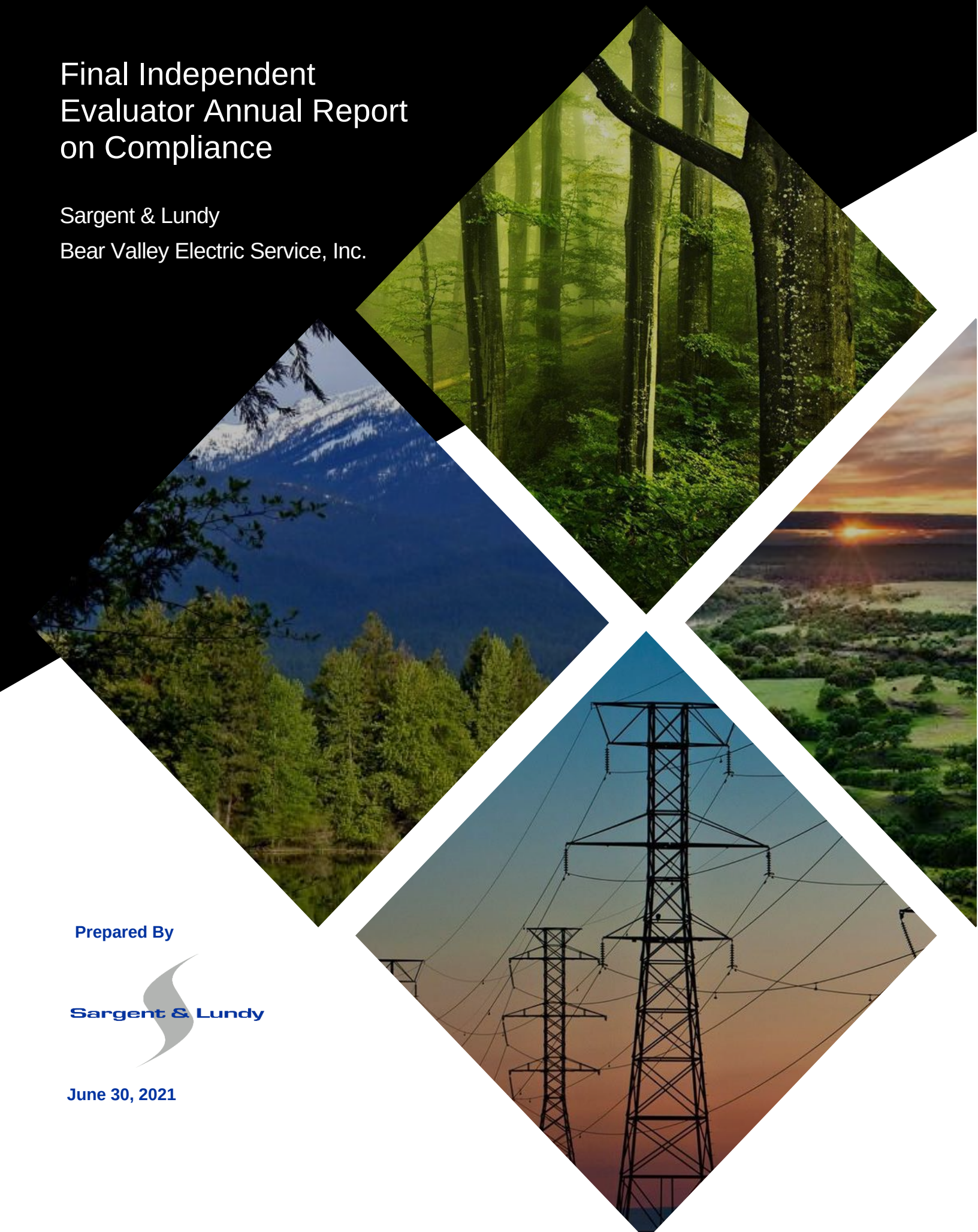
Final Independent Evaluator Annual Report on Compliance

Sargent & Lundy

Bear Valley Electric Service, Inc.



Prepared By

Sargent & Lundy

June 30, 2021

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ISSUE SUMMARY AND APPROVAL PAGE

This is to certify that this document has been prepared, reviewed, and approved in accordance with Sargent & Lundy's Standard Operating Procedure SOP-0405, which is based on ANSI/ISO/ASSQC Q9001 Quality Management Systems.

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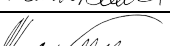
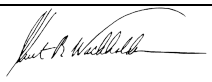
Lara Bledin	Project Manager	Overall		June 30, 2021
Kurt B. Wachholder	Assessment Manager	Overall		June 30, 2021
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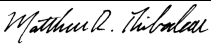
Matthew Thibodeau	Project Director		June 30, 2021

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ACRONYMS AND ABBREVIATIONS

Acronym/Abbreviation	Definition/Clarification
BVES	Bear Valley Electric Service
capex	Capital Expenditures
CPUC	California Public Utilities Commission
FI	Fault Indicator
GIS	Geographic Information System
GO	California General Order
GRC	General Rate Case
HFTD	High Fire-Threat District
IBEW	International Brotherhood of Electrical Workers
LiDAR	Light Detection and Ranging
opex	Operational Expenditures
PSPS	Public Safety Power Shutoff
QA/QC	Quality Assurance/Quality Control
QAL	Quarterly Advice Letter
QDR	Quarterly Data Report
QIU	Quarterly Initiative Update
RFP	Request for Proposal
S&L	Sargent & Lundy
SME	Subject Matter Expert
UCSD	University of California San Diego
WMP	Bear Valley Electric Service 2020 Wildfire Mitigation Plan
WSD	Wildfire Safety Division of the California Public Utilities Commission

1. EXECUTIVE SUMMARY

Bear Valley Electric Services, Inc. (BVES) is an investor-owned electric utility in the mountain resort community of Big Bear Lake, California. BVES provides service to approximately 24,360 customers in a service area of approximately 32 square miles.

In accordance with the California Public Utilities Commission (CPUC) Wildlife Safety Division (WSD) wildfire mitigation requirements, BVES engaged Sargent & Lundy (S&L) to perform an independent evaluation of BVES's compliance with its 2020 Wildfire Mitigation Plan (WMP). As part of this evaluation, S&L performed site visits and desktop reviews of the WMP initiatives. S&L followed the scope of work for the assessment as outlined in the CPUC letter titled "Final Independent Evaluator Scope of Work for Review of Compliance with 2020 WMP" and dated April 21, 2021. A copy of this letter is included in Appendix 5.1.

The evaluation reviewed and assessed BVES's compliance with its WMP. It included verification of compliance with initiative goals, verification of funding for each identified WMP activity, and validation and descriptions of any relevant BVES quality assurance/quality control (QA/QC) programs in place for WMP compliance.

S&L's evaluation was based on reviews of: (i) the WMP; (ii) quarterly reports (including the quarterly advice letter [QAL], quarterly initiative update [QIU], and quarterly data reports [QDRs]); (iii) the BVES 2020 Remedial Compliance Plan; (iv) the BVES 2020 Annual Report on Compliance; (v) BVES-provided, initiative-specific documentation; (vi) interviews with BVES subject matter experts (SMEs); and (vii) input from site visits of WMP utility initiatives specific to BVES assets. Field visits were performed on June 2–4, 2021 by three International Brotherhood of Electrical Workers (IBEW) qualified electrical workers from S&L's subcontractor, ICON Utility Services. Multiple SME interviews were held between May 19 and June 14, 2021.

1.1. WMP ACTIVITY COMPLETION

S&L reviewed the WMP activities with specific quantifiable or qualitative performance goals and/or targets as indicated in the WMP for compliance. As specified by the CPUC, BVES divided the relevant WMP initiatives into the following four assessment categories:

Table 1-1 — WMP Assessment Categories

Assessment Category	CPUC WSD Definition	Number of BVES Initiatives
Large Field Verifiable	Large volume (≥100 units) + quantifiable goal/target + field verifiable WMP activities	7

Assessment Category	CPUC WSD Definition	Number of BVES Initiatives
Large Non-Field Verifiable	Large volume (≥100 units) + quantifiable goal/target + non-field verifiable WMP activities	8
Small	Small volume (<100 units) + quantifiable goal/target WMP activities	9
Qualitative	Qualitative goal/target WMP activities	37

For each initiative, S&L assessed WMP compliance in multiple dimensions, including work completion, work quality, and adherence to applicable protocols and procedures. For field verifiable WMP initiative activities (in both the large- and small-volume categories), S&L completed site visits to a sample of assets to verify completion of installation, adherence to applicable protocols, and work quality. For all WMP initiative activities, S&L reviewed publicly available documents, as well as documents provided by BVES, and conducted SME interviews as needed to confirm the performance of the WMP initiative activities and adherence to applicable protocols and procedures.

For the review, S&L employed a sampling methodology from which results were extrapolated to determine whether BVES met the performance goal specified in the WMP. For small-volume initiative activities, S&L reviewed and validated approximately 10–100% of available and relevant documents, quality records, and assets; this was largely dependent on document availability and time constraints. For large-volume initiative goal values, S&L attempted to review and validate approximately 10–20% of relevant documents, quality records, and assets.

S&L found that BVES complied with their plan and met the indicated target goals for all but 8 of their 90 total WMP initiatives. Even where BVES did not meet the WMP goal, the intent of the initiative or significant objective progress was often achieved. If goals were not met, it was most commonly due to unforeseen scheduling and permitting delays or an underestimation by BVES of the level of effort required to complete an activity due to lack of prior experience. S&L found BVES did not meet the goals and/or targets for the following initiative activities:

- 5.3.2.1 Advanced weather monitoring and weather stations
- 5.3.3.1 Capacitor maintenance and replacement program
- 5.3.3.11 Mitigation of impact on customers and other residents affected during PSPS [public safety power shutoff] event
- 5.3.3.12 Other corrective action (Radford Line Covered Conductor Replacement Project)
- 5.3.4.7 LiDAR [light detection and ranging] inspections of distribution electric lines and equipment
- 5.3.7.4 Tracking and analysis of near miss data

- 5.3.3.19 Safety and technical upgrades to Palomino Substation
- 5.3.4.4 Infrared inspections of distribution electric lines and equipment

Additionally, BVES did not have specific target goals for a significant number of 2020 initiatives. This made initiative assessment challenging, as WMP compliance was subjective. A general lack of granular documentation and quality records was also identified across many of the WMP initiatives; as a result, a review of the S&L-selected sample records were limited or impossible. Nevertheless, the S&L assessment team found that BVES endeavored to comply with each of their WMP initiative goals to the best of their ability and appears to be proactive in the process of improving compliance-related documentation, record controls, staffing, and resource expansion for future WMP activities.

1.2. FUNDING VERIFICATION

S&L compared the financial budget against actual BVES spending for each WMP initiative, considering capital expenditures (capex) separate from operational expenditures (opex). In the aggregate, BVES's overall WMP spending exceeded its budget projections for 2020 by 11% for capex and 2% for opex. For capex spending, there were 7 tasks where actual spending was below the budget projections; there were 12 such instances for opex spending.

Note that the budgets and actuals for these comparisons are based on the allocation of budget and actuals across the WSD tasks, beginning with budgets and actuals that were established and collected according to the general rate case (GRC) system of accounts. This differs from the WSD work breakdown because the GRC account breakdown predated the WSD task breakdown for WMP work.

The principal reasons for capex underspending on specific tasks were: (i) errors in cost estimating for certain aspects of the work (i.e., the budgets overestimated the costs); (ii) coverage of certain expenses by the University of California San Diego (UCSD), which had not been expected at time of budgeting; and (iii) delays in certain activities (pushing some spending beyond 2020). Additionally, BVES discovered that some objectives could be fulfilled under other budgets, such as examination of composite poles in the "Grid Design and System Hardening" initiative.

Nearly the entire WMP opex budget (92%) was allocated to "Vegetation Management and Inspections," with minor spending budgeted for "Asset Management and Inspections" (5%), "Data Governance" (1%), and "Situational Awareness and Forecasting" (1%). The largest deviation of actual opex experience from the budget opex projection was for spending on "Vegetation Management and Inspections," where the budget was underspent by 16% (about $452,000). The largest reason for the underspending was overestimation, in budgeting, of costs relative to actuals experienced under the new contract with Mowbray's Tree Service for successful completion of the requested work. BVES had been concerned about

increases in wages due to changes in labor laws applicable to tree trimmers. Costs also were reduced by the fact that, once the results of the first light detection and ranging (LiDAR) survey were reviewed, BVES determined, and S&L concurs, that a second LiDAR survey for the year that had been budgeted would not be necessary.

1.3. VERIFICATION OF QA/QC PROGRAMS

S&L reviewed available documentation and conducted interviews of BVES SMEs to assess the BVES QA/QC programs for WMP compliance. Following an initial S&L request for QA/QC programs related to the WMP initiatives, BVES indicated that, in general, they do not have formal written QA/QC procedures, processes, or programs for controlling WMP activities. S&L SME interviews and a review of available documentation confirmed that, with the exceptions of the vegetation management, risk management, and emergency preparedness programs, the lack of written programs was prevalent throughout all 10 target categories. Despite this, S&L found that BVES's utilization of informal procedures and team communication to govern and control the majority of their WMP compliance activities was relatively effective; however, it was also clear that detailed written programs and processes would provide enhanced quality controls as well as a more granular understanding of how WMP initiative-specific documents and records are generated, maintained, and updated as well as what specific quality records (or lower-tier documents) may be used to populate them. BVES indicated that improvements and additions for QA/QC programs for WMP activities are planned for future years.

1.4. CONCLUSIONS

In general, S&L found BVES to be responsive, knowledgeable, transparent, and cooperative during the WMP compliance assessment. BVES did not hesitate to have one or often several SMEs attend virtual interviews with S&L and respond to clarifications with short notice. The most common obstacle encountered by S&L evaluators during the BVES assessment was documentation availability, especially for more granular quality records and inspection reports; however, for this WMP assessment—being the first of its kind in California and coupled with BVES's status as a smaller utility with less staff and resource availability—much of the delay in documentation submittals was to be expected. Overall, the S&L assessment team found that BVES genuinely supported the S&L WMP independent evaluation to the best of their ability. BVES adequately addressed most of the WMP activities and funded them appropriately. Where the goals or targets were not met, or for initiatives that were not fully funded, BVES appeared to often meet the intent of the initiative or made considerable progress. The most common reasons for variation from the plan was either overestimation (due to a lack prior experience) or unforeseen schedule delays or modifications made in 2020 for substantive reasons. Additional formal written QA/QC programs and procedures in future years will also help validate the BVES WMP.

2. INTRODUCTION

Bear Valley Electric Services, Inc. (BVES) is an investor-owned electric utility in the mountain resort community of Big Bear Lake, California. BVES provides service to approximately 24,360 customers in a service area of approximately 32 square miles.

In accordance with the California Public Utilities Commission (CPUC) Wildlife Safety Division (WSD) wildfire mitigation requirements, BVES engaged Sargent & Lundy (S&L) to perform an independent evaluation of BVES's compliance with its 2020 Wildfire Mitigation Plan (WMP). As part of this evaluation, S&L performed site visits and desktop reviews of the WMP initiatives. S&L followed the scope of work for the assessment as outlined in the CPUC letter titled "Final Independent Evaluator Scope of Work for Review of Compliance with 2020 WMP" and dated April 21, 2021. A copy of this letter is included in Appendix 5.1.

The evaluation reviewed and assessed BVES's compliance with its WMP. It included verification of compliance with initiative goals, verification of funding for each identified WMP activity, and validation and descriptions of any relevant BVES quality assurance/quality control (QA/QC) programs in place for WMP compliance.

S&L's evaluation was based on reviews of: (i) the WMP;[1] (ii) quarterly reports (including the quarterly advice letter [QAL], quarterly initiative update [QIU], and quarterly data reports [QDRs]); (iii) the BVES 2020 Remedial Compliance Plan; (iv) the BVES 2020 Annual Report on Compliance; (v) BVES-provided, initiative-specific documentation; (vi) interviews with BVES subject matter experts (SMEs); and (vii) input from site visits of WMP utility initiatives specific to BVES assets. Field visits were performed on June 2–4, 2021 by three International Brotherhood of Electrical Workers (IBEW) qualified electrical workers from S&L's subcontractor, ICON Utility Services. Multiple SME interviews were held between May 19 and June 11, 2021; this report is based on information and documents provided during that time.

2.1. BVES OVERVIEW

BVES owns and operates 86.8 miles of overhead, 34.5-kV sub-transmission miles, 2.7 miles of 34.5-kV underground sub-transmission miles, 488.6 miles of overhead distribution circuit miles, 86.4 miles of underground distribution circuit miles, 13 substations, and a natural gas-fueled 8.4-MW peaking generation facility. It is an investor-owned electric utility of approximately 52 employees. The BVES service area is rural and mountainous; it is located in the San Bernardino Mountains of Southern California, 80 miles east

[1] BVES WMP Refile 09.18.2020A, dated September 18, 2020

of Los Angeles. The entire service area is located in a high fire-threat district (HFTD) and consists of primarily Tier 2 (elevated-risk) with some Tier 3 (extreme-risk) areas.[2]

[2] CPUC, Fire-Threat Map; BVES

3. INDEPENDENT EVALUATOR REVIEW OF COMPLIANCE

As part of this scope of work, S&L reviewed BVES's WMP activities for completion, verified WMP funding, and reviewed QA/QC programs applicable to the WMP. The review was based on available documents, reports, interviews with various BVES SMEs, and site visits to various assets.

3.1. WMP ACTIVITY COMPLETION

S&L reviewed the WMP activities that have specific quantifiable or qualitative performance goals and/or targets as indicated in the WMP for compliance. BVES divided the relevant WMP initiatives into four assessment categories as defined by the CPUC:

- Large volume (≥100 units) + quantifiable goal/target + field verifiable WMP activities
- Large volume (≥100 units) + quantifiable goal/target + non-field verifiable WMP activities
- Small volume (<100 units) + quantifiable goal/target WMP activities
- Qualitative goal/target WMP activities

Of the WMP initiative activities, 7 are considered large volume and field verifiable, 8 are considered large volume and non-field verifiable, 9 are considered small volume, and 37 are considered qualitative.

For each activity, S&L assessed WMP compliance in multiple dimensions, including work completion, work quality, and adherence to applicable protocols and procedures. For field verifiable WMP initiative activities (in both the large- and small-volume categories), S&L completed site visits to a sample of assets to verify completion of installation, adherence to applicable protocols, and work quality. For all WMP initiative activities, S&L reviewed publicly available documents, as well as documents provided by BVES, and conducted SME interviews as needed to confirm the performance of the WMP initiative activities and adherence to applicable protocols and procedures.

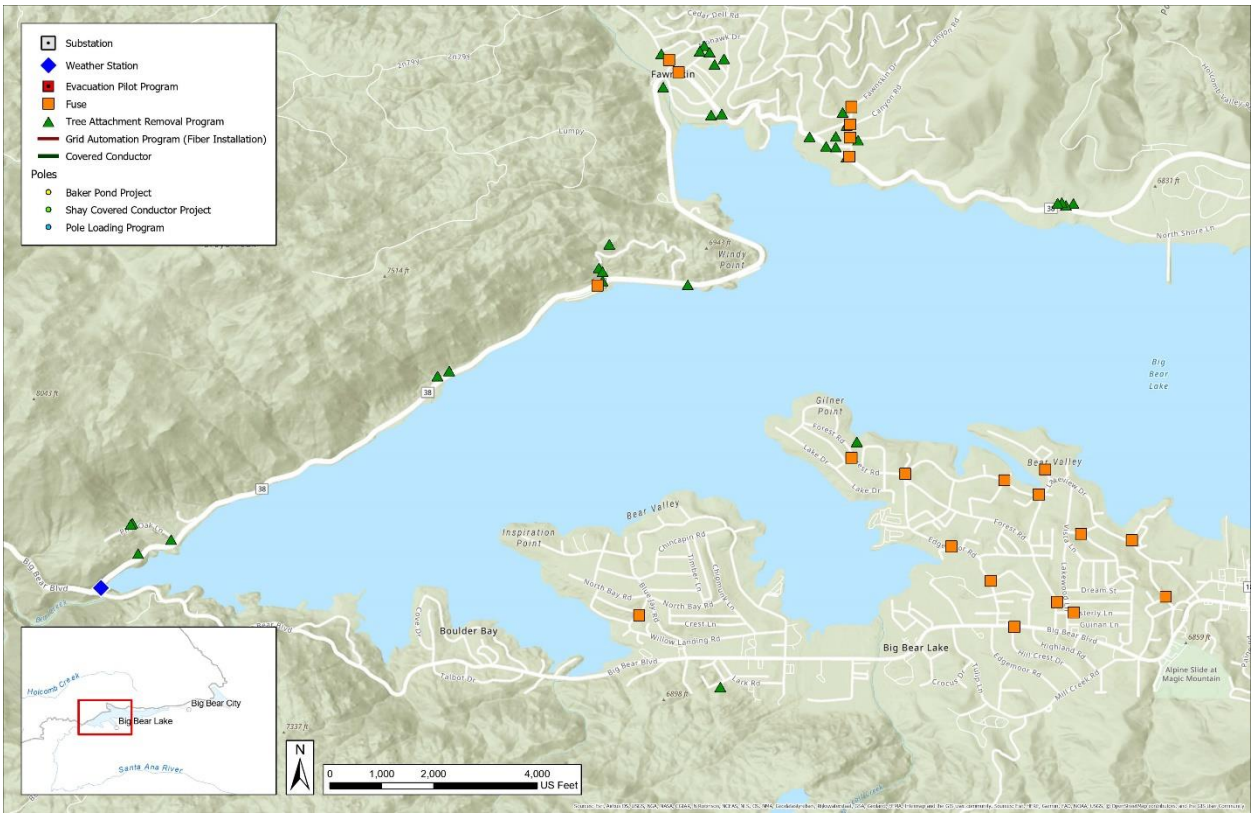
BVES provided a list of initiative activities for each assessment category; however, some were excluded from the original list or identified by another activity name. S&L therefore modified the activities to match the 2020 initiative number. A list of initiative activities considered for each category is provided in Section 5.3. Both the BVES-provided and S&L-revised lists are included for reference.

3.1.1. Sampling Methodology and Discussion

The sampling methodology employed for both the quantitative field verifiable initiative inspections and quantitative non-field verifiable initiative documentation reviews (desktop inspections) during the

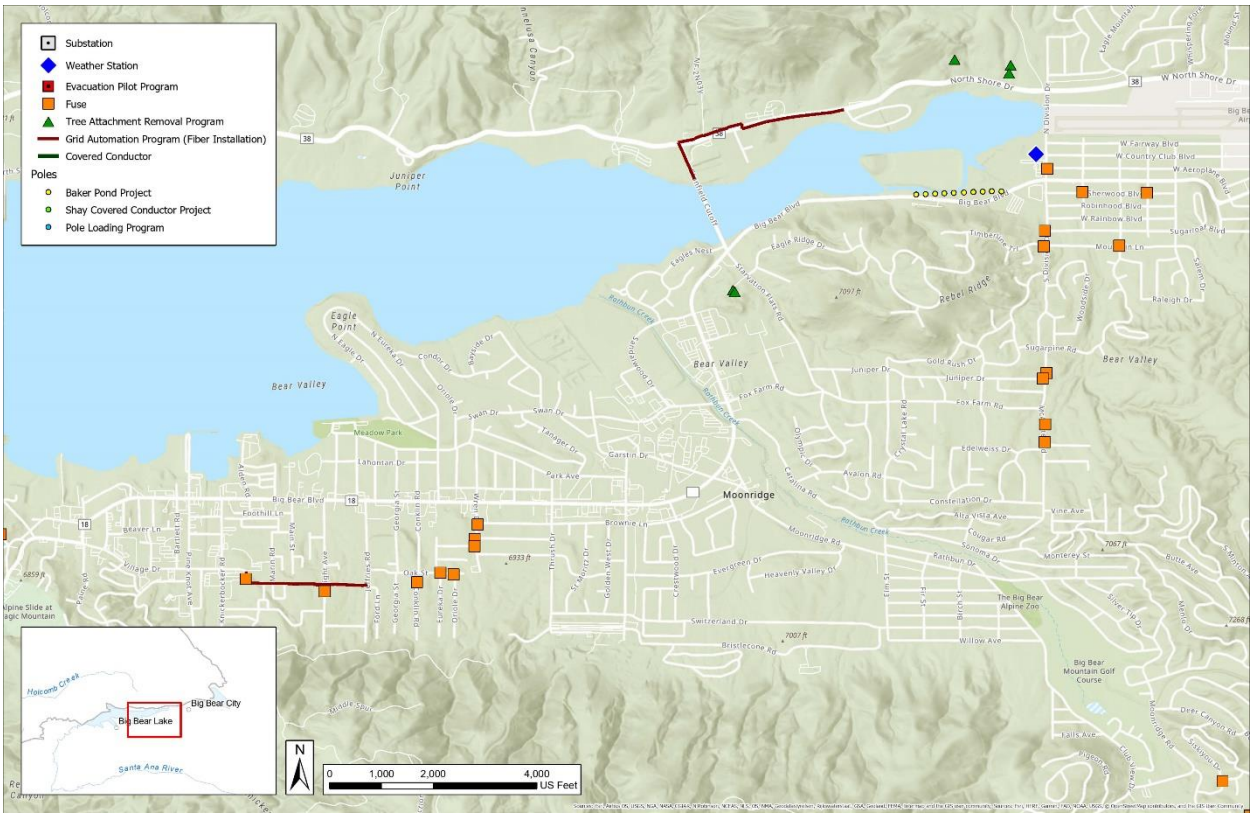
assessment consisted of selecting a portion of each of the 2020 actualized quantitative initiative activity goals for review, inspection, and validation based on the goal volume (small versus large), document and quality record availability, asset accessibility, schedule limitations, and priority focus. S&L extrapolated results to determine whether BVES met the performance goal specified in the WMP. For the small-volume initiative activities, S&L reviewed approximately 10–100% of available documentation. For the smaller populations, this sample size percentage range typically included most of the population except when schedule limitations, access, or document availability issues were encountered. For large-volume initiative goal values, S&L attempted to review and validate approximately 10–20% of relevant documents, quality records, and assets. For larger populations, this sample size percentage range is generally considered substantial enough to be statistically significant while providing reasonable confidence that the results of the sample reviews will be representative of the entire population. Schedule limitations also affected the sample sizes reviewed. Since the entire BVES service area is located in a high fire-threat district (HFTD) and consists almost exclusively of Tier 2 (elevated-risk) areas, priority, fire-threat, and risk-based sample selection was irrelevant. Additionally, for field verifiable initiative activities, S&L strove to select samples from diverse regions within the BVES service area (e.g., heavily forested areas, highways, residential locations) rather than choosing a large cluster of samples in the same region. Sample sizes per initiative are included in Table 5-1 in Appendix 5.4. The maps from Figure 3-1 through Figure 3-4 show the locations of assets selected for site inspection. For many initiatives, interviews with BVES SMEs were required to validate initiative activity goals since written procedures, records, and other documentation was not readily available.

Figure 3-1 — Overview of Site Inspection Locations



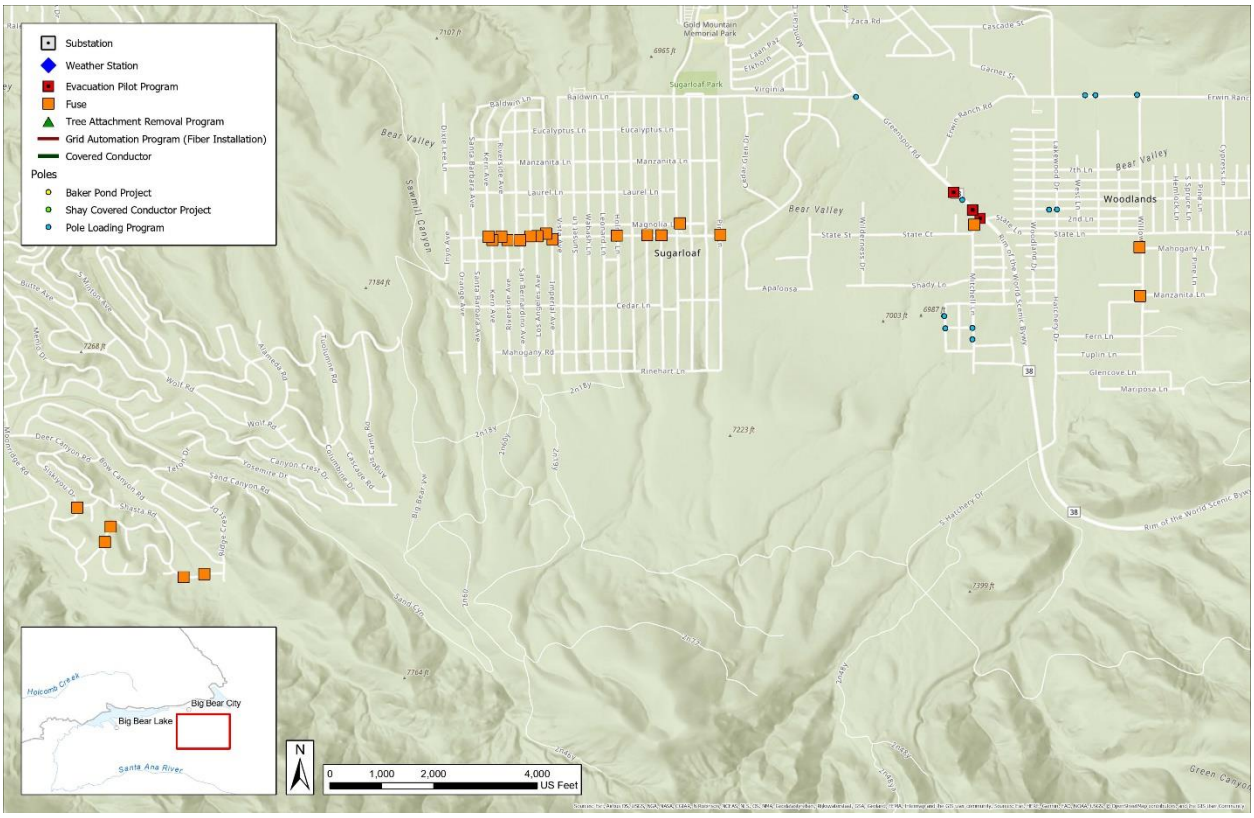
Note: This map was generated from BVES-provided geographic information system (GIS) data that was adapted by S&L for field verification activities.

Figure 3-2 — Overview of Site Inspection Locations



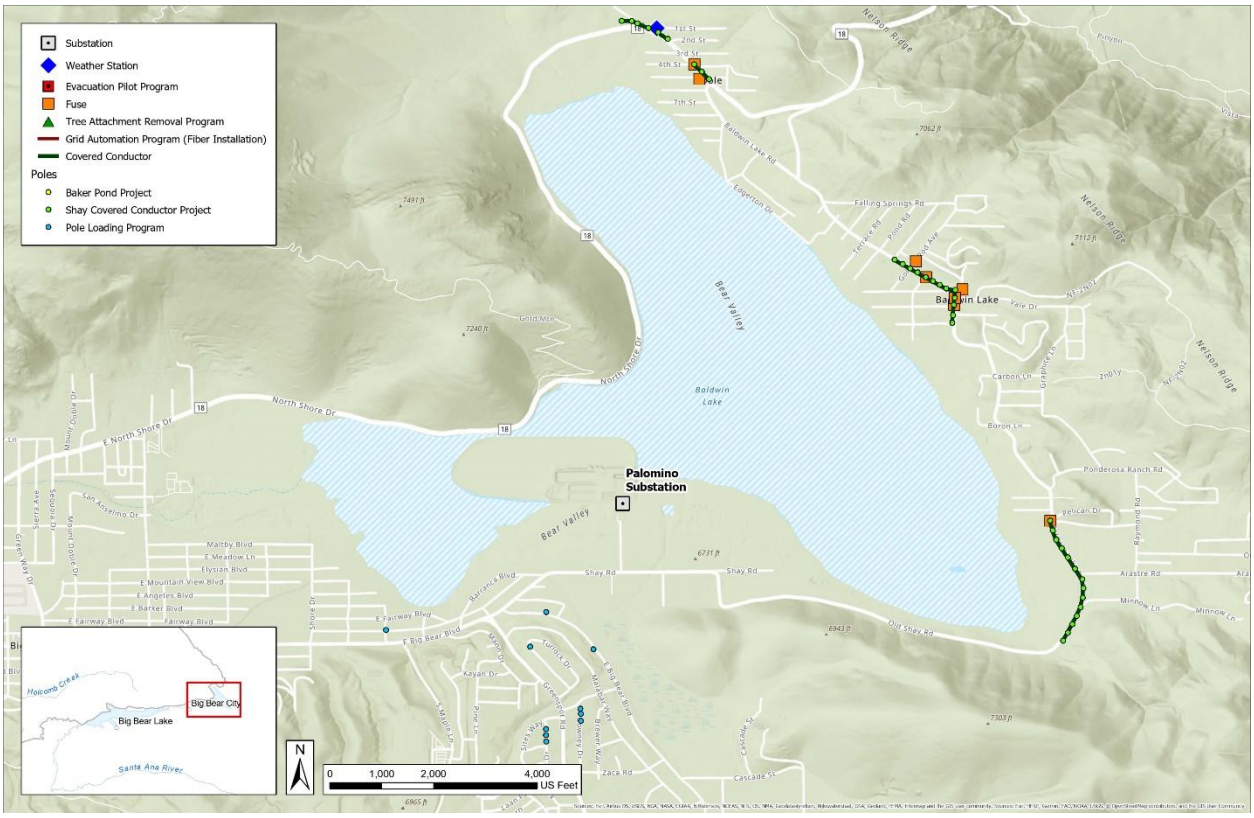
Note: This map was generated from BVES-provided GIS data that was adapted by S&L for field verification activities.

Figure 3-3 — Overview of Site Inspection Locations



Note: This map was generated from BVES-provided GIS data that was adapted by S&L for field verification activities.

Figure 3-4 — Overview of Site Inspection Locations



Note: This map was generated from BVES-provided GIS data that was adapted by S&L for field verification activities.

Due to the short time available for the independent evaluation, specific samples for field verification were primarily based on the availability of 2020 asset documentation and information (e.g., location, date of work, and component identification) with a secondary priority placed on the overall fire-threat risk and the importance of the asset. Each WMP large- and small-volume field verifiable initiative received sample field verification, except for Activity 5.3.2.2, “Continuous Monitoring Sensors.” This was due to accessibility, time, and WSD direction.

3.1.2. Large-Volume Quantifiable Goal/Target – Field Verifiable

“Large-Volume Quantifiable Goal/Target – Field Verifiable” activities are initiatives with over 100 quantifiable assets included in the goal or target that could be verified for completion in the field. S&L reviewed a sample of each initiative activity, as described in Section 3.1.1. An IBEW qualified electrical worker from S&L’s subcontractor conducted site visits to predetermined locations to confirm installation, work quality, and adherence to applicable utility protocols and standards for each initiative. Additionally, S&L reviewed various documents provided by BVES to help determine completeness. Finally, S&L submitted clarification requests and conducted interviews with BVES SMEs for an understanding of the

activities performed. S&L's findings and assessments for each of this category's activities are provided below.

3.1.2.1. Initiative Review

3.1.2.1.1. Initiative #5.3.3.3: Covered Conductor Installation

Per the WMP, BVES plans to replace all overhead sub-transmission bare wire with covered wire over a six-year period of execution from 2020 to 2025, covering approximately five miles per year. BVES's Q4 2020 QIU reported that 7.83 miles of hardened circuits had been completed in 2020. S&L reviewed documentation for Work Order 6040000802, which included capturing inspections of the covered conductor installation work in progress. Design Drawing 6012073-02, Sheets 1–18 associated with the Shay 34-kV circuit were provided by BVES and contained markups of inspection notes along with field inspector signatures and dates indicating completion of the work. In addition, S&L inspected spans of covered conductor installation between 47 different poles, or approximately 1 mile, noting no issues with regards to the covered conductor installation. An example of the covered conductor installed on the Shay 34-kV circuit is shown in Figure 3-5.

Figure 3-5 — Example of Covered Conductor Installation

BVES informed S&L that California General Order (GO) 95 requirements and its construction standards are utilized for all BVES construction projects and that BVES performs QA/QC in accordance with the process outlined in BVES's clarification email to S&L (dated May 26, 2021).

Based on S&L's review of BVES's documentation and discussions with BVES personnel, there is reasonable assurance that 7.83 circuit miles were hardened with covered conductor installation in 2020. Per the WMP, the goal was stated to be approximately five miles per year; therefore, S&L finds that the WMP initiative activity goal was met.

3.1.2.1.2. Initiative #5.3.3.6: Distribution Pole Replacement and Reinforcement, Including with Composite Poles (Pole Replacement and Reinforcement)

Per the WMP, BVES has an ongoing program to assess and remediate distribution poles that are found to be noncompliant with the requirements of GOs 95 and 165. S&L noted that, although the WMP did not specify a specific number of poles to be replaced or reinforced, the BVES Q4 2020 QIU indicated a target of 200 poles to be replaced or reinforced for 2020. The QIU also reports that a total of 213 poles were replaced or reinforced. BVES provided the pole replacement and reinforcement data for the Erwin circuit only as summarized in "BVES Asset-Pole loading infrastructure hardening & replacement program based on PL assessment program–sample report.xlsx."

S&L reviewed the spreadsheet and found the data to include 140 entries for pole replacement or reinforcement performed in 2020. S&L requested additional pole replacement and reinforcement documentation for non-Erwin circuits. BVES subsequently provided documentation for the Boulder circuit; however, this information was from 2018 and 2019, which is outside the scope of this evaluation. BVES was unable to provide the remaining 2020 pole replacement and reinforcement documentation completed on other circuits for S&L's review.

The information included the associated work order ID, section within the circuit, course of action, date in which construction was completed, and old and new structure IDs. S&L performed a field inspection on 22 of the 140 poles listed in the summary spreadsheet. The inspections confirmed installation and noted that quality of work was found to meet expectations with no issues noted.

In addition, BVES provided Design Drawings 4011973-01, Sheets 1–3 associated with the Baker Pond relocation project; however, due to timeline constraints, S&L was unable to make a proper assessment of the drawings.

Figure 3-6 — Example Replaced Pole

Based on review of documentation and site inspections performed on BVES distribution poles, it is apparent that BVES is performing distribution pole replacement and reinforcement. The pole replacement and reinforcement data reviewed was determined to be a representative sample of the work completed by BVES and provided reasonable assurance that BVES completed 213 poles replaced or reinforced in 2020, surpassing their 2020 QIU target of 200 poles; therefore, S&L considers this WMP initiative met for 2020.

3.1.2.1.3. Initiative #5.3.3.7: Expulsion Fuse Replacement

Per the WMP, BVES plans to replace approximately 628 conventional fuses with electronic fuses and approximately 2576 conventional fuses with current limiting ELF™ fuses over a 24-month timeframe. Table 5-4 of the WMP provides the number of planned fuses and indicates that the project started in June of 2019. Per the BVES Q4 QIU, the target number of replaced fuses for 2020 was 2000, with a total of 2001 fuses reported as being replaced. S&L reviewed monthly handwritten logs found in "BVES Asset-Expulsion Fuse

Replacement ELF scans.zip" provided by BVES that captured fuse replacement data for over 800 fuses replaced in 2020; however, it appeared that all 2001 fuses reported were included in this documentation. Due to time constraints, S&L was not able to confirm the number provided. The information captured on the log sheets was noted to include the date, pole number, location, transformer details (e.g., brand, serial number), size of the removed existing fuse, and size of the ELF™ fuse installed. In addition, S&L observed 65 poles with replaced fuses installed. The observations verified fuse installation, noted that the quality of work on the installations met expectations, and noted no issues with the fuse replacement. BVES does not have a documented procedure governing the performance and control of conventional fuse replacements.

