 6.4. Nevertheless, Energy Safety finds that while BVES did not meet all of its near-term objectives as a result of many objectives covering the three-year plan period, it did meet its overarching objectives.

6.3 Reducing Wildfire Risk

Pursuant to Government Code section 15475.1, Energy Safety's primary objective is to ensure that electrical corporations reduce wildfire risk and comply with energy infrastructure safety measures. Therefore, as stated in the Compliance Framework, Energy Safety's evaluation of BVES's performance in implementing its 2020 WMP goes beyond a check-box exercise of

[124] BVES WMP Refiling (September18, 2020), page 54.
[125] BVES WMP Refiling (September18, 2020), page 54.
[126] BVES 2020 Q4 QAL.
[127] BVES 2020 Q4 QAL.
[128] BVES 2020 Q4 QIU.

whether BVES met its initiative targets to instead evaluate whether BVES's performance in 2020 reduces the risk of BVES equipment igniting a catastrophic wildfire. As noted in the Compliance Framework, given that 2020 is the first year in a three-year cycle and the benefits of work deployed in 2020 may accrue over time, Energy Safety's evaluation largely focuses on establishing baseline measures against which to measure BVES's performance over time.

Measuring ignitions provides the most direct measure of electrical corporation wildfire risk. While BVES is much smaller than other California utilities, BVES had no reported ignitions during the 2015-2020 time period and did not initiate any PSPS events in 2020. While the Independent Transmission Operators (ITOs) had similar results, BVES's performance stands separate from those entities in many respects. First, BVES's equipment is more widely spread than the ITOs, which are limited to one or two facilities. Additionally, unlike the ITOs, most of BVES's assets are exposed to weather, vegetation, and other factors that carry high wildfire risk. In this way, BVES's outcomes are notable when compared to other similarly situated utilities.

Other performance metrics, such as wire down events and unplanned outages correlate with wildfire risk because these events can result in ignitions. BVES experienced fewer normalized wire down events in 2020 than 2019; however, the the number of normalized down wire events is still higher than it was in 2017 or 2018. Additionally, the normalized impact of power outages was the second highest it has been since 2015. Therefore, BVES must remain vigilant in its mitigation efforts to avoid future potential ignition sources.

With regard to identified and resolved risk, BVES discovered only a small number of level 1 issues and fixed all but one in a timely manner. This indicates that BVES was able to address almost all of the high risk issues that it found on its system.

In its EC ARC, BVES provided Energy Safety further documentation of risk reduction on its system. BVES provided a circuit-level evaluation of risk at the beginning and end of 2020, identifying which circuits were high, moderate, or low risk. BVES then calculated an overall reduction of 10% of its wildfire risk. Energy Safety acknowledges BVES's efforts to provide a transparent and quantified evaluation of risk and how that risk has changed over time.

6.4 Systemic Issues

Energy Safety did not find any systemic issues that hindered BVES's ability to adequately implement its WMP. However, Energy Safety uncovered some shortcomings that are reflective of BVES's maturity as an electrical corporation with a small service territory. For example, BVES lacked maturity in creating and following standard procedures and controlling documentation.

As noted in Section 5.7, Energy Safety determined that BVES did not meet condition BVES-R6, which was related to having controls to ensure targets and goals are met. Similarly, Energy Safety finds that BVES failed to adequately address condition BVES-R11, which was related to data governance.

S&L also noted that BVES did not have formal written processes to control and maintain records. S&L also found that BVES lacked granular documentation and formal control procedures for its WMP activities and that most target categories lacked written programs.[129] These findings imply that BVES relied on informal procedures and team communication to track its WMP-related work.

Additionally, BVES lacked maturity in maintaining spatial data. As noted in S&L's IE ARC, BVES's GIS database was incomplete and required updates. Additionally, the document referenced in Energy Safety's disposition on 2020 conditions found several issues regarding BVES's GIS data that was submitted on September 9, 2020.[130] Energy Safety acknowledges that BVES has made progress in maturing its capabilities in the above areas since 2020.

7.0 CONCLUSION

Considering all factors and information, and after weighing the various considerations unique to BVES, Energy Safety finds that BVES substantially complied with its 2020 WMP. Energy Safety acknowledges the work that BVES carried out to reduce the risk of wildfires. On balance BVES's performance in implementing most of its grid hardening, vegetation management, inspection, and situational awareness initiatives, in conjunction with BVES's lack of utility-caused ignitions, outweighs BVES's recordkeeping deficiencies. BVES's performance over subsequent years will demonstrate if BVES is successful in further reducing risk and maintaining its record of zero utility-caused ignitions and zero PSPS. Energy Safety will continue to monitor BVES's WMP implementation and push BVES to improve its ability to reduce the risk of wildfires in its service territory.

[129] BVES IE ARC, page 75.
[130] WSD QC Report on GIS Data Submitted by BVES on September 9, 2020, page 2.

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APPENDIX

List of Public Documents Referenced

APPENDIX –List of public documents referenced:

1. BVES 2020 Wildfire Mitigation Plan Report Updated September 18, 2020 (2020 WMP) https://www.bvesinc.com/safety/wildfire-mitigation-plan
2. BVES 2020 WMP Attachment 1 https://www.bvesinc.com/assets/migrated/managed/bveswmp/BVES_2020_WMP_Attachment_1_Tables.pdf
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4. BVES GIS DR 02262020 https://www.bvesinc.com/safety/wildfire-mitigation-plan
5. BVES Faults Covered Wire GIS files https://www.bvesinc.com/safety/wildfire-mitigation-plan
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8. Quarterly Report on 2020 Wildfire Mitigation Plan for the period covering May 22, 2020 – September 18, 2020 https://www.bvesinc.com/assets/migrated/managed/bveswmp/bves_quarterly_report_2020_wmp_09.18.2020a.pdf
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18. Final Independent Evaluator Annual Report on Compliance https://efiling.energysafety.ca.gov/Lists/DocketLog.aspx?docketnumber=2021-IE
19. Assembly Bill (AB – 1054) Public utilities: wildfire and employee protection Bill Text - AB-1054 Public utilities: wildfires and employee protection. (ca.gov)
20. Assembly Bill (AB -111) Wildfire agencies: public utilities: safety and insurance Bill Text - AB-111 Wildfire agencies: public utilities: safety and insurance. (ca.gov)
21. California Energy Infrastructure Safety Act – Government Code §§15470 – 15476 Codes Display Text (ca.gov)
22. CPUC's General Order 95 Original General Order 95 (ca.gov)
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24. Public Utilities Code Organization: Codes Display Text (ca.gov)
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