Figure 3-7 — Example Fuse Replacement

Review of BVES's Q4 QAL indicates that 72% of the total amount of fuses have been replaced and that the 24-month project was on track for completion by the end of May 2021.

Based on the documentation reviewed and described above and the results of the physical inspections (see Section 3.1.1), S&L concludes that BVES is appropriately performing expulsion fuse replacements and met their 2020 target of 2000 replaced fuses.

3.1.2.1.4. Initiative #5.3.3.12: Other Corrective Action (Radford Line Covered Conductor Replacement Project)

Per the WMP, BVES planned to replace bare wire with a high-performance covered conductor on the Radford 34.5-kV line due to its location in an HFTD Tier 3 area, the highest wildfire risk of all of BVES's overhead facilities. The WMP states that BVES issued a request for proposal (RFP) for the construction portion of the project and awarded the construction in June 2020. Per the BVES Q4 QAL, BVES reported that the project is awaiting U.S. Forestry Service approval of the permit to perform the scope of work. BVES anticipated starting construction in April 2021 with completion expected in October 2021; however, as of

June 21, 2021, construction had not started. S&L reviewed Design Drawing 4011973-05-01, Sheets 1–14. The design drawings[3] were noted to address the Radford Line Covered Conductor project. In addition, S&L verified that the construction contract was awarded in 2020 via review of the contract (dated May 15, 2020). BVES also provided the RFP and response to RFP documentation, which was also reviewed. 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.

S&L's review noted that there is reasonable assurance BVES took the appropriate steps towards project completion via the development of design drawings and awarding of construction work; however, project construction did not commence in 2020 due to the external reasons listed herein. Due to this, BVES was unable to complete their goal of 2.82 circuit miles; therefore, S&L concludes that BVES did not meet their WMP initiative goal.

3.1.2.1.5. Initiative #5.3.3.13: Pole-Loading Infrastructure Hardening and Replacement Program Based on Pole Loading Assessment Program

Per the WMP, BVES has an ongoing program to assess and remediate distribution poles that are noncompliant with the requirements of GOs 95 and 165 over a five-year period. S&L noted that, although the WMP did not appear to specify a specific number of poles to be assessed in 2020, the BVES Q4 2020 QIU indicated a target of 1600 poles to be assessed in 2020. The BVES Q4 2020 QIU reports that a total of 191 poles were assessed in 2020. BVES informed S&L that there were a larger percentage of pole assessment failures than anticipated during 2018 and 2019. Given the progress that BVES has made on the number of poles assessed in those years, they were ahead of schedule; therefore, the decision was made to increase BVES resources into remediating the number of failed poles for the previous years and limit 2020 pole assessments to support covered conductor installation and other construction activities. No documented pole-loading infrastructure hardening and replacement program assessment was noted.

BVES provided pole-loading assessment work packages[4] for the 13 structures requested. Due to time constraints, S&L reviewed the packages for the 6023BV, 6029BV, 9673BV, 6031BV, 6032BV, and 6522BV structures. The package was noted to include the associated pole-loading design drawing, multiple photographs of the assessed pole, and SPIDACalc pole-loading software computational results, which included safety factors. Assessment pass/fail results were tabulated for the subject pole and all other poles within the same circuit section. S&L performed physical inspections on a sample of poles having undergone replacement/remediation. Included in those inspections were the replacement of poles 6031BV and

[3] BVES Asset-Other corrective action (Radford Line Covered Conductor Replacement Project) Design Package.pdf
[4] PL Docs 060921.zip & PL Docs 061021.zip

6032BV. Per the work packages reviewed, 6031BV and 6032BV failed their assessments, and their replacement was verified via the S&L inspection. The review noted that the pole assessments were performed in 2019, with the pole replacement construction activities performed in 2020. Discussions with BVES confirmed that pole assessment activities continued in 2020 and provided SPIDACalc computational results for pole assessments performed on the Shay 34-kV circuit. The calculation sample was noted to include results for structures 10898BV, 9219BV, 11964BV, and 9269BV. The software results were performed in September of 2020. No evidence of 2020 pole replacement construction activities based on 2020 pole assessments were noted.

Based on the documentation reviewed, results of the S&L inspection, and discussions with BVES personnel, S&L concludes that pole loading infrastructure hardening and replacement is being performed based on pole loading assessments. Considering that the WMP did not have a specified number target, S&L finds BVES met their WMP initiative goal.

3.1.2.1.6. Initiative #5.3.3.18: Removal of Tree Attachments in HFTD

Per the WMP, BVES planned to remove tree attachments at a rate of approximately 220 per year, with estimated completion of the tree removal attachment project in 2022.

S&L reviewed tree attachment removal data provided by BVES, which contained 183 entries of data performed in 2020 for various sections of the Fawnskin circuit. Data included the associated work order number, address, remediation method, new pole number assignment, construction date, and number of tree attachments removed. S&L attempted to observe 34 tree attachment removals derived from the BVES-provided spreadsheet.[5] During a discussion with an S&L inspector regarding the 30 tree attachment removals observed, the inspector indicated that the quality of tree attachment removal activities met quality expectations.

Additionally, S&L reviewed “BVES Asset-Removal of Tree Attachments in HFTD.pdf,” which was noted to contain markups of Fawnskin pole locations indicating where tree attachment removal activities had occurred. S&L also reviewed a sampling of BVES-provided tree attachment removal work packages consisting of the M_6424, M_6429, M_6422, M_4971, and M_4971 marker removals. The work packages contained an associated tree attachment removal design drawing with markups and a field inspector signature, material sheets, and photographs of the subject pole. S&L inspected the poles in the work packages and confirmed good quality of the removal work.

[5] BVES Asset-Removal of Tree Attachments in HFTD.pdf

Figure 3-8 — Example Tree Attachment Removal

Based on review of documentation, BVES performed tree attachment removal activities in 2020 and met this WMP initiative activity.

3.1.2.1.7. Initiative #5.3.5.20: Vegetation Management to Achieve Clearances Around Electric Lines and Equipment (Pole Brushing)

As indicated in the WMP refile 09.18.2020A, Table 25, for this initiative, "Vegetation management to achieve clearances around electric lines and equipment is captured in Table 25 Items 2 and 14." (Refer to Initiatives 5.3.5.2 and 5.3.5.14 for assessment of these initiatives herein.) Additionally, the BVES Q4 2020 QIU indicates "Maintain minimum clearances" for this initiative with a status of "In Progress." A target goal of "NA" is provided, meaning "not applicable."

S&L reviewed the following BVES vegetation management documentation, which address vegetation management clearances around electric lines and equipment:

- Vegetation Management QC Program:[6] This document provides the BVES vegetation clearance requirements and applicable standards, defines BVES vegetation management program roles and responsibilities, defines vegetation management reporting schedules and requirements, defines tracking of vegetation clearance discrepancy requirements, provides customer outreach requirements, details vegetation quality control check frequencies and requirements, and provides a typical "Tree Trimming QC" clearance inspection report template.
- BVES GO 165 Compliance Plan:[7] This document provides the requirements and guidelines for the BVES implementation of GO 165, including those for inspection frequencies, tracking, reporting, finding category criteria, and other data recording requirements.
- LiDAR Encroachment Points 2020:[8] This spreadsheet provides a list of identified vegetation encroachment locations, with the approximate encroachment distances, clearance levels, relevant breaker, electric line type, and voltage. This document also provided validation that the defined activities occurred and were implemented in accordance with the BVES program requirements in 2020.

During the site inspections, field personnel noted no vegetation issues in the majority of their reviews; however, in some instances, the field personnel noted vegetation not meeting typical industry best practices for clearances, though they were still meeting the GO 95 requirements.

Based on the documentation reviewed, and evidence that vegetation clearances around electric lines were being maintained in 2020, BVES met the WMP initiative goal.

3.1.2.2. Trends and Themes

S&L identified several trends for the assessment of the WMP "Large-Volume Quantifiable Goal/Target – Field Verifiable" initiatives:

- For many initiatives, no documented procedures or processes governing the performance and control of WMP initiatives were available.
- For most initiatives, BVES did not appear to have a formal written process to control and maintain quality records (e.g., report forms, inspection checklists, work orders) and other documentation.
- Summary-level spreadsheets and similar high-level documents were often used to manage and track initiative activities; however, in many cases, more granular documentation (such as regular inspection reports, checklists, third-party reports, daily/weekly meeting notes, and similar quality records) was not immediately available for review.

[6] Vegetation Management and Vegetation Management QC Programs Policy and Procedures Rev0.pdf
[7] BVES GO 165 Compliance Plan.pdf
[8] LiDAR EncroachmentPoints2020.xlsx

3.1.3. Large-Volume Quantifiable Goal/Target – Not Field Verifiable

"Large-Volume Quantifiable Goal/Target – Not Field Verifiable" initiative activities are initiatives with more than 100 quantifiable assets included in the goal or target that could not be verified for completion in the field. S&L reviewed a sample of each initiative activity as described in Section 3.1.1. In lieu of physical inspections, S&L reviewed various documents provided by BVES to help determine completeness. Finally, S&L submitted clarification requests and conducted interviews with BVES SMEs to confirm understanding of the activities. S&L's findings and assessments of each of this category's activities are provided herein.

3.1.3.1. Initiative Review

3.1.3.1.1. Initiative #5.3.4.1: Detailed Inspections of Distribution Electric Lines and Equipment

Per the WMP, BVES's distribution inspection initiatives are best captured in Initiative 5.3.4.11; S&L's review of the inspections is covered in Section 3.1.3.1.3. Based on interviews conducted and documentation reviewed in Initiative 5.3.4.11, BVES has met the goal for this initiative activity.

3.1.3.1.2. Initiative #5.3.4.7: LiDAR Inspections of Distribution Electric Lines and Equipment

BVES's plan was to conduct two light detection and ranging (LiDAR) sweeps in 2020 to evaluate the effectiveness of clearance efforts and identify any potential wildfire hazards. This WMP initiative was not met, as one LiDAR sweep was conducted in July 2020. Based on interviews with the BVES SMEs, this change was made because the LiDAR data took 2–3 months to process, and after evaluating the results obtained, they did not see the necessity of two sweeps. BVES received more data than they expected. The results of the survey gave them enough information to accomplish their goals without a second sweep. The LiDAR data was used to identify encroachment points for vegetation management, identify other structural encroachments, and provide geodatabase updates for the data governance WMP category.

S&L reviewed the LiDAR encroachment point (2020) data and discussed the subject with BVES personnel, Anthony Rivera, in an interview. He outlined the following process for resolving encroachment issues: (i) use of the encroachment spreadsheet; (ii) the location information, infractions, and circuit voltage; and (iii) the prioritization of field work. The vegetation management contractor is sent out to verify and trim as required. The trims are recorded in a separate database.

S&L received a geodatabase file[9] with the LiDAR survey results. To view this data, S&L converted the file to a .KMZ file, which S&L then viewed in Google Earth. The file shows each encroachment point and

[9] LiDAR.gdb

identifies the priority level per GO 95 , encroachment distance, section name, parent section, feeder, phase code, operating voltage, overhead, voltage, and X/Y coordinates. The file serves as evidence that BVES performed one LiDAR survey.

3.1.3.1.3. Initiative #5.3.4.11: Patrol Inspections of Distribution Electric Lines and Equipment – CMP

The WMP refile 09.18.2020A, Table 24, indicates that this initiative is addressed by the GO 165 inspections and a second ground patrol of overhead facilities by a third party. S&L reviewed the 2020 inspection schedule by quarter,[10] one ground patrol inspection record,[11] the spreadsheet of detailed inspection findings,[12] and the third-party inspection spreadsheet results.[13] The inspection schedule is defined by the BVES GO 165 Compliance Plan.[14]

The example ground patrol inspection record includes the circuit name (Pioneer), voltage (4 kV), inspection type (patrol), off-cycle (no), inspector (A. Rivera), and date (January 29, 2020). No notes were made. Per interviews with SMEs, the patrols are such that, if the inspector identifies an issue and must exit the vehicle, the inspection becomes a detailed inspection; therefore, inspection records often do not contain notes.

S&L interviewed BVES inspector Anthony Rivera to validate the performance of the detailed and patrol inspections in accordance with the plan and understand the process for resolving issues; he performed all of the GO 165 circuit patrols as well as the detailed inspections in 2020. Mr. Rivera described the patrol inspections as simple in nature: a drive-by inspection looking for anything obvious. Detailed inspections include a visit to each individual location. An inspector looks at the physical pole for damage, major car hits, cracks that would be a problem, the condition of conductor, etc. The inspector currently utilizes a general checklist; Anthony indicated that the inspection software is being upgraded to something more robust for future years. Following inspection, each issue is entered into an Excel log, wherein each structure with a finding gets its own entry where the findings are recorded. The spreadsheet includes the following:

- Recipient and Reportee
- Foreman
- Date
- Priority
- Structure Number
- Circuit
- Inspection Type
- Details
- Due Date
- Completed Data

[10] 2020 Inspection-Patrols by Quarter.xlsx
[11] BVES Example Patrol Inspection Record_2020.pdf
[12] BVES Example Detailed Inspection Record_2020.xlsx
[13] DRG Ground Patrol_BV-2020Inspections.xlsx
[14] BVES GO 165 Compliance Plan July 1, 2020

As issues are resolved, the completion date and foreman are recorded. The top of the spreadsheet shows a count of the Open Category 1, 2, and 3 items. The details provide a summary of the issue—for example, “Primary DBL DE arms rotten, bolts pulling through due to angle, one already floating. High P2.”

If nothing is found requiring corrections during the inspection, no entry is made. The inspector simply records that the detailed inspection of that circuit was completed.

S&L reviewed the third-party inspection spreadsheet, which contained 6582 entries. Each line identified the inventory date, remote ID, site comments, “site last changed by," site change date, site change time, and whether any of the following discrepant conditions were present: blown fuses, unit damage, damaged or missing guy guards, encroachments within 10' of primary wires, and missing or incorrect grid tags. The spreadsheet also identifies photos applicable to the inspection.

Based on the interview, BVES reviews the third-party findings and determines the validity. BVES might not categorize these issues in the same manner and assign the same threat level as the third party. When the third-party inspection patrol of a circuit identifies findings requiring repair, they are assigned to a crew, logged in their system, and tracked to closure.

Based on interviews conducted and documentation reviewed, BVES has satisfied this WMP initiative activity.

3.1.3.1.4. Initiative #5.3.4.9: Other Discretionary Inspection of Distribution Electric Lines and Equipment, Beyond Inspections Mandated by Rules and Regulations

As indicated in the WMP refile 09.18.2020A, Table 24, BVES does not have any wildfire mitigation asset management and inspection initiatives focused on other discretionary inspections of distribution electric lines and equipment beyond inspections mandated by rules and regulations that have not been captured in other initiatives. BVES does, however, have a contract with third-party inspector DRG to perform an annual ground patrol, as described in Initiative 5.3.4.11; therefore, BVES achieved the goal of this WMP initiative.

3.1.3.1.5. Initiative #5.3.5.2: Detailed Inspections of Vegetation Around Distribution Electric Lines and Equipment

Per the WMP refile 09.18.2020A , Table 25, the objectives of this initiative are to reduce the following targeted ignition probability drivers: “contact from object, all types of equipment/facility failure, wire-to-wire contact/contamination.” Additionally, BVES indicates that this initiative “increases vegetation clearances,

criterial for tree removals, and eliminates overhang on sub-transmission lines. These are above the 2017 baseline vegetation clearances that were in effect before CPUC Decision 17-12-024 was adopted."

Additionally, in accordance with the Q4 2020 QIU, there is a quantifiable goal of 100% of detailed inspections for scheduled circuits completed. The "2020 Inspections – Patrols by Quarter" spreadsheet[15] provides quarterly detailed and patrol inspection completions by circuit. As indicated in this document, 100% of the circuits scheduled for detailed inspections were inspected in 2020. Any findings from these inspections are recorded with finding category, date of observation, inspector, location, type of inspection, and corrective action tracking in the BVES "Example Detailed Inspection Record" spreadsheet.[16] The BVES GO 165 compliance plan[17] provides requirements and guidelines for BVES implementation of GO 165 compliance, including inspection frequencies, tracking, reporting, category criteria, and other recording requirements. Per the documentation provided, BVES has met this quantitative initiative goal since all detailed inspections were completed.

The same BVES documentation was provided, reviewed, and assessed by S&L for Initiatives 5.3.4.1 (detailed inspections of distribution electric lines and equipment) and 5.3.4.11 (patrol inspections of distribution electric lines and equipment – CMP). See these activity discussions in Sections 3.1.3.1.1 and 3.1.3.1.3 for additional information.

3.1.3.1.6. Initiative #5.3.5.7: LiDAR Inspections of Vegetation Around Distribution Electric Lines and Equipment (Vegetation Management Technology)

Initiative 5.3.4.7 (LiDAR inspections of distribution electric lines and equipment) includes the goals for this initiative. See Section 3.1.3.1.2 for S&L's review. Discussions with BVES personnel noted that BVES verifies contractor vegetation management activities once performed. S&L reviewed "2020VegRecord.xls," which contained over 4500 entries of vegetation management activities performed by BVES or its contractors. Information included in this spreadsheet includes locations identified by the LiDAR analysis and other means, such as physical patrols. The spreadsheet contained the service location, grid ID, cycle year, vegetation species, quantity, trim style, and date performed of the vegetation management activities. Based on the information from Initiative 5.3.4.7, along with review of vegetation management documentation, S&L finds that BVES met this WMP initiative goal.

[15] 2020 Inspections-Patrols by Quarter.xlsx
[16] BVES Example Detailed Inspection Record_2020
[17] BVES GO 165 Compliance Plan.pdf

3.1.3.1.7. Initiative #5.3.5.11: Patrol Inspections of Vegetation Around Distribution Electric Lines and Equipment

Per the WMP, Table 25, BVES's patrol inspections of vegetation around distribution electric lines and equipment are fully captured in Table 25, Initiative 2 (Initiative #5.3.5.2) of the WMP. Detailed inspection of vegetation around distribution electric lines and equipment are captured in Table 24, Initiative 11 (Initiative #5.3.4.11) of the WMP. The scope of the patrol inspections and detailed inspections cover vegetation management; therefore, refer to Sections 3.1.3.1.5 and 3.1.3.1.3 for S&L's review of the initiative.

3.1.3.1.8. Initiative #5.3.5.9: Other Discretionary Inspection of Vegetation Around Distribution Electric Lines and Equipment Beyond Inspections Mandated by Rules and Regulations (Enhanced Inspections, Patrols, and Trims)

Per the WMP, Table 25, "Bear Valley Electric Service does not have any other discretionary inspections of vegetation around distribution electric lines and equipment beyond inspections mandate by rules and regulations and other described initiatives at this time." Per the BVES Q4 2020 QIU, this initiative goal is qualitative with a "planned" status. No goal or specific progress was noted for 2020; therefore, BVES met this WMP initiative activity goal.

3.1.3.2. Trends and Themes

S&L identified several trends for the assessment of the WMP "Large-Volume Quantifiable Goal/Target – Not Field Verifiable" initiatives:

- For many initiatives, no documented procedures or processes governing the performance and control of WMP initiatives were available.
- For most initiatives, BVES did not appear to have a formal written process to control and maintain quality records (e.g., report forms, inspection checklists, work orders) and other documentation.
- Summary-level spreadsheets and similar high-level documents were often used to manage and track initiative activities; however, in many cases, more granular documentation (such as regular inspection reports, checklists, third-party reports, daily/weekly meeting notes, and similar quality records) was not immediately available for review.

3.1.4. Small-Volume (<100 Items) Quantifiable Goal/Target

"Small-Volume Quantifiable Goal/Target" activities are initiatives with less than 100 quantifiable assets included in the goal or target. Some initiative activities can be verified in the field while others are not field verifiable. S&L attempted to review all initiative activity; however, in some cases, the available time for this assessment only allowed a sample of assets to be assessed, as described in Section 3.1.1. Where feasible, an IBEW qualified electrical worker from S&L's subcontractor conducted site visits to predetermined assets

and locations to confirm installation, work quality, and adherence to applicable utility protocols and standards for each of these initiatives. Additionally, S&L reviewed various documents provided by BVES to help determine completeness. Finally, S&L submitted clarification requests and conducted interviews with BVES SMEs to confirm understanding of the activities performed. S&L's findings and assessments of each of this category's initiative activities are provided herein.

3.1.4.1. Initiative Review

3.1.4.1.1. Initiative #5.3.2.1: Advanced Weather Monitoring and Weather Stations

The WMP indicated that BVES intended to install 10 new weather stations in 2020; however, BVES only installed 8 new weather stations in 2020, giving BVES a total of 18 weather stations. One weather station and HD camera installation are being held up due to access issues to Bertha Peak. BVES reported that they are working with the U.S. Forest Service and San Bernardino County to gain access to the desired site. One other weather station was delayed because it was determined that it would be better to install a solar/battery power kit rather than transform 34.5 kV to 120 V. This installation of the solar and battery power kit and weather station was completed in April 2021.

S&L observed four of the eight weather stations installed during the June 2021 site visit. S&L found that the four weather stations were installed with good quality and under the appropriate standards. Additionally, BVES provided weather monitoring reports[18,19] that included information from the 18 weather stations, indicating that all eight weather stations were installed and functional in 2020. The visual confirmations and reports indicate that the eight weather stations were installed as planned per the overview map of the BVES "Asset-Advanced" weather monitoring and weather stations; however, as two weather stations were not installed, even under other circumstances, BVES did not meet their 2020 initiative goal. A picture of an installed weather station is provided in Figure 3-9 for reference.

[18] BVES Asset-Advanced weather monitoring and weather stations (001) Overview Map.pdf
[19] BVES Asset-Advanced weather monitoring and weather stations (001) Spreadsheet.xlsx

Figure 3-9 — Example of Installed Weather Station at Big Bear Dam

3.1.4.1.2. Initiative #5.3.2.2: Continuous Monitoring Sensors

According to the WMP, BVES planned to install one new ALERTWILDFIRE Camera system in 2020. Per the document titled "BVES Asset-Continous monitoring sensors.docx," the ALERTWILDFIRE camera system provides monitoring and surveillance. S&L originally intended to conduct a site visit to observe the new camera in the field; however, after discussions with WSD, it was determined that a field observation was unnecessary, as WSD had completed a field inspection of the camera and it is in a location that is difficult to access. S&L was nevertheless able to observe data output from the camera[20] and confirmed that BVES met this initiative goal.

[20] BVES Asset- Continuous monitoring sensors.docx, http://www.alertwildfire.org/inlandempire/index.html?camera=Axis-BearMtnNorth&v=7a7f1c3

3.1.4.1.3. Initiative #5.3.3.9: Installation of System Automation Equipment

Per the WMP, BVES plans to install SCADA system-wide with the enabling fiber-optics communication system to allow for remote monitoring, operation, and control of its electrical system. The WMP indicates that plan implementation commenced in 2020 and is scheduled for completion in 2022. S&L reviewed documentation provided by BVES that contained the locations where fiber splicing has been performed,[21] the design drawings for the SCADA system automation upgrades,[22] and a spreadsheet containing order equipment from their supplier.[23] Additionally, S&L's site visit included 20 poles to verify the reported fiber installation. S&L's inspection confirmed fiber installation and sufficient quality of installation work to meet expectations; no issues were noted. The BVES Q4 2020 QIU reports that the target for 2020 installation of system automation equipment activities was 25% of the target milestones. The QIU reported that this target was achieved in 2020.

Based on the documentation reviewed and the results of site inspections, S&L finds that BVES is installing system automation equipment as intended under this initiative. In addition, S&L concludes that BVES met their QIU-reported target for the installation of system automation equipment activities.

3.1.4.1.4. Initiative #5.3.3.14: Transformers Maintenance and Replacement

BVES does not currently have a specific wildfire mitigation grid design and system-hardening initiative focused on transformer maintenance and replacement. The WMP indicates that transformer replacement and maintenance is included in the company's standard inspection, maintenance, and replacement protocols.

Review of "DRG Ground Patrol_BV_2020Inspections.xlsx," a report generated by a BVES-subcontracted company to perform a "second ground patrol" inspection, was verified to contain transformer inspection results. S&L's review noted the spreadsheet contained data for over 6500 poles, with inspection results for items such as fuses, arresters, protective devices, and transformers.

Monthly substation inspections were verified to be performed per the BVES Operations and Planning Department Policy and Procedure 15, "Substation Inspection Program." S&L reviewed the 2020 substation inspection sheets for the Bear Mountain, Big Bear City, Division, Fawnskin, and Maltby substations. Review of the substation inspection sheets noted transformers as part of the scope of the inspections. Inspections included transformer minimum and maximum temperature, oil levels, and gas pressure. In addition, BVES initiated an electrical preventive maintenance program that consists of a subcontractor performing

[21] Phase 1/2 Fiber Splicing Detailed Map.pdf), fiber splicing inventory (151-1149_BVES_Fiber_Splice_Inventory.pdf
[22] 151-3868_Aerial_Fiber_Loop.pdf
[23] Items received as of 5.11-PO119118.xlsx

inspections and electrical tests on substation equipment. S&L reviewed technical service reports prepared by the subcontractor for the Fawnskin, Lake, and Maltby substations. Transformers were verified to be within the scope of the program. All testing was verified to have been performed in 2020. Equipment on this program is anticipated to be inspected and tested every four years.

S&L found that BVES's plan for performing inspections is documented in "Compliance Plan Inspection Procedures for General Order 165," dated July 1, 2020 and signed by the BVES president. The plan was noted to include inspection methodology, inspection cycles, and explanations of assigned condition ratings.

Based on the information reviewed, BVES is performing transformer maintenance and replacement; therefore, it is determined that BVES met this WMP initiative goal.

3.1.4.1.5. Initiative #5.3.4.13: Pole-Loading Assessment Program to Determine Safety Factor

As indicated in the WMP, Table 24, BVES's wildfire mitigation asset management and inspections pole-loading assessment program—to determine the safety factor—is fully captured in Table 24 Initiative 6, "Intrusive Pole Inspections." S&L's assessment of this initiative can be found in Sections 3.1.6.1.13.

3.1.4.1.6. Initiative #5.3.4.15: Substation Inspections (Asset Management and Inspections)

The WMP's Table 24, "Asset Management and Inspections," states that BVES's substation inspections are fully captured in Table 24, Item 11, "Patrol Inspections of Distribution Electric Lines and Equipment"; however, S&L interviewed BVES SMEs and reviewed specific substation inspection documentation.

Per the plan, BVES performs monthly inspections of each substation. BVES initially provided GO 174 substation inspection reports for nine inspections that S&L reviewed. The reports document the following information:

- Date, Station, Inspector Name, and Time of Reading
- Ambient Temperature
- Transformer Information: Number, Present and Maximum Temperature, Oil Level, Gas Pressure
- Voltage Regulator Information: Number, Position Indictors, Indicator Range (Low and High), Present Counter, Previous Counter, and Oil Clarity
- Reclosers and Devices Information: Circuit Name, Present Counter, Previous Counter, Peak/Current Amps (GND, 1-2, 3-4, 5-6), and Battery (No Load and Load)
- Metering Information: Circuit Name, kW, and kWh

- Notes

The reverse side of the report includes a general condition checklist and space for notes.

Of the nine inspections, five were completed with no notes or actions required. Two had notes not requiring action—e.g. “Hampton Tedder Testing complete, New 4 kV AR700 Pump house circuit; New AR controller.” One identified that weeds and trash were present and that weed abatement was performed. Later, BVES provided 12 substation inspection reports for 12 of the substations and 11 reports for the remaining substation, Pineknot. S&L reviewed them, validating that reports were present for each substation for each month. BVES exceeded their target of 144 inspections, as they conducted 155 inspections. Per interviews with SMEs, BVES commissioned Pineknot in January 2020 and brought it online at the end of January; therefore, no January inspection was required.

S&L conducted an interview with BVES substation technician, Daniel “Danny” Hotchkiss. He confirmed that he inspects each substation on a monthly basis. He typically performs all of the inspections the first week of the month.

Mr. Hotchkiss described the process for resolving deficiencies. If the issue is simple, he makes a phone call and is present while the issue is being resolved. If the issue is more involved, he may note it on the inspection record. He may only note it on the inspection record the first time the issue is identified. For example, if there were damage to the concrete pads, he would note it the first month and begin the process of getting the replacement scheduled, but he would not identify it the next month if the replacement were scheduled. To resolve the issue, he would call the operations supervisor or engineering staff requesting a contractor to replace the pads. Danny is not involved in the work orders. More significant corrective actions require a work order, but a simple issue like the replacement of a breaker counter would not require one.

BVES provided inspection reports from the substation inspections performed by contractor Hampton Tedder in 2020 for Fawnskin Substation, Lake Substation, and Maltby Substation. In the interview, the substation inspector stated that these inspections are on a three-year cycle. They are performing the inspections as if the substations were being commissioned because the original commissioning records are not available. The BVES inspector does not currently have the expertise to perform the testing of devices; that is why the inspections are contracted. The reports summarize the equipment serviced, service procedures performed, the test data recorded, and analysis and recommendations. Based on the interview conducted, the substation inspector typically resolves issues identified by the contractor by placing a phone call and initiating the correction.

Considering that all expected inspections were performed, BVES has satisfied this initiative activity goal.

3.1.4.1.7. Initiative #5.3.5.17: Substation Inspections (Vegetation Management and Inspections)

Per the BVES Q4 2020 QIU, the target number of substation inspections for 2020 was 144, with all 144 inspections reported as completed. The BVES Q4 QAL does not specifically address this initiative. BVES inspections covering vegetation management are included with the regular inspections. After review of BVES records and discussion with BVES SMEs, S&L understands vegetation management is covered under regular inspections; therefore, see Section 3.1.4.1.6 for S&L's assessment.

Based on the information provided in Initiative 5.3.4.15 (Section 3.1.4.1.6), BVES met their goal of 144 substation inspections; therefore, BVES met the goal of this quantifiable WMP initiative.

3.1.4.1.8. Initiative #5.3.3.19: Safety and Technical Upgrades to Palomino Substation

Per the WMP, BVES planned to complete civil work, electrical work, testing, and placement in service by December 2020.

Per the BVES Q4 QAL, BVES is in the process of converting the existing Palomino Substation from an overhead-type to a padmount design with dead-front SCADA enabled. This project is estimated to be completed in 2021. S&L reviewed associated project procurement documentation, including the BVES's RFP, bid evaluator rankings, and bid tabulation sheet that indicates the recommended bid and budgeted amount. S&L inspected the Palomino Substation and verified that it is currently under construction and that the old substation was demolished.

Based on the information reviewed and results of the S&L inspection, BVES is progressing with their Palomino Substation upgrade project but did not meet their WMP initiative activity goal of having the substation in service by December 2020.

3.1.4.1.9. Initiative #5.3.3.20: Evacuation Route Hardening Pilot Program

Per the WMP, BVES planned to perform their evacuation-route hardening pilot program in 2020. "BVES Asset – Evacuation Route Hardening Pilot Program 2020.pdf" was noted to indicate the locations where the activities were performed. BVES indicated that wire mesh was installed on three poles in accordance with installation instructions found in "BVES Example Fire Mesh Install Instructions.pdf" with a BVES field inspector on site for installation monitoring. These three locations were inspected by S&L. Construction installation was verified with no issues noted.

Based on the information reviewed, discussions with BVES, and results of inspections performed, S&L finds that the evacuation-route hardening pilot program was performed in 2020; therefore, BVES met this WMP initiative goal.

3.1.4.2. Trends and Themes

S&L identified several trends for the assessment of the "2020 BVES WMP Small Volume Quantifiable Goal/Target" initiatives:

- For many initiatives, no documented procedures or processes governing the performance and control of WMP initiatives were available.
- For most initiatives, BVES did not appear to have a formal written process to control and maintain quality records (e.g., report forms, inspection checklists, work orders) and other documentation.
- Summary-level spreadsheets and similar high-level documents were often used to manage and track initiative activities; however, in many cases, more granular documentation (such as regular inspection reports, checklists, third-party reports, daily/weekly meeting notes, and similar quality records) was not immediately available for review.

3.1.5. Qualitative Goal/Target

"Qualitative Goal/Target" initiative activities are initiatives without a quantifiable goal or target that were conducted in 2020. S&L reviewed various documents provided by BVES to help determine if the objectives of the initiative activities were met. Additionally, S&L submitted clarification requests and conducted interviews with BVES SMEs for an understanding of the activities performed. S&L's findings and assessments of each of this category's initiative activities are provided herein.

3.1.5.1. Review of Initiatives

3.1.5.1.1. Initiative #5.3.2.4: Forecast of a Fire Risk Index, Fire Potential Index, or Similar

The WMP for this initiative indicates the following:

> Bear Valley Electric Service has not established a plan to develop a forecast of a fire risk index, fire potential index, or similar beyond that which it has communicated in its 2019 and 2020 WMPs at this time. BVES Subject Matter Expert evaluates the frequency of potential ignition events versus a set of impact categories (reliability, compliance, quality of service, safety and environmental) to develop total risk impact and scores. In addition, no specific incremental spend has been identified for this initiative. BVES does not have a proprietary model or methodology for evaluating the potential impact of ignitions.

BVES currently uses the National Fire Danger Rating System and a weather consultant to provide a fire risk index. BVES's Public Safety Power Shutoff (PSPS) Procedure, Rev.1, Section 4 expands on the variables and measured datapoints for the fire risk and potential indexes.

The WMP and Q4 2020 QIU indicate that this initiative goal has not started; it is "planned" with an annual target goal of "sufficient resources during high-risk conditions." Based on the documentation reviewed and the results of S&L evaluations, it was determined that BVES has satisfied this WMP activity.

3.1.5.1.2. Initiative #5.3.2.5: Personnel Monitoring Areas of Electric Lines and Equipment in Elevated Fire Risk Conditions

The WMP for this initiative indicates the following:

> BVES does not have a specific wildfire mitigation situational awareness and forecasting initiative focused on personnel monitoring areas of electric lines and equipment in elevated fire risk conditions. The initiatives BVES has for situational awareness and forecasting initiatives are described in Table 22 of the WMP as well as the asset management and inspection initiatives described in Table 24. During high fire threat weather that could lead to PSPS events, BVES deploys crews to monitor conditions in the field, in the high threat areas.

BVES's PSPS Procedure, Rev.1, Section 4 provides measured datapoints for the fire risk and fire indexes. In Appendix A, BVES provides a map of the "high-risk areas" that have the station names and affected customers. BVES has satisfied this WMP initiative; the WMP goal for this initiative was "N/A" with respect to the Q4 2020 QIU, and the goal was to have BVES deploy crews as necessary based upon the fire risk index and other data gathered as well as the PSPS drill script.

Based upon the BVES 2020 annual quantity target of zero and the BVES 2020 quantity actual progress (Q1-4) of zero with respect to the number of emergencies, and with BVES customer support processes in place, it is evident that BVES has reached its goal. BVES has satisfied the WMP activity.

3.1.5.1.3. Initiative #5.3.2.6: Weather Forecasting and Estimating Impacts on Electric Lines and Equipment

The WMP for this initiative indicates the following:

> Weather Consulting Services. Provides BVES staff service area specific forecasts to better understand fire threat weather as well as storm conditions that may affect service. Allows BVES to prepare response ahead of time and take precautionary and/or avoidance action. Est. $45,000 O&M annually.

BVES's PSPS Procedure, Rev.1 provides guidance for weather forecasting and measurable data for impact. Individual Contract "C#3000-000-Weather Consulting & C#3000-000-Weather Consulting-Fully Executed & Sample Fire Threat Weather Forecast" provided information for the WMP initiative's goal. BVES

currently uses a weather consultant to provide weather forecasts that assist in driving operational decisions, including PSPS.

Based on the documentation reviewed (e.g., the sample fire threat weather forecast)[24] and procedure set in place, BVES has satisfied this initiative activity, as the forecasting efforts were completed as expected.

3.1.5.1.4. Initiative #5.3.3.1: Capacitor Maintenance and Replacement Program

As indicated in the WMP, BVES does not have a specific wildfire mitigation grid design and system-hardening initiative focused on capacitor maintenance and replacement. The WMP indicates that BVES has 25 capacitor locations and that maintenance and replacement is included in the company's standard inspection, maintenance, and replacement protocols.

Discussions with BVES SMEs confirmed that BVES currently does not track capacitor maintenance and replacement. BVES indicated that routine inspection maintenance is performed on capacitors during detailed and patrol inspections. In addition, BVES indicated that, prior to operating capacitor banks, they are inspected once more. A review of "DRG Ground Patrol_BV_2020Inspections.xlsx" and "BVES Example Detailed Inspection Record_2020.xlsx," which contains summaries of ground patrol and detailed inspection results, respectively, found no evidence of capacitor inspections. Review of "BVES Asset-Capacitor maintenance and replacement program.xlsx" provides a listing of BVES capacitors with information such as location, associated circuit, and current status; however, the file does not track capacitor inspection and maintenance information.

BVES indicated in their response to a request for information on May 30, 2021 that no capacitor replacements occurred in 2020 and that they currently do not have planned replacements until possibly 2023. BVES has plans to perform a formal evaluation of capacitors in 2022 and develop a tracking system for maintenance and replacement upon completion of the evaluation.

Based on the information reviewed and discussions with BVES personnel, it is concluded that this initiative was not met in 2020.

3.1.5.1.5. Initiative #5.3.3.2: Circuit-Breaker Maintenance and Installation to De-Energize Lines Upon Detecting a Fault

Per the WMP, BVES does not have a specific wildfire mitigation grid design and system-hardening initiative focused on circuit-breaker maintenance and replacement. The WMP indicates that circuit-breaker replacement and maintenance is included in the company's standard inspection, maintenance, and

[24] Sample Fire Threat Weather Forecast.pdf

replacement protocols. The WMP also notes that circuit breakers are generally installed for all distribution circuits to detect fault current and protect equipment in the event that a fault is detected.

Review of "DRG Ground Patrol_BV_2020Inspections.xlsx," a report generated by a BVES-subcontracted company to perform a "second ground patrol" inspection, noted data for "protective device blow fuses" and "protective device leaking oil," indicating that patrol inspections included circuit breakers. Data was provided for over 6500 different pieces of equipment, including circuit breakers.

Monthly substation inspections were verified to be performed per the BVES Operations and Planning Department Policy and Procedure 15, "Substation Inspection Program." S&L reviewed the 2020 substation inspection sheets for the Bear Mountain, Big Bear City, Division, Fawnskin, and Maltby substations. The inspection sheets noted circuit breakers (i.e., reclosers) as part of the scope of the inspections. In addition, BVES initiated an electrical preventive maintenance program that consists of a subcontractor performing inspections and electrical tests on substation equipment. S&L reviewed technical service reports prepared by the subcontractor for the Fawnskin, Lake, and Maltby substations. Circuit breakers were verified to be within the scope of the program. Equipment on this program is anticipated to be inspected and tested every four years.

Although BVES does not have a specific initiative focused on circuit-breaker maintenance and installation, the review found that circuit-breaker maintenance and installation is being performed; therefore, it is determined that this initiative was met for 2020.

3.1.5.1.6. Initiative #5.3.3.5: Crossarm Maintenance, Repair, and Replacement

Per the WMP, BVES does not have a specific wildfire mitigation grid design and system-hardening initiative focused on crossarm maintenance, repair, and replacement. The WMP states that routine crossarm maintenance, repair, and replacement is included in the company's standard inspection programs. S&L interviewed BVES personnel responsible for performing inspection activities in 2020. The discussion noted that both "patrol" and "detailed" inspections are routinely performed in accordance with the requirements of GO 165. "Patrol" inspections were characterized as simple in nature, as the inspections are intended to look for obvious or egregious infractions. "Detailed" inspections were noted to be more involved, looking at each pole for items that cannot be assessed by the "patrol" inspection. Crossarms were noted to be part of the inspection scope. BVES personnel indicated that inspection data is logged into an Excel spreadsheet. S&L reviewed inspection data contained in "BVES Example Detailed Inspection Record_2020.xlsx," which contained 79 entries for inspections performed during the month of February for the Boulder, Clubview, Erwin, Harnish, and Lagonita circuits. The spreadsheet was noted to contain details of inspection results that required corrective action. In addition, the spreadsheet included priority assignments, due dates, and closure dates. S&L's review noted that BVES does not have a formally documented procedure or program

for performing the “patrol” or “detailed” inspections. The process relies on addressing the requirements of GO 165.

Based on S&L’s interview with BVES personnel performing inspections, and based on a review of BVES inspection documentation, S&L finds that BVES appropriately inspects, maintains, repairs, and replaces crossarms. Although no specific crossarm maintenance, repair, and replacement goal was identified for 2020, S&L finds BVES appropriately meets the intent of this wildfire mitigation initiative.

3.1.5.1.7. Initiative #5.3.3.10: Maintenance, Repair, and Replacement of Connectors, Including Hotline Clamps

Per the WMP, BVES does not have a specific wildfire mitigation grid and system-hardening initiative focused on maintenance, repair, and replacement of connectors, including hotline clamps. The plan also indicates that the replacement of connectors, where applicable, is included in other programs such as the installation of covered conductors.

S&L noted that inspections are performed in accordance with “Compliance Plan Inspection Procedures for General Order 165, dated July 1, 2020.” Discussions with BVES personnel responsible for performing “patrol” and “detailed” inspections were held and noted to be consistent with the information found in the inspection compliance plan. S&L reviewed “BVES Example Detailed Inspection Record_2020.xlsx,” which contained 79 entries for inspections performed during the month of February for the Boulder, Clubview, Erwin, Harnish, and Lagonita circuits. The spreadsheet included details of inspection results that required corrective action, with priority assignments, due dates, and closure dates provided. S&L noted that BVES does not have a formally documented procedure or program for performing the “patrol” or “detailed” inspections. Although no specific inspection issues were noted for connectors in review of BVES documentation, inspection of connectors is noted to be within the scope of inspections per the compliance plan.

Based on review of information and discussions with BVES personnel, BVES inspects connectors within their standard inspection program and thus performs maintenance, repair, and replacement when deemed necessary. It is therefore determined that BVES met this WMP initiative goal.

3.1.5.1.8. Initiative #5.3.3.11: Mitigation of Impact on Customers and Other Residents Affected During PSPS Event

Per the WMP, BVES does not have a specific wildfire mitigation grid and system-hardening initiative focused on impact mitigation for customers and other residents affected during a PSPS event. In addition, the WMP indicates that, aside from the listed grid design and system-hardening initiatives developed to

reduce PSPS events inherently, additional programs or efforts to mitigate the impact on customers affected during a PSPS event are captured in the "Resource Allocation Methodology" WMP initiative category.

The WMP did not indicate a specific initiative goal. The Q4 2020 QIU indicated an "Energy Storage Project" to mitigate PSPS customer impact with a "planned" status. S&L's review of RFP clarification responses indicated that "BVES plans to install an 8-MW/4-MWh battery storage system in 2022." This project is still in development. Based on the information reviewed, although BVES's battery storage project is in development, there was no evidence of planning or project development activities in 2020; therefore, S&L concludes that BVES was did not meet this WMP initiative goal. S&L was unable, however, to discuss the initiative with BVES to confirm that no planning or development activities occurred in 2020.

3.1.5.1.9. Initiative #5.3.4.3: Improvement of Inspections

Per the WMP refile 09.18.2020A, Table 24, improvements of BVES's inspections are fully captured in other initiatives; however, S&L's review of other relevant initiatives identified that continuous improvement is not addressed. BVES has therefore not satisfied this initiative activity.

3.1.5.1.10. Initiative #5.3.4.14: Quality Assurance/Quality Control of Inspections

Per the WMP refile 09.18.2020A, Table 24, QA/QC of inspections is a general initiative, and best practices are applied and accounted for in other relevant initiatives. S&L reviewed other relevant initiatives and the email describing the QA/QC programs that BVES has in place.[25] S&L has determined that BVES does not have a written QA/QC procedure addressing inspections. Per the email, an asset inspection QA/QC program is one of the initiatives planned for development in 2021; therefore, BVES did not satisfy this initiative activity.

3.1.5.1.11. Initiative #5.3.5.1: Additional Efforts to Manage Community and Environmental Impacts

As indicated in the WMP refile 09.18.2020A, Table 25:

> Bear Valley Electric Service does not have a specific wildfire mitigation vegetation management and inspection initiative dedicated to this effort at this time. The utility recognizes that additional efforts to manage community and environmental impacts are critical to reducing wildfire risk and conducts such efforts on an as-needed basis, as well as incorporating additional efforts within other programs.

Additionally, per the Q4 2020 QIU regarding this initiative, BVES reported that it has not encountered the need for additional efforts to manage community and environmental impacts.

[25] QAQC Email 20210527

The Q4 QIU regarding this initiative indicates “N/A” for the 2020 target goal and status. The Q4 2020 QAL does not appear to address this initiative.

Based on the information reviewed, BVES did not encounter the need for additional efforts to manage community and environmental impacts in 2020 and listed this initiative as “N/A”; therefore, S&L finds that BVES met this WMP initiative activity goal and that these efforts will continue to be performed on an as-needed basis in future years.

3.1.5.1.12. Initiative #5.3.5.4: Emergency Response Vegetation Management Due to Red-Flag Warning or Other Urgent Conditions

As indicated in the WMP refile 09.18.2020A , Table 25:

> Bear Valley Electric Service does not have a specific wildfire mitigation vegetation management and inspection initiative dedicated to this effort at this time. The utility recognizes that emergency response vegetation management due to red flag warnings or other urgent conditions are critical to reducing wildfire risk and has already incorporated these efforts into BVES’s existing Emergency Response and Preparedness Plan.

Per the Q4 QIU, this initiative goal is qualitative with a “completed” status. The Q4 QAL reports that BVES has a vegetation management plan that meets or exceeds the associated GOs. The program includes three components: preventative vegetation management, corrective vegetation clearance, and emergency vegetation clearance. Discussions with BVES indicated that a third-party contractor is performing emergency vegetation activities at the direction of BVES.

BVES performs emergency vegetation management per the hiring of a third-party contractor to perform emergency vegetation management activities at their direction. No specific goal for this initiative activity was listed on the WMP; therefore, S&L finds that BVES met this WMP initiative goal.

3.1.5.1.13. Initiative #5.3.5.5: Fuel Management and Reduction of “Slash” From Vegetation Management Activities Improvements of Inspections

As indicated in the WMP, Table 25:

> Bear Valley Electric Service does not have a specific wildfire mitigation vegetation management and inspection initiative dedicated to this effort at this time. Fuel management and reduction of ‘slash’ from vegetation management activities has been incorporated into BVES’s ongoing and newly proposed vegetation management initiatives.

Per the Q4 QIU, this initiative goal is qualitative with “in progress” status. The Q4 QAL reports that BVES has a vegetation management plan that meets or exceeds the associated GOs. The program includes three components: preventative vegetation management, corrective vegetation clearance, and emergency

vegetation clearance. Discussions with BVES indicated that they have a third-party contractor performing a reduction of slash activities at the direction of BVES. BVES subsequently inspects the areas the contractor clears and verifies completion of the activity.

Based on the information reviewed, BVES performs fuel management and a reduction of "slash" from vegetation management activities per the use of a third-party contractor. No specific goal for this qualitative initiative activity was listed in the WMP; therefore, S&L finds that BVES met this WMP initiative activity goal.

3.1.5.1.14. Initiative #5.3.5.6: Improvement of Inspections

Per the WMP, Table 25, this initiative activity is listed as "N/A – Elements already captured in other relevant initiatives." The BVES Q4 QIU states that "BVES does not have a unique WMP initiative for this activity at this time" and lists this initiative as "N/A" with a status of "N/A." In addition, the Q4 QAL does not address this initiative. No goal was indicated, and no specific progress was made in 2020; therefore, it is determined that BVES met this WMP initiative goal.

3.1.5.1.15. Initiative #5.3.5.13: Quality Assurance/Quality Control of Vegetation Inspections

Per the WMP, Table 25, this initiative activity is listed as "N/A – Elements already captured in other relevant initiatives." BVES's Q4 QAL does not specifically address this initiative. The Q4 2020 QIU reported 100% completion of their vegetation management program in 2020 with "in progress" status, as this effort is ongoing in 2021. Discussions with BVES during the evaluation found that BVES decided to add a quality assurance element to its vegetation program. Vegetation inspections along with the associated QA/QC activities are captured in Initiatives 5.3.4.11 and 5.3.5.2.

No WMP goal was indicated. Based on review of documentation, BVES is performing vegetation inspections within the scope of their patrol and detailed inspection QA/QC procedures as detailed in other related initiatives such as Initiatives 5.3.4.11 and 5.3.5.2. In addition, BVES will be adding a quality assurance element to their vegetation program in 2021. S&L therefore finds that BVES met this WMP initiative goal.

3.1.5.1.16. Initiative #5.3.5.14: Recruiting and Training of Vegetation Management Personnel

Per the WMP, Table 25, BVES places a full-time contract utility forester as part of the BVES team. The job duties of the contract forester were listed on the WMP and noted to include: (i) inspections and evaluations of circuits for hot spot locations; (ii) hazard tree identification; and (iii) outage investigations. The BVES Q4 QAL reported that BVES has entered into a contract to engage a full-time forester to provide field support and oversight of high-risk vegetation management work. S&L reviewed Contract Number 3095-000, dated

November 13, 2020; it included the scope of work for vegetation management services. Per the BVES Q4 2020 QIU, this initiative goal is qualitative with "in progress" status. Based on the information reviewed, BVES met this WMP initiative goal.

3.1.5.1.17. Initiative #5.3.5.15: Remediation of At-Risk Species

Per the WMP, Table 25, "Remediation of at-risk species is a subset to the company's vegetation management practices to achieve clearances around electric lines and equipment." As such, BVES does not have a specific wildfire mitigation initiative for remediation of at-risk species at this time. BVES's Q4 QIU lists this initiative goal as "N/A" with a status of "N/A." The BVES Q4 2020 QAL does not specifically address this initiative. S&L reviewed "2020VegRecord.xlsx," which contained over 4500 vegetation management activity entries performed in 2020. The review noted that "species" was included in the documentation.

Although no specific WMP goal was indicated, BVES performs vegetation management activities and documents vegetation species in the process; therefore, S&L finds that BVES met this WMP initiative goal.

3.1.5.1.18. Initiative #5.3.5.16: Removal and Remediation of Trees With Strike Potential To Electric Lines and Equipment (Hazard Tree Removal and Right Tree-Right Place)

As indicated in the WMP refile 09.18.2020A, Table 25:

> Removal and remediation of trees with strike potential to electric lines and equipment is a subset to the company's vegetation management practices to achieve clearances around electric lines and equipment as described in Table 25, particularly Table 24 Item 14. As such, Bear Valley Electric Service does not have a specific wildfire mitigation initiative for removal and remediation of trees with strike potential at this time.

Additionally, the BVES Q4 2020 QIU indicates an initiative goal of "100% of trees designated for removal actually removed" with a status of "in progress"; however, an actualized 2020 Q1–Q4 progress of "N/A" is provided for each quarter.

BVES management has indicated that this initiative goal is "qualitative" for 2020.

Per the summary level spreadsheet provided by BVES and populated by their vegetation management third party, 2020 tree trimming activities and details such as location, grid ID, cycle year, species and quantity, method of ascent, trim style, foreman, and date, are provided.[26] Though it is unclear how or whether removal and remediation of trees with strike potential were addressed from this document, the BVES

[26] 2020VegRecord.xlsx

vegetation management quality control program does address removal of tree limbs and foliage designated as having high strike potential:[27]

> Right of Way: All brush, limbs and foliage in the right of way (ROW) shall be cut up to 8-feet above the ground. All dead, dying, diseased or dried vegetation from 8 feet above the ground to the top of the power lines must be cut down during each normal vegetation management cycle clearance visit. This requirement is applicable to all ROWs in the HFTD Tier 3 and to all ROWs in the HFTD Tier 2 designated as having high strike potential by the Wildfire Mitigation and Safety Engineer. Exceptions per the effective California Power Line Fire Prevention Field Guide are authorized.

Additionally, per BVES management response to S&L clarifications, this initiative is addressed as "part of all-inclusive VM contract." In other words, the trees and other vegetation located in BVES HFTD Tier 2 and 3 areas with high strike potential are removed or remediated through the BVES third-party vegetation management contractor.

Based on the BVES summary data and vegetation management quality programs provided—as well as the lack of any specific 2020 initiative goal/target provided in the WMP refile 09.18.2020A, Table 25—this initiative activity is complete, and BVES met the WMP initiative goal.

3.1.5.1.19. Initiative #5.3.5.18: Substation Vegetation Management

See Initiative #5.3.4.15. Per the BVES Q4 2020 QIU, this initiative goal is qualitative with "in progress" status. The BVES Q4 2020 QAL does not specifically address this initiative. Rather, it indicates that the vegetation management program as a whole is completed/ongoing.

No WMP goal was indicated. Based on the information detailed in Initiative #5.3.4.15, BVES performed vegetation management in 2020; therefore, S&L finds BVES met the goal of this qualitative WMP initiative activity.

3.1.5.1.20. Initiative #5.3.5.19: Vegetation Inventory System

As indicated in the WMP, Table 25:

> Bear Valley Electric Service does not have a specific wildfire mitigation initiative dedicated to the creation and management of a vegetation inventory system at this time. The company's utility forester, as described in Table 25 Item 14, will maintain such a system.

Additionally, the BVES Q4 2020 QIU indicates that "contractor responsible for tracking and inventory" for this initiative with a status of "completed." A target goal of "N/A" is provided.

[27] Vegetation Management and Vegetation Management QC Programs Policy and Procedures Rev0.pdf

Furthermore, the BVES supporting documentation and quality programs provided for this initiative is the same as discussed in many other vegetation management initiatives (i.e., Initiatives #5.3.5.15, 5.3.5.16, and 5.3.5.20).[28, 29, 30] The summary level spreadsheet, "2020VegRecord.xlsx," is the closest document to a vegetation inventory system.

Based on the BVES documentation and vegetation management quality programs provided—as well as the lack of any specific 2020 initiative goal/target provided in the WMP, Table 25—this initiative activity is complete, and BVES has met the WMP initiative goal.

3.1.5.1.21. Initiative #5.3.6.1: Automatic Recloser Operations

As indicated in the WMP refile 09.18.2020A, Table 26, "Grid Operations and Protocols," the WMP intended to replace the automatic reclosers to reduce electrical sparking while also helping mitigate power outages and equipment damage. Three reclosers required replacement. Per the WMP and an RFP response, BVES replaced the final two reclosers in 2020. BVES completed this work under a 2019 work order and was funded through GRC capex.

This activity is complete, and BVES achieved the goal of the WMP initiative.

3.1.5.1.22. Initiative #5.3.6.3: Personnel Work Procedures and Training in Conditions of Elevated Fire Risk (Other Special Work Procedures)

The WMP, Table 26, states that this initiative is addressed by Wildfire Infrastructure Protection Teams with roles and responsibilities for staff to respond to protect system infrastructure in case of emergencies.

Personnel work procedures in conditions of elevated fire risk are addressed in the BVES PSPS procedure[31] and the BVES emergency response plan.[32]

The original PSPS procedure was published on July 22, 2020. A training drill was conducted on June 26, 2020 utilizing the PSPS plan and BVES emergency response procedures. S&L reviewed the drill script. Due to Covid-19 precautions, BVES conducted the drill remotely. Following the drill, BVES performed an evaluation of the annual exercise.

Based on the existing procedures and documented training exercise, BVES achieved the qualitative goal of Initiative #5.3.6.3.

[28] 2020VegRecord.xlsx
[29] Vegetation Management and Vegetation Management QC Programs Policy and Procedures Rev0.pdf
[30] C#3095-000 Vegetation Management.pdf
[31] BVES INC PSPS Procedures Rev. 1
[32] BVES INC Emergency Response Plan Rev. 1

3.1.5.1.23. Initiative #5.3.6.4: Protocols for PSPS Re-Energization

Per the WMP, BVES considers re-energization after a PSPS event to be a subset of outage restoration and re-energization protocols generally included in 5.3.6, “Grid Operations and Protocols”; therefore, the utility does not have a separate protocol for PSPS. Based on the protocols discussed in Initiative #5.3.6.3, BVES met the qualitative goal of this initiative.

3.1.5.1.24. Initiative #5.3.6.5: PSPS Events and Mitigation of PSPS Impacts

The WMP, Table 26, identifies that Initiative #5.3.6.5 is a system-wide initiative to ensure that BVES has protocols and procedures to respond to and recover from de-energization events to proactively prevent wildfires. Based on interviews with Paul Marconi, there were no PSPS events in 2020. The procedures in place and training to mitigate impacts are documented in Initiative #5.3.6.3.

Based on zero PSPS events in 2020 and the existing procedures and documented training exercise, BVES met the qualitative goal of this initiative.

3.1.5.1.25. Initiative #5.3.7.1: Centralized Repository for Data

Per the BVES SME, Tom Chou stated the following in response to S&L clarification requests on May 30, 2021 regarding the BVES-submitted documentation for this initiative:

> Yes, it [the GIS file ("BVES GIS_BV_20210503_V2.gdb")] contains BVES, Inc. asset information. Mid-March of 2021 we hired our GIS personal [stet], he has currently been updating our assets in our GIS system. Unfortunately, the GIS position was vacant for about 6 months [September 2020 to March 2021]. In addition, before 2020 due to not having GIS position our GIS system had gaps in updating it. BVES is on track to having its GIS up to date.[33]

As indicated in the WMP, Table 27, the qualitative initiative goal of a having a “centralized repository for data” is effectively met. As indicated in the BVES SME’s clarifications and review of the provided documentation, BVES has a centralized repository for collecting, maintaining, and sharing asset, infrastructure, and related data through their geographic information system (GIS) database.[34] Also, per the Q4 2020 QIU, BVES “developed [a] GIS gap analysis” in Quarter 3 and “initiated process to determine data management needs for 2021 activities” in Quarter 4; however, currently, 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.

[33] SL RFI for BVES WMP Assessment 20210607 6 PM.xlsx, #12, Subject 5.3.7.1.
[34] BVES GIS_BV_20210503_V2.gdb

3.1.5.1.26. Initiative #5.3.7.3: Documentation and Disclosure of Wildfire-Related Data and Algorithms

As indicated in the WMP refile 09.18.2020A, Table 27:

> Bear Valley Electric Service does not have a specific data governance wildfire mitigation program focused on documentation and disclosure of wildfire-related data and algorithms that maps to the tracking and level of detail requested in this table at this time." Additionally, per the Q4 2020 QIU regarding this initiative, "BVES does not have a unique WMP initiative for this activity at this time. This is captured under normal business operations.

The WMP, Q4 2020 QIU, and 2020 QAL indicate that this qualitative initiative goal is "on track" to be performed during the remainder of the three-year WMP cycle. No goal was indicated, nor was specific progress made in 2020; however, BVES provided a risk management program and a risk register that appear to address many expected requirements of a wildfire data program.[35, 36] These documents describe a methodology for collecting, recording, and analyzing wildfire risk and mitigation costs. S&L review did not verify the completeness or accuracy of this data.

Based on the documentation provided, BVES has met their WMP goal for this initiative, and additional progress is expected to be made and reported in future years.

3.1.5.1.27. Initiative #5.3.7.4: Tracking and Analysis of Near-Miss Data

As indicated in the WMP refile 09.18.2020A, Table 27:

> Bear Valley Electric Service 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 requested in this table at this time.

The Q4 2020 QIU regarding this initiative indicates a 2020 target goal of "program in place and continued compliance with program" for "WMP metrics tracking" with "in progress" status. The Q4 2020 QAL indicates that this initiative is "on track."

BVES-provided documentation, a risk management program, and a risk register appear to address some aspects of a WMP metrics tracking program.[37,38] The documents, however, mention near-miss data only in the context of personnel safety. Following an S&L request for clarification, BVES provided a summary spreadsheet containing a list of all 2020 outages and related outage details, including outage causes that

[35] Risk Management Program, 2017, Process 1 and Process 2, pages 9-18.
[36] BVES Risk Register 2021-2-18 WMP.xlsx
[37] Risk Management Program, 2017, Process 1 and Process 2, pages 9-18.
[38] BVES Risk Register 2021-2-18 WMP.xlsx

were identified as wildfire near misses.[39] In 2020, there were five wildfire near misses reported. Three near misses were caused by "spark producing events in [a] high fire threat environment": one was a "possible spark producing event" and one was a "conventional fuse blew in high fire-threat condition." Based on the available documentation, no analysis or trending of the near-miss data appears to have been performed.

With respect to meeting the WMP target goal of putting a WMP metrics tracking program in place and complying with the program, BVES has not achieved this objective. Additional program details and clarification, as well as the tracking, trending, and analysis of relevant data, are required. Based on BVES-provided documentation and SME interviews, this initiative program is still under development, and future improvements are expected in future years.

3.1.5.1.28. Initiative #5.3.8.1: Allocation Methodology Development and Application (Asset Management)

As indicated in the WMP refile 09.18.2020A, Table 28:

> N/A - While the utility is committed to the continued development and improvement of the company's risk-based decision-making framework, many of the elements requested in this 2020 WMP filing may not be applicable to Bear Valley Electric Service, specifically many of the components requested in this section. Bear Valley Electric Service cannot provide information regarding BVES's wildfire mitigation resource allocation methodology focused on allocation methodology development and application to the level of tracking and detail requested in this table at this time. At the guidance of the Wildfire Safety Division of the California Public Utilities Commission, these elements are marked 'N/A' to indicate 'does not apply' or 'not applicable,' with supplementary explanations where applicable throughout the company's filing.

The Q4 2020 QIU regarding this initiative indicates a 2020 target goal of "program in place and continued compliance with program" with "in progress" status. The Q4 2020 QAL does not appear to address this initiative.

The BVES-provided supporting documentation, the risk management program and risk register, describes a methodology for collecting, recording, and analyzing resource allocation benefits and costs.[40,41] S&L did not verify the completeness or accuracy of this data.

With respect to meeting the WMP target goal of putting a risk-based decision making program in place and complying with the program, BVES has achieved this objective.

[39] 2020 Outage Log.xlsx
[40] Risk Management Program, 2017, Process 5, pages 23-25.
[41] BVES Risk Register 2021-2-18 WMP.xlsx

3.1.5.1.29. Initiative #5.3.8.2: Risk Reduction Scenario Development and Analysis

As indicated in the WMP, Table 28:

> N/A - While the utility is committed to the continued development and improvement of the company's risk-based decision-making framework, many of the elements requested in this 2020 CA WMP filing may not be applicable to Bear Valley Electric Service, specifically many of the components requested in this section. Bear Valley Electric Service cannot provide information regarding BVES's wildfire mitigation resource allocation methodology focused on risk reduction scenario development and analysis to the level of tracking and detail requested in this table at this time. At the guidance of the Wildfire Safety Division of the California Public Utilities Commission, these elements are marked 'N/A' to indicate 'does not apply' or 'not applicable,' with supplementary explanations where applicable throughout the company's filing.

The Q4 2020 QIU regarding this initiative indicates "N/A" for the 2020 target goal with a "planned" status. The Q4 2020 QAL does not appear to address this initiative.

The BVES-provided initiative supporting documentation, the risk management program, and risk register spreadsheet describe a methodology for collecting, recording, and analyzing risk reduction, effectiveness, benefits, and costs.[42,43] The spreadsheet provides some analysis of risk reduction as well. S&L did not verify the completeness or accuracy of this data. Also, per BVES's request for information responses, "currently [BVES] ha[s] [a] 7x7 matrix process and Fire Safety Matrix in place. To be further developed by contractor in 2021."

Based on the documentation provided, BVES has met the WMP goal for this initiative, and additional progress is expected to be made and reported in future years.

3.1.5.1.30. Initiative #5.3.8.3: Risk Spend Efficiency Analysis

As indicated in the WMP, Table 28:

> N/A - While the utility is committed to the continued development and improvement of the company's risk-based decision-making framework, many of the elements requested in this 2020 CA WMP filing may not be applicable to Bear Valley Electric Service, specifically many of the components requested in this section. Bear Valley Electric Service cannot provide information regarding BVES's wildfire mitigation resource allocation methodology focused on risk spend efficiency analysis to the level of tracking and detail requested in this table at this time. At the guidance of the Wildfire Safety Division of the California Public Utilities Commission, these elements are marked 'N/A' to indicate 'does not apply' or 'not applicable,' with supplementary explanations where applicable throughout the company's filing.

[42] Risk Management Program, 2017, Process 4, pages 22-23.
[43] BVES Risk Register 2021-2-18 WMP.xlsx

The Q4 2020 QIU regarding this initiative indicates "N/A" for the 2020 target goal with a "planned" status. The Q4 2020 QAL does not appear to address this initiative.

The BVES-provided initiative supporting documentation, the risk management program, and risk register spreadsheet describe a methodology for collecting, recording, and analyzing risk reduction, effectiveness, benefits, and costs.[44,45] The spreadsheet provides some analysis of risk spend efficiencies as well. S&L did not verify the completeness or accuracy of this data. Also, per BVES's request for information responses, "currently [BVES] ha[s] [a] 7x7 matrix process and Fire Safety Matrix in place. To be further developed by contractor in 2021."

Based on the documentation provided, BVES has met the WMP goal for this initiative, and additional progress is expected to be made and reported in future years.

3.1.5.1.31. Initiative #5.3.9.1: Adequate and Trained Workforce for Service Restoration

Per the WMP:

> BVES currently has adequate and trained workforce for service restoration. No risk reduction has been calculated since this action is considered a 'control'. No RSE was calculated due no incremental cost being incurred or planned to date.

Additionally, as indicated in the Q4 2020 QIU reports for this initiative, 100% staffing is the annual target goal for this initiative, and the actual Quarter 4 initiative progress is indicated as 100%. The current status of this initiative activity is "in progress."

The relevant quality documents governing this initiative are the BVES emergency response plan[46] and the BVES PSPS procedure.[47] The documents provide relatively detailed methodology for PSPS and emergency response organizational roles and responsibilities, response plan training and exercises, preparedness, background information, guidelines, procedures, checklists, and resources.

Based on the Q4 2020 QIU initiative update—indicating 100% staffing achieved for Quarter 4 as well as the PSPS and emergency response plan training and exercises—it was determined that BVES has satisfied this initiative activity goal.

[44] Risk Management Program, 2017, Process 4 and Process 5, pages 22-25.
[45] BVES Risk Register 2021-2-18 WMP.xlsx
[46] BVERS INC EmergencyResponsePlan Rev1.pdf
[47] BVES INC PSPS Procedure Rev1.pdf

3.1.5.1.32. Initiative #5.3.9.2: Community Outreach, Public Awareness, and Communications Efforts

The BVES Q4 2020 QIU indicates a 2020 annual target of 100 engagements (radio, newspaper, online, mail) with an actualized Q4 progress of 114 engagements.

Additionally, the BVES processes for meeting this WMP initiative is fulfilled by the BVES emergency response plan[48] and the BVES PSPS procedure.[49] These documents provide guidance and a tabulated list for the BVES customer support representative to follow and has a guidance template for content, media usage, and communication with the receiving community recipients.

Review of the provided WMP/PSPS community engagement tracking list[50] evidenced that community outreach and communication efforts had occurred in 2020. This document provides several tables, each for a different community outreach medium and each providing dates, methods of communication, and the title of the document/communication.

Based upon the BVES 2020 annual quantity target of 100 and the BVES 2020 quantity actual progress (Q1-4) of 114, as well as the WMP/PSPS community engagement tracking list, it is evident that BVES has reached its initiative goal of community outreach, public awareness, and communication efforts.

3.1.5.1.33. Initiative #5.3.9.3: Customer Support in Emergencies

The WMP, Table 29, indicates that "BVES has an emergency response plan that addresses customer support in emergencies and a disaster relief plan."

Also, the BVES Q4 2020 QIU for this initiative indicates an annual target of zero emergencies with an actualized Q4 progress of zero emergencies. The initiative status is "in progress."

Additionally, the BVES processes for meeting this WMP initiative activity are contained in the BVES emergency response plan[51] and the PSPS procedure.[52] The documents provide relatively detailed methodology for PSPS and emergency response communications and customer support in emergencies.

Based upon the BVES 2020 annual quantity target of zero and the BVES 2020 quantity actual progress (Q1-4) of zero with respect to the number of emergencies—as well as the BVES customer support processes in place—it is evident that BVES has reached its goal and satisfied the WMP initiative activity.

[48] BVERS INC EmergencyResponsePlan Rev1.pdf
[49] BVES INC PSPS Procedure Rev.1.pdf, Section 6, and Appendix C
[50] WMP - PSPS word doc community Engagement.docx
[51] BVERS INC EmergencyResponsePlan Rev1.pdf
[52] BVES INC PSPS Procedure Rev.1.pdf, Section 6, and Appendix C

3.1.5.1.34. Initiative #5.3.9.4: Disaster and Emergency Preparedness Plan

The WMP, Table 29, indicates that "BVES has an emergency response plan for service restoration and a disaster relief plans in place."

Also, the BVES Q4 2020 QIU for this initiative indicates an annual target of zero emergencies with an actualized Q4 progress of zero emergencies. The initiative status is "in progress."

Additionally, the BVES processes for meeting this WMP initiative are contained in the BVES emergency response plan[53] and the PSPS procedure.[54] The documents provide relatively detailed methodology for PSPS and emergency response event preparation, procedures, and evacuation.

"Achieving unity of effort provides for the most effective and efficient emergency response. This is best attained through the "4 C's" of disaster planning:

- Collaboration
- Cooperation
- Coordination
- Communication"

Based upon the BVES 2020 annual quantity target of zero and the BVES 2020 quantity actual progress (Q1-4) of zero with respect to the number of emergencies—as well as the BVES disaster and emergency preparedness processes in place—it is evident that BVES has reached its goal.

Based on the documentation reviewed, S&L finds determined that BVES has satisfied this initiative activity goal, as the plan was in place and there were no events in 2020.

3.1.5.1.35. Initiative #5.3.9.5: Preparedness and Planning for Service Restoration (Mutual Assistance and Contractors)

The acceptability of this WMP initiative activity is fulfilled in "BVERS INC EmergencyResponsePlan Rev1.pdf" and/or "BVES INC PSPS Procedure Rev1.pdf." Based upon the BVES 2020 annual quantity target of zero and the BVES 2020 quantity actual progress (1–4) of zero with respect to number of emergencies, it is evident that BVES has reached its goal. Based on the documentation reviewed, S&L finds BVES has satisfied this initiative activity goal.

[53] BVERS INC EmergencyResponsePlan Rev1.pdf, Section 5
[54] BVES INC PSPS Procedure Rev.1.pdf

3.1.5.1.36. Initiative #5.3.9.6: Protocols in Place to Learn from Wildfire Events

The acceptability of this WMP initiative activity is fulfilled in "BVERS INC EmergencyResponsePlan Rev1.pdf" and/or "BVES INC PSPS Procedure Rev1.pdf." Based upon the BVES 2020 annual quantity target of zero and the BVES 2020 quantity actual progress (1–4) of zero with respect to the number of emergencies, it is evident that BVES has reached its goal. Based on the documentation reviewed, S&L finds that BVES has satisfied this initiative activity goal.

3.1.5.1.37. Initiative #5.3.10.1: Community Engagement

The acceptability of this WMP initiative activity is fulfilled in "BVERS INC EmergencyResponsePlan Rev1.pdf" and/or "BVES INC PSPS Procedure Rev1.pdf." The BVES INC PSPS Procedure, Rev.1, Section 6 and Appendix C provide guidance for public outreach and communication with description and effectiveness of each method. Based upon the BVES 2020 annual quantity target of 100 and the BVES 2020 quantity actual progress (1–4) of 114, it is evident that BVES has reached its goal of community engagement.

Due to the significant impact that a PSPS event may have on the community and customers, it is essential that early and accurate communications be conducted throughout the PSPS event and coincide with local government, agencies, partner organizations (including emergency management community and first responders, county and local governments, independent living centers, and representatives of people/communities with access and functional needs), and customers. Effective communications are key to allow stakeholders to take preparatory actions that will mitigate the impact of a PSPS event.

Based on the documentation reviewed, S&L finds that BVES has satisfied this initiative activity goal.

3.1.5.1.38. Initiative #5.3.10.3: Cooperation with suppression agencies

The acceptability of this WMP initiative activity is fulfilled in "BVERS INC EmergencyResponsePlan Rev1.pdf" and/or "BVES INC PSPS Procedure Rev1.pdf." In "BVERS INC EmergencyResponsePlan Rev1.pdf," Section 3.8 ("Mutual Aid"), mutual aid agreements are an efficient and effective resource multiplier available to BVES restoration efforts; therefore, it is important that these agreements be maintained and that staff understand what resources they may provide and how to request the resources.

The following provides the list of pertinent local government agencies and partner organizations to BVES PSPS notifications. This list overlaps with the list of what is considered critical facilities and infrastructure:

- Local officials (City of Big Bear Lake and San Bernardino County)
- State officials (normally CPUC Energy Division and Safety Enforcement Division)

- San Bernardino County Office of Emergency Services (County OES)
- Big Bear Fire Department
- California Department of Forestry and Fire Protection (CAL FIRE)
- U.S. Forest Service
- San Bernardino County Sheriff's Department Big Bear Lake Patrol Station
- California Highway Patrol (CHP) Arrowhead Area
- California Department of Transportation (Caltrans)
- Big Bear Area Regional Wastewater Agency (BBARWA)
- Big Bear City Community Services District (CSD)
- Big Bear Lake Water Department (DWP)
- Big Bear Municipal Water District (MWD)
- Southwest Gas Corporation
- Bear Valley Community Hospital
- Bear Valley Unified School District
- Big Bear Chamber of Commerce
- Big Bear Airport District
- Big Bear Mountain Resorts
- Spectrum Communications
- Various cell tower providers

Based on the documentation reviewed, it was determined that BVES has satisfied this initiative activity goal.

3.1.5.2. Trends and Themes

S&L identified several trends and themes during the assessment of the "2020 BVES WMP Qualitative Goal/Target" initiatives:

- For many initiatives, no documented procedures or processes governing the performance and control of WMP initiatives were available.
- For most initiatives, BVES did not appear to have a formal written process to control and maintain quality records (e.g., report forms, inspection checklists, work orders) and other documentation.
- Summary-level spreadsheets and similar high-level documents were often used to manage and track initiative activities; however, in many cases, more granular documentation (such as regular inspection reports, checklists, third-party reports, daily/weekly meeting notes, and similar quality records) was not immediately available for review.

- Many of the BVES qualitative initiative goals/targets were not well defined or measurable with clearly scheduled milestone dates, making the assessments of compliance challenging and subjective.

3.1.6. "Not Applicable" or No Goal/Target

In 2020, there were several initiative activities for which no activity was recorded for various reasons. In other cases, the initiative was deemed to be not applicable to BVES. These activities are discussed herein.

3.1.6.1. Review of Initiatives

Considering that BVES does not have any transmission facilities, the following initiatives were excluded:

- Initiative #5.3.3.15: Transmission tower maintenance and replacement
- Initiative #5.3.4.2: Detailed inspections of transmission electric lines and equipment
- Initiative #5.3.4.5: Infrared inspections of transmission electric lines and equipment
- Initiative #5.3.4.8: LiDAR inspections of transmission electric lines and equipment
- Initiative #5.3.4.10: Other discretionary inspection of transmission electric lines and equipment, beyond inspections mandated by rules and regulations
- Initiative #5.3.4.12: Patrol inspections of transmission electric lines and equipment
- Initiative #5.3.5.3: Detailed inspections of vegetation around transmission electric lines and equipment
- Initiative #5.3.5.8: LiDAR inspections for vegetation around transmission electric lines and equipment
- Initiative #5.3.5.10: Other discretionary inspection of vegetation around transmission electric lines and equipment, beyond inspections mandated by rules and regulations
- Initiative #5.3.5.12: Patrol inspections of vegetation around transmission electric lines and equipment

3.1.6.1.1. Initiative #5.3.1.1: A Summarized Risk Map That Shows the Overall Ignition Probability and Estimated Wildfire Consequence Along the Electric Lines and Equipment

As indicated in the WMP, Table 21:

> Bear Valley Electric Service does not have a summarized risk map showing the overall ignition probability and estimated wildfire consequence along electric lines and equipment. Within the next 3 years, BVES will

> endeavor to develop a summarized risk map showing the overall ignition probability and estimated wildfire consequence along electric lines and equipment.[55,56,57]

Additionally, per the Q4 2020 QIU regarding this initiative, "BVES did not have this capability in 2020. This capability is to be developed in 2021 by contractor."[58]

The WMP, Q4 2020 QIU, and Q4 2020 QAL[59] indicate that this initiative goal is qualitative, has not started, and is "planned" to be performed during the remainder of the three-year WMP cycle (starting in 2021). No goal was indicated, nor was specific progress made in 2020; therefore, BVES has met their WMP goal for this initiative, and additional progress is expected to be made and reported in future years.

3.1.6.1.2. Initiative #5.3.1.2: Climate-Driven Risk Map and Modelling Based on Various Relevant Weather Scenarios

As indicated in the WMP, Table 21:

> Bear Valley Electric Service does not have a climate-driven risk map and modelling based on various relevant weather scenarios. Within the next 3 years, BVES will endeavor to develop a climate-driven risk map and modelling based on various relevant weather scenarios.

Additionally, per the Q4 2020 QIU regarding this initiative, BVES did not have this capability in 2020. This capability is to be developed in 2021 by a contractor.

The WMP, Q4 2020 QIU, and Q4 2020 QAL indicate that this initiative goal is qualitative, not started, and "planned" to be performed during the remainder of the three-year WMP cycle (starting in 2021). No goal was indicated, nor was specific progress made in 2020; therefore, BVES has met their WMP goal for this initiative, and additional progress is expected to be made and reported in future years.

3.1.6.1.3. Initiative #5.3.1.3: Ignition Probability Mapping Showing the Probability of Ignition Along the Electric Lines and Equipment

As indicated in the WMP, Table 21:

> Bear Valley Electric Service does not have an ignition probability mapping showing the probability of ignition along the electric lines and equipment. Within the next 3 years, BVES will endeavor to develop an ignition probability mapping showing the probability of ignition along the electric lines and equipment.

[55] Bear Valley Electric Service Wildfire Mitigation Plan, 2020 Final Action Statement Refiling, September 18, 2020, Table 21, pages 108-111.
[56] Risk Management Program Manual, 2017.
[57] Risk Register 2021-2-18 WMP.xlsx
[58] bves_2020_q4_qiu_20210401.xlsx
[59] BVES_2020 Q4 QAL_20210209.pptx

Additionally, per the Q4 2020 QIU regarding this initiative, BVES did not have this capability in 2020. This capability is to be developed in 2021 by a contractor.

The WMP, Q4 2020 QIU, and Q4 2020 QAL indicate that this initiative goal is qualitative, not started, and "planned" to be performed during the remainder of the three-year WMP cycle (starting in 2021). No goal was indicated, nor was specific progress made in 2020; therefore, BVES has met the WMP goal for this initiative, and additional progress is expected to be made and reported in future years.

3.1.6.1.4. Initiative #5.3.1.4: Initiative Mapping and Estimation of Wildfire and PSPS Risk-Reduction Impact

As indicated in the WMP, Table 21:

> Bear Valley Electric Service does not have an initiative mapping and estimation of wildfire and PSPS risk-reduction impact. Within the next 3 years, BVES will endeavor to develop an Initiative "mapping and estimation of wildfire and PSPS risk-reduction impact.

Additionally, per the Q4 2020 QIU regarding this initiative, BVES had limited capability in this area in 2020. Currently, BVES has a 7x7 matrix process and fire safety matrix in place to identify risk reduction for each initiative. This initiative is "to be further developed by contractor in 2021. This capability will be enhanced in 2021 by expert contractor."

The WMP, Q4 2020 QIU, and Q4 2020 QAL indicate that this initiative goal is qualitative, not started, and "planned" to be performed during the remainder of the three-year WMP cycle (starting in 2021). No goal was indicated, nor was specific progress made in 2020; therefore, BVES has met their WMP goal for this initiative, and additional progress is expected to be made and reported in future years.

3.1.6.1.5. Initiative #5.3.1.5: Match Drop Simulations Showing the Potential Wildfire Consequence of Ignitions That Occur Along the Electric Lines and Equipment

As indicated in the WMP, Table 21:

> Bear Valley Electric Service does not, at this time, have a specific wildfire mitigation risk assessment and mapping initiative focused on conducting match drop simulations showing the potential wildfire consequence of ignitions that occur along BVES's electric lines and equipment.

Additionally, per the Q4 2020 QIU regarding this initiative, BVES did not have this capability in 2020. This capability is to be developed in 2021 by a contractor.

The WMP, Q4 2020 QIU, and Q4 2020 QAL indicate that this initiative goal is qualitative, not started, and "planned" to be performed during the remainder of the three-year WMP cycle (starting in 2021). No goal was indicated, nor was specific progress made in 2020; therefore, BVES has met their WMP goal for this initiative, and additional progress is expected to be made and reported in future years.

3.1.6.1.6. Initiative #5.3.1.6: Weather-Driven Risk Map and Modelling Based on Various Relevant Weather Scenarios

As indicated in the WMP, Table 21:

> Bear Valley Electric Service does not have a weather driven risk map and model based on various relevant weather scenarios. BVES subject matter expert evaluates the frequency of potential ignition events versus a set of impact categories (reliability, compliance, quality of service, safety and environmental) to develop total risk impact and scores. Within the next 3 years, BVES will endeavor to develop a weather-driven risk map and modelling based on various relevant weather scenarios.

Additionally, per the Q4 2020 QIU regarding this initiative, BVES did not have this capability in 2020. This capability is to be developed in 2021 by a contractor.

The WMP and Q4 2020 QAL indicate that this initiative goal is qualitative, not started, and "planned" to be performed during the remainder of the three-year WMP cycle (starting in 2021). No goal was indicated, nor was specific progress made in 2020; therefore, BVES has met the WMP goal for this initiative, and additional progress is expected to be made and reported in future years.

3.1.6.1.7. Initiative #5.3.2.3: Fault Indicators for Detecting Faults on Electric Lines and Equipment

BVES's PSPS procedure, Rev.1, Section 4 expands the logic and provides measured datapoints for the decision to deploy crews as the data describes. According to the WMP and Q4 2020 reports, "no work was planned or conducted in 2020 for this initiative. BVES has 110 Fault Indicators (FIs) installed in the system and intends to install an additional 117 in the system in 2022." The current status of this initiative activity is indicated as "planned" per the Q4 2020 QIU; therefore, BVES has satisfied the WMP initiative activity.

3.1.6.1.8. Initiative #5.3.3.4: Covered Conductor Maintenance

Per the WMP, BVES does not have a specific wildfire mitigation grid design and system-hardening initiative focused on covered conductor maintenance. In discussions with BVES, it was noted that BVES began covered conductor installation in November 2019 with installation completion expected in 2025. Given that the covered conductor installation was still in the early stages in 2020, it is reasonable that maintenance of the covered conductors would not be performed. BVES confirmed that no maintenance of covered

conductors was performed in 2020. Based on the information reviewed and discussions with BVES personnel, it is determined that this initiative is not applicable.

3.1.6.1.9. Initiative #5.3.3.16: Undergrounding of Electric Lines and/or Equipment

Per the WMP, BVES did not propose to underground any overhead lines based on their understanding of the capabilities of covered wire systems, including their lower cost relative to undergrounding and their ability to substantially reduce the risk of wildfire; therefore, S&L concludes that this WMP initiative is not applicable, as there was no goal for 2020.

3.1.6.1.10. Initiative #5.3.3.8: Grid Topology Improvements to Mitigate or Reduce PSPS Events

Per the WMP, BVES does not have a specific wildfire mitigation grid design and system-hardening initiative focused on grid topology improvements to mitigate or reduce PSPS events. BVES communicated to S&L that no activities with respect to this initiative were performed in 2020. The WMP indicates that BVES recognizes that it is challenging to mitigate wildfire risk through grid topology changes alone and therefore focuses more on the augmentation of existing circuitry through its system-hardening efforts.

Based on the information reviewed, BVES did not have a specific initiative activity focused on grid topology improvements to mitigate or reduce PSPS events; no goal was explicitly stated for 2020, and no activities with respect to this initiative were performed in 2020. S&L therefore concludes that BVES met this WMP initiative activity goal.

3.1.6.1.11. Initiative #5.3.3.17: Updates to Grid Topology to Minimize Risk of Ignition in HFTDs

Per the WMP, BVES does not have a specific initiative focused on grid topology to minimize risk of ignition in HFTDs. BVES communicated to S&L that no activities with respect to this initiative were performed in 2020. The WMP indicates that BVES recognizes that it is challenging to mitigate wildfire risk through grid topology changes alone and therefore focuses more on the augmentation of existing circuity through its system-hardening efforts.

No specific goal was listed for this initiative in 2020. Based on the information reviewed—and the evidence that BVES is augmenting the existing circuitry through its system-hardening efforts as mentioned in the WMP—S&L finds that BVES met this WMP initiative activity.

3.1.6.1.12. Initiative #5.3.4.4: Infrared Inspections of Distribution Electric Lines and Equipment

The WMP identifies that surveys will be conducted on a three-year cycle using infrared, ultrasonic, and EMI sensors and that this activity will be contracted to Exacter Services with one-third of the line miles surveyed each year for 70.27 miles surveyed annually; however, the Q4 report[61] identifies that BVES paused use of this inspection methodology and that the surveys will be conducted on a five-year cycle with the next inspection in 2024.

The WMP target of 70.27 line miles to be treated in 2020 was not met, as no infrared inspections of distribution equipment occurred in 2020; therefore, BVES did not meet the goal of this initiative.

3.1.6.1.13. Initiative #5.3.4.6: Intrusive Pole Inspections

The WMP refile 09.18.2020A identifies the objective for intrusive pole inspections as follows: "Test all poles to loading standards, GO95 requirements, intrusive inspection criteria and age and then, replaces or remediates non-compliant poles." Per discussion with BVES SMEs, no intrusive pole inspections were conducted in 2020. The inspections were ahead of schedule based on prior years' activities, and this pause allowed them to catch up with pole replacements. BVES met the goal of this initiative, as they did not plan any 2020 inspections and, per the plan, none were performed.

3.1.6.1.14. Initiative #5.3.5.6: Improvement of Inspections

Per the WMP, Table 25, this initiative activity is listed as "N/A – Elements already captured in other relevant initiatives." The BVES Q4 QIU states that "BVES does not have a unique WMP initiative for this activity at this time" and lists this initiative as "N/A" with a status of "N/A" as well. In addition, the Q4 QAL does not address this initiative. No goal was indicated, nor was specific progress made in 2020; therefore, S&L finds this WMP initiative activity to be not applicable.

3.1.6.1.15. Initiative #5.3.6.2: Crew Accompanying Ignition Prevention and Suppression Resources and Services

Per the WMP refile 09.18.2020A , Table 26:

> Grid Operations and Protocols, the utility does not currently have a specific grid operations and protocols wildfire mitigation initiative focused on crew-accompanying ignition prevention and suppression resources and services. The use of these services will be re-evaluated and considered for future incorporation as part of the annual WMP review process.

[61] BVES_2020 Q4 QAL_20210209.ppt

Additionally, per S&L request for information responses:

> BVES does not have this initiative. BVES is able to conduct work with fire risk by de-energizing work areas as applicable. If special circumstances arise where this would be necessary, BVES would contract this work out as part of the project.

As there was no specific 2020 initiative or WMP activity goal/target provided in the WMP, this initiative activity is complete.

3.1.6.1.16. Initiative #5.3.6.6: Stationed and On-Call Ignition Prevention and Suppression Resources and Services

The WMP refile, Table 26, "Grid Operations and Protocols," identifies that BVES does not currently have stationed and on-call ignition prevention and suppression resources and services not captured in existing initiatives.

3.1.6.1.17. Initiative #5.3.7.2: Collaborative Research on Utility Ignition and/or Wildfire

As indicated in the WMP and Q4 2020 QIU:

> Bear Valley Electric Service does not have a specific wildfire mitigation data governance plan focused on collaborative research on utility ignition or wildfire at this time. The company generally collaborates with Mutual Aid Partners and first responders to develop protocols, procedures, and communication plans to prevent, manage, and respond to utility ignition or wildfire.
>
> BVES does not have a unique WMP initiative for this activity at this time. BVES is open to collaborative research on utility ignition and/or wildfire.

No goal was indicated, nor was specific progress made in 2020; therefore, BVES has met their WMP goal for this initiative activity, and additional progress is expected to be made and reported in future years.

3.1.6.1.18. Initiative #5.3.10.2: Cooperation and Best Practice Sharing with Agencies Outside California

The acceptability of this WMP initiative activity is fulfilled in "BVERS INC EmergencyResponsePlan Rev1.pdf" and/or "BVES INC PSPS Procedure Rev1.pdf." In the BVES INC PSPS procedure, Rev.1 Section 6, there is a list breaking down the agencies that are contacted with respect to lessons learned. BVES interfaces with a range of universities for research purposes. BVES has satisfied the WMP initiative activity.

3.1.6.1.19. Initiative #5.3.10.4: Forest Service and Fuel Reduction Cooperation and Joint Roadmap

BVES does not have a unique WMP initiative for this activity at this time. Per the WMP and Q4 2020 QIU, there was no initiative program or specific goals or targets set in 2020. Based on the information reviewed, BVES did not satisfy this initiative activity in 2020, as it did not perform the fuel cooperation and joint roadmap.

3.2. VERIFICATION OF FUNDING

3.2.1. Scope of Study

S&L's scope regarding initiative funding was to determine the financial projections of BVES for each of its WMP initiatives, document each instance where BVES spent less than 100% of its budget/forecast at the task level, and document BVES's explanations for such underspending. Below, S&L initially evaluated BVES's aggregate capital expenditures (capex) and operational expenditures (opex) for each of the 10 WMP target/initiative areas, including areas of both overspending and underspending. This report then tabulates data that address the sub-initiative tasks where spending was less than the budget/target.

S&L examined budgeted/projected spending and actual spending for the 10 WMP target/initiative areas, taking into consideration the following documents:

- Wildfire Mitigation Plan Memorandum Account (WMPMA)
- Fire Risk Mitigation Memorandum Account (FRMMA)
- Fire Hazard Prevention Memorandum Account (FHPMA)
- Catastrophic Event Memorandum Account (CEMA)
- 2020 Wildfire Mitigation Plan
- Quarterly Reports for Wildfire Mitigation
- Wildfire Mitigation Plan 2021 Update

S&L's scope of work also considers any catastrophic event memorandum account (CEMA) existing for the WMP. BVES confirmed that no such account exists for WMP activities.

Additionally, S&L supplemented the above documents by submitting questions on deviations between budgeted and actual spending.

3.2.2. Accounting Framework Evolution for Wildfire Mitigation Expenditures

A general observation applies for budget/actual deviations in both the capex and opex areas related to differences in accounting between BVES's budgets—as in its most recent general rate case (GRC) for test

year 2018—and the budgeting framework specified by the WSD of the CPUC for the WMP initiatives. GRC budgets were developed and approved by the CPUC before the WMP task breakdowns were issued by the WSD. BVES's budgets for many WMP initiatives were thus in rates and were approved by the CPUC using the pre-WMP accounting system.

Judgments were required for breaking down the existing capex and opex budgets into the framework specified by the WSD, which differs from the GRC accounts and is more granular. BVES had to develop a methodology to determine which initiatives or portions of initiatives were already covered in rates and which should be tracked by separate memorandum accounts for later recovery.

Many DCS initiatives therefore did not have a budget when the WMP was filed in 2020, and budgets were shown as "not specified." BVES has since developed a methodology to budget and report expenses in each of the initiatives to the level of granularity required by the WSD. S&L was advised by BVES that the most accurate and up-to-date information regarding the WMP budgets, projections, and actual spending is contained in a spreadsheet called "2020 Cost Template.xlsx," although it has not yet been audited. Since that is the most accurate information, and since in many cases budgeted/projected spending is not clearly defined in the WMP document, this analysis relies on the information in the above-mentioned spreadsheet.

3.2.3. Findings for Capex Spending

For 2020, S&L found that capex spending for wildfire mitigation exceeded the budget projection by $3.1 million (11% of the budget), broken down as shown in Table 3-1.

Table 3-1 — 2020 Capex Budgets and Actuals, By WMP Program Category

Designation	WMP Program Target/Initiative	Dollars		% of Total*	Over (+) or Under (-) Spent	
		Budget	Actual		Dollars	% of Projected
A	Risk Assessment and Mapping	0	0	---	0	---
B	Situational Awareness and Forecasting	268,864	32,241	2%	(236,623)**	(88%)
C	Grid Design and System Hardening	13,523,945	15,204,473	97%	1,680,529	12%
D	Asset Management and Inspections	122,207	127,338	1%	5,131	4%
E	Vegetation Management and Inspections	0	0	---	0	---
F	Grid Operations and Protocols	0	0	---	0	---

Designation	WMP Program Target/Initiative	Dollars		% of Total*	Over (+) or Under (-) Spent	
		Budget	Actual		Dollars	% of Projected
G	Data Governance	0	0	---	0	---
H	Resource Allocation Methodology	0	0	---	0	---
I	Emergency Planning and Preparedness	0	23,125	---	23,125	---
J	Stakeholder Cooperation and Community Engagement	0	0	---	0	---
Total		**13,915,015**	**15,387,177**	**100%**	**1,472,162**	**11%**

Source: 2020 Cost Template.xlsx

*Figures are percentages of budget.

**Parentheses indicate negatives.

Nearly the entire WMP capex budget (97%) was allocated to “Grid Design and System Hardening,” with minor spending budgeted for “Situational Awareness and Forecasting” (2%) and “Asset Management and Inspections” (1%). No capex funds were budgeted or spent in categories E, F, G, or H because those are operation and maintenance expenses, not capital types of spending.

The largest deviation of actual capex experience from the budget capex projection was for spending on “Grid Design and System Hardening,” which exceeded budget by 12%. S&L was informed that BVES had embarked on several new initiatives, such as the installation of covered wires and replacement of fuses. BVES did not have significant experience in cost estimation for that work. The main driver for those projects was to achieve physical targets, such as number of circuit miles, number of fuses replaced, etc., in a prudent and reasonable manner. Achieving project targets in mitigating wildfire risk was viewed as the main driver for these activities. The budget, therefore, was not viewed as a hard stop by management. Management was aware of expenses for these projects but authorized the work to continue because of the positive impact those projects have on reducing wildfire risks.

WMPs are not rate-setting procedures and are not an approval mechanism for WMP project costs. All WMP projects are to undergo reasonableness and prudency reviews by the CPUC at a utility’s next general rate case, which for BVES will be Test Year 2023 (file GRC Application May 1, 2022).

Spending on “Asset Management and Inspections” was roughly at budget (exceeding the budget by only 4%).

Spending on “Situational Awareness and Forecasting” was only 12% of that budgeted, with 88% of budgeted funds not spent during 2020. In this connection, S&L learned that an HD camera project was budgeted at $250,000 per year. The actual expense was much less: $15,529. BVES’s budgeting was significantly off because BVES did not realize the University of California San Diego (UCSD) would pay for the cameras, its own technical labor, and connectivity equipment and resources. The HD camera alert system is a large partnership between UCSD and many entities; BVES’s expenses for this initiative were limited to only those necessary for pole installation and hooking up power.

In 2020, BVES intended to install 10 additional weather stations and 2 HD cameras. By the end of 2020, BVES had installed 8 additional weather stations and 1 HD camera. One weather station and one HD camera installation are being held up due to access issues to Bertha Peak; BVES is working with the U.S. Forest Service and San Bernardino County to gain access to the desired site. One other weather station was delayed because it was determined that it would be better to install a solar/battery power kit rather than transform 34.5 kV to 120 V. This installation of the solar/battery power kit and weather station was completed in April 2021.

About $23,000 was spent in the “Emergency Planning and Preparedness” category, which was budgeted for no spending in 2020.

Considering activities at the lowest task level, there were seven activities where actual capex spending was less than projected/budgeted, as summarized in Table 3-2.

Table 3-2 — WMP Funding Verification Summary: Capex in 2020

Initiative Category	Initiative No.	Initiative Name	Funding Discrepancy Amount		Detail on Funding Discrepancy
			Budget Less Actual, $	Budget Less Actual, % of Budget	
Situational Awareness and Forecasting	5.3.2.1	Advanced weather monitoring and weather stations	($2,152)	(11%)	Budget covered installing 10 stations, but only 8 were completed
Situational Awareness and Forecasting	5.3.2.2	Continuous monitoring sensors	($234,471)	(94%)	Budget covered all equipment and installation, but UCSD provided most equipment and services at no cost to BVES; BVES only had to cover service power and identify a suitable pole for installation
Grid Design and System Hardening	5.3.3.6	Distribution pole replacement and reinforcement, including composite poles (pole replacement and reinforcement)	($488,085)	(53%)	The GRC standard annual distribution pole budget was $925K, which exceeded 2020's requirements; excess budget was transferred to other WMP projects/initiatives
Grid Design and System Hardening	5.3.3.12	Other corrective action (Radford line covered conductor replacement project)	($93,902)	(60%)	Budgeted $156K for expected design and permitting cost, but contractor bid was lower; project was also delayed, so some spending was delayed out of 2020
Grid Design and System Hardening	5.3.3.14	Transformers maintenance and replacement	($1,503)	(0%)	Was only 0.5% under the budget; delta due to slight estimating error
Grid Design and System Hardening	No Number	Safety and technical upgrades to Palomino Substation	($917,963)	(58%)	Had expected 2020 completion; project was delayed, moving some spending out of 2020
Grid Design and System Hardening	No Number	Evacuation route hardening pilot program	($188,980)	(94%)	Originally budgeted $200K for composite poles, light weight steel poles, and mesh wrapping; investigated composite poles under different budget; in 2020, spent only on wire wrap plus ordered light weight steel poles, still yet to be installed; undergrounding covered outside this budget

Note: With respect to the WMP page numbers for these items, the WMP document does not, in general, present clear 2020 budget information because GRC budgets predated the WSD accounting framework. The budgets and actuals for this table are from a spreadsheet provided separately by BVES, allocating GRC data to WSD accounting. S&L understands that the spreadsheet ("2020 Cost Template.xlsx") has the most accurate information.

3.2.4. Findings for Opex Spending

For 2020, S&L found that opex spending for wildfire mitigation in the aggregate was essentially equal to the budget projection (spending was 2% over budget), with a breakdown as shown in Table 3-3.

Table 3-3 — 2020 Capex Budgets and Actuals, By WMP Program Category

Designation	WMP Program Target/Initiative	Dollars		% of Total	Over (+) or Under (-) Spent	
		Budget	Actual		Dollars	% of Projected
A	Risk Assessment and Mapping	0	18,172	---	18,172	---
B	Situational Awareness and Forecasting	45,000	31,976	1%	(13,024)	(29%)
C	Grid Design and System Hardening	0	105,207	---	105,207	---
D	Asset Management and Inspections	165,000	370,661	5%	205,661	125%
E	Vegetation Management and Inspections	2,843,000	2,391,086	92%	(451,914)	(16%)
F	Grid Operations and Protocols	0	36,344	---	36,344	---
G	Data Governance	46,382	114,466	1%	68,084	147%
H	Resource Allocation Methodology	0	27,258	---	27,258	---
I	Emergency Planning and Preparedness	0	48,238	---	48,238	---
J	Stakeholder Cooperation and Community Engagement	0	24,027	---	24,027	---
Total		**3,099,382**	**3,167,435**	**100%**	**68,053**	**2%**

Source: 2020 Cost Template.xlsx

Nearly the entire WMP opex budget (92%) was allocated to “Vegetation Management and Inspections,” with minor spending budgeted for “Asset Management and Inspections” (5%), “Data Governance” (1%), and “Situational Awareness and Forecasting” (1%).

The largest deviation of actual opex experience from the budget opex projection was for spending on the largest budgeted item, "Vegetation Management and Inspections," where the budget was underspent by 16% (about $452,000). S&L was informed that BVES, as of January 1, 2020, established a new vegetation management contract with Mowbray's Tree Service. This contract included increases in wages due to changes in labor laws applicable to tree trimmers. BVES made its best effort to estimate the budget using the new rates and overestimated those costs. BVES reported all vegetation management objectives were achieved. BVES's vegetation management contractor completed all sites that were intended to be trimmed and also performed corrective trimming as directed by BVES in response to inspection findings, such as those by LiDAR, a remote-sensing technology.

Spending on "Asset Management and Inspections" was more than double the budget (exceeding the budget by 125%). That deviation arose from the differences in accounting systems discussed above. Many initiatives—such as detailed inspections, patrol inspections, substation inspections, etc.—had unspecified budgets, but all the work done was necessary.

Spending on "Data Governance" also was more than double the budget (overspending equal to 147% of the 2020 budget). "Data Governance" exceeded its budget because, in August 2020, WSD began issuing its GIS data requirements. BVES hired a consultant to first perform a gap analysis on the current BVES GIS and the WSD requirements, then take action to remedy the gaps. This was an unplanned late-year expense.

Spending on "Situational Awareness and Forecasting" was about 70% of the 2020 budget. About $260,000 (approximately 8% of the aggregate WMP opex budget) was spent in six WMP categories that were budgeted for zero spending in 2020. These deviations arose from the accounting system issues discussed earlier; in any case, they do not represent a large fraction of the overall opex budget (only about 8%).

Considering activities at the lowest task level, there were 12 activities where actual opex spending was less than projected/budgeted, as summarized in Table 3-4.

Table 3-4 — WMP Funding Verification Summary: Opex in 2020

Initiative Category	Initiative No.	Initiative Name	Funding Discrepancy Amount		Detail on Funding Discrepancy
			Budget Less Actual, $	Budget Less Actual, % of Budget	
Vegetation Management and Inspections	5.3.5.4	Emergency response vegetation management due to red flag warning or other urgent conditions	($21,174)	(20%)	BVES budgeted about $2.5M for all vegetation management work to be done under a new time and materials contract with Mowbray Tree Service. The total scope of work, plus corrective trimming shown by LiDAR to be necessary, was completed for just over $2M. The original budget was high due to overestimation of the impact of newly applicable IBEW Step Level 3 wage requirements. Budgets and actuals for these accounts were allocated from GRC figures to the WSD accounting framework.
Vegetation Management and Inspections	5.3.5.5	Fuel management and reduction of “slash” from vegetation management activities improvements of inspections	($26,467)	(20%)	
Vegetation Management and Inspections	5.3.5.7	LiDAR inspections of vegetation around distribution electric lines and equipment (vegetation management technology)	($14,940)	(12%)	
Vegetation Management and Inspections	5.3.5.9	Other discretionary inspection of vegetation around distribution electric lines and equipment, beyond inspections mandated by rules and regulations (enhanced inspections, patrols, and trims)	($6,465)	(14%)	
Vegetation Management and Inspections	5.3.5.15	Remediation of at-risk species	($26,467)	(20%)	
Vegetation Management and Inspections	5.3.5.16	Removal and remediation of trees with strike potential to electric lines and equipment (hazard tree removal and right tree-right place)	($26,467)	(20%)	
Vegetation Management and Inspections	5.3.5.19	Vegetation inventory system	($26,467)	(20%)	
Vegetation Management and Inspections	5.3.5.20	Vegetation management to achieve clearances around electric lines and equipment (pole brushing)	($418,186)	(20%)	

Initiative Category	Initiative No.	Initiative Name	Funding Discrepancy Amount		Detail on Funding Discrepancy
			Budget Less Actual, $	Budget Less Actual, % of Budget	
Situational Awareness and Forecasting	5.3.2.4	Forecast of a fire risk index, fire potential index, or similar	($11,500)	(51%)	The weather consultant's time and materials costs were estimated at $45K per year, but he completed all this assigned work, plus some added services, and invoiced only about $22K.
Situational Awareness and Forecasting	5.3.2.6	Weather forecasting and estimating impacts on electric lines and equipment	($11,500)	(51%)	---
Asset Management and Inspections	5.3.4.7	LiDAR inspections of distribution electric lines and equipment	($14,940)	(12%)	This was budgeted as 2 LiDAR surveys/year. After the first, BVES found that one per year was adequate and did not authorize a second.
Asset Management and Inspections	5.3.4.11	Other discretionary inspection of distribution electric lines and equipment, beyond inspections mandated by rules and regulations	($6,465)	(14%)	BVES budgeted more for ground patrols than was required to complete the work. Funds paid out covered completion of all the work that was required.

Note: With respect to the WMP page numbers for these items, the WMP document does not, in general, present clear 2020 budget information because GRC budgets predated the WSD accounting framework. The budgets and actuals for this table are from a spreadsheet provided separately by BVES, allocating GRC data to WSD accounting. S&L understands the spreadsheet ("2020 Cost Template.xlsx") has the most accurate information.

3.3. VERIFICATION OF QA/QC PROGRAMS

As part of the WMP compliance, S&L reviewed BVES' QA/QC programs. S&L also reviewed available documentation and conducted interviews of BVES SMEs to validate these BVES QA/QC programs.

Following an initial S&L request for QA/QC programs related to the WMP initiatives, BVES indicated that, in general, they do not have formal written QA/QC procedures, processes, or programs for controlling WMP activities. Their process is quoted below:

> QA/QC process for WMP work – we do not have a formal written process. This [is] the process we utilize:
>
> a) Contractor's design/planning group develops work package (instructions, drawings, materials, etc.).
>
> b) All work is reviewed by BVES prior to construction to ensure the accuracy of the scope, design, material, and supporting documentation. This review is conducted by the BVES Field Inspector and/or the Engineering & Planning Department.
>
> c) Once BVES approves the work package, BVES orders material and/or draws from stock if available.
>
> d) At BVES's direction, Contractor performs the specific work.
>
> e) BVES Field Inspector monitors the work in progress and performs regular progress inspections.
>
> f) When Contractor reports work is complete, BVES Field Inspector performs final inspection of the work in the field and performs the initial work package audit. Upon approval of field work and work package, an initial billing review is performed and approval for invoicing is given.
>
> g) Upon receipt of an invoice, the Project Coordinator performs a work package audit and validates the materials and work performed. Project Coordinator also performs a validation of billing units, and ensures the Field Inspector's verification of work completion and approval for billing.[62]

With the exceptions of the vegetation management, risk management, and emergency preparedness programs, the lack of written QA/QC programs for WMP compliance is pervasive throughout all target categories. For each category, a description and method of validation for the relevant BVES QA/QC programs have been provided.

3.3.1. Category #1: Risk Assessment and Mapping

The BVES-provided risk management program manual describes the requirements, roles, and responsibilities for risk management. It provides direction to BVES on implementing the company's risk management framework. In general, BVES's risk management process consists of six high-level processes:

- Risk identification
- Risk analysis

[62] Email from Paul Marconi. "BVES RFI: Complete listing, description, and support files of existing QA/QC programs in place to ensure compliance with WMPs." 2021 May 26.

- Risk evaluation and scoring
- Risk mitigation
- Risk informed investment decisions (annual and periodic)
- Risk monitoring

The descriptions and intended goals of these six processes are detailed within the program manual. The overall goal of the BVES risk management program is as follows:

> Our goal is that all employees become "risk managers" who are encouraged to identify and ultimately help mitigate risks.[63]

Validation of this QA/QC program's implementation was not possible, as no significant risk management activities were performed for the relevant initiatives in 2020. Capability expansion and development of this initiative and its processes are planned for 2021.

3.3.2. Category #2: Situational Awareness and Forecasting

There is no formal written QA/QC program for the initiatives contained in this WMP target category. BVES performance is governed primarily by summary-level spreadsheets and weekly forecast records where yearly initiative specific progress is tracked and recorded. S&L finds that this documentation, coupled with management direction, provides sufficient guidance for staff to fulfill the relevant initiative requirements; however, more formalized and written QA/QC programs and processes for WMP compliance would be beneficial. Quality records, design packages, work orders, and similar documentation was not readily available, and complete detailed documentation was often unavailable.

3.3.3. Category #3: Grid Design and System Hardening

There is no formal written QA/QC program for the initiatives contained in this WMP target category. BVES performance is governed primarily by summary-level spreadsheets and similar documentation where yearly initiative specific progress is tracked and recorded. An initiative-related project design package and asset GIS data are also retained as records of initiative progress. S&L finds that this documentation, coupled with management direction, provides sufficient guidance for staff to fulfill the relevant initiative requirements; however, more formalized and written QA/QC programs and processes for WMP compliance would be beneficial. Quality records, design packages, work orders, and similar documentation was not readily available, and complete detailed documentation was often unavailable. Additionally, some records are

[63] Risk Management Program Manual, 2017. Pages 1-2.

maintained as paper copies and not digitized, contributing to the difficulty to produce records or verify records.

Furthermore, BVES was not able to provide a complete list of assets assessed under some initiative activities. For example, the BVES-provided pole loading assessment report[64] and HFTD tree attachment removal tracking spreadsheet[65] were both only small samples of all 2020 initiative activities that were performed based on the Q4 2020 QIU actualized target quantities completed; it was unclear how BVES tracked the remaining activities. During BVES interviews, S&L learned that, while BVES often does have access to more granular documentation (such as inspection reports and work orders), for some of the larger-volume initiatives requiring multiple third-party contracts, these documents are not readily available. They must either be requested from the specific third party that performed the relevant subset of the work or the paper copies must be located and digitized for distribution.

3.3.4. Category #4: Asset Management and Inspections

BVES provided an email summarizing their QA/QC program.[66] For asset inspection, they stated that BVES does not have a formal written program. This is an initiative they intend to develop in 2021 per their 2021 WMP update. Management performs cross-checks of the various inspections to determine if there are issues. They compare the results of LiDAR and third-party ground patrol against their own patrols and inspections. The LiDAR surveys provided substantial raw geographic, positioning, and asset location and clearance (point cloud) data that was then analyzed, distilled, filtered, and incorporated into the BVES geographic information system (GIS) database. Any encroachment, clearance, or other issues identified from the GIS data was then field verified during regular patrol and detailed inspections, then corrective actions were performed as needed.

3.3.5. Category #5: Vegetation Management and Inspections

BVES has a formal written vegetation management QA/QC program in place for these initiatives. The BVES program primarily consists of the "Vegetation Management and Vegetation Management QC Programs Policy and Procedures"[67] supported by the BVES GO 165 compliance plan[68] and the third-party vegetation management contract[69] requirements. The vegetation QC program document clarifies BVES vegetation clearance requirements and applicable standards, defines BVES vegetation management program roles

[64] BVES Asset-Pole loading infrastructure hardening & replacement program based on PL assessment program–sample report.xlsx
[65] BVES Asset-Removal of Tree Attachments in HFTD – sample report.xlsx
[66] QAQC Email 20210527.pdf
[67] Vegetation Management and Vegetation Management QC Programs Policy and Procedures Rev0.pdf
[68] BVES GO 165 Compliance Plan.pdf
[69] C#3095-000 Vegetation Management.pdf

and responsibilities, defines vegetation management reporting schedules and requirements, defines the tracking of vegetation clearance discrepancy requirements, provides customer outreach requirements, details vegetation quality control check frequencies and requirements, and provides a typical "Tree Trimming QC" clearance inspection report template. Review of documentation supported by the vegetation QC program, such as the "Tree Trimming QC"[70] and "Veg Record 2020" spreadsheets,[71] provided validation that the defined activities occurred and were implemented in accordance with the BVES program requirements in 2020. These programs and plans, coupled with management direction, provides sufficient guidance for staff to fulfill the relevant initiative requirements.

3.3.6. Category #6: Grid Operations and Protocols

As indicated in the introduction to this section, BVES has no formal written QA/QC programs or processes for WMP compliance. Their performance is governed by the emergency response plan[72] and the PSPS procedure.[73] The emergency response plan outlines the responsibilities, organization, preparations, emergency response procedures, communications plan, and customer support plan. The PSPS procedure identifies the chain of responsibility, the fire protection procedures, the PSPS procedures, and the PSPS outreach plan. The plan and procedure, along with management direction, provide sufficient guidance for staff to fulfill the relevant initiative requirements.

3.3.7. Category #7: Data Governance

As indicated in the introduction to this section, BVES has no formal written QA/QC programs or processes for WMP compliance. Additionally, validation of the informal QA/QC program's implementation was not possible, as no significant data governance activities were performed for the relevant initiatives in 2020.

For the Initiatives #5.3.7.2 and #5.3.7.3, the BVES risk management program manual[74] provides a methodology for collecting, recording, and analyzing wildfire risk and mitigation costs. It briefly discusses near-miss data, but only in the context of personnel safety; however, significant gaps in the current written BVES QA/QC program exist with respect to the data governance of the WMP initiative.

Supporting records and documentation for this WMP initiative included the BVES risk register[75] and the 2020 outage log.[76] These documents provide either a management/summary level of detail or relatively

[70] Tree Trimming QC 2020.xlsx
[71] 2020VegRecord.xlsx
[72] BVES INC Emergency Response Plan Rev1.pdf
[73] BVES INC PSPS Procedures Rev1.pdf
[74] Risk Management Program, 2017.
[75] BVES Risk Register 2021-2-18 WMP.xlsx
[76] 2020 Outage Log.xlsx

raw unfiltered data relating to relevant initiatives. Detailed written programs and processes would be required to provide a more granular understanding of how these documents are generated, maintained, and updated as well as what specific quality records (or lower tier documents) may be used to populate them.

3.3.8. Category #8: Resource Allocation Methodology

As indicated in the introduction to this section, BVES has no formal written QA/QC programs or processes for WMP compliance. Additionally, validation of the informal QA/QC program's implementation was not possible, as no significant data governance activities were performed for the relevant initiatives in 2020.

For the three relevant initiatives in this WMP target category (Initiatives #5.3.8.1, #5.2.8.2, and #5.3.8.3), the BVES risk management program manual[77] provides a methodology for collecting, recording, and analyzing resource allocation benefits and costs as well as risk reduction, effectiveness, benefits, and costs; however, significant gaps in the current written BVES QA/QC program exist with respect to the resource allocation methodology WMP activity.

Supporting records and documentation for this WMP activity include the BVES risk register.[78] This document provides both a management-summary level of detail and data as well as relatively raw unfiltered data relating to relevant initiatives. Detailed written programs and processes would be required to provide a more granular understanding of how these documents are generated, maintained, and updated as well as what specific quality records (or lower-tier documents) may be used to populate them.

3.3.9. Category #9: Emergency Planning and Preparedness

There are two relevant formal written QA/QC documents for the initiatives contained in this WMP target category. The BVES emergency response plan[79] and PSPS procedures[80] provide relatively detailed methodology for PSPS and emergency response organizational roles and responsibilities, preparedness, background information, guidelines, procedures, and resources. BVES performance in this target category is governed primarily by these plan and procedure documents as well as summary-level spreadsheets, PSPS scripts, and similar documentation where yearly initiative specific progress is tracked and recorded. This documentation, coupled with management direction, provides sufficient guidance for staff to fulfill the relevant initiative requirements.

[77] Risk Management Program, 2017.
[78] BVES Risk Register 2021-2-18 WMP.xlsx
[79] BVERS INC EmergencyResponsePlan Rev1.pdf
[80] BVES INC PSPS Procedures Rev1.pdf

3.3.10. Category #10: Stakeholder Cooperation and Community Engagement

There are two relevant formal written QA/QC documents for the initiatives contained in this WMP target category. The BVES emergency response plan[81] and PSPS procedures[82] provide relatively detailed methodology for public outreach, engagement, and communication with respect to PSPS and emergency response. BVES performance in this target category is governed primarily by these plan and procedure documents as well as a summary-level Word file where yearly initiative specific progress (e.g., outreach communication methods) is tracked and recorded.[83] This documentation, coupled with management direction, provides sufficient guidance for staff to fulfill the relevant initiative requirements.

[81] BVERS INC EmergencyResponsePlan Rev1.pdf
[82] BVES INC PSPS Procedures Rev1.pdf
[83] WMP - PSPS word doc community Engagement.docx

4. CONCLUSION

In general, S&L found BVES to be responsive, knowledgeable, transparent, and cooperative during the WMP compliance assessment. BVES did not hesitate to have one or several SMEs attend virtual interviews and respond to clarifications with short notice. The most common obstacle encountered by S&L evaluators during the BVES assessment was documentation availability and turnaround times, especially for more granular quality records and inspection reports; however, considering that this WMP assessment is the first of its kind—coupled with BVES being a smaller utility with less staff and resource availability—much of the delay in documentation submittals was to be expected. Overall, the S&L assessment team found that BVES genuinely supported the S&L WMP review efforts to the best of their ability.

With respect to the WMP activity completion, of the 90 total initiatives, S&L found that BVES complied with their plan and met the indicated target goals for all but 8 of their WMP initiatives. Even in instances where BVES did not meet the WMP initiative goal, the intent of the initiative or substantial completion was often achieved. The most common reason initiatives objectives were not met was a quantitative goal that was either overestimated (often due to a lack prior experience or unforeseen schedule delays) or modifications made during 2020 for cause. Additionally, BVES, due to its size, assets, or resources, did not have specific target goals or relevant activity for 18 of the 90 2020 initiatives, and an additional 10 initiatives were not applicable to BVES, as the utility does not have any transmission lines. Assessment of the no goal initiatives was somewhat challenging, as determining WMP compliance was subjective. A general lack of granular documentation and quality records was also identified across many of the WMP initiatives; therefore, a review of the S&L-selected sample records was often limited or impossible. Overall, the S&L assessment team found that BVES endeavored to comply with each of the WMP initiative goals to the best of their ability and appears to be proactive in the process of improving compliance-related documentation, record controls, staffing, and expanding capabilities for future WMP activities.

Regarding verification of funding for each WMP activity, S&L was able to obtain and compare budgets and actuals for each activity defined by WSD, considering capex spending separate from opex spending. S&L identified 7 tasks for which actual capex spending was less than what had been budgeted and 12 tasks for which actual opex spending was less than had been budgeted. This report documents the explanations provided by BVES for each instance of capex or opex underspending relative to budget.

The principal reasons for capex underspending on specific tasks were errors in cost estimation for certain aspects of the work (i.e., the budgets overestimated the costs), coverage of certain expenses by UCSD (which had not been expected at time of budgeting), and delays in certain activities (pushing some spending

beyond 2020). Additionally, BVES discovered that some objectives could be fulfilled under other budgets, such as examination of composite poles in the “Grid Design and System Hardening” task.

With respect to the QA/QC programs for WMP compliance, early in this assessment, BVES informed S&L that they typically do not have formal written QA/QC procedures, processes, or programs for controlling most of their WMP activities. S&L SME interviews and review of available documentation confirmed that, with the exceptions of the vegetation management, risk management, and emergency preparedness programs, the lack of written programs was prevalent throughout all 10 target categories. Despite this, S&L also found that BVES utilization of informal procedures and team communication to govern and control the majority of their WMP compliance activities was relatively effective; however, it was also clear that detailed written programs and processes would provide enhanced quality controls as well as a more granular understanding of how WMP initiative-specific documents and records are generated, maintained, and updated as well as what specific quality records (or lower tier documents) may be used to populate them. BVES indicated that improvements and additions for QA/QC programs for WMP activities are planned for future years.

Based on the S&L compliance assessment of the WMP initiative activities discussed in Section 3, the relevant deficiencies are summarized in Table 4-1.

Table 4-1 — Findings Summary

SOW Category	2020 Initiative Number	Initiative Name	Finding	Detail on Finding
WMP Activity Completion	5.3.2.1	Advanced weather monitoring and weather stations	BVES did not meet their WMP quantitative goal for this initiative.	BVES planned to install 10 weather stations but were only able to install 8 due to mitigating circumstances. BVES did not meet their 2020 goal.
WMP Activity Completion	5.3.3.1	Capacitor maintenance and replacement program	BVES did not meet their WMP quantitative goal for this initiative.	The review of documentation provided by BVES found no evidence of capacitor inspections, maintenance, or replacement being performed.
Verification of QA/QC Program	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.

SOW Category	2020 Initiative Number	Initiative Name	Finding	Detail on Finding
WMP Activity Completion	5.3.3.11	Mitigation of impact on customers and other residents affected during PSPS event	BVES did not meet their 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; however, S&L was not able to discuss the initiative with BVES to confirm that no planning or development activities occurred in 2020.
WMP Activity Completion	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.
WMP Activity Completion	5.3.3.12	Other corrective action (Radford Line covered conductor replacement project)	BVES did not meet their 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 their goal of 2.82 circuit miles in 2020.
WMP Activity Completion	5.3.4.7	LiDAR inspections of distribution electric lines and equipment	BVES did not meet their WMP quantitative goal for this initiative.	The WMP target was two LiDAR inspections. One was performed due BVES having a better understanding of LiDAR surveys and the data included.
Verification of QA/QC Program	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.

SOW Category	2020 Initiative Number	Initiative Name	Finding	Detail on Finding
Verification of QA/QC Program	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.
WMP Activity Completion	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.
WMP Activity Completion	5.3.7.4	Tracking and analysis of near miss data	BVES did not meet their 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.” Bear Valley Electric Service does not have a specific wildfire mitigation data governance initiative focused on tracking and analysis of nr-miss data that maps to the tracking and level of detail required.
WMP Activity Completion	5.3.3.19	Safety and technical upgrades to Palomino Substation	BVES did not meet their 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.
WMP Activity Completion	5.3.4.4	Infrared inspections of distribution electric lines and equipment	BVES did not meet their 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.

SOW Category	2020 Initiative Number	Initiative Name	Finding	Detail on Finding
Verification of QA/QC Program	--	--	With few exceptions, BVES does not have formal written QA/QC programs for controlling WMP activities.	While not having formal written programs and procedures is not necessarily a problem by itself, this can introduce quality risks where there is employee turnover, new employees, larger work forces, and more complex initiatives.
Verification of QA/QC Program	--	--	For most initiatives, BVES did not appear to have a formal written process to control and maintain quality records and other documentation.	The general lack of a formal document control system meant summary-level spreadsheets and similar high-level documents were often used to manage initiative activities while granular documentation (e.g., regular inspection) was unavailable.
WMP Activity Completion	--	--	Many of the BVES qualitative initiative goals/targets were not well defined or measurable with clearly scheduled milestone dates.	--
Funding Verification	--	--	7 tasks actual spending was below the budget projections for capex	The details for the spend below the budget is provided in Table 3-2.
Funding Verification	--	--	12 tasks actual spending was below the budget projections for opex	The details for the spend below the budget is provided in Table 3-4.
WMP Activity Completion	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 no vegetation issues in the majority of their reviews; however, in some instances, the field personnel noted vegetation not meeting typical industry best practices for clearances, although still met the GO 95 requirements.
WMP Activity Completion	5.3.3.6	Distribution pole replacement and reinforcement, including with composite poles (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 therefore could not be reviewed.

5. APPENDIX

5.1. COPY OF CPUC SCOPE OF WORK LETTER

PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298

April 21, 2021

SUBJECT: Final Independent Evaluator Scope of Work for the Review of Compliance with 2020 WMP

Pursuant to the Wildfire Safety Division's (WSD's) Final Guidance on Engagement of Independent Evaluators, dated April 6, 2021 (Guidance Document), the WSD has reviewed and considered the scope of work proposals received for the 2020 WMP Independent Evaluator (IE) review. In addition to this final scope, the WSD notes that pursuant to PUC Section 8386.3(c)(2)(B)(i), "The engaged independent evaluator shall consult with, and operate under the direction of, the Wildfire Safety Division of the commission."
Consistent with Resolution WSD-012 and the April 6th Guidance Document, the scope of the IE review is to verify that the electrical corporation has complied with its 2020 WMP, validate and describe the electrical corporation's quality assurance (QA)/quality control (QC) programs in place for Wildfire Mitigation Plan (WMP) compliance, and determination of whether the electrical corporation failed to fund any activities in its WMP. The final scope does not explicitly include verifying compliance with other CPUC General Orders (e.g., GO 95) or other CPUC regulations or decisions. However, if the IE, during the course of their work, identifies any GO 95 non-compliance, then the IE shall document and report such issues in the IE Final Annual Report on Compliance. If the IE identifies any issues that pose an imminent safety threat (e.g., broken crossarm, broken anchor guy, etc.), then the IE shall immediately notify the electrical corporation of such conditions. The IE shall have access to all documents, tools, and systems necessary to complete its review.

Finally, as discussed in the April 6th Guidance Document, given the condensed timing of this inaugural IE compliance review process, finalization of this Final IE Scope of Work was expedited and will be applicable for engagement of IEs in 2021 only. The WSD looks forward to further collaborating on refinement of the IE process moving forward.

1. Compliance Standard to be Applied:

Pursuant to P.U. Code Section 8386.3(c)(2)(B)(i), the IE is "to review and assess the electrical corporation's compliance with its plan." The IE shall verify that the electrical corporation has complied with the goals set forth for each of the initiatives and/or activities contained in its approved WMP or as modified pursuant to the electrical

corporation's submittals through the Change Order process.[1] To effectively execute this scope, at a minimum, the IE shall utilize the approved WMP, remedial compliance plan (RCP), quarterly reports (QRs), change orders, quarterly initiative updates (QIUs), and quarterly advice letters (QALs). In addition, the IE shall determine whether the electrical corporation "failed to fund any activities included in its plan."[2] Finally, in accordance with the April 6th Guidance Document, the IE shall validate and describe the electrical corporation's QA/QC programs in place for WMP compliance.

2. WMP Activities To Be Reviewed:

The IE shall review and verify compliance for all WMP activities that have specific quantifiable or qualitative performance goals/targets set forth in the IOU's 2020 WMP. If the IE is not able to review all the electrical corporation's WMP activities, then the IE shall consult with WSD on which activities to prioritize. It is imperative that the IE avoid any conflicts of interest. Accordingly, the IE shall abide by all conflict of interest parameters as laid out in Request for Qualification (RFQ) number 20NC0427 and shall have an ongoing obligation to inform the WSD of any new or changing circumstances that may raise conflict of interest questions or concerns.

3. Approaches to Verifying Compliance:

a. Large Volume Quantifiable Goal/Target - Field Verifiable:

Examples:

- **SCE**: SH-1 Covered Conductor, SH-3 Fire Resistant Poles, SH-4 Fuses, VM-3 Expanded Clearances Legacy Facilities, SA-1 Weather Stations, SH-10 Remediate Tree Attachments
- **PG&E**: : 5.3.3.17.4 - C.6 Non-Exempt Surge Arrester Replacement Program, 5.3.5.15 - E.1 - EVM line miles, 5.3.3.7 - C.12 - Expulsion Fuse Replacement (non-exempt equipment), 5.3.3.8-1 - C.2 - Distribution Sectionalizing (automated devices), 5.3.2.1.3 - B.10 - Weather Stations, 5.3.3.17.2-1 - C.10 System Hardening (line miles), 5.3.2.1.4 - B.9 - HD Cameras Deployment, 5.3.3.18.1-1 - C.7 - System Protection deploy DCD (reclosers)
- **SDG&E**: 5.3.3.7 – Expulsion Fuse Replacement, 5.3.3.10 – Hotline Clamps, 5.3.3.3 – Bare Conductor Hardening, 5.3.5.9 – Enhanced Vegetation Management, 5.3.5.20 – Pole Brushing

- Utilities shall provide a complete list of all large volume (i.e., greater than or equal to 100 units) 2020 WMP initiatives with quantifiable goals/targets that are field verifiable and were conducted in 2020 (e.g., list of all structures where covered conductor was installed, list of all weather stations installed, etc.).

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[1] In WSD's Wildfire Mitigation Plan Compliance Process, dated November 2020 and approved in Resolution WSD-012, WSD states that one of their objectives is "assessing electrical corporations' implementation of initiatives identified in their approved WMPs." The footnote goes on to state: "An initiative is a commitment pertaining to a wildfire risk mitigation activity in an electrical corporation's WMP used to measure performance and compliance." See page 3.

[2] P.U.C. §8386.3(c)(2)(B)(i).

- The complete list shall include the quantitative goal/target for each initiative and be attached to the executed scope of work between the utility and IE.

- The IE shall request additional documentation, as needed, to support execution of its field verification.
- The IE shall select a sample to field verify.
  - The WSD shall have final approval over the sample chosen.
- IE shall conduct field verification to confirm installation, work quality, and adherence to applicable utility protocols and standards for such work.
- Based upon field verification of sample, the IE shall extrapolate results to determine if the utility has met the performance goal specified in its WMP.
- The IE's findings and assessment of utility compliance with these activities shall be included in the Final IE Annual Report on Compliance.

b. Large Volume Quantifiable Goal/Target – Not Field Verifiable:

Examples:

- **SCE**: IN-1 Ground Inspections, IN-6 Aerial Inspections, SH-12.1 Distribution Remediation, SH-12.2 Transmission Remediation, VM-1 Hazard Tree Inspections, VM-2 Pole Brush Clearing, VM-5 QC Inspections, IN-3 Infrared Inspection Distribution
- **PG&E**: 5.3.3.8-2 - C.4 -Transmission Line Evaluation for PSPS Scoping, 5.3.4.2-1 - D.3 - Transmission HFTD Inspections (structures), 5.3.4.15 - D.4 - Substation HFTD Inspections (substations), 5.3.4.1 - D.2 - Distribution HFTD Inspections (poles)
- **SDG&E**: 5.3.3.11.1 – Resiliency Grant Programs, 5.3.4.1 – 5-Year Detailed Inspections, 5.3.4.9.2 – Drone Assessments of Distribution Infrastructure, 5.3.5.2 – Tree Trimming

- Utilities shall provide a complete list of all large volume (i.e., greater than or equal to 100 units) 2020 WMP activities with quantifiable goals/targets that are not field verifiable and were conducted in 2020 related to the specific goal (e.g., list of all field inspections conducted, list of all Hazard Tree inspections performed, etc.).
  - The complete list shall include the quantitative goal/target for each activity and be attached to the executed scope of work between the utility and IE.
- The IE shall select a sample to seek additional documentation to verify that the activity was completed and executed in accordance with all applicable work procedures and protocols (e.g., inspection reports, work orders, contractor invoices, etc.).
  - The WSD shall have final approval over the sample chosen.
- The IE shall review additional documentation provided and conduct subject matter expert (SME) interviews, as needed, to verify performance of activities and adherence to applicable procedures and protocols.

- Based on sample validation results, the IE shall extrapolate results to determine if the utility has met the performance goal specified in its WMP.
- The IE's findings and assessment of utility compliance with these activities shall be included in the Final IE Annual Report on Compliance.

c. Small (less than 100 items) Volume Quantifiable Goal/Target:

Examples:

- **SCE**: SH-5 RAR/RCS Installation, PSPS-2 Community Resource Centers, OP-3 UAS Operators, DEP-12 Community Meetings, OP-2 Hire additional staff, SA-3 Install HPCC,
- **PG&E**: 5.3.2.2.8 - Distribution Arcing Fault Signature Library, 5.3.3.8-6 - I.6 - Microgrids for PSPS Mitigation (operationalized units), 5.3.2.2.7 - Line Sensor Devices, 5.3.3.17.2-2 - C.11 Butte County Rebuild (UG de-energized miles), 5.3.3.8-3 - C.1 - SCADA Transmission Switching (switches)
- **SDG&E**: 5.3.2.1 – Advanced Weather Station Integration, 5.3.3.1 – SCADA Capacitors, 5.3.3.8.1 – PSPS Sectionalizing Enhancements, 5.3.3.8.2 – Microgrids, 5.3.3.18.1 – Distribution Communications Reliability Improvements

- Utilities shall provide a complete list of all small volume (i.e., less than 100 units) 2020 WMP activities with quantifiable goals/targets that were conducted in 2020 related to the specific goal (e.g., list of all community meetings conducted, list of additional staff hired, etc.).
  - The complete list shall include the quantitative goal/target for each activity and be attached to the executed scope of work between the utility and IE.
- The IE shall request additional documentation (e.g., community meeting notices, contracts for Community Resource Centers, invoices for HPCC) needed to verify that the activity was completed/performed and executed in accordance with all applicable work procedures and protocols.
- The IE shall request SME interviews, as needed, to verify completion/performance of activities and adherence to applicable procedures and protocols.
- The IE shall perform data/documentation review and conduct SME interviews, as needed, to verify completion of activity.
- Based on review, the IE shall determine if the utility has met the performance goal specified in its WMP.
- The IE's findings and assessment of utility compliance with these activities shall be included in the Final IE Annual Report on Compliance.

d. Qualitative Goal/Target:

Examples:

- **SCE**: PSPS-1 De-Energization Notifications, PSPS-2 Customer Resiliency Equipment Incentive Program, RA-1 Implement WRRM module, OP-1 Review Annual System Operating Bulletin 322, SA-4 Implement FireCast and FireSim, AT-3 Alternative Technology Evaluations, AT-1 Meter Alarming Downed Energized Conductor, Dep-2 Hold Internal Training De-energization protocols
- **PG&E**: 5.3.2.4 - Forecast of a fire risk index, fire potential index, or similar, 5.3.2.6 - Weather forecasting and estimating impacts on electric lines and equipment, 5.3.2.7 - Wildfire Safety Operations Center (WSOC), 5.3.3.8-4 - C.9 - System Hardening Criteria Refinement (Dist.), 5.3.3.11 - Mitigation of impact on customers and other residents affected during PSPS event, 5.3.3.17.5 - Transmission Line System Hardening Overview and Strategy, 5.3.3.18.1-2 - Increased Protection Sensitivity, 5.3.6.4 - F.2 - Protocols for PSPS Re-Energization, 5.3.10.4 - Forest service and fuel reduction cooperation and joint roadmap
- **SDG&E**: 5.3.1.1 – WRRM-Ops, 5.3.2.4.1 – Fire Science and Climate Adaptation Department, 5.3.6.6.1 – Aviation Firefighting Program, 5.3.8.1 – Asset Management, 5.3.8.4.1 – Wildfire Mitigation Personnel, 5.3.9.4.7 – Emergency Management Operations

- Utilities shall provide a complete list of all 2020 WMP activities with no quantifiable goals/targets that were conducted in 2020.
  - The complete list shall include the qualitative goal/target for each activity and be attached to the executed scope of work between the utility and IE.
- The IE shall request documentation needed to verify the activity was completed as stated in the WMP.
- The IE shall request SME interviews, as needed, to verify completion of activity.
- The IE shall perform document review and conduct SME interviews, as needed, to verify that the performance goal was met.
- The IE's findings and assessment of utility compliance with these activities shall be included in the Final IE Annual Report on Compliance.

4. Approach to Verifying Funding of Each Activity:

- The IE shall use all available financial audit reports and memorandum accounts, including but not limited to Wildfire Mitigation Plan Memorandum Account (WMPMA), Fire Risk Mitigation Memorandum Account (FRMMA), Fire Hazard Prevention Memorandum Account (FHPMA), and Catastrophic Event Memorandum Account (CEMA), the 2020 WMP, associated quarterly reports, the 2021 WMP Update, and other publicly available information to determine the electrical corporation's financial projections for each of its WMP activities.
- The IE shall request documentation and conduct SME interviews, as needed, to supplement publicly available information and determine financial projections for WMP activities.

- For all 2020 WMP activities where the utility actually spent less than 100 percent of its forecasted spend, as determined above, the IE shall document each instance.
- For all instances in which 100 percent of forecasted spend was not spent, the IE shall also request and document the utility's explanation for the underfunding.
- All instances of 2020 WMP activity underfunding and utility's explanations for such shall be included in the Final IE Annual Report on Compliance.

5. Approach to Validating QA/QC Programs for WMP Compliance:

- Utilities shall provide a complete listing and description of their existing QA/QC programs in place to ensure compliance with WMPs.
    - This list shall be attached to the executed scope of work between the utility and IE.
- The IE shall request any additional documentation needed to validate the utility's QA/QC programs.
- The IE shall request SME interviews, as needed, to validate the QA/QC programs.
- The IE shall review all available documentation and/or interviews to validate utility QA/QC programs.
- For all in-scope WMP activities, the IE shall include a validation and detailed description of utility QA/QC programs for WMP compliance in the Final IE Annual Report on Compliance.

6. Data Requests and Interview Requests:

All data and interview requests shall be submitted in writing to the point of contact for each IOU. The utility and IE shall clearly identify, by name, title, email, and phone number, their preferred points of contact. All data request responses shall be provided to the IE's point of contact in writing and in a searchable format (e.g., Excel) or other formats as agreed upon by the IE and the IOU.

The standard turnaround time for data requests shall be three (3) business days, but the IE and IOU shall work cooperatively to provide data in a shorter time where achievable. The IOU shall extend best efforts to meet the three (3) business day goal, realizing some requests will not be completed within this timeframe. All instances of requests being responded to after three (3) business days shall be documented by the IE and included in the Final IE Annual Report on Compliance.

All communications containing exchanges of information and/or documents material to the IE's evaluation of WMP compliance between the IE and the electrical corporation shall include a copy to a designated WSD representative and the following inbox: WSDCompliance@cpuc.ca.gov.

Appropriate confidentiality protocols shall be maintained between the IE and utility, when relevant, consistent with California law and the CPUC's longstanding confidentiality rules.

7. Schedule:

Date	Activity
April XX, 2021	IE to commence review
April XX – June 30, 2021	IE to provide WSD weekly updates on progress
June 11, 2021	Draft report submitted to WSD for review
June XX, 2021	WSD to provide IE comments on draft report
June 30, 2021	Final IE Annual Report on Compliance to be published by WSD and served on parties

For questions regarding the information provided herein, please contact Koko Tomassian, Program Manager of the Wildfire Safety Division, at Koko.Tomassian@cpuc.ca.gov, with a copy to WSDCompliance@cpuc.ca.gov.

Sincerely,

Koko Tomassian, P.E., Program Manager
Compliance Branch, Wildfire Safety Division
California Public Utilities Commission

5.2. LIST OF SME INTERVIEWS AND ATTENDEES

Date	Subject	BVES Attendees
5/19/2021	Bear Valley and Sargent & Lundy – Ind Eval WMP Compliance kick-off meeting	Paul Marconi, Jon Pecchia, Tom Cho, Jared Hennen, Michelle Sayegh, Kimberly Hauer, Nguyen Quan
5/25/2021	S&L WMP Compliance Review – Request for Information	Jeff Barber, Jon Pecchia, Jared Hennen, Paul Marconi, Tom Cho
5/27/2021	WMP Request for Information Status and S&L Questions	Jeff Barber, Jon Pecchia, Jared Hennen, Paul Marconi, Tom Cho
5/28/2021	WMP Review of Asset Locations	Jeff Barber, Jon Pecchia, Jared Hennen, Paul Marconi, Tom Cho
6/7/2021	S&L Interview Meeting Requests – WMP	Jeff Barber, Paul Marconi, Tom Cho
6/8/2021	BVES WMP Funding Review	Paul Marconi
6/9/2021	BVES Inspection Discussion – Distribution	Anthony Rivera
6/9/2021	BVES Inspection Discussion – Substations	Daniel Hotchkiss
6/11/2021	BVES/S&L WMP Questions	Paul Marconi, Jon Pecchia, Tom Cho, Jeff Barber, Anthony Rivera

5.3. LIST OF BVES CATEGORIZATION OF INTIATIVES

5.3.1. BVES Provided Categorization of Initiatives

Large Volume Quantifiable Goal/Target – Field Verifiable

- 5.3.3. Covered Conductor (34.5 KV) (3. Covered conductor installation)
- 5.3.3. Pole Loading Assessment and Remediation Program (6. Distribution pole replacement and reinforcement, including with composite poles)
- 5.3.3. Conventional Fuse Replacement (7. Expulsion fuse replacement)
- 5.3.3. Tree Attachment Removal (20. Other/not listed (TARP)
- 5.3.3. Radford Line Covered Conductor Replacement Project (12. Other corrective action)
- 5.3.5. Vegetation management to achieve clearances around electric lines and equipment

Large Volume Quantifiable Goal/Target – Not Field Verifiable

- 5.3.4. Ground Patrol Inspection
- 5.3.4. Second Ground Patrol
- 5.3.4. Electrical Preventative Maintenance Program
- 5.3.4. LIDAR Inspection

Small (less than 100 items) Volume Quantifiable Goal/Target

- 5.3.2. BVES-Owned Weather Stations (Advanced weather monitoring and weather stations)
- 5.3.2. Remote Monitoring (via Camera) (Continuous monitoring sensors)
- 5.3.3. Covered Conductor Replacement Pilot Program
- 5.3.3. Safety and Technical Upgrades of Palomino Substation (18. Other/not listed)
- 5.3.3. Safety and Technical Upgrades of Pineknot (19. Other/not listed)
- 5.3.3. Grid Automation (9. Installation of system automation equipment)
- 5.3.3. Evacuation Route Hardening (Pilot Project) (21. Other/not listed)
- 5.3.6. High-Speed Clearing (Automatic Reclosers (AR) and Fast-Curve Sensitive Relay Settings)(1. Automatic recloser operations)

Qualitative Goal/Target:

- 5.3.2. Weather forecasting (Weather forecasting and estimating impacts on electric lines and equipment)
- 5.3.2. GIS-based applications (Other/not listed)

- 5.3.3. Covered Conductor Wrap Pilot Program
- 5.3.5. Forester Consulting Services
- 5.3.6. Operational Considerations and Special Work Procedures
- 5.3.6. Wildfire Infrastructure Protection Teams (3. Personnel work procedures and training in conditions of elevated fire risk)
- 5.3.6. PSPS events and mitigation of PSPS impacts
- 5.3.7. Data Taxonomy and Schema Alignment
- 5.3.7. GIS Data Collection & Sharing (1. Centralized repository for data)

5.3.2. S&L Modified Categorization of Initiatives

Large Volume Quantifiable Goal/Target – Field Verifiable

- 5.3.3.3 Covered conductor installation
- 5.3.3.6 Distribution pole replacement and reinforcement, including with composite poles (Pole replacement and reinforcement)
- 5.3.3.7 Expulsion fuse replacement
- 5.3.3.12 Other corrective action (Radford Line Covered Conductor Replacement Project)
- 5.3.3.13 Pole loading infrastructure hardening and replacement program based on pole loading assessment program
- 5.3.5.20 Vegetation management to achieve clearances around electric lines and equipment (Pole brushing)
- 5.3.3.18 Removal of tree attachments in HFTD

Large Volume Quantifiable Goal/Target – Not Field Verifiable

- 5.3.4.1 Detailed inspections of distribution electric lines and equipment
- 5.3.4.7 LiDAR inspections of distribution electric lines and equipment
- 5.3.4.9 Other discretionary inspection of distribution electric lines and equipment, beyond inspections mandated by rules and regulations
- 5.3.4.11 Patrol inspections of distribution electric lines and equipment – CMP
- 5.3.5.2 Detailed inspections of vegetation around distribution electric lines and equipment
- 5.3.5.7 LiDAR inspections of vegetation around distribution electric lines and equipment (vegetation management technology)
- 5.3.5.9 Other discretionary inspection of vegetation around distribution electric lines and equipment, beyond inspections mandated by rules and regulations (enhanced inspections, patrols, and trims)

- 5.3.5.11 Patrol inspections of vegetation around distribution electric lines and equipment

Small (less than 100 items) Volume Quantifiable Goal/Target

- 5.3.2.1 Advanced weather monitoring and weather stations
- 5.3.2.2 Continuous monitoring sensors
- 5.3.3.9 Installation of system automation equipment
- 5.3.3.14 Transformers maintenance and replacement
- 5.3.4.13 Pole loading assessment program to determine safety factor
- 5.3.4.15 Substation inspections
- 5.3.5.17 Substation inspections
- 5.3.3.19 Safety and technical upgrades to Palomino Substation
- 5.3.3.20 Evacuation route-hardening pilot program

Qualitative Goal/Target:

- 5.3.2.4 Forecast of a fire risk index, fire potential index, or similar
- 5.3.2.5 Personnel monitoring areas of electric lines and equipment in elevated fire risk conditions
- 5.3.2.6 Weather forecasting and estimating impacts on electric lines and equipment
- 5.3.3.1 Capacitor maintenance and replacement program
- 5.3.3.2 Circuit breaker maintenance and installation to de- energize lines upon detecting a fault
- 5.3.3.5 Crossarm maintenance, repair, and replacement
- 5.3.3.10 Maintenance, repair, and replacement of connectors, including hotline clamps
- 5.3.3.11 Mitigation of impact on customers and other residents affected during PSPS event
- 5.3.4.3 Improvement of inspections
- 5.3.4.14 Quality assurance/quality control of inspections
- 5.3.5.1 Additional efforts to manage community and environmental impacts
- 5.3.5.4 Emergency response vegetation management due to red flag warning or other urgent conditions
- 5.3.5.5 Fuel management and reduction of “slash” from vegetation management activities improvements of inspections
- 5.3.5.6 Improvement of inspections
- 5.3.5.13 Quality assurance/quality control of vegetation inspections

- 5.3.5.14 Recruiting and training of vegetation management personnel
- 5.3.5.15 Remediation of at-risk species
- 5.3.5.16 Removal and remediation of trees with strike potential to electric lines and equipment (hazard tree removal and right tree-right place)
- 5.3.5.18 Substation vegetation management
- 5.3.5.19 Vegetation inventory system
- 5.3.6.1 Automatic recloser operations
- 5.3.6.3 Personnel work procedures and training in conditions of elevated fire risk (other special work procedures)
- 5.3.6.4 Protocols for PSPS re-energization
- 5.3.6.5 PSPS events and mitigation of PSPS impacts
- 5.3.7.1 Centralized repository for data
- 5.3.7.3 Documentation and disclosure of wildfire-related data and algorithms
- 5.3.7.4 Tracking and analysis of near miss data
- 5.3.8.1 Allocation methodology development and application (asset management)
- 5.3.8.2 Risk reduction scenario development and analysis
- 5.3.8.3 Risk spend efficiency analysis
- 5.3.9.1 Adequate and trained workforce for service restoration
- 5.3.9.2 Community outreach, public awareness, and communications efforts
- 5.3.9.3 Customer support in emergencies
- 5.3.9.4 Disaster and emergency preparedness plan
- 5.3.9.5 Preparedness and planning for service restoration (Mutual assistance and contractors)
- 5.3.9.6 Protocols in place to learn from wildfire events
- 5.3.10.1 Community engagement
- 5.3.10.3 Cooperation with suppression agencies

5.4. SAMPLE SIZE BY INITIATIVE ACTIVITY

Table 5-1 — Sample Sizes by Initiative Activity

WMP Initiative Category	WMP Initiative #	WMP Initiative Activity	BVES 2020 Qty Target Units	BVES 2020 Annual Qty Target	BVES 2020 Qty Actual Progress (Q1-4)	Physical Inspection Sample Size	Target Desktop Inspection
Situational Awareness and Forecasting	5.3.2.1	Advanced weather monitoring and weather stations	Number of weather stations installed	10	8	4	4
Situational Awareness and Forecasting	5.3.2.2	Continuous monitoring sensors (HD camera)	Number of HD cameras installed	1	1	0	1
Situational Awareness and Forecasting	5.3.2.3	Fault indicators for detecting faults on electric lines and equipment	NA	0	0	0	0
Grid Design and System Hardening	5.3.3.3	Covered conductor installation	Circuit miles hardened	4.5	7.8	1	1
Grid Design and System Hardening	5.3.3.6	Distribution pole replacement and reinforcement, including with composite poles (pole replacement and reinforcement)	Number of poles replaced or remediated as a result of failed assessments	200	213	46	46
Grid Design and System Hardening	5.3.3.7	Expulsion fuse replacement	Number of fuses replaced	2000	2001	69	138
Grid Design and System Hardening	5.3.3.9	Installation of system automation equipment	Percent of target milestones reached	25	25	1 mi	1 mi
Grid Design and System Hardening	5.3.3.12	Other corrective action (Radford Line covered conductor replacement project)	Circuit miles hardened	2.82	2.82	0	1

WMP Initiative Category	WMP Initiative #	WMP Initiative Activity	BVES 2020 Qty Target Units	BVES 2020 Annual Qty Target	BVES 2020 Qty Actual Progress (Q1-4)	Physical Inspection Sample Size	Target Desktop Inspection
Grid Design and System Hardening	5.3.3.13	Pole loading infrastructure hardening and replacement program based on pole loading assessment program	Number of poles assessed	1600	191	22	22
Grid Design and System Hardening	5.3.3.14	Transformers maintenance and replacement	N/A	0	0	0	0
Grid Design and System Hardening	5.3.3.16	Undergrounding of electric lines and/or equipment	N/A	0	0	0	0
Asset Management and Inspections	5.3.4.1	Detailed inspections of distribution electric lines and equipment	Percent of scheduled circuits completed	100	100	0	20
Asset Management and Inspections	5.3.4.7	LiDAR inspections of distribution electric lines and equipment	Circuit miles surveyed	211	211	0	42
Asset Management and Inspections	5.3.4.11	Other discretionary inspection of distribution electric lines and equipment, beyond inspections mandated by rules and regulations	Circuit miles inspected	211	211	0	42
Asset Management and Inspections	5.3.4.11	Patrol inspections of distribution electric lines and equipment – CMP	Circuit miles inspected	211	0	0	0
Asset Management and Inspections	5.3.4.13	Pole loading assessment program to determine safety factor	Number of poles assessed	1600	191	0	38

WMP Initiative Category	WMP Initiative #	WMP Initiative Activity	BVES 2020 Qty Target Units	BVES 2020 Annual Qty Target	BVES 2020 Qty Actual Progress (Q1-4)	Physical Inspection Sample Size	Target Desktop Inspection
Asset Management and Inspections	5.3.4.15	Substation inspections	Number of monthly substations inspected	144	144	0	29
Vegetation Management and Inspections	5.3.5.2	Detailed inspections of vegetation around distribution electric lines and equipment	Percent of scheduled circuits completed	100	100	0	20
Vegetation Management and Inspections	5.3.5.7	LiDAR inspections of vegetation around distribution electric lines and equipment (vegetation management technology)	Circuit miles surveyed	211	211	0	42
Vegetation Management and Inspections	5.3.5.9	Other discretionary inspection of vegetation around distribution electric lines and equipment, beyond inspections mandated by rules and regulations (enhanced inspections, patrols, and trims)	Circuit miles inspected	0	0	0	0
Vegetation Management and Inspections	5.3.5.11	Patrol inspections of vegetation around distribution electric lines and equipment	Percent complete	100	100	0	20
Vegetation Management and Inspections	5.3.5.17	Substation inspections	Number of substations inspected	144	144	0	29
Vegetation Management and Inspections	5.3.5.18	Substation vegetation management	N/A	0	0	0	0

WMP Initiative Category	WMP Initiative #	WMP Initiative Activity	BVES 2020 Qty Target Units	BVES 2020 Annual Qty Target	BVES 2020 Qty Actual Progress (Q1-4)	Physical Inspection Sample Size	Target Desktop Inspection
Vegetation Management and Inspections	5.3.5.20	Vegetation management to achieve clearances around electric lines and equipment (pole brushing)	N/A	0	0	0	0
Grid Design and System Hardening	5.3.3.18	Removal of tree attachments in HFTD	--	1207	430	39	86
Grid Design and System Hardening	5.3.3.19	Safety and technical upgrades to Palomino Substation	--	1	1	1	1
Grid Design and System Hardening	5.3.3.20	Evacuation route-hardening pilot program	--		3	3	3

5.5. S&L RFI AND CLARIFICATIONS

Sargent Lundy
Request for Information

Bear Valley Electric Service - Wildfire Mitigation Plan - Compliance Review
Sargent & Lundy Request for Information
File Update: June 15, 2021, for report

Update No.	Notes and Comments	Status
1	Data Request first submitted 5/19/2021	Closed
2	Update submitted 5/20/2021, 8:41pm. Items due 5/25/2021. Direction below	Closed
2.1	1. Please identify the most applicable BVES contact or subject matter expert for each item (column E)? Provided by BVES 5/24/2021	Closed
2.2	2. Please identify the approach as indicated in the final statement of work in column F (i.e. Large volume quantifiable and field verifiable, Large volume quantifiable and not field verifiable, small volume quantifiable, and qualitative). We identified the	Closed
2.3	3. Please provide the documents associated in columns G through H, except for column K, for each initiative if marked with an X. If you think an item is not applicable, please let us know. Once we have selected the sample of projects or assets for	Closed
3	Update submitted 5/27/2021, 8:00pm. Items due 6/2/2021. Direction below	Closed
3.1	1. Several clarifications have been added on the "Clarifications" sheet	Closed
4	Update submitted on the clarifications tab only on 5/28/2021, 4:45pm. Items due	Closed
5	Updates submitted on the RFI Matrix and Clarifications Sheets on 6/1/2021, 10:00pm	Closed
5.1	1. One item on the RFI Matrix tab remains partially open. Please see notes in the	Closed
5.2	2. Clarifications have been updated and closed as needed. Please see follow up	Closed
6	Updates submitted on the Specific Data Requests and Clarifications Sheets on 6/3/2021,	Closed
6.1	1. Additional Financial documents requested based on the CPUC scope of work	Closed
6.2	2. Additional clarifications submitted on the clarifications tab.	Closed
7	New Questions submitted on the Clarifications Sheet on 6/5/2021, 12pm. Items due	Closed
7.1	1. Additional clarifications submitted on the clarifications tab.	Closed
8	New Questions submitted on the Clarifications Sheet, RFI Matrix was closed, and additional documents requested on the Specific Data Requests sheet on 6/7/2021, 6pm.	Closed
8.1	1. Twenty one Additional clarifications submitted on the clarifications tab.	Closed
8.1	1. Two Additional documents requested on the Specific Data Requests tab.	Closed
9	New Question submitted on the Clarifications Sheet and additional documents requested on the Specific Data Requests sheet on 6/8/2021, 9:15am. Items due 6/10/2021	Closed
9.1	1. Additional clarifications submitted on the clarifications tab.	Closed
9.2	1. Additional documents requested on the Specific Data Requests tab and referenced	Closed
10	New Question submitted on the Clarifications Sheet and additional documents requested on the Specific Data Requests sheet on 6/8/2021, 9:45am. Items due 6/11/2021	Open
10.1	1. Additional clarifications submitted on the clarifications tab with reference to the	Open
10.2	1. Additional documents requested on the Specific Data Requests tab and referenced	Open

						Funding Review		Examples - Supporting Evidence To Be Determined and Furnished by BVES				
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1	5.3.1.1	A summarized risk map that shows the overall ignition probability and estimated wildfire consequence along the electric lines and equipment	Risk Assessment and Mapping	Paul Marconi	Qualitative	None specified.	0	NA				
2	5.3.1.2	Climate-driven risk map and modelling based on various relevant weather scenarios	Risk Assessment and Mapping	Paul Marconi	Qualitative	None specified.	0	NA				
3	5.3.1.3	Ignition probability mapping showing the probability of ignition along the electric lines and equipment	Risk Assessment and Mapping	Paul Marconi	Qualitative	None specified.	0	NA				
4	5.3.1.4	Initiative mapping and estimation of wildfire and PSPS risk-reduction impact	Risk Assessment and Mapping	Paul Marconi	Qualitative	None specified.	18172	RM Program Manual Final 06-2017	BVES Risk Register 2021-2-18 WMP			
5	5.3.1.5	Match drop simulations showing the potential wildfire consequence of ignitions that occur along the electric lines and equipment	Risk Assessment and Mapping	Paul Marconi	Qualitative	None specified.	0	NA				
6	5.3.1.6	Weather-driven risk map and modelling based on various relevant weather scenarios	Risk Assessment and Mapping	Paul Marconi	Qualitative	None specified.	0	NA				
7	5.3.2.1	Advanced weather monitoring and weather stations	Situational Awareness and Forecasting	Tom Chou	Small Volume	18864	16712	NA	BVES Asset-Advanced weather monitoring and weather stations			

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8	5.3.2.2	Continuous monitoring sensors	Situational Awareness and Forecasting	Paul Marconi	Small Volume	250000	15529	NA	BVES Asset-Continuous monitoring sensors			
9	5.3.2.3	Fault indicators for detecting faults on electric lines and equipment	Situational Awareness and Forecasting	Tom Chou	Small Volume	None specified.	0	NA		X		
10	5.3.2.4	Forecast of a fire risk index, fire potential index, or similar	Situational Awareness and Forecasting	Paul Marconi	Qualitative	22500	11000	C#3000-000-Weather Consulting & C#3000-000-Weather Consulting-Fully Executed & Sample Fire Threat Weather Forecast				X
11	5.3.2.5	Personnel monitoring areas of electric lines and equipment in elevated fire risk conditions	Situational Awareness and Forecasting	Jeff Barber	Qualitative	None specified.	9976	BVES INC PSPS Procedures Rev1				PSPS Drill Script
12	5.3.2.6	Weather forecasting and estimating impacts on electric lines and equipment	Situational Awareness and Forecasting	Paul Marconi	Qualitative	22500	11000	C#3000-000-Weather Consulting & C#3000-000-Weather Consulting-Fully Executed & Sample Fire Threat Weather Forecast			BVES INC PSPS Procedures Rev1	PSPS Drill Script

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13	5.3.3.1	Capacitor maintenance and replacement program	Grid Design and System Hardening	Jeff Barber	Qualitative	None specified.	9429	NA	BVES Asset-Capacitor maintenance and replacement program	NA		NA
14	5.3.3.2	Circuit breaker maintenance and installation to de- energize lines upon detecting a fault	Grid Design and System Hardening	Jeff Barber	Qualitative	None specified.	47955	NA	BVES Asset-Circuit breaker maintenance and installation to de-energize lines upon detecting a fault	NA		NA
15	5.3.3.3	Covered conductor installation	Grid Design and System Hardening	Tom Chou	L. Volume - Field	1832933	3057088.3	BVES Asset-Covered Conductor Installation- Shay Design	BVES Asset-Covered Conductor Installation (001)	NA	Comment: BVES is unsure what is desired here? S&L: N/A	None available. Training conducted by manufacturer could be verified by interviews. S&L:Provide Training record that it was completed - e.g. email, sign-in sheet, course description
16	5.3.3.4	Covered conductor maintenance	Grid Design and System Hardening	Jeff Barber	Qualitative	None specified.	0	NA	NA	NA		NA
17	5.3.3.5	Crossarm maintenance, repair, and replacement	Grid Design and System Hardening	Jeff Barber	Qualitative	None specified.	28079	NA	NA	NA		NA

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18	5.3.3.6	Distribution pole replacement and reinforcement, including with composite poles (Pole replacement and reinforcement)	Grid Design and System Hardening	Paul Marconi	L. Volume - Field	925000	436915	NA	BVES Asset-Distribution pole replacement and reinforcement, including with composite poles	NA		NA
19	5.3.3.7	Expulsion fuse replacement	Grid Design and System Hardening	Tom Chou	L. Volume - Field	2600000	3559483.7	NA	BVES Asset-Expulsion Fuse Replacement ELF scans & BVES Asset-Expulsion Fuse Replacement KMZ File ELF Fuses & • BVES Asset-Expulsion Fuse Replacement-Tripsavers	NA		NA
20	5.3.3.8	Grid topology improvements to mitigate or reduce PSPS events	Grid Design and System Hardening	Paul Marconi	NA	None specified.	0	NA	NA	NA		NA
21	5.3.3.9	Installation of system automation equipment	Grid Design and System Hardening	Tom Chou	Small Volume	2753159	3061238	BVES Asset-Installation of system automation equipment-Construction_Design Drawings for Fiber & FLISR (Sample)	BVES Asset-Installation of system automation equipment	NA		NA
22	5.3.3.10	Maintenance, repair, and replacement of connectors, including hotline clamps	Grid Design and System Hardening	Jeff Barber	Qualitative	None specified.	14144	NA	NA	NA	NA	NA
23	5.3.3.11	Mitigation of impact on customers and other residents affected during PSPS event	Grid Design and System Hardening	Paul Marconi	Qualitative	None specified.	0	NA				NA

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24	5.3.3.12	Other corrective action (Radford Line Covered Conductor Replacement Project)	Grid Design and System Hardening	Tom Chou	L. Volume - Field	156236	62333.94	**BVES Asset-Other corrective action (Radford Line Covered Conductor Replacement Project) Design Package**	NA			NA
25	5.3.3.13	Pole loading infrastructure hardening and replacement program based on pole loading assessment program	Grid Design and System Hardening	Tom Chou	L. Volume - Field	2321923.5	2419421.6	BVES Asset-Pole loading infrastructure hardening and replacement program based on pole loading assessment program	BVES Asset-Pole loading infrastructure hardening and replacement program based on pole loading assessment program	BVES Asset-Pole loading infrastructure hardening & replacement program based on PL assessment program–sample report		NA
26	5.3.3.14	Transformers maintenance and replacement	Grid Design and System Hardening	Paul Marconi	Small Volume	310000	314097.12	BVES Asset-Transformers maintenance and replacement Sample Work Order from 2020 where we replaced a transformer	BVES Asset-Transformers maintenance and replacement	NA		NA
27	5.3.3.15	Transmission tower maintenance and replacement	Grid Design and System Hardening	NA	NA	None specified.	0	NA	NA	NA	NA	NA
28	5.3.3.16	Undergrounding of electric lines and/or equipment	Grid Design and System Hardening	Paul Marconi	Small Volume	105000	165545.79	BVES Asset-Undergrounding of electric lines and_or equipment-Design	BVES Asset-Undergrounding of electric lines and_or equipment	NA		NA
29	5.3.3.17	Updates to grid topology to minimize risk of ignition in HFTDs	Grid Design and System Hardening	Paul Marconi	NA	None specified.	0	NA				
30	5.3.4.1	Detailed inspections of distribution electric lines and equipment	Asset Management and Inspections	Paul Marconi	L. Volume - Field	None specified.	14672	BVES GO 165 Compliance Plan	2020 Inspections-Patrols by Quarter	BVES Example Detailed Inspection Record_2020		NA

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No.	**Tgt#**	**WMP Program Target / Intitiative**	Category / Subject / Program	BVES Contact	Approach	**2020 Budget**	**2020 Actual Spend**	**Plan, Procedure and/or Standard**	**List of Projects and/or Assets and Status**	**Example Reports or Designs[1]**	**Review of Initiative Tool**	**Information on Training Plans and Records**
31	5.3.4.2	Detailed inspections of transmission electric lines and equipment	Asset Management and Inspections	NA	NA	None specified.	0	NA	NA	NA		NA
32	5.3.4.3	Improvement of inspections	Asset Management and Inspections	Paul Marconi	Qualitative	None specified.	9086	NA	NA	NA		NA
33	5.3.4.4	Infrared inspections of distribution electric lines and equipment	Asset Management and Inspections	Paul Marconi	NA	None specified.	0	NA				NA
34	5.3.4.5	Infrared inspections of transmission electric lines and equipment	Asset Management and Inspections	NA	NA	None specified.	0	NA				
35	5.3.4.6	Intrusive pole inspections	Asset Management and Inspections	Tom Chou	NA	None specified.	0	NA	NA	NA		NA
36	5.3.4.7	LiDAR inspections of distribution electric lines and equipment	Asset Management and Inspections	Paul Marconi	L. Volume - Field	120000	105060	LiDAR Inspection Contract-C#3003-000 & LiDAR Inspection Exhibit A-C#3003-000 & LiDAR Inspection Exhibit B-C#3003-000	LiDAR EncroachmentPoints2020 & LiDAR Encroachments2020.kmz & LiDAR Zip File	NA		NA
37	5.3.4.8	LiDAR inspections of transmission electric lines and equipment	Asset Management and Inspections	NA	NA	None specified.	0	NA	NA	NA		NA
38	5.3.4.9	Other discretionary inspection of distribution electric lines and equipment, beyond inspections mandated by rules and regulations	Asset Management and Inspections	Paul Marconi	L. Volume - No Field	45000	38585	Ground Patrol Contract-C#3004-000 & Ground Patrol General Exhibit A-C#3004-000 & Ground Patrol General Exhibit B-C#3004-000	DRG Ground Patrol_BV_2020Inspections	NA		NA
39	5.3.4.10	Other discretionary inspection of transmission electric lines and equipment, beyond inspections mandated by rules and regulations	Asset Management and Inspections	NA	NA	None specified.	0	NA	NA	NA		NA

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40	5.3.4.11	Patrol inspections of distribution electric lines and equipment - CMP	Asset Management and Inspections	Paul Marconi	L. Volume - Field	None specified.	34236	BVES GO 165 Compliance Plan	2020 Inspections-Patrols by Quarter	BVES Example Patrol Inspection Record_2020		NA
41	5.3.4.12	Patrol inspections of transmission electric lines and equipment	Asset Management and Inspections	NA	NA	None specified.	0	NA	NA	NA		NA
42	5.3.4.13	Pole loading assessment program to determine safety factor	Asset Management and Inspections	Paul Marconi	Small Volume	122206.5	127337.98	BVES Asset-Pole loading infrastructure hardening and replacement program based on pole loading assessment program	BVES Asset-Pole loading infrastructure hardening and replacement program based on pole loading assessment program	NA		NA
43	5.3.4.14	Quality assurance / quality control of inspections	Asset Management and Inspections	Paul Marconi	Qualitative	None specified.	9086	NA				NA
44	5.3.4.15	Substation inspections	Asset Management and Inspections	Jeff Barber	Small Volume	None specified.	159985.73	OpsPlanningPolicyProcedures-15 Rev O	SubstationLocations	G.O.174 Lake May 2020 & G.O.174 Maple May 2020 & G.O.174 Maltby May 2020 & G.O.174 Meadow Oct. 2020 & G.O.174 Pineknot November 2020		NA
45	5.3.5.1	Additional efforts to manage community and environmental impacts	Vegetation Management and Inspections	Paul Marconi	Qualitative	None specified.	22715	NA	NA	NA		NA
46	5.3.5.2	Detailed inspections of vegetation around distribution electric lines and equipment	Vegetation Management and Inspections	Paul Marconi	L. Volume - Field	None specified.	14672	BVES GO 165 Compliance Plan	2020 Inspections-Patrols by Quarter	BVES Example Detailed Inspection Record_2020		NA
47	5.3.5.3	Detailed inspections of vegetation around transmission electric lines and equipment	Vegetation Management and Inspections	NA	NA	None specified.	0	NA	NA	NA		NA
48	5.3.5.4	Emergency response vegetation management due to red flag warning or other urgent conditions	Vegetation Management and Inspections	Paul Marconi	Qualitative	104000	82826.04	C#3095-000 Vegetation Management	NA	NA		NA
49	5.3.5.5	Fuel management and reduction of “slash” from vegetation management activities improvements of inspections	Vegetation Management and Inspections	Paul Marconi	Qualitative	130000	103532.55	C#3095-000 Vegetation Management	NA	NA		NA

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50	5.3.5.6	Improvement of inspections	Vegetation Management and Inspections	Paul Marconi	Qualitative	None specified.	9086	NA	NA	NA		NA
51	5.3.5.7	LiDAR inspections of vegetation around distribution electric lines and equipment (vegetation management technology)	Vegetation Management and Inspections	Paul Marconi	L. Volume - Field	120000	105060	LiDAR Inspection Contract-C#3003-000 & LiDAR Inspection Exhibit A-C#3003-000 & LiDAR Inspection Exhibit B-C#3003-000	LiDAR EncroachmentPoints2020 & LiDAR Encroachments2020.kmz & LiDAR Zip File	NA		NA
52	5.3.5.8	LiDAR inspections for vegetation around transmission electric lines and equipment	Vegetation Management and Inspections	NA	NA	None specified.	0	NA	NA	NA		NA
53	5.3.5.9	Other discretionary inspection of vegetation around distribution electric lines and equipment, beyond inspections mandated by rules and regulations (Enhanced inspections, patrols, and trims)	Vegetation Management and Inspections	Paul Marconi	L. Volume - No Field	45000	38585	Ground Patrol Contract-C#3004-000 & Ground Patrol General Exhibit A-C#3004-000 & Ground Patrol General Exhibit B-C#3004-000	DRG Ground Patrol_BV_2020Inspections	NA		NA
54	5.3.5.10	Other discretionary inspection of vegetation around transmission electric lines and equipment, beyond inspections mandated by rules and regulations	Vegetation Management and Inspections	NA	NA	None specified.	0	NA		NA		NA
55	5.3.5.11	Patrol inspections of vegetation around distribution electric lines and equipment	Vegetation Management and Inspections	Paul Marconi	L. Volume - Field	None specified.	34236	BVES GO 165 Compliance Plan	2020 Inspections-Patrols by Quarter	BVES Example Patrol Inspection Record_2020		NA
56	5.3.5.12	Patrol inspections of vegetation around transmission electric lines and equipment	Vegetation Management and Inspections	NA	NA	None specified.	0	NA	NA	NA		NA

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57	5.3.5.13	Quality assurance / quality control of vegetation inspections	Vegetation Management and Inspections	Paul Marconi	Qualitative	None specified.	9086	Vegetation Management and Vegetation Management QC Programs Policy and Procedures Rev0	Tree Trimming QC 2020	VegQC	Comment: BVES is unsure what is desired here? S&L: N/A	NA
58	5.3.5.14	Recruiting and training of vegetation management personnel	Vegetation Management and Inspections	Paul Marconi	Qualitative	None specified.	9086	NA		NA		NA
59	5.3.5.15	Remediation of at-risk species	Vegetation Management and Inspections	Paul Marconi	Qualitative	130000	103532.55	C#3095-000 Vegetation Management & Vegetation Management and Vegetation Management QC Programs Policy and Procedures Rev0	2020VegRecord	NA		NA
60	5.3.5.16	Removal and remediation of trees with strike potential to electric lines and equipment (Hazard tree removal and Right Tree-Right Place)	Vegetation Management and Inspections	Paul Marconi	Qualitative	130000	103532.55	C#3095-000 Vegetation Management & Vegetation Management and Vegetation Management QC Programs Policy and Procedures Rev0	2020VegRecord	NA		NA
61	5.3.5.17	Substation inspections	Vegetation Management and Inspections	Jeff Barber	Small Volume	None specified.	6429.4595	OpsPlanningPolicyProcedures-15 Rev O	SubstationLocations	G.O.174 Lake May 2020 & G.O.174 Maple May 2020 & G.O.174 Maltby May 2020 & G.O.174 Meadow Oct. 2020 & G.O.174 Pineknot November 2020		NA

						Funding Review		Examples - Supporting Evidence To Be Determined and Furnished by BVES				
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62	5.3.5.18	Substation vegetation management	Vegetation Management and Inspections	Paul Marconi	Small Volume	None specified.	9410	Substation VM Task Order Example	Weed abatement by contractor at the substations listed: Fawnskin Lake Maltby Meadow Moonridge Weed abatement by BVES substation personnel at the substations listed: Bear City Maltby Pineknot Village			NA
63	5.3.5.19	Vegetation inventory system	Vegetation Management and Inspections	Paul Marconi	Qualitative	130000	103532.55	C#3095-000 Vegetation Management	2020VegRecord	2020VegRecord	NA	NA
64	5.3.5.20	Vegetation management to achieve clearances around electric lines and equipment (Pole brushing)	Vegetation Management and Inspections	Paul Marconi	L. Volume - Field	2054000	1635814.3	C#3095-000 Vegetation Management & Vegetation Management and Vegetation Management QC Programs Policy and Procedures Rev0	2020VegRecord	NA		NA
65	5.3.6.1	Automatic recloser operations	Grid operations and protocols	Paul Marconi	Qualitative	None specified.	9086	BVES INC PSPS Procedures Rev1				NA
66	5.3.6.2	Crew accompanying ignition prevention and suppression resources and services	Grid operations and protocols	Paul Marconi	Qualitative	None specified.	0	NA				NA

						Funding Review		Examples - Supporting Evidence To Be Determined and Furnished by BVES				
No.	**Tgt#**	**WMP Program Target / Intitiative**	Category / Subject / Program	BVES Contact	Approach	**2020 Budget**	**2020 Actual Spend**	**Plan, Procedure and/or Standard**	**List of Projects and/or Assets and Status**	**Example Reports or Designs[1]**	**Review of Initiative Tool**	**Information on Training Plans and Records**
67	5.3.6.3	Personnel work procedures and training in conditions of elevated fire risk (Other special work procedures)	Grid operations and protocols	Paul Marconi	Qualitative	None specified.	9086	BVES INC PSPS Procedures Rev1 & BVERS INC EmergencyResponsePlan Rev1				NA
68	5.3.6.4	Protocols for PSPS re- energization	Grid operations and protocols	Paul Marconi	Qualitative	None specified.	9086	BVES INC PSPS Procedures Rev1 & BVERS INC EmergencyResponsePlan Rev1		NA	NA	
69	5.3.6.5	PSPS events and mitigation of PSPS impacts	Grid operations and protocols	Paul Marconi	Qualitative	42000	9086	BVES INC PSPS Procedures Rev1 & BVERS INC EmergencyResponsePlan Rev1			NA	
70	5.3.6.6	Stationed and on-call ignition prevention and suppression resources and services	Grid operations and protocols	Paul Marconi	NA	None specified.	0	NA				
71	5.3.7.1	Centralized repository for data	Data governance	Tom Chou	Qualitative	46382	96294.45	BVES GIS_BV_20210503_V2.gdb			NA	
72	5.3.7.2	Collaborative research on utility ignition and/or wildfire	Data governance	Paul Marconi	NA	None specified.	0	NA				
73	5.3.7.3	Documentation and disclosure of wildfire-related data and algorithms	Data governance	Paul Marconi	Qualitative	None specified.	9086	NA		NA		
74	5.3.7.4	Tracking and analysis of near miss data	Data governance	Paul Marconi	Qualitative	None specified.	9086	NA				NA
75	5.3.8.1	Allocation methodology development and application (Asset management)	Resource allocation methodology	Paul Marconi	Qualitative	None specified.	9086	RM Program Manual Final 06-2017	BVES Risk Register 2021-2-18 WMP		NA	
76	5.3.8.2	Risk reduction scenario development and analysis	Resource allocation methodology	Paul Marconi	Qualitative	None specified.	9086	RM Program Manual Final 06-2017	BVES Risk Register 2021-2-18 WMP		NA	

						Funding Review		Examples - Supporting Evidence To Be Determined and Furnished by BVES				
No.	**Tgt#**	**WMP Program Target / Intitiative**	Category / Subject / Program	BVES Contact	Approach	**2020 Budget**	**2020 Actual Spend**	**Plan, Procedure and/or Standard**	**List of Projects and/or Assets and Status**	**Example Reports or Designs[1]**	**Review of Initiative Tool**	**Information on Training Plans and Records**
77	5.3.8.3	Risk spend efficiency analysis	Resource allocation methodology	Paul Marconi	Qualitative	None specified.	9086	RM Program Manual Final 06-2017	BVES Risk Register 2021-2-18 WMP			
78	5.3.9.1	Adequate and trained workforce for service restoration	Emergency planning and preparedness	Paul Marconi	Qualitative	None specified.	9086					PSPS Drill Script
79	5.3.9.2	Community outreach, public awareness, and communications efforts	Emergency planning and preparedness	Sean Matlock	Qualitative	None specified.	9008.66	BVES INC PSPS Procedures Rev1 & BVERS INC EmergencyResponsePlan Rev1	WMP - PSPS word doc community Engagement	2020 WMP-PSPS Outreach Tracking 052821, AFN BVES_ Post Card 2020, BVE Text Communication Ad 5.0625 x 7.1875 PRESS, BVE20 Wildfire Mitigation Plan Brochure d2, BVES, INC. WMP Ad 5.0625 x 7.8125 PRESS, BVES_ FB Two-Way Emergency Text Communications (2),PSPS 5-1 to 12-31, Text Communications 5-1 to 12-31, Two-way emergency text communications video, Wildfire Mitigation 5-1 to		
80	5.3.9.3	Customer support in emergencies	Emergency planning and preparedness	Sean Matlock	Qualitative	None specified.	26009.91	BVES INC PSPS Procedures Rev1 & BVERS INC EmergencyResponsePlan Rev1				PSPS Drill Script
81	5.3.9.4	Disaster and emergency preparedness plan	Emergency planning and preparedness	Paul Marconi	Qualitative	None specified.	9086	BVERS INC EmergencyResponsePlan Rev1				PSPS Drill Script
82	5.3.9.5	Preparedness and planning for service restoration (Mutual assistance and contractors)	Emergency planning and preparedness	Paul Marconi	Qualitative	None specified.	9086	BVES INC PSPS Procedures Rev1 & BVERS INC EmergencyResponsePlan Rev1				PSPS Drill Script

						Funding Review		Examples - Supporting Evidence To Be Determined and Furnished by BVES				
No.	**Tgt#**	**WMP Program Target / Intitiative**	Category / Subject / Program	BVES Contact	Approach	**2020 Budget**	**2020 Actual Spend**	**Plan, Procedure and/or Standard**	**List of Projects and/or Assets and Status**	**Example Reports or Designs[1]**	**Review of Initiative Tool**	**Information on Training Plans and Records**
83	5.3.9.6	Protocols in place to learn from wildfire events	Emergency planning and preparedness	Paul Marconi	Qualitative	None specified.	9086	BVERS INC EmergencyResponsePlan Rev1				Evaluation of Annual Exercise Using the Procedures Set Forth in the BVES Emergency Response and PSPS Plans
84	5.3.10.1	Community engagement	Stakeholder cooperation and community engagement	Sean Matlock	Qualitative	None specified.	14941	BVES INC PSPS Procedures Rev1 & BVERS INC EmergencyResponsePlan Rev1	WMP - PSPS word doc community Engagement			NA
85	5.3.10.2	Cooperation and best practice sharing with agencies outside California	Stakeholder cooperation and community engagement	Paul Marconi	NA	None specified.	0	NA				NA
86	5.3.10.3	Cooperation with suppression agencies	Stakeholder cooperation and community engagement	Paul Marconi	Qualitative	None specified.	9086	NA				
87	5.3.10.4	Forest service and fuel reduction cooperation and joint roadmap	Stakeholder cooperation and community engagement	Jared Hennen	NA	None specified.	0	NA				NA
88	5.3.3.18	Removal of Tree Attachments in HFTD	Grid Design and System Hardening	Tom Chou	L. Volume - Field	732,018	1453218.1	BVES Asset-Removal of Tree Attachments in HFTD – sample work package	BVES Asset-Removal of Tree Attachments in HFTD	BVES Asset-Removal of Tree Attachments in HFTD – sample report		
89	5.3.3.19	Safety and Technical Upgrades to Palomino Substation	Grid Design and System Hardening	Tom Chou	Small Volume	1587675	669711.57	BVES Asset-Safety and Technical Upgrades to Palomino Substation Design Package	BVES Asset-Safety and Technical Upgrades to Palomino Substation			
90	5.3.3.20	Evacuation Route Hardening Pilot Program	Grid Design and System Hardening	Tom Chou	Small Volume	200000	11020	BVES Example Fire Mesh Install Instructions	BVES Asset-Evacuation Route Hardening Pilot Program			

						Funding Review		Examples - Supporting Evidence To Be Determined and Furnished by BVES				
No.	**Tgt#**	**WMP Program Target / Intitiative**	Category / Subject / Program	BVES Contact	Approach	**2020 Budget**	**2020 Actual Spend**	**Plan, Procedure and/or Standard**	**List of Projects and/or Assets and Status**	**Example Reports or Designs[1]**	**Review of Initiative Tool**	**Information on Training Plans and Records**

Bear Valley Electric Service - Wildfire Mitigation Plan - Compliance Review
Sargent & Lundy Document / Data Request Tracking Log
For Data provided through June 11, 2021

No.	Document	Document Name	FileType	Date Requested	Date Due	Date Received	Status
1	2020 Q1 QAL	BVES_2020 Q1 QAL_20210503 Final	pdf	5/19/2021	5/24/2021	5/20/2021	Closed
2	2020 Q1 QAL	BVES_2020 Q1 QAL_20210503 Final	pptx	5/19/2021	5/24/2021	5/20/2021	Closed
3	2020 Q4 QAL	BVES_2020 Q4 QAL_20210209	pptx	5/19/2021	5/24/2021	5/20/2021	Closed
4	2020 Q4 QAL	BVES_2020_Q4_QAL_20210319_Supplemental	pdf	5/19/2021	5/24/2021	5/20/2021	Closed
5	Complete listing, description, and support files of existing QA/QC programs in place to ensure compliance with WMPs	Vegetation Management and Vegetation Management QC Programs Policy and Procedures Rev0, VM QC Sample Deer Canyon Rd bet Siskiyou and Sand Canyon, VegQC Moonridge, VegQC, Work Packet Review Sample	email	5/25/2021	5/28/2021	5/27/2021	Closed
6	GIS or KMZ file of WMP projects or assets	BVES GIS_BV_20210503_V2.gdb	zip	5/25/2021	5/28/2021	5/27/2021	Closed
7	Design Standards	Multiple - See email 6/1/2021 from Tom Chou		6/1/2021	6/4/2021	6/1/2021	Closed
8	Wildfire Mitigation Plan Memorandum Account (WMPMA)	WMPMA-BVE fire mitigation 68552.xlsx	.xlsx	6/3/2021	6/8/2021	6/5/2021	Closed
9	Fire Risk Mitigation Memorandum Account (FRMMA)	Not Applicable		6/3/2021	6/8/2021	6/5/2021	Closed
10	Fire Hazard Prevention Memorandum Account (FHPMA)	FHPMA-BVE fire prevention 1670.41 (subledger 68388 and 25947) thru 04.30.2021	.xlsx	6/3/2021	6/8/2021	6/5/2021	Closed
11	Catastrophic Event Memorandum Account (CEMA)	Not Applicable		6/3/2021	6/8/2021	6/5/2021	Closed
12	"BVES Intrusive Inspection Parameters" document referenced in "BVES GO 165 Compliance Plan.pdf"	Email from Tom Chou 6/9/2021 8:23am		6/7/2021	6/10/2021	6/9/2021	Closed

Sargent Lundy Request For Information
BVES Wildfire Mitigation Plan Compliance Review

No.	Document	Document Name	FileType	Date Requested	Date Due	Date Received	Status
13	As indicated in "OpsPlanningPolicyProcedures-15 Rev O.docx," please provide the 2020 quarterly reports on the VM program developed by the BVES Wildfire Mitigation & Reliability Engineer.	Not Applicable		6/7/2021	6/10/2021	6/9/2021	Closed
14	Pole Replacement and Hardening pole WO Packages for the specified structures on sheet "Pole"	PL Docs 060921.zip and "PL Docs 061021.zip"	zip	6/8/2021	6/10/2021	6/10/2021	Closed
15	Please provide the patrol or detailed inspection records for the items on sheet "Inspections"	N/A		6/8/2021	6/11/2021	6/11/2021	Closed
16	Please provide the work packages if work packages exist for the resolution of the inspection findings for items on sheet "inspections".			6/8/2021	6/11/2021		Open
17	Please provide work packages or other records of completion for the items on sheet "TARP".	Partial "TARP Docs 060921.zip"		6/8/2021	6/11/2021	6/11/2021	Partial
17	Please provide work packages or other records of completion for the items on sheet "TARP" for items 37-82.	Partial "TARP Docs 061021.zip"		6/9/2021	6/14/2021	6/11/2021	Partial

Bear Valley Electric Service - Wildfire Mitigation Plan - Compliance Review
Sargent & Lundy Request for Information
Update: June 15, 2021

#	Subject	Clarification/Request	Status	Date Requested	Date Due	Date Closed	BVES Comments	S&L Follow-Up Comments (As Needed)	BVES Follow-Up Comments
1	5.3.2.1 Weather	The asset spreadsheet provided ("BVES Asset-Advanced weather monitoring and weather stations.xlsx") does not appear to indicate dates of installation or which weather stations are new / existing. Please clarify which weather stations were installed in 2020.	Closed	5/27/2021		6/1/2021	5/30/2021: Installed in 2019: Boulder, Sunrise, Pioneer, NorthShore, Lagonita, Goldmine, Erwin, Clubview, Garstin and Radford Installed in 2020: Baldwin, Big Bear Dam, Fawnskin, Division, Surgarloaf, Paradise, Erwin Lake, and Lake Williams. Installed in 2021: 2N10 Future install: Bertha Peak		
2	5.3.3.1 Capacitor maintenance and replacement program	The asset spreadsheet provided ("BVES Asset-Capacitor maintenance and replacement program.xlsx) does not appear to indicate dates of installation, maintenance, status update, etc. Please clarify any capacitor maintenance and replacement activities that occurred in 2020.	Closed	5/27/2021		6/4/2021	5/30/2021: No capacitor replacements occurred in 2020. The capacitor data that we provided are existing capacitor location that been in the BVES, Inc. system for a long time. Currenly BVES did not have planned any replacements until possibly 2023 following a system study for optimal capacitor placement. BVES, Inc. plans to evaluate our capacitor in 2022 and make changes as needed. Routine inspection maintenance is performed during Detailed and Patrol Inspections of overhead faciltiies. Additionally, when capacitor banks are operated (placed on service or removed from service) they are checked.	6/1/2021: Please provide any available documentation clarifying how BVES controls and tracks capacitor maintenance and replacement. For example, the spreadsheet provided ("BVES Asset-Capacitor maintenance and replacement program.xlsx") provides a list of 25 capacitors with locations and various status. However, no dates of last maintenance, next maintenance, inspections cycles, or information regarding the indicated "OFFLINE" or "DAMAGED" capacitors. Also, please provide any records or other documentation for the routine detailed inspections and operation inspections of the capacitors.	BVES uses Milsoft GIS to track BVES assets out in the field. BVES currently doesn't have a spreadsheet to track capacitor maintenance and replacement. Moving forward when BVES evaluate capacitor placements and replacements, BVES will start a tracking with a spreadsheet.
3	5.3.3.13 Pole loading infrastructure hardening and replacement program based on pole loading assessment program	The asset documentation ("BVES Asset-Pole loading infrastructure hardening and replacement program based on pole loading assessment program.xlsx") appears to provides fuse information as well. Does this information address expulsion fuses?	Closed	5/27/2021		6/1/2021	5/30/2021: The contractor performing the Pole Loading Assessment and Replacement Program was required to replace expulsion fuses with the boundaries of their work area.		
4	5.3.3.14 Transformers maintenance and replacement	The asset spreadsheet provided ("BVES Asset-Transformers maintenance and replacement.xlsx") does not appear to indicate dates of transformer maintenance, replacement, or status updates. Please clarify which transformers were maintained / replaced in 2020.	Closed	5/27/2021		6/1/2021	5/30/2021: Please see uploaded updated spreadsheet. File name: **BVES Asset-Transformers maintenance and replacement (001)**		
5	5.3.3.16 Undergrounding of electric lines and/or equipment	Asset documentation ("BVES Asset-Undergrounding of electric lines and_or equipment.jpg") includes a high level google image of the area where an underground line was run. However, no other detailed information, dates, specific poles numbers, etc., appears to have been included. Please clarify how this information is tracked and/or recorded.	Closed	5/27/2021		6/1/2021	5/30/2021: Please see uploaded as-built drawing. File name: **BVES Asset-Undergrounding of electric lines and_or equipment-Design**		
6	5.3.4.7 LiDAR inspections of distribution electric lines and equipment	The asset spreadsheet provided ("LiDAR EncroachmentPoints2020.xlsx") does not appear to indicate dates of inspection. Please clarify inspections performed in 2020.	Closed	5/27/2021		6/4/2021	5/30/2021: The document provided was for 2020 LiDAR survey results. Are you looking for the specific dates of the survey?	6/1/2021: Though not essential, specific dates would be useful (if available) to establish an inspection timeline. Was the 2020 LiDAR spreadsheet generated from a larger database?	LiDAR survey was completed on July 29, 2021. GIS file containing raw data uploaded ("LiDAR.gdb").
7	5.3.4.13 Patrol inspections of distribution electric lines and equipment - CMP	The example inspection record provided in "BVES Example Patrol Inspection Record_2020.pdf" does not appear to provide space for comments, observations, or specific items examined. Please clarify how these comments, observations, or deficiencies are documented (when necessary).	Closed	5/27/2021		6/4/2021	5/30/2021: The patrol inspection records are completed and filed for the purpose of documenting the occurrence of the patrol inspection and do not include space for comments, observations, or specific items examined, due to the nature of the inspection type. Any actionable findings discovered during a patrol inspection are recorded within the Inspection Findings records, independent of the patrol inspection record itself. Any such findings are ranked and responded to in accordance with GO 95, GO 165, and BVES policies.	6/1/2021: Thank you for the clarification. If possible, please provide any relevant 2020 Inspection Findings records for review. Additionally, please clarify how BVES controls inspection finding responses (e.g., quality program, quality documents) and meets the relevant California GO 95, GO 165, and other standards / code requirements. Please provide any relevant BVES policies for review as well.	Patrol inspection findings are documented by date discovered and whether it was found during a "patrol" or "detailed inspection". The Field Inspector updates inspection findings as corrected once they are resolved. The field Inspector uses GO-95, GO-128, or other applicable standards to ensure resolution of the finding was appropriate. BVES does not have a written QA/QC program as of yet.

#	Subject	Clarification/Request	Status	Date Requested	Date Due	Date Closed	BVES Comments	S&L Follow-Up Comments (As Needed)	BVES Follow-Up Comments
8	5.3.4.17 Substation inspections	Substations records provide locations but no other information regarding inspections or status.	Closed	5/27/2021		6/4/2021	5/30/2021: BVES conducts monthly inspections of the substations per the inspection procedure provided and GO-174. 5 sample inspection reports were also provided. We will upload additional documents. BVES has in place a substation maintenance and testing plan that is conducted every three years.	6/1/2021: Thank you for the clarification. Will the BVES substation maintenance and testing plan be submitted for review as well?	6/4/2021: The BVES Substation Operations tentative testing and maintenance schedule is as follows: -2020; Fawnskin, Lake and Maltby (completed) -2021; Bear City, Maple and Bear Mountain -2022; Division, Meadow, Village, Moonridge -2023; Pineknot, Palomino, Summit Uploaded the following reports: Hampton Tedder ES12626 BVES FAWNSKIN REPORT REV 2020, Hampton Tedder ES12627 BVE Fawnskin Sub Report Ground 2020, Hampton Tedder ES12628 BVES LAKE 4KV REPORT REV 2020, Hampton Tedder ES12628 BVES LAKE 4KV Temp Recloser Report Rev-, and Hampton Tedder ES12702 MALTBY REPORT 2020
9	5.3.5.13 Quality assurance / quality control of vegetation inspections	The initiative documentation ("Vegetation Management and Vegetation Management QC Programs Policy and Procedures Rev0.pdf") provided appears to indicate that regular vegetation managemet reports are generated. Please provide any relevant reports for 2020.	Closed	5/27/2021		6/1/2021	5/30/2021: Vegetation Management reports was a new requirement in 2021. No reports exist for 2020.		
10	5.3.5.17 Substation inspections	The asset document provided ("SubstationLocations.docx") indicates substation locations but does not appear to address information regarding inspections or status. Please provide any relevant inspections and status reports for 2020.	Closed	5/27/2021		6/4/2021	5/30/2021: BVES conducts monthly inspections of the substations per the inspection procedure provided and GO-174. 5 sample inspection reports were also provided. We will upload additional documents. BVES has in place a substation maintenance and testing plan that is conducted every three years.	6/1/2021: Thank you for the clarification. Will the BVES substation maintenance and testing plan be submitted for review as well?	6/4/2021: The BVES Substation Operations tentative testing and maintenance schedule is as follows: -2020; Fawnskin, Lake and Maltby (completed) -2021; Bear City, Maple and Bear Mountain -2022; Division, Meadow, Village, Moonridge -2023; Pineknot, Palomino, Summit Uploaded the following reports: Hampton Tedder ES12626 BVES FAWNSKIN REPORT REV 2020, Hampton Tedder ES12627 BVE Fawnskin Sub Report Ground 2020, Hampton Tedder ES12628 BVES LAKE 4KV REPORT REV 2020, Hampton Tedder ES12628 BVES LAKE 4KV Temp Recloser Report Rev-, and Hampton Tedder ES12702 MALTBY REPORT 2020
11	5.3.5.18 Substation vegetation management	Please provide any inspection records or BVES procedures that govern third party vegetation management work. Does the vegetation contractor cover substations?	Closed	5/27/2021		6/1/2021	5/30/2021: We do not have any records or procedures that govern third party vegetation management work at substations. The substation vegetation management contractor works under the direct supervision of BVES qualified staff. Contractors are not allowed in substations without BVES Qualified Electrical Worker direct supervision. Only the substations that were listed required vegetation abatement.		
12	5.3.7.1 Centralized repository for data	Can you please confirm if the GIS file ("BVES GIS_BV_20210503_V2.gdb") contains asset information for all of BVES?	Closed	5/27/2021		6/1/2021	5/30/2021: Yes, it contain BVES, Inc. asset information. Mid March of 2021 we hired our GIS personal, he has currently been updating our assest in our GIS system. Unfortunately, the GIS position was vacant for about 6 months (September 2020 to March 2021). In addition, before 2020 due to not having GIS position our GIS system had gaps in updating it. BVES is on track to having its GIS up to date.		
13	5.3.9.1 Adequate and trained workforce for service restoration	Please provide any training plans and/or procedures in place for this initiative and please clarify how service restoration training is performed.	Closed	5/27/2021		6/1/2021	5/30/2021: BVES conducted a PSPS drill on June 26, 2021. Drill record has been uploaded "PSPS Drill Script" and "Evaluation of Annual Exercise Using the Procedures Set Forth in the BVES Emergency Response and PSPS Plans". BVERS INC EmergencyResponsePlan Rev1 and BVES INC PSPS Procedures Rev1 have been uploaded to the document site. These provide detailed instructions on service restoration.		
14	5.3.9.6 Protocols in place to learn from wildfire events	Please clarify if there are any written protocols, training, procedures, and/or guidelines governing this intitative.	Closed	5/27/2021		6/1/2021	5/30/2021: “BVERS INC EmergencyResponsePlan Rev1” was uploaded. This has protocols for lessons learned from emergency and disaster events which includes wildfire events.		
15	Safety and Technical Upgrades to Palomino Substation	Please clarify any details, dates, status updates, and the nature of any upgrades performed in 2020.	Closed	5/27/2021		6/1/2021	5/30/2021: Designing, ordering major equipment and civil construction started in 2020. Electrical construction still in progress.		

#	Subject	Clarification/Request	Status	Date Requested	Date Due	Date Closed	BVES Comments	S&L Follow-Up Comments (As Needed)	BVES Follow-Up Comments
16	Evacuation Route Hardening Pilot Program	The fire mesh installation procedure and evacuation route locations are well documented. However, quality documents, procedures, guidelines, etc., for this program do not appear to have been included. Please provide this documentation if available.	Closed	5/27/2021		6/1/2021	5/30/2021: BVES installed wire mesh at 3 locations as part of the 2020 Evacuation Route Hardening Pilot Program. BVES followed the wire mesh instruction and the BVES Field Inspector (Anthony River) was on-site monitoring the installation. Evacuation Route Hardening Program started in 2021 and currently working on installing wire mesh.		
17	Funding Verification	Please see the separate word document *Funding Questions_2021_05_28_rev01.docx* for questions specific to the subject of funding.	Closed	5/28/2021		6/3/2021	5/30/2021: We are working on the responses to this document.		
18	5.3.3.12 Radford Line Covered Conductor Replacement Project	Q4 QAL indicates that the Radford Line Covered Conductor Replacement has not started as it is pending with the US Forestry Service for approval of the permit to perform the scope of work. Q4 QDR appears to report that 2.82 miles have been hardened and that the project is in progress. We understand that the project has not started due to the delayed permit approval; however, can you please clarify what is meant in the Q4 QDR that reports 2.82 miles have been completed?	Closed	6/3/2021		6/4/2021	6/4/2021: Table 12 of the 2020 Q4 QDR lists the line miles as projected for 2021. We do not believe we reported as completed.		
19	5.3.3.13 / 5.3.4.6 Grid hardening and pole replacement due to pole loading.	Per the WMP, initiative 5.3.3.13 BVES's pole loading infrastructure hardening and replacement program based on pole loading assessment program is encompassed by initiative 5.3.4.6. Can further clarification be provided on the following items: a) Assessing 191 poles in 2020 with a target of 1600 for the year (5.3.3.13), and b) If 5.3.3.13 is indeed encompassed by the efforts of 5.3.4.6, can clarification be provided on how the "Percent of Scheduled Circuits Completed" was 100% if the pole assessment target of 1600 from 5.3.3.13 was not reached?	Closed	6/3/2021		6/4/2021	6/4/2021: In 2020, we paused the number of poles to be assessed to only those neceessary to support covered wire installation. This was to allow us to dedicate resources to replace/remediate the number of failed poles for the previous years (2018 & 2019) in which we had assessed a total of 2,512.		
20	5.3.3.1 Capacitor maintenance and replacement program, 5.3.3.2 Circuit breaker maintenance and installation to de- energize lines upon detecting a fault, 5.3.3.14 Transformers maintenance and replacement	Per BVES Operations and Planning Department Policy and Procedure 15: Substation Inspection Program "Visual inspections will be completed for each BVES substation at least 9 times per calendar year. Qualified personnel will fill out the Substation Inspection Sheet (Attachment A) during each inspection cycle to record applicable substation operating parameters and note substation conditions." Equipment included in these inspections includes capacitor banks, circuit breakers, and transformers as included under the respectivie WPM initiative. Would you be able to provide all completed Inspection Sheets for 2020 for our review?	Closed	6/5/2021	6/9/2021	6/8/2021	6/9/2021: BVES is compiling all of the substation inspection sheets.	Inspections provided in Substation Inspection.zip	
21	5.3.3.1 Capacitor maintenance and replacement program, 5.3.3.2 Circuit breaker maintenance and installation to de- energize lines upon detecting a fault, 5.3.3.14 Transformers maintenance and replacement	Per the WMP, BVES states that the maintenance, repair, and replacement activities for equipment such as capacitors circuit breakers, cross arms, and transformers are included in the company's standard inspection, maintenance, and replacement protocols. Can BVES provide quality records demonstrating performance of their standard inspection, maintenance, and replacement protocols? In addition, which procedure governs the performance of inspection, maintenance, and replacement of equipment?	Closed	6/5/2021	6/9/2021	6/15/2021	6/9/2021: BVES follows CPUC General Orders 95, 165, and 174, which are the governing procedures for its inspection programs, outside and inside of substations. Numerous examples of inspection records have been previously submitted which demonstrate BVES' performance of the activities in question.		
22	5.3.4.11 Other discretionary inspection of distribution electric lines and equipment, beyond inspections mandated by rules and regulationsOther discretionary inspection of distribution electric lines and equipment, beyond inspections mandated by rules and regulations	Can BVES show how the 211 of Circuit Miles inspected were calculated? Is there a full list of the patrol inspections and detailed inspections performed in 2020 that could be provided for Sargent & Lundy review? If all inspection records cannot be provided, Sargent & Lundy will request specfic records.	Closed	6/5/2021	6/9/2021	6/9/2021	6/9/2021: BVES performs annual patrols of all of its circuits, at minimum and in accordance with CPUC General Order 165. The 211 circuit miles is the sum of all 4kV and 34kV circuits operated by BVES. Please reference the file titled "2020 Inspections by Quarter.xlsx" for further detail.		

#	Subject	Clarification/Request	Status	Date Requested	Date Due	Date Closed	BVES Comments	S&L Follow-Up Comments (As Needed)	BVES Follow-Up Comments
23	5.3.3.3 Covered conductor installation	Can BVES provide quality records associated with the covered conductor installation activities performed? In addition, what procedures govern the covered conductor installation activities?	Closed	6/5/2021	6/9/2021	6/15/2021	6/9/2021: BVES utilizes General Order 95 and its construction standards for all construction projects including the installation of covered conductor. BVES performs QA/QC in accordance with its process, outlined in the QA/QC clarification email response, dated 5/26/21 15:53 PST. As such, there are no individual quality records associated with this work. However, the BVES Field Inspector performs regular inspections of the work in progress and provides a redline review and approval upon project completion. Please reference the previously submitted file titled "Work Packet Review Sample.pdf" for an example.		
24	5.3.3.4 Covered conductor maintenance	How did BVES evaluate covered conductor maintenance needs and initiatives specific to wildfire mitigation in 2020? If any maintenance was performed, could BVES provide the documentation?	Closed	6/5/2021	6/9/2021	6/15/2021	6/9/2021: No maintenance was perform. BVES began installing covered wire in November 2019 (less than a circuit mile). In 2020 BVES installed about 7.7 circuit miles. Therefore, no routine maintenance was necessary and no routine maintenance was performed on covered wire.		
25	5.3.6.1 Automatic recloser operations	What was the status of 2020 automatic recloser operation activities? What percentage of the automatic reclosers have been replaced? How is this tracked? No budget was specified for 2020, but it appears some money was spent on the activity.	Closed	6/5/2021	6/9/2021	6/15/2021	6/9/2021: All three main supply (34.5 Kv) reclosers were replaced. Two were replaced in 2019 and the final recloser was replaced in 2020. The Work Order was a 2019 work order and was funded through GRC CAPEX.		
26	5.3.4.7 LiDAR inspections of distribution electric lines and equipment	The LIDAR RFP identified that surveys would be performed in February/March & July/August 2020 and the WMP identifies that two LIDAR sweeps will be performed each year. Did only one take place in 2020?	Closed	6/5/2021	6/9/2021	6/8/2021	6/9/2021: Yes – BVES determined that one survey per year was sufficient.	Per call, only one took place	
27	5.3.6.3 Personnel work procedures and training in conditions of elevated fire risk (Other special work procedures)	This appears to be addressed by Bear Valley Electric Service, Inc. Public Safety Power Shutoff Plan Rev. 1. When was Rev. 0 published? How was this plan rolled out? Is there documentation of training?	Closed	6/5/2021	6/9/2021	6/15/2021	6/9/2021: Rev 0 was signed out on July 22, 2020. A PSPS training drill was conducted on June 26, 2020 (supporting documentation was uploaded). Rev 1 was issued in response to drill comments, lessons learned from the 2020 fire season and other requirements of the CPUC on PSPS.		
28	5.3.3.6 Distribution pole replacement and reinforcement, including with composite poles (Pole replacement and reinforcement)	Can BVES provide documentation of pole replacement and reinforcement for circuits other than Erwin?	Closed	6/5/2021	6/9/2021	6/15/2021	6/9/2021: Yes – Boulder Circuit started in 2018. Documents will be uploaded to EGNYTE, File name "Boulder PL.zip"		
29	5.3.3.9 Installation of system automation equipment	Can BVES provide documentation demonstrating installation of system automation equipment progress?	Open	6/5/2021	6/9/2021		6/9/2021: Yes – BVES uploaded the design package on 6/7/21 to EGNYTE, File name BVES Asset-Installation of system automation equipment documents.zip	6/9/2021: Is this considered "as-built". Please clarify if any "as-built" documentation exists.	
30	5.3.3.11 Mitigation of impact on customers and other residents affected during PSPS event	Per WMP, Table 23, Item 11, "BVES's additional programs or efforts to mitigate the impact on customers and other residents affected during a PSPS event are captured in Table 28 Item 5". Review of the WMP noted that Item 5 of Table 28 is not listed. Can clarification be provided on the additional programs or efforts to mitigate impact on customers affected by PSPS events?	Closed	6/5/2021	6/9/2021	6/15/2021	6/9/2021: BVES is currently seeking to develop a solar/battery utility scale facility. This project is still in the development phase (searching suitable location).		
31	5.3.3.18 Removal of Tree Attachments in HFTD	Can BVES provide documentation of tree attachment removal activities for circuits other than Fawnskin?	Open	6/5/2021	6/9/2021		6/9/2021: Yes – Erwin Circuit TARP completed in 2019. Documents will be uploaded to EGNYTE, File name "Erwin TARP.zip"	6/9/2021: Can you please clarify if any other TARP activities were completed in 2020 to those on Fawnskin?	
32	5.3.3.19 Safety and Technical Upgrades to Palomino Substation	Per the WMP, the design was completed, equipment was on order, and construction bids were being evaluated. Can BVES provide quality records of activities associated with the equipment orders, construction bid evaluations, and construction activities? In addition, which procedures govern the procurement process?	Closed	6/5/2021	6/9/2021	6/8/2021	6/9/2021: BVES provided the equipment orders (PO & requisition), bid evaluation documents. Documents will be uploaded to EGNYTE, File name: Palomino Sub Docs.zip. The palomino substation is still in construction, document will be available when the project has been complete.	Bid documents provided Palomino Sub Docs.zip. Procurement process discussed in meeting 6/8/2021 with BVES	
33	5.3.3.20 Evacuation Route Hardening Pilot Program	Per the Q4 QAL, it was reported that the Evacuation Route Hardening Pilot program was initiated to test various solutions. The QAL also indicated that BVES successfully installed fire resistant composite poles and a wire mesh protective coating for wood poles. Were these activities completed in 2020? If so, can BVES provide quality records of these activities?	Closed	6/5/2021	6/9/2021	6/15/2021	6/9/2021: BVES had another project (Bakers Pond) that installed fire resistant composite poles in 2020. BVES used the experience from this project as meeting the objectives of the evacuation route hardening pilot program. The work order for this project was uploaded.		

#	Subject	Clarification/Request	Status	Date Requested	Date Due	Date Closed	BVES Comments	S&L Follow-Up Comments (As Needed)	BVES Follow-Up Comments
34	5.3.2.1 Advanced weather monitoring and weather stations	Per document C#3000-000 Orion Weather Stations Monitoring Equipment is to provide detailed weekly weather forecast and outlook reports. Is there any examples of weather reports currently? Please provide an update of the weather stations status. 8 of the 10 weather stations were built in 2020. Have the the remaining 2 weather station since been completed and online?	Closed	6/5/2021	6/9/2021	6/15/2021	6/9/2021: Sample weather report is attached. 1 additional weather station was installed in April 2021 and we expect the 2nd weather station to be installed by the end of June 2021.		
35	5.3.2.2 Continuous monitoring sensors	Per Asset-Continous monitoring sensors.docx, is ALERT WILDFIRE able to provide infrastructure assitance and support to expedite these efforts?	Closed	6/5/2021	6/9/2021	6/15/2021	6/9/2021: Not on a routine basis. HD Alert Wildfire Cameras can spot problems such as flare ups/smoke and, if located on multiple cameras, then they can geo-locate the issue and allow the utility to act upon the information.		
36	5.3.2.4 Forecast of a fire risk index, fire potential index, or similar	Please provide the reports of the Fire Risk Index and its classification rating system. If all reports are not able to be provided, Sargent & Lundy will make requests for samples.	Closed	6/5/2021	6/9/2021	6/15/2021	6/9/2021: Attached is a sample. The Fire Risk forecasting is discussed in Section 4 to BVES Inc. PSPS Procedures Rev1, which are previously provided and is attached to this email.		
37	5.3.2.5 Personnel monitoring areas of electric lines and equipment in elevated fire risk conditions	Can BVES provide the job report of the notes and observations in the field with observations noted of the electric lines and equipment in elevated fire risk conditions? If all reports cannot be provided Sargent & Lundy will make a request for specific reports.	Closed	6/5/2021	6/9/2021	6/15/2021	6/9/2021: BVES did not have any high threat weather events that required deployment of personnel to evaluate distribution facilities in 2020.		
38	5.3.2.6 Weather forecasting and estimating impacts on electric lines and equipment	Can BVES provide a weather report that would provide information for a formal decisison to mobilze and are these observations documented and recorded?	Closed	6/5/2021	6/9/2021	6/9/2021	6/9/2021: A sample weather report ("Sample Fire Threat Weather Forecast") was uploaded previously and is attached to this email. BVES did not have to execute a PSPS due to the weather never reaching our PSPS thresholds.		
39	5.3.9.1 Adequate and trained workforce for service restoration	How are the technicans recruited and hired? What are the retention and turnover rates? Do exiting employee have an exit interview to learn from their expereince?	Closed	6/5/2021	6/9/2021	6/15/2021	6/9/2021: Technicians are recruited and hired by posting job descriptions on our Company website and advertising the positions. Applicants apply to our web recruiting application (TALEO) and submit their resumes. The hiring manager reviews applications and resumes and selects applicants to interview via Zoom. Based on the Zoom panel interviews, top applicants are invited to BVES in Big Bear Lake to conduct further interviews. Final hiring decision is made by the President. Retention rates are tracked. We lost approximately 20-25% of our staff each year. Exit interviews are performed by a third party Company to provide us feedback. It should be noted that Big Bear Lake is a challenging area to attract skilled technicians.		
40	5.3.9.6 Protocols in place to learn from wildfire events	Are lessons learned tracked and discussed after an event has happened?	Closed	6/5/2021	6/9/2021	6/15/2021	6/9/2021: "BVES INC EmergencyResponsePlan Rev1" has process for tracking and reviewing lessons learned.		
41	5.3.5.1 Additional Efforts to Manage Community and Environmental Impact	As indicated in the 2020 BVES WMP and the 2020 quarterly reports, "BVES does not have a unique WMP initiative for this activity at this time. BVES currently has not encountered the need for additional efforts to manage community and environmental impacts" and the initiative is a "Management/ Supervisory effort" only. However, per the 2020 QDR, though there was a $0 budget, there was a $22,715 actual spend. Please clarify what initiative related efforts were performed in 2020 for this spend.	Closed	6/7/2021	6/10/2021	6/15/2021	6/10/2021: The spend is an estimate of Supervisory labor (time) used in engaging local officials, the public, and managing contractor regarding this issue. This spend is already in rates. The budget was "$0" because when BVES drafted its 2020 plan, it did not disaggregate the costs for many individual initiatives.		
42	5.3.5.2 Detailed inspections of vegetation around distribution electric lines and equipment	The 2020 BVES WMP quantative goal for this initiative is "100%" of scheduled circuit inspections completed. Please clarify the process / procedure for selecting which circuit(s) will be inspected and what kind of inspection (e.g., patrol versus detailed) will be performed for a given year.	Closed	6/7/2021	6/10/2021	6/15/2021	6/10/2021: 100% completion means completing all scheduled detailed inspections, which for BVES is each circuit gets a detailed inspection at least once per 5 years. BVES spreads the detailed circuit inspections over a 5-year schedule. Uploaded document "2020 Inspections-Patrols by Quarter" has the circuits that had detailed inspection performed on them.		

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43	5.3.5.2 Detailed inspections of vegetation around distribution electric lines and equipment	The two inspection records spreadsheets provided ("2020 Inspections-Patrols by Quarter.xlsx" and "BVES Example Detailed Inspection Record_2020.xlsx") do not explicitly indicate what type of pole or component(s) were inspected. For example, for the detailed inspections, it is not clear whether the inspection was overhead detailed, underground detailed, or wood pole intrusive. GO 165 reporting requirements enforce these inspection categories. Please provide clarification on how the type of detailed inspection is tracked.	Closed	6/7/2021	6/10/2021	6/15/2021	6/10/2021: BVES records the inspection type within its inspection findings records for each finding. This is exampled within the previously submitted file titled "BVES Example Detailed Inspection Record_2020.xlsx" under the heading “Inspection Type”. Regarding overhead versus underground facilities and findings, BVES is able to differentiate between these using the unique asset number, also identifiable within the file titled "BVES Example Detailed Inspection Record_2020.xlsx", under the heading “Structure #”.		
44	5.3.5.4 Emergency response vegetation management due to red flag warning or other urgent conditions	Per the provided contract documentation ("C#3095-000 Vegetation Management.pdf"), BVES utilizes a third party for performing much of the vegetation management and related activities for this initiative. As part of the contract, the "Contractor shall establish a [preventative] vegetation management program." Please provide this vegetation management program for review. Additionally, please provide any 2020 quality records (e.g., emergency response / red flag warning reports, work orders, tracking documents) related to this vegetation management initiative for review.	Closed	6/7/2021	6/10/2021	6/15/2021	6/10/2021: BVES has an all-inclusive contract for Vegetation Management that includes the elements of this initiative. When BVES prepared its 2020 WMP it did not disaggregate this initiative from the overall VM category. BVES has since disaggregated the initiative based on the contractors estimated level of effort toward the initiative. There are no specific documents emergency quality documents. Contractor performs emergency vegetation at the direction of BVES. The preventative maintenance plan is the grid documents that were provided.		
45	5.3.5.5 Fuel management and reduction of “slash” from vegetation management activities improvements of inspections	Per the provided contract documentation ("C#3095-000 Vegetation Management.pdf"), BVES utilizes a third party for performing much of the vegetation management and related activities for this initiative. As part of the contract, the "Contractor shall establish a [preventative] vegetation management program." Please provide this vegetation management program for review. Additionally, please provide any 2020 quality records (e.g., "slash" reduction reports, work orders, tracking documents) related to this vegetation management initiative for review.	Closed	6/7/2021	6/10/2021	6/15/2021	6/10/2021: BVES has an all-inclusive contract for Vegetation Management that includes the elements of this initiative. When BVES prepared its 2020 WMP it did not disaggregate this initiative from the overall VM category. BVES has since disaggregated the initiative based on the contractors estimated level of effort toward the initiative. BVES inspects the areas the contractor clears and verifies that waste products are removed.		
46	5.3.5.6 Improvement of inspections	As indicated in the 2020 BVES WMP and the 2020 quarterly reports, "BVES does not have a unique WMP initiative for this activity at this time" and the initiative effort is a "Management/ Supervisory effort" only. However, per the 2020 QDR, though there was a $0 budget, there was a $9086 actual spend. Please clarify what initiative related efforts were performed in 2020 for this spend.	Closed	6/7/2021	6/10/2021	6/15/2021	6/10/2021: The spend is an estimate of Supervisory labor (time) used in engaging on this initiative. While BVES did not articulate a specific program for this initiative, BVES is constantly reviewing inspections and how to improve processes. BVES has engaged in a significant effort of new inspections (LiDAR, 3rd Party Ground Patrol) and spent 2020 evaluating UAV inspections which will be added in 2021.		
47	5.3.5.7 LiDAR inspections of vegetation around distribution electric lines and equipment (vegetation management technology)	Per the provided contract documentation ("LiDAR Inspection Contract-C#3003-000.pdf," "LiDAR Inspection Exhibit A-C#3003-000.pdf," and "LiDAR Inspection Exhibit B-C#3003-000.pdf"), BVES utilizes a third party for performing the biannual (February/March and July/August) 2020 LiDAR surveys. Per Exhibit B, the third party shall retain records of daily job briefings and tail boards to be provided to BVES. Please provide these records and any other related 2020 quality records / documentation for the LiDAR surveys for review.	Closed	6/7/2021	6/10/2021	6/15/2021	6/10/2021: BVES reserves the option to request these records from its contractors however they were not requested for the work in question and therefore are not readily available. BVES can make a request to its contractor but the response may be delayed.		

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48	5.3.5.7 LiDAR inspections of vegetation around distribution electric lines and equipment (vegetation management technology)	Per the provided contract documentation ("LiDAR Inspection Contract-C#3003-000.pdf," "LiDAR Inspection Exhibit A-C#3003-000.pdf," and "LiDAR Inspection Exhibit B-C#3003-000.pdf"), BVES utilizes a third party for performing the biannual (February/March and July/August) 2020 LiDAR surveys. Per Exhibit B, as part of the LiDAR survey deliverables, the third party shall be "5.13.2. Providing analysis of the LiDAR inspections in the form of an electronic (PDF and CSV) and written report. Analysis shall identify the specific location and the extent of any vegetation clearance from bare conductor violations as described in this section. Similarly, Contractor shall identify the specific location and the extent of any potential violations as described in this section." Please provide the 2020 analysis report for review (unless the provided "LiDAR EncroachmentPoints2020.xlsx" is this document).	Closed	6/7/2021	6/10/2021	6/15/2021	6/10/2021: The "LiDAR EncroachmentPoints2020.xlsx" file is the document in question. Further, the previously submitted file titled “LiDAR.gdb” is a geospatial file containing all of the information in available and in question		
49	5.3.5.7 LiDAR inspections of vegetation around distribution electric lines and equipment (vegetation management technology)	As indicated in the 2020 BVES WMP, the initiatve goal was 211 circuit miles surveyed. How does BVES validate and track which circuits were surveyed, when they were surveyed, what issues were identified (if any), and remediation methods / schedule. Please clarify.	Closed	6/7/2021	6/10/2021	6/15/2021	6/10/2021: The total overhead circuit miles of the BVES system are 211 circuit miles. BVES reviews the results of the LiDAR survey, which includes which circuits were surveyed by LiDAR.		
50	5.3.5.9 Other discretionary inspection of vegetation around distribution electric lines and equipment, beyond inspections mandated by rules and regulations (Enhanced inspections, patrols, and trims)	As indicated in the 2020 BVES WMP, the initiative goal was "N/A" circuit miles inspected. However, per the provided documentation ("DRG Ground Patrol_BV_2020Inspections.xlsx"), several third party ("DRG") ground patrols occurred in 2020. Please provide clarification.	Closed	6/7/2021	6/10/2021	6/15/2021	6/10/2021: Goal should have been 211 circuit miles.		
51	5.3.5.9 Other discretionary inspection of vegetation around distribution electric lines and equipment, beyond inspections mandated by rules and regulations (Enhanced inspections, patrols, and trims)	The provided third party summary ground patrol documentation ("DRG Ground Patrol_BV_2020Inspections.xlsx") indicates many findings and photographs of identified issues. Please provide the 2020 ground patrol progress reports, ground patrol inspection results analysis reports (as required in the contract document "Ground Patrol General Exhibit A-C#3004-000.pdf"), and relevant photographs for review. If all files cannot be submitted S&L will provide a list based on the inspection document.	Closed	6/7/2021	6/10/2021	6/15/2021	6/10/2021: BVES only requred photographs for Level 1 issues - there were no Level 1 issues. Progress reports were provided verbally.		
52	5.3.5.11 Patrol inspections of vegetation around distribution electric lines and equipment	As indicated in the 2020 BVES WMP, the initiative goal and actualized completion was 100 percent complete. Please clarify the number of 2020 patrol inspections scheduled and performed (e.g., what constitutes 100% completion) as well as what the criteria for performing a patrol inspection is.	Closed	6/7/2021	6/10/2021	6/15/2021	6/10/2021: 100% completion means completing all scheduled patrol inspections, which for BVES is each circuit gets patrolled at least once per year. Uploaded document “2020 Inspections-Patrols by Quarter” has the circuits patrolled.		
53	5.3.5.13 Quality assurance / quality control of vegetation inspections	As indicated in the 2020 BVES WMP, the initiative goal and actualized completion was 100 percent complete. Please clarify what constitutes this 100% completion (zero gaps in BVES vegetation management staffing?). Also, please clarify the 2020 actual spend ($9086) and "Management/Supervisory effort" performed for this initiative.	Closed	6/7/2021	6/10/2021	6/15/2021	6/10/2021: The spend is an estimate of Supervisory labor (time) used in managing the vegetation QC program and conducting QCs. These costs are already in rates. BVES listed the initiative as complete; however, BVES has decided to add a Quality Assurance (QA) element to its program in 2021.		
54	5.3.5.14 Recruiting and training of vegetation management personnel	As indicated in the 2020 BVES WMP, this initiative goal is qualitative and "In-Progress" per the Q4 2020 QIU. There was a $9086 actual spend and "Management/Supervisory effort" performed for this initiative. Please clarify what initiative related efforts were performed in 2020.	Closed	6/7/2021	6/10/2021	6/15/2021	6/10/2021: The spend is an estimate of Supervisory labor (time) used in contracting for a full-service vegetation management clearance contractor and forester. It also includes the time used to manage these contractors. These costs are already in rates.		

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55	5.3.5.15 Remediation of at-risk species	As indicated in the 2020 BVES WMP and the 2020 quarterly reports, "BVES does not have a unique WMP initiative for this activity at this time. BVES has not had an issue and has discussed this with its VM contractor. BVES will be bringing on a Forester in 2021 to review this initiative more closely." However, the Q4 2020 QDR indicates an actual spend of $103,532.55. Please clarify what initiative related efforts were performed in 2020 for this spend.	Closed	6/7/2021	6/10/2021	6/15/2021	6/10/2021: BVES has an all-inclusive contract for Vegetation Management that includes the elements of this initiative. When BVES prepared its 2020 WMP it did not disaggregate this initiative from the overall VM category. BVES has since disaggregated the initiative based on the contractors estimated level of effort toward the initiative.		
56	5.3.5.16 Removal and remediation of trees with strike potential to electric lines and equipment (Hazard tree removal and Right Tree-Right Place)	As indicated in the 2020 BVES WMP, this initiative goal is 100 percent of trees designated for removal actually removed. The 2020 actualized goal provided is "N/A" and the Q4 initiative update indicated an "In-Progress" status. Please clarify the process that BVES or its third party uses to designate trees for removal and then track the activity to completion. Additionally, please clarify the initiative goal and progress status provided.	Closed	6/7/2021	6/10/2021	6/15/2021	6/10/2021: BVES has an all-inclusive contract for Vegetation Management that includes the elements of this initiative. When BVES prepared its 2020 WMP it did not disaggregate this initiative from the overall VM category. BVES has since disaggregated the initiative based on the contractors estimated level of effort toward the initiative. BVES's Field Inspector and the contractor may designate a tree for removal. Once it is designated for removal, the contractor works on getting it removed including any permit requirements. Since it is impossible to know how many trees will be designated for removal ahead of time, BVES was not able to develop a number that defined the goal and goal accomplishment. BVES removed 137 trees in 2020. Documents has been uploaded to EGNYTE, File name "TreeRemovalReccord.xlsx"		
57	5.3.5.17 Substation inspections	As indicated in the 2020 BVES WMP and the 2020 quarterly reports, this quantitative initiative goal is 144 substations inspected of which 144 were reported as completed. However, per "SubstationLocations.docx" and other documentation, BVES has 13 substations. Therefore, 156 inspections are expected (13 substations x 12 inspections each). Can you please clarify?	Closed	6/7/2021	6/10/2021	6/15/2021	6/10/2021: Our requirement is to visually inspect each substation 9 times per year per our policy instruction (this accounts for the fact that some substations may not be accessible in winter). The goal in the QDR was based on an assumption that we would exceed our own requirement and inspect each on-service substation once per month and we assumed at least one substation would be off service due to construction at any given time in 2020.		
58	5.3.5.18 Substation vegetation management	As indicated in the 2020 BVES WMP and other provided documentation, the initiative activities are performed partially by a third party and partially by BVES substation personnel depending on the substation. Please provide any relevant 2020 substation vegetation management inspections, corrections, and tracking records for review.	Closed	6/7/2021	6/10/2021	6/15/2021	6/10/2021: Please reference the documents within the folder titled "Substation VM.zip" for the inspection records in question.		
59	5.3.5.19 Vegetation inventory system	As indicated in the 2020 BVES WMP, the initiative activities are performed by a third party and the 2020 goal is "completed." Please clarify how this initiative is controlled and tracked to completion. Also, please provide any relevant 2020 vegetation inventory system procedures or quality records.	Closed	6/7/2021	6/10/2021	6/15/2021	6/10/2021**:** Per BVES's contract with its VM Contractor, the contractor provides vegetation trimming results in a csv format that can be uploaded in BVES data inventory system. BVES's contractor also enters the data in the BVES GIS application (Right of Way). This is an ongoing process. It is marked as complete because the process is in place and functioning.		
60	5.3.5.20 Vegetation management to achieve clearances around electric lines and equipment (Pole brushing)	As indicated in the 2020 BVES WMP and the 2020 quarterly reports, this initiative is performed by a third party and considered "Large Volume Field Verifiable." However, no quantiative goals were set or achieved in 2020. Please clarify how this initiative is controlled and tracked to completion by the third party (or BVES).	Closed	6/7/2021	6/10/2021	6/15/2021	6/10/2021: BVES and its contractor use a grid to manage the cycle vegetation management plan. BVES and the contractor agree on the areas to be cleared per the cycle plan. Sample grids were provided.		
61	5.3.4.7 LiDAR inspections of distribution electric lines and equipment	As discussed in today's call, 1) the LIDAR data documents encroachments. 2) These encroachments are validated, and then 3) When needed a crew goes out to clear. How are steps 2 and 3 documented and tracked?	Closed	6/7/2021	6/10/2021	6/15/2021	6/10/2021: BVES provides its vegetation management contractor with a list and maps of the encroachments. Prioritization is established and work is completed accordingly. All LiDAR driven vegetation management activities are recorded within BVES' standard vegetation management records.		
62	5.3.7.4 Tracking and analysis of near miss data	The documents (Risk Management Program, 2017 and BVES Risk Register 2021-2-18 WMP.xlsx) mentioned near miss data, but only in the context of personnel safety. No data for fire near misses was found. Is there fire near miss data available?	Closed	6/8/2021	6/10/2021	6/15/2021	6/10/2021: The tracking data for near misses (fire) is in the 2020 Outage Log which was uploaded 6/9/2020 – see column V.		

#	Subject	Clarification/Request	Status	Date Requested	Date Due	Date Closed	BVES Comments	S&L Follow-Up Comments (As Needed)	BVES Follow-Up Comments
63	5.3.3.9 Installation of system automation equipment	Please provide automation equipment installer's work completion records, reports, or similar documentation for review. We have the design documents for the fiber cables ("BVES Asset-Grid Automation Fiber Installation Overview.pdf" and "BVES Asset-Installation of system automation equipment-Construction_Design Drawings for Fiber & FLISR (Sample).pdf"), but we would like to review documentation that provides evidence of activity completion.	Closed	6/8/2021	6/11/2021	6/15/2021	6/10/2021: The installation began in October 2020 and is still ongoing. The actvitiy is ongoing and will be completed in July-August 2021. BVES has invoices for the 2020 work from the installer and BVES verified that the work was completed by inspection prior to issuing invoice payments. Installation drawings will be provided at the end of the project in 2021.		
64	5.3.1.1 - 5.3.1.6 Risk Assessment and Mapping	Can you please confirm that "BVES did not have this capability in 2020. This capability is to be developed in 2021 by contractor." for the summarized risk map, climate-driven risk map, ignition probability mapping, initiative mapping, match drop simulations, and weather-driven risk map.	Closed	6/8/2021	6/11/2021	6/15/2021	6/10/2021: We can confirm not having this capability in 2020.		
65	5.3.4.9 Other discretionary inspection of distribution electric lines and equipment, beyond inspections mandated by rules and regulations	Can you please provide documentation showing how the selection of items on the tab "DRG Ground Patrol" were resolved. It it's not possible to show resolution, would you be able show how you are managing and tracking resolution?	Closed	6/8/2021	6/11/2021	6/15/2021	6/10/2021: There was no process in place for recording the requested information. BVES would field verify any items with a Level 1 status, and correct and record within its inspection findings records any items which were valid. Any findings which are valid, but not of a Level 1 status are assigned a Level ranking of 2 or 3 and are responded to in accordance with the timelines within the BVES General Order 165 Compliance plan.		

5.3.3.13 BVES's pole loading infrastructure hardening and replacement program based on pole loading assessment program
Please provide the work packages for the following poles:

Item No.	Section	Work Order ID	Old Structure Number	New Assigned Pole #	Course of Action	Pole Size	Scott Bracket	Open Wire	Guy Needed	Construction Completed Date	BVES comments
1	5	40412045	6543BV	13440BV	Replacement	45'/CL 1	no	no	no	4/14/2020	File name: PL Docs 060921.zip
2	5	40412045	8241BV	13441BV	Replacement	45'/CL 1	no	yes	no	4/1/2020	File name: PL Docs 060921.zip
3	5	40412045	8243BV	13443BV	Replacement	45'/CL 1	no	yes	no	3/31/2020	File name: PL Docs 060921.zip
4	6	40412046	6551BV	13893BV	Replacement	45'/CL 1	no	no	no	3/6/2020	File name: PL Docs 061021.zip
5	6	40412046	6610BV	13894BV	Replacement	45'/CL 1	no	no	no	3/3/2020	File name: PL Docs 061021.zip
6	6	40412046	6611BV	13895BV	Replacement	45'/CL 1	no	no	no	3/2/2020	File name: PL Docs 061021.zip
7	7	40412047	9672BV	14021BV	Replacement	45'/CL 1	no	no	no	4/21/2020	File name: PL Docs 061021.zip
8	7	40412047	9673BV	13475BV	Replacement	45'/CL 1	no	no	no	4/24/2020	File name: PL Docs 061021.zip
9	8	40412048	6023BV	13556BV	Replacement	35'/CL3	no	no	no	4/23/2020	File name: PL Docs 061021.zip
10	8	40412048	6029BV	13561BV	Replacement	50'/H3	no	no	no	4/28/2020	File name: PL Docs 061021.zip
11	8	40412048	6031BV	13564BV	Replacement	50'/H3	no	no	no	4/29/2020	File name: PL Docs 061021.zip
12	8	40412048	6032BV	13565BV	Replacement	50'/H3	no	no	yes	4/29/2020	File name: PL Docs 061021.zip
13	8	40412048	8395BV	13563BV	Replacement	45'/CL1	no	no	no	4/30/2020	File name: PL Docs 061021.zip
14	9	40412053	8340BV	13719BV	Replacement	50'/H3	no	no	yes	6/19/2020	File name: PL Docs 061021.zip
15	9	40412053	8349BV	13720BV	Replacement	45'/CL 1	no	no	yes	6/19/2020	File name: PL Docs 061021.zip
16	9	40412053	8766BV	13721BV	Replacement	45'/CL 1	no	no	no	5/14/2020	File name: PL Docs 061021.zip
17	11	40412055	6522BV	13412BV	Replacement	40'/CL 1	no	no	no	6/10/2020	File name: PL Docs 060921.zip
18	11	40412055	6523BV	13413BV	Replacement	40'/CL 1	no	no	yes	6/12/2020	File name: PL Docs 060921.zip
19	11	40412055	6772BV	13416BV	Replacement	40'/CL 1	no	no	no	6/12/2020	File name: PL Docs 060921.zip
20	11	40412055	8205BV	13423BV	Replacement	40'/CL 1	no	no	no	6/11/2020	File name: PL Docs 060921.zip
21	12	40412056	9707BV	14376BV	Replacement	45'/CL 1	no	no	yes	6/15/2020	File name: PL Docs 060921.zip
22	12	40412056	P_8045	13664BV	Replacement	40'/CL 1	no	no	no	6/9/2020	File name: PL Docs 060921.zip
23	12	40412056	P_8794	14375BV	Replacement	35'/CL 3	no	no	no	6/19/2020	File name: PL Docs 060921.zip

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Can you please provide documentation showing how the selection of items below were resolved. It it's not possible to show resolution, would you be able show how you are managing and tracking resolution?

Work Area	Site ID	X	Y	Latitude	Longitude	Inventory Date	Remote ID	Site Comments	Site Last Changed By	Site Change Date	Site Change Time	Arc	Blown fuse	Broken insu	Broken or r	Conductor	Conductor	Controls	Damage to	Damaged li	Damaged c	Damaged c	Damaged c	Damaged c	Damaged t	Encroachm	Hanging in	Improper c	Insulators	Leaking oil	Leaning po	Missing On	Missing grc	Missing or	Old pole su	Pole Numb	Pole Other	Pole dama	Protective	Protective	Transforme	Transforme	Trees and v	Unused an	Visited	Visual Photo
BV	20231	6908537	1909701	34.2345	-116.8523561	7/28/2020	DRG_20200728_5_5330	No tag on pole; tree growth near circuit; add 1 visibility strip	Brett Edwards	9/11/2020	12:41:33	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	P_2024	No	No	No	No	No	No	Yes	No	Fail	DRG_20200728_5_5330_20200911124114.jpg
BV	20540	6881347	1910886	34.23857	-116.9422674	7/28/2020	DRG_20200728_5_0096	replace guy guard	Brett Edwards	8/26/2020	13:46:06	No	No	No	No	No	No	No	No	No	No	Yes	No	No	No	No	No	No	No	No	No	No	No	No	62545CIT	No	No	No	No	No	No	No	No	Fail	DRG_20200728_5_0096_20200826134603.jpg
BV	20908	6907251	1910038	34.23547	-116.8565972	7/28/2020	DRG_20200728_5_3424	no tag on pole; add 3 visibility strips; tree growth near circuit	Brett Edwards	9/11/2020	10:58:09	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	P_1490	Yes	No	No	No	No	No	Yes	No	Fail	DRG_20200728_5_3424_20200911105748.jpg
BV	21130	6880715	1913172	34.24487	-116.944281	7/28/2020	DRG_20200728_5_6076	add 1 visibility strip	Brett Edwards	9/1/2020	09:21:10	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	35761CTC	Yes	No	No	No	No	No	No	No	Fail	DRG_20200728_5_6076_20200901092108.jpg
BV	21391	6910566	1908255	34.23046	-116.8457003	7/28/2020	DRG_20200728_5_5447	No tag on pole; add 1 visibility strip	Brett Edwards	9/14/2020	11:06:54	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	P_2187	Yes	No	No	No	No	No	No	No	Fail	DRG_20200728_5_5447_20200914110646.jpg
BV	21810	6905913	1912687	34.24279	-116.860926	7/28/2020	DRG_20200728_5_6145	No tag on pole	Brett Edwards	9/10/2020	12:09:40	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	P_2326	Yes	No	No	No	No	No	No	No	Fail	DRG_20200728_5_6145_20200910120934.jpg
BV	22173	6903854	1910718	34.23744	-116.8678115	7/28/2020	DRG_20200728_5_2891	No tag on pole	Brett Edwards	9/8/2020	11:02:42	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	P_1623	Yes	No	No	No	No	No	No	No	Fail	DRG_20200728_5_2891_20200908110238.jpg
BV	22531	6908283	1910977	34.23801	-116.853149	7/28/2020	DRG_20200728_5_0296	No tag on pole; add 1 visibility strip; add guy guard	Brett Edwards	9/14/2020	13:42:26	No	No	No	No	No	No	No	No	No	No	Yes	No	No	No	No	No	No	No	No	No	No	No	P_1833	Yes	No	No	No	No	No	No	No	Fail	DRG_20200914134221.jpg
BV	23132	6904114	1911542	34.2397	-116.8669213	7/28/2020	DRG_20200728_5_1673	No tag on pole; add 3 visibility strips	Brett Edwards	9/11/2020	08:29:41	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	P_2210	Yes	No	No	No	No	No	No	No	Fail	DRG_20200728_5_1673_20200911082936.jpg
BV	23454	6906788	1912616	34.24256	-116.8580338	7/28/2020	DRG_20200728_5_5653	No tag on pole, add guy guard	Brett Edwards	9/10/2020	12:50:46	No	No	No	No	No	No	No	No	No	No	Yes	No	No	No	No	No	No	No	No	No	No	No	P_2240	Yes	No	No	No	No	No	No	No	Fail	DRG_20200728_5_5653_20200910125024.jpg
BV	23725	6881750	1915401	34.25097	-116.9407762	7/28/2020	DRG_20200728_5_1072	No tag on pole; old pole stub	Brett Edwards	8/31/2020	13:19:45	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	Yes	P_2941	Yes	No	No	No	No	No	No	No	Fail	DRG_20200728_5_1072_20200831131943.jpg
BV	24341	6890839	1912320	34.24224	-116.9108121	7/28/2020	DRG_20200728_5_5082	old pole stub	Brett Edwards	9/4/2020	09:03:23	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	Yes	P_2511	No	No	No	No	No	No	No	No	Fail	DRG_20200728_5_5082_20200904090314.jpg
BV	25908	6908796	1907337	34.228	-116.8515904	7/28/2020	DRG_20200728_5_5898	No tag on pole; tree growth near circuit; add 3 visibility strips	Brett Edwards	9/9/2020	13:34:11	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	P_1696	Yes	No	No	No	No	No	Yes	No	Fail	DRG_20200728_5_5898_20200909133402.jpg
Baldwin	20678	6918447	1928027	34.28454	-116.8188581	7/28/2020	DRG_20200728_5_0110	add guy guard	Brett Edwards	8/12/2020	08:43:40	No	No	No	No	No	No	No	No	No	No	Yes	No	No	No	No	No	No	No	No	No	No	No	1022 BV	No	No	No	No	No	No	No	No	Fail	DRG_20200728_5_0110_20200812084325.jpg
Baldwin	22771	6897334	1913312	34.24477	-116.8892879	7/28/2020	DRG_20200728_5_0320	replace high voltage sign	Brett Edwards	8/3/2020	14:41:12	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	9651BV	Yes	No	No	No	No	No	No	No	Fail	DRG_20200728_5_0320_20200803144101.jpg
Baldwin	25406	6918628	1924331	34.27438	-116.8184026	7/28/2020	DRG_20200728_5_1240	add 3 guy guards	Brett Edwards	8/12/2020	08:31:48	No	No	No	No	No	No	No	No	No	No	Yes	No	No	No	No	No	No	No	No	No	No	No	12316BV, 12317BV	No	No	No	No	No	No	No	No	Fail	DRG_20200728_5_1240_20200812083141.jpg
Moonridge	24591	6903315	1911194	34.23877	-116.8695785	7/28/2020	DRG_20200728_5_3132	tree growth near circuit	Brett Edwards	9/9/2020	10:12:01	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	1210472C TC	No	No	No	No	No	No	Yes	No	Fail	DRG_20200728_5_3132_20200909101153.jpg
Moonridge	25957	6907579	1906849	34.22669	-116.8556332	7/28/2020	DRG_20200728_5_6556	tree growth near circuit; add 3 visibility strips	Brett Edwards	9/9/2020	11:54:25	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	5290BV	Yes	No	No	No	No	No	Yes	No	Fail	DRG_20200728_5_6556_20200909115409.jpg
Moonridge	25972	6906777	1907824	34.2294	-116.8582503	7/28/2020	DRG_20200728_5_3927	old pole stub	Brett Edwards	9/9/2020	11:22:03	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	Yes	11946BV	No	No	No	No	No	No	No	No	Fail	DRG_20200728_5_3927_20200909112158.jpg
Moonridge	25993	6908274	1909064	34.23276	-116.8532496	7/28/2020	DRG_20200728_5_5248	add high voltage signs; add 1 visibility strip; add guy guard	Brett Edwards	9/11/2020	13:10:45	No	No	No	No	No	No	No	No	No	No	Yes	No	No	No	No	No	No	No	No	No	No	No	6822BV	Yes	No	No	No	No	No	No	No	Fail	DRG_20200728_5_5248_20200911131040.jpg
Moonridge	26093	6908151	1909099	34.23286	-116.8536553	7/28/2020	DRG_20200728_5_5258	add high voltage signs; add 1 visibility strip; add guy guard	Brett Edwards	9/11/2020	13:08:36	No	No	No	No	No	No	No	No	No	No	Yes	No	No	No	No	No	No	No	No	No	No	No	6821BV	Yes	No	No	No	No	No	No	No	Fail	DRG_20200728_5_5258_20200911130832.jpg
Moonridge	26152	6902589	1910951	34.23812	-116.8719884	7/28/2020	DRG_20200728_5_3289	tree growth near circuit	Brett Edwards	9/8/2020	10:46:24	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	13113BV	No	No	No	No	No	No	Yes	No	Fail	DRG_20200728_5_3289_20200908104558.jpg
Moonridge	26156	6911411	1907724	34.22898	-116.8429246	7/28/2020	DRG_20200728_5_1316	add 3 visibility strips	Brett Edwards	9/14/2020	11:33:40	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	7321BV	Yes	No	No	No	No	No	No	No	Fail	DRG_20200728_5_1316_20200914113338.jpg
SHORE NORTH	19666	6879499	1921139	34.2668	-116.9480275	7/28/2020	DRG_20200728_5_1982	add 3 visibility strips	Brett Edwards	8/4/2020	11:05:49	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	3470BV	Yes	No	No	No	No	No	No	No	Fail	DRG_20200728_5_1982_20200804110425.jpg
SHORE NORTH	19771	6882698	1923090	34.27207	-116.9373726	7/28/2020	DRG_20200728_5_4625	add 3 reflective strips	Brett Edwards	8/5/2020	11:21:51	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	8661BV	Yes	No	No	No	No	No	No	No	Fail	DRG_20200728_5_4625_20200805112148.jpg
SHORE NORTH	19898	6899975	1916518	34.2535	-116.8804313	7/28/2020	DRG_20200728_5_5296	add 1 visibility strip	Brett Edwards	8/6/2020	13:01:09	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	10471BV	Yes	No	No	No	No	No	No	No	Fail	DRG_20200728_5_5296_20200806130104.jpg
SHORE NORTH	20072	6876256	1916269	34.25351	-116.9589278	7/28/2020	DRG_20200728_5_2023	No tag on pole	Brett Edwards	8/4/2020	09:20:07	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	P_7492	Yes	No	No	No	No	No	No	No	Fail	DRG_20200728_5_2023_20200804092004.jpg
SHORE NORTH	20106	6880594	1921157	34.26682	-116.9444031	7/28/2020	DRG_20200728_5_5317	No tag on pole; no guy guard	Brett Edwards	8/4/2020	14:16:00	No	No	No	No	No	No	No	No	No	No	Yes	No	No	No	No	No	No	No	No	No	No	No	P_6845	Yes	No	No	No	No	No	No	No	Fail	DRG_20200728_5_5317_20200804141544.jpg
SHORE NORTH	20129	6879495	1922853	34.27151	-116.9479813	7/28/2020	DRG_20200728_5_4002	add 3 reflective strips	Brett Edwards	8/4/2020	12:30:05	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	23509CIT	Yes	No	No	No	No	No	No	No	Fail	DRG_20200728_5_4002_20200804122950.jpg
SHORE NORTH	20139	6873392	1914213	34.24794	-116.968474	7/28/2020	DRG_20200728_5_4003	old pole stub	Brett Edwards	8/4/2020	10:23:38	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	Yes	12575BV	No	No	No	No	No	No	No	No	Fail	DRG_20200728_5_4003_20200804102325.jpg
SHORE NORTH	20400	6883881	1920074	34.26375	-116.9335624	7/28/2020	DRG_20200728_5_2714	No tag on pole	Brett Edwards	8/5/2020	13:39:02	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No		Yes	No	No	No	No	No	No	No	Fail	DRG_20200728_5_2714_20200805133858.jpg
SHORE NORTH	20468	6900116	1916339	34.253	-116.8799721	7/28/2020	DRG_20200728_5_4695	add 1 visibility strip	Brett Edwards	8/6/2020	13:00:04	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	11177BV	Yes	No	No	No	No	No	No	No	Fail	DRG_20200728_5_4695_20200806125955.jpg
SHORE NORTH	20671	6870959	1912506	34.24332	-116.9765818	7/28/2020	DRG_20200728_5_3400	Undergrowth	Brett Edwards	8/9/2020	16:11:18	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	12285BV	No	No	No	No	No	No	Yes	No	Fail	DRG_20200728_5_3400_20200804092820.jpg
SHORE NORTH	20712	6899381	1920576	34.26466	-116.8822461	7/28/2020	DRG_20200728_5_0771	no tag on pole	Brett Edwards	8/6/2020	10:06:04	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	P_6404	Yes	No	No	No	No	No	No	No	Fail	DRG_20200728_5_0771_20200806100557.jpg
SHORE NORTH	20731	6879671	1922420	34.27032	-116.9474151	7/28/2020	DRG_20200728_5_0115	transformer on pole but no ground	Brett Edwards	8/4/2020	13:15:30	No	No	No	No	No	No	No	No	No	No	Yes	No	No	No	No	No	No	No	No	No	No	No	31549CIT	No	No	No	No	No	No	No	No	Fail	DRG_20200728_5_0115_20200804131516.jpg
SHORE NORTH	21132	6879557	1920824	34.26593	-116.9478448	7/28/2020	DRG_20200728_5_3446	add 1 reflective strip	Brett Edwards	8/4/2020	11:00:53	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	11432BV	Yes	No	No	No	No	No	No	No	Fail	DRG_20200728_5_3446_20200804110050.jpg
SHORE NORTH	21394	6871790	1912944	34.2445	-116.9738189	7/28/2020	DRG_20200728_5_2813	old pole stub	Brett Edwards	8/4/2020	09:36:35	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	Yes	13035BV	No	No	No	No	No	No	No	No	Fail	DRG_20200728_5_2813_20200804093623.jpg
PARADISE	24534	6911111	1918130	34.25758	-116.8435198	7/28/2020	DRG_20200728_5_4442	add 1 visibility strip; replace guy guard	Brett Edwards	8/24/2020	10:05:41	No	No	No	No	No	No	No	No	No	No	Yes	No	No	No	No	No	No	No	No	No	No	No	11435BV	Yes	No	No	No	No	No	No	No	Fail	DRG_20200728_5_4442_20200824100539.jpg
PARADISE	26084	6914319	1918373	34.25814	-116.8328936	7/28/2020	DRG_20200728_5_1308	add 3 visibility strips; add guy guard	Brett Edwards	8/24/2020	12:02:44	No	No	No	No	No	No	No	No	No	No	Yes	No	No	No	No	No	No	No	No	No	No	No	9514BV	Yes	No	No	No	No	No	No	No	Fail	DRG_20200728_5_1308_20200824120240.jpg
PIONEER	20460	6924898	1926385	34.27982	-116.7975695	7/28/2020	DRG_20200728_5_2720	add 1 visibility strip	Brett Edwards	8/13/2020	09:32:27	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	11463BV	Yes	No	No	No	No	No	No	No	Fail	DRG_20200728_5_2720_20200813093225.jpg
PIONEER	22940	6923480	1926739	34.28084	-116.802249	7/28/2020	DRG_20200728_5_1654	add 1 visibility strip; add guy guard	Brett Edwards	8/12/2020	13:41:17	No	No	No	No	No	No	No	No	No	No	Yes	No	No	No	No	No	No	No	No	No	No	No	11676BV	Yes	No	No	No	No	No	No	No	Fail	DRG_20200728_5_1654_20200812134115.jpg
SUNSET	20368	6913051	1911934	34.24049	-116.8373363	7/28/2020	DRG_20200728_5_4685	No tag on pole; add high voltage signs	Brett Edwards	9/17/2020	08:36:37	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	P_9863	Yes	No	No	No	No	No	No	No	Fail	DRG_20200728_5_4685_20200917083634.jpg
SUNSET	24134	6914579	1914303	34.24695	-116.8321906	7/28/2020	DRG_20200728_5_3746	old pole stub	Brett Edwards	9/16/2020	10:15:59	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	Yes	12345BV	No	No	No	No	No	No	No	No	Fail	DRG_20200728_5_3746_20200916101556.jpg
Village	23024	6880464	1912276	34.24242	-116.945143	7/28/2020	DRG_20200728_5_6266	add guy guard; old pole stub; add 1 visibility strip	Brett Edwards	9/1/2020	10:26:18	No	No	No	No	No	No	No	No	No	No	Yes	No	No	No	No	No	No	No	No	No	Yes	11743BV	Yes	No	No	No	No	No	No	No	Fail	DRG_20200728_5_6266_20200901102608.jpg
Village	24745	6886051	1914518	34.24842	-116.926576	7/28/2020	DRG_20200728_5_6437	add 1 visibility strip; add guy guard	Brett Edwards	9/3/2020	09:16:36	No	No	No	No	No	No	No	No	No	No	Yes	No	No	No	No	No	No	No	No	No	No	No	6597BV	Yes	No	No	No	No	No	No	No	Fail	DRG_20200728_5_6437_20200903091626.jpg
Village	26149	6872915	1911321	34.24001	-116.9701517	7/28/2020	DRG_20200728_5_2632	tree growth near circuit	Brett Edwards	8/26/2020	08:11:44	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	11005BV	No	No	No	No	No	No	Yes	No	Fail	DRG_20200728_5_2632_20200826081142.jpg

Sargent Lundy Request For Information
BVES Wildfire Mitigation Plan Compliance Review

Please provide the patrol or detailed inspection records for the items below.
Please provide the work packages if work packages exist for the resolution of the inspection findings for items below.

Recipient	Reportee	Date	Priority	Structure #	Circuit	Inspection Type	Details	Due Date	Completed	Foreman
Barber	Rivera	2/4/2020	3	10229BV	Clubview 4kV	Detailed	Repair HS	12/29/2024	5/8/2020	BK
Barber	Rivera	2/5/2020	3	11594BV	Clubview 4kV	Detailed	Repair VS	12/30/2024	2/5/2020	AR
Barber	Rivera	2/5/2020	3	11256BV	Clubview 4kV	Detailed	Repair VS	12/30/2024	2/5/2020	AR
Barber	Rivera	2/5/2020	3	18717CIT	Clubview 4kV	Detailed	Replace HS	12/30/2024	5/8/2020	BK
Barber	Rivera	2/5/2020	3	18718CIT	Clubview 4kV	Detailed	Repair Sec GM, Install HS	12/30/2024	5/8/2020	BK
Barber	Rivera	2/7/2020	2	8688CIT	Boulder 4kV	Patrol	Primary DBL DE arms rotten, bolts pulling through due to angle, one already floating. High P2	2/6/2021	4/4/2020	MC
Barber	Kelly	2/7/2020	3	62976CIT	Erwin 4kV	Patrol	Anchor is exposed 7' due to excavation. Need new 10' anchor.	1/1/2025	5/21/2020	JM
Barber	Rivera	2/13/2020	2	TPAD_1878	Boulder 4kV	Patrol	Oil leak, pad also unlevel. Reco'd repl PMT and clean or repl pad. Can also have BVP grade location if pad repl'd	2/12/2021	4/18/2020	MC
Barber	Rivera	2/26/2020	3	5176BV	Harnish 4kV	Detailed	Repair slack Sec DG, Installed new GG	1/20/2025	5/5/2020	BK
Barber	Rivera	2/26/2020	3	4739BV	Harnish 4kV	Detailed	Repair GG	1/20/2025	2/26/2020	AR
Barber	Rivera	2/26/2020	3	8179BV	Harnish 4kV	Detailed	Repair GG	1/20/2025	2/26/2020	AR
Barber	Rivera	2/26/2020	3	9852BV	Harnish 4kV	Detailed	Repair VS	1/20/2025	2/26/2020	AR
Barber	Rivera	2/27/2020	3	3610BV	Harnish 4kV	Detailed	Install VS	1/21/2025	2/26/2020	AR
Barber	Rivera	2/27/2020	3	P_2534	Harnish 4kV	Detailed	FIF as "8611" Install VS, repair GM	1/21/2025	2/27/2020	AR
Barber	Rivera	2/27/2020	3	8612BV	Harnish 4kV	Detailed	Install VS, removed pine grwoing between riser and pole, installed VS on guard pole	1/21/2025	2/27/2020	AR
Barber	Rivera	2/27/2020	3	P_2495	Harnish 4kV	Detailed	FIF as "1210121" Install VS	1/21/2025	2/27/2020	AR
Barber	Rivera	2/27/2020	3	P_2501	Harnish 4kV	Detailed	FIF as "7590BV" Repair GM	1/21/2025	5/7/2020	BK
Barber	Rivera	2/27/2020	3	12688BV	Harnish 4kV	Detailed	Install VS	1/21/2025	2/27/2020	AR
Barber	Rivera	2/27/2020	3	JBOX_1750	Harnish 4kV	Detailed	FIF as a PMT. Cleaned, decals, removed customer sign attached to XFMR	1/21/2025	2/27/2020	AR
Barber	Rivera	2/28/2020	3	12750BV	Lagonita 4kV	Patrol	Install VS	1/22/2025	2/29/2020	AR

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Can you please provide the work packages for the below items.

No.	WMPInitiativeCategory	WMPInitiativeCategory#	WMPInitiativeActivity	Circuit	Section No.	Work Order #	Marker No.	Address	Remediation	New Pole #	New Pole Latitude	New Pole Longitude	Construction Completed	Tree Attachments Removed	Poles Installed	BVES comments
1	Grid Design and System Hardening	5.3.3.18	Removal of Tree Attachments in HFTD	Fawnskin	1	40412096	M_6429	Lease Lakeview #97	INSTALL NEW POLE	14601BV	34.2669	-116.871	4/3/2020	1	1	File name: TARP Docs 061021.zip
2	Grid Design and System Hardening	5.3.3.18	Removal of Tree Attachments in HFTD	Fawnskin	1	40412096	M_6422	Lease Lakeview #107	INSTALL NEW POLE	14608BV	34.2664	116.8681	4/17/2020	1	1	File name: TARP Docs 061021.zip
3	Grid Design and System Hardening	5.3.3.18	Removal of Tree Attachments in HFTD	Fawnskin	1	40412096	M_6424	Lease Lakeview #106	INSTALL NEW POLE	14609BV			4/15/2020	1	1	File name: TARP Docs 061021.zip
4	Grid Design and System Hardening	5.3.3.18	Removal of Tree Attachments in HFTD	Fawnskin	2	40412097	M_4965	40098 North Shore Dr	INSTALL NEW POLE	13922BV	34.262644	-116.926933	3/16/2020	1	1	File name: TARP Docs 060921.zip
5	Grid Design and System Hardening	5.3.3.18	Removal of Tree Attachments in HFTD	Fawnskin	2	40412097	M_4969	40118 & 40132 North Shore Dr	INSTALL NEW POLE	14520BV	34.262597	-116.926322	3/18/2020	1	1	File name: TARP Docs 060921.zip
6	Grid Design and System Hardening	5.3.3.18	Removal of Tree Attachments in HFTD	Fawnskin	2	40412097	M_4971	Across from 40103 North Shore Dr for Pole P_6584	INSTALL NEW POLE	14521BV	34.262492	-116.926716	3/18/2020	1	1	File name: TARP Docs 060921.zip
7	Grid Design and System Hardening	5.3.3.18	Removal of Tree Attachments in HFTD	Fawnskin	2	40412097	M_4973	40084 North Shore Dr	INSTALL NEW POLE	14522BV	34.262616	-116.927155	3/15/2020	1	1	File name: TARP Docs 060921.zip
8	Grid Design and System Hardening	5.3.3.18	Removal of Tree Attachments in HFTD	Fawnskin	3	40412057	M_5087	39515 North Shore Dr, California 92333	INSTALL NEW POLE	13499BV	34.26612	-116.940265	3/5/2020	1	1	
9	Grid Design and System Hardening	5.3.3.18	Removal of Tree Attachments in HFTD	Fawnskin	3	40412057	M_5096	39534 North Shore Dr, California 92333	INSTALL NEW POLE	13701BV	34.265613	-116.93939	3/4/2020	1	1	
10	Grid Design and System Hardening	5.3.3.18	Removal of Tree Attachments in HFTD	Fawnskin	3	40412057	M_5006	966 Canyon Rd, Fawnskin, California 92333	INSTALL NEW POLE	14180BV	34.250013	-116.937764	3/3/2020	1	1	
11	Grid Design and System Hardening	5.3.3.18	Removal of Tree Attachments in HFTD	Fawnskin	3	40412057	M_5045	1057 Fawnskin Dr, Fawnskin, California 92333	INSTALL NEW POLE	14182BV	34.267402	-116.938517	3/2/2020	1	1	
12	Grid Design and System Hardening	5.3.3.18	Removal of Tree Attachments in HFTD	Fawnskin	3	40412057	M_5008	899 Canyon Rd for Pole 5715BV, Fawnskin, California 92333	INSTALL NEW POLE	14183BV	34.265033	-116.93831	3/3/2020	1	1	
13	Grid Design and System Hardening	5.3.3.18	Removal of Tree Attachments in HFTD	Fawnskin	3	40412057	M_5009	915 Canyon Rd, California 92333	INSTALL NEW POLE	14186BV	34.265938	-116.937703	3/3/2020	1	1	
14	Grid Design and System Hardening	5.3.3.18	Removal of Tree Attachments in HFTD	Fawnskin	3	40412057	M_5100	39554 Barbara Lee Ln	INSTALL NEW POLE	14198BV	34.266136	-116.93888	3/9/2020	1	1	
15	Grid Design and System Hardening	5.3.3.18	Removal of Tree Attachments in HFTD	Fawnskin	3	40412057	M_5100-1	39554 Barbara Lee, Fawnskin, California 92333	INSTALL NEW POLE	14199BV	34.265576	-116.93888	3/9/2020		1	
16	Grid Design and System Hardening	5.3.3.18	Removal of Tree Attachments in HFTD	Fawnskin	4	40412058	M_5738	1128 Illini Dr	INSTALL NEW POLE	13477BV	34.26994	-116.945281	3/10/2020	1	1	
17	Grid Design and System Hardening	5.3.3.18	Removal of Tree Attachments in HFTD	Fawnskin	4	40412058	M_6569	Rec Park - Chickasaw Road, Fawnskin, California 92333	INSTALL NEW POLE	13491BV	34.270242	-116.944783	8/7/2020	1	1	
18	Grid Design and System Hardening	5.3.3.18	Removal of Tree Attachments in HFTD	Fawnskin	4	40412058	M_6576	1145 Illini Dr, Fawnskin 92333	INSTALL NEW POLE (NO POLE NEEDED PER BVES)	13492BV	34.2370589	-116.944978	8/7/2020	1		
19	Grid Design and System Hardening	5.3.3.18	Removal of Tree Attachments in HFTD	Fawnskin	4	40412058	M_5093-1	39271 Seminole Drive, Fawnskin, California 92333	INSTALL NEW POLE	13493BV	34.267329	-116.944902	7/3/2020		1	

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20	Grid Design and System Hardening	5.3.3.18	Removal of Tree Attachments in HFTD	Fawnskin	4	40412058	M_5093	39266 North Shore Dr	INSTALL NEW POLE	13494BV	34.267265	-116.945464	7/3/2020	1	1	
21	Grid Design and System Hardening	5.3.3.18	Removal of Tree Attachments in HFTD	Fawnskin	5	40412059	M_5313	39244 Mohawk Dr	INSTALL NEW POLE	14590BV	34.270931	-116.945833	3/31/2020	1	1	
22	Grid Design and System Hardening	5.3.3.18	Removal of Tree Attachments in HFTD	Fawnskin	5	40412059	M_5126	39127 North Shore Dr	INSTALL NEW POLE	14591BV	34.268737	-116.947999	3/14/2020	1	1	
23	Grid Design and System Hardening	5.3.3.18	Removal of Tree Attachments in HFTD	Fawnskin	5	40412059	M_5317	39205 Mohawk Dr	INSTALL NEW POLE	14596BV	34.270635	-116.946066	3/31/2020	1	1	
24	Grid Design and System Hardening	5.3.3.18	Removal of Tree Attachments in HFTD	Fawnskin	5	40412059	M_5319	1177 Navajo Rd	INSTALL NEW POLE	14597BV	34.270577	-116.945547	3/31/2020	1	1	
25	Grid Design and System Hardening	5.3.3.18	Removal of Tree Attachments in HFTD	Fawnskin	5	40412059	M_5221	39147 Rim Of The World Dr	INSTALL NEW POLE	14740BV	34.270505	-116.948099	3/30/2020	1	1	
26	Grid Design and System Hardening	5.3.3.18	Removal of Tree Attachments in HFTD	Fawnskin	6	40412098	M_6319	Lease BB Tr #314	INSTALL NEW POLE	14217BV	34.2592	-116.9514	5/26/2020	1	1	
27	Grid Design and System Hardening	5.3.3.18	Removal of Tree Attachments in HFTD	Fawnskin	6	40412098	M_6336	Lease BB Tr #333	INSTALL NEW POLE	14219BV	34.2585	-116.9512	5/26/2020	1	1	
28	Grid Design and System Hardening	5.3.3.18	Removal of Tree Attachments in HFTD	Fawnskin	6	40412098	M_5569	Lease BB Tr #318	INSTALL NEW POLE	14220BV	34.259	-116.9512	6/18/2020	1	1	
29	Grid Design and System Hardening	5.3.3.18	Removal of Tree Attachments in HFTD	Fawnskin	6	40412098	M_93510	Lease BB Tr #391	INSTALL NEW POLE	14576BV	34.2583	-116.9467	6/5/2020	1	1	
30	Grid Design and System Hardening	5.3.3.18	Removal of Tree Attachments in HFTD	Fawnskin	6	40412098	M_6329	Lease BB Tr #391	INSTALL NEW POLE	14620BV	34.2603	-116.9504	6/3/2020	2	1	
31	Grid Design and System Hardening	5.3.3.18	Removal of Tree Attachments in HFTD	Fawnskin	7	40412049	M_5643	38600 & 38606 North Shore Dr	INSTALL NEW POLE	14212BV	34.2533	-116.9598	4/28/2020	1	1	
32	Grid Design and System Hardening	5.3.3.18	Removal of Tree Attachments in HFTD	Fawnskin	7	40412049	M_5572	38634 North Shore Dr	INSTALL NEW POLE	14213BV	34.2539	-116.9592	5/15/2020	1	1	
33	Grid Design and System Hardening	5.3.3.18	Removal of Tree Attachments in HFTD	Fawnskin	7	40412049	M_5940	Lease BB Tr #236	INSTALL NEW POLE	14743BV	34.2457	-116.9762	5/1/2020	1	1	
34	Grid Design and System Hardening	5.3.3.18	Removal of Tree Attachments in HFTD	Fawnskin	7	40412049	M_5948	Lease BB Tr #237	INSTALL NEW POLE	14745BV	34.24403	-116.97582	5/1/2020	1	1	
35	Grid Design and System Hardening	5.3.3.18	Removal of Tree Attachments in HFTD	Fawnskin	7	40412049	M_5946	Lease BB Tr #211, 235 & 236	INSTALL NEW POLE	14746BV	34.2458	-116.9761	5/1/2020	1	1	
36	Grid Design and System Hardening	5.3.3.18	Removal of Tree Attachments in HFTD	Fawnskin	7	40412049	M_5934	Pine Oak Ln for Pole 4169BV	REMOVE TREE ATTACHMENT				6/18/2020	1		
37	Grid Design and System Hardening	5.3.3.18	Removal of Tree Attachments in HFTD	Fawnskin	1	40412096	M_6254	Lease Lakeview #58 & #59, FAWNSKIN, California 92333	INSTALL NEW POLE	14605BV			4/1/2020	1	1	
38	Grid Design and System Hardening	5.3.3.18	Removal of Tree Attachments in HFTD	Fawnskin	1	40412096	M_6260	Lease Lakeview #33, FAWNSKIN, California 92333	INSTALL NEW POLE	14604BV			4/1/2020	1	1	File name: TARP Docs 061021.zip
39	Grid Design and System Hardening	5.3.3.18	Removal of Tree Attachments in HFTD	Fawnskin	1	40412096	M_6274	Lease Lakeview #45	INSTALL NEW POLE	14519BV			5/28/2020	1	1	
40	Grid Design and System Hardening	5.3.3.18	Removal of Tree Attachments in HFTD	Fawnskin	1	40412096	M_6277	Lease Lakeview #35	INSTALL NEW POLE	14603BV			4/1/2020	1	1	File name: TARP Docs 061021.zip
41	Grid Design and System Hardening	5.3.3.18	Removal of Tree Attachments in HFTD	Fawnskin	1	40412096	M_6323	Lease Lakeview #54	INSTALL NEW POLE	14515BV			4/13/2020	1	1	File name: TARP Docs 061021.zip
42	Grid Design and System Hardening	5.3.3.18	Removal of Tree Attachments in HFTD	Fawnskin	1	40412096	M_6423	Lease Lakeview #103	INSTALL NEW POLE	14613BV			4/16/2020	1	1	File name: TARP Docs 061021.zip
43	Grid Design and System Hardening	5.3.3.18	Removal of Tree Attachments in HFTD	Fawnskin	1	40412096	M_6430	Lease Lakeview #88	INSTALL NEW POLE	14602BV	34.2661	-116.8732	4/15/2020	1	1	
44	Grid Design and System Hardening	5.3.3.18	Removal of Tree Attachments in HFTD	Fawnskin	2	40412097	M_4963	40118 & 40132 North Shore Dr	INSTALL NEW POLE	13911BV	34.2262359	-116.926289	3/17/2020	1	1	File name: TARP Docs 061021.zip

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45	Grid Design and System Hardening	5.3.3.18	Removal of Tree Attachments in HFTD	Fawnskin	2	40412097	M_4968	40007 North Shore Dr	INSTALL NEW POLE	13919BV	34.2622689	-116.9292005	3/19/2020	1	1	File name: TARP Docs 061021.zip
46	Grid Design and System Hardening	5.3.3.18	Removal of Tree Attachments in HFTD	Fawnskin	2	40412097	M_4979-1	40081 & 40091 North Shore Dr	INSTALL NEW POLE	13921BV	34.2619835	-116.9270869	3/17/2020		1	File name: TARP Docs 061021.zip
47	Grid Design and System Hardening	5.3.3.18	Removal of Tree Attachments in HFTD	Fawnskin	2	40412097	M_5435	Lease Pol Tr #21	INSTALL NEW POLE	13916BV	34.266268	-116.916449	5/29/2020	1	1	File name: TARP Docs 061021.zip
48	Grid Design and System Hardening	5.3.3.18	Removal of Tree Attachments in HFTD	Fawnskin	2	40412097	M_6157	Lease Lakeview #142	INSTALL NEW POLE	14584BV	34.267472	-116.893556	5/6/2020	1	1	File name: TARP Docs 061021.zip
49	Grid Design and System Hardening	5.3.3.18	Removal of Tree Attachments in HFTD	Fawnskin	2	40412097	M_6159	Lease Lakeview#10	INSTALL NEW POLE	14507BV	34.266172	-116.892244	4/20/2020	1	1	File name: TARP Docs 061021.zip
50	Grid Design and System Hardening	5.3.3.18	Removal of Tree Attachments in HFTD	Fawnskin	2	40412097	M_6162	Lease Lakeview #20	INSTALL NEW POLE	14503BV	34 15' 59"		3/23/2020	1	1	File name: TARP Docs 061021.zip
51	Grid Design and System Hardening	5.3.3.18	Removal of Tree Attachments in HFTD	Fawnskin	3	40412057	M_5048-1	39671 Flicker Rd, Fawnskin 92333	INSTALL NEW POLE	14197BV	34.265594	-116.935812	3/6/2020		1	
52	Grid Design and System Hardening	5.3.3.18	Removal of Tree Attachments in HFTD	Fawnskin	3	40412057	M_5100	39554 Barbara Lee Ln	INSTALL NEW POLE	14198BV	34.266136	-116.93888	3/9/2020	1	1	
53	Grid Design and System Hardening	5.3.3.18	Removal of Tree Attachments in HFTD	Fawnskin	3	40412057	M_5200	997 Chinook Rd, Fawnskin, California 92333	INSTALL NEW SERVICE				5/7/2020	1		
54	Grid Design and System Hardening	5.3.3.18	Removal of Tree Attachments in HFTD	Fawnskin	3	40412057	M_6146	1297 Ridge Rd 92333	INSTALL NEW POLE	13495BV	34.271133	-116.935818	3/12/2020	1	1	
55	Grid Design and System Hardening	5.3.3.18	Removal of Tree Attachments in HFTD	Fawnskin	3	40412057	M_6437	North of 1068 Fawnskin Dr for Pole 31479CIT, Fawnskin, California 92333	INSTALL NEW POLE	14190BV	34.268636	-116.936661	3/12/2020	1	1	
56	Grid Design and System Hardening	5.3.3.18	Removal of Tree Attachments in HFTD	Fawnskin	3	40412057	M_6567	39629 Oakglen Rd	INSTALL NEW POLE	13496BV	34.269444	-116.937505	3/5/2020	1	1	
57	Grid Design and System Hardening	5.3.3.18	Removal of Tree Attachments in HFTD	Fawnskin	3	40412057	M_6679	39569 Raccoon Dr, Fawnskin, California 92333	INSTALL NEW POLE	14181BV	34.271494	-116.937992	3/10/2020	1	1	
58	Grid Design and System Hardening	5.3.3.18	Removal of Tree Attachments in HFTD	Fawnskin	4	40412058	M_5415	1239 Brookside Ln	INSTALL NEW POLE	13573BV	34.271683	-116.942476	3/11/2020	1	1	
59	Grid Design and System Hardening	5.3.3.18	Removal of Tree Attachments in HFTD	Fawnskin	4	40412058	M_5426	1221 Crags Ln & 1188 Bruin Trail 1188 Bruin Trail, Big Bear, California 92333	INSTALL NEW POLE (NO POLE NEEDED PER BVES)	13484BV	34.27147	-116.942254	3/24/2020	1		
60	Grid Design and System Hardening	5.3.3.18	Removal of Tree Attachments in HFTD	Fawnskin	4	40412058	M_5431	39312 & 39318 Cedar Dell		13486BV	34.272726	-116.944247	9/18/2020	1	1	
61	Grid Design and System Hardening	5.3.3.18	Removal of Tree Attachments in HFTD	Fawnskin	4	40412058	M_5448	39372 Cedar Dell Rd, Fawnskin, California 92333	INSTALL NEW POLE	13490BV	34.272561	-116.94328	3/27/2020	1	1	
62	Grid Design and System Hardening	5.3.3.18	Removal of Tree Attachments in HFTD	Fawnskin	4	40412058	M_6099	1130 Bruin Trl & 1127 Crags Ln	EASEMENT	14249BV			8/21/2020	1	1	
63	Grid Design and System Hardening	5.3.3.18	Removal of Tree Attachments in HFTD	Fawnskin	4	40412058	M_6571	1300 & 1303 Bruin Trl 92333	INSTALL NEW POLE	13574BV	34.273141	-116.341291	3/10/2020	1	1	
64	Grid Design and System Hardening	5.3.3.18	Removal of Tree Attachments in HFTD	Fawnskin	5	40412059	M_5134	39167 Rim Of The World Dr	INSTALL NEW SERVICE (ADDED POLE PER BVES)	14574BV			3/30/2020	1	1	
65	Grid Design and System Hardening	5.3.3.18	Removal of Tree Attachments in HFTD	Fawnskin	5	40412059	M_5232	Rim of the World Dr for Pole 3881BV	INSTALL ANCHOR/GUY WIRE				6/18/2020	1		

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66	Grid Design and System Hardening	5.3.3.18	Removal of Tree Attachments in HFTD	Fawnskin	5	40412059	M_5244	38888 Rim Of The World Dr	INSTALL NEW POLE	14729BV	34.2742	-116.9527	7/17/2020	1	1	
67	Grid Design and System Hardening	5.3.3.18	Removal of Tree Attachments in HFTD	Fawnskin	5	40412059	M_5251	38979 Rim Of The World Dr	INSTALL NEW POLE	14263BV	34.273384	-116.951355	7/17/2020	1	1	
68	Grid Design and System Hardening	5.3.3.18	Removal of Tree Attachments in HFTD	Fawnskin	5	40412059	M_5382	39110 Choctaw Dr	INSTALL NEW POLE	14599BV	34.272329	-116.948288	4/2/2020	1	1	
69	Grid Design and System Hardening	5.3.3.18	Removal of Tree Attachments in HFTD	Fawnskin	6	40412098	M_5558	Lease BB Tr #323	INSTALL NEW POLE	14206BV	34.2587	-116.9485	5/27/2020	1	1	
70	Grid Design and System Hardening	5.3.3.18	Removal of Tree Attachments in HFTD	Fawnskin	6	40412098	M_5568	Lease BB Tr #311	INSTALL NEW POLE	14223BV			5/26/2020	1	1	
71	Grid Design and System Hardening	5.3.3.18	Removal of Tree Attachments in HFTD	Fawnskin	6	40412098	M_5578	Lease BB Tr #322	INSTALL NEW POLE	14624BV	34.2589	-116.949	6/3/2020	1	1	
72	Grid Design and System Hardening	5.3.3.18	Removal of Tree Attachments in HFTD	Fawnskin	6	40412098	M_6322	Lease BB Tr #329	INSTALL NEW POLE	14615BV			5/19/2020	1	1	
73	Grid Design and System Hardening	5.3.3.18	Removal of Tree Attachments in HFTD	Fawnskin	6	40412098	M_6327	Lease BB Tr #372	INSTALL NEW POLE	14616BV			5/19/2020	1	1	
74	Grid Design and System Hardening	5.3.3.18	Removal of Tree Attachments in HFTD	Fawnskin	6	40412098	M_6333	Lease BB Tr #358	INSTALL NEW POLE	14619BV			6/2/2020	1	1	
75	Grid Design and System Hardening	5.3.3.18	Removal of Tree Attachments in HFTD	Fawnskin	6	40412098	M_6340	Lease BB Tr #351	INSTALL NEW POLE	14217BV	34.2591	-116.9575	6/4/2020	1	1	
76	Grid Design and System Hardening	5.3.3.18	Removal of Tree Attachments in HFTD	Fawnskin	7	40412049	M_5577	Lease BB Tr #300	INSTALL NEW POLE	14215BV	34.2554	-116.9574	5/13/2020	1	1	
77	Grid Design and System Hardening	5.3.3.18	Removal of Tree Attachments in HFTD	Fawnskin	7	40412049	M_5648	Lease BB Tr #227	INSTALL NEW POLE	14209BV	34.2486	-116.9673	5/12/2020	1	1	
78	Grid Design and System Hardening	5.3.3.18	Removal of Tree Attachments in HFTD	Fawnskin	7	40412049	M_5656	Lease BB Tr #228	INSTALL NEW POLE	14208BV	34.2487	-116.9671	5/12/2020	1	1	
79	Grid Design and System Hardening	5.3.3.18	Removal of Tree Attachments in HFTD	Fawnskin	7	40412049	M_5932	Lease BB Tr #102	INSTALL NEW POLE	14747BV	34.2457	-116.9732	5/11/2020	1	1	
80	Grid Design and System Hardening	5.3.3.18	Removal of Tree Attachments in HFTD	Fawnskin	7	40412049	M_5945	Lease BB Tr #260	INSTALL NEW POLE	13924BV	34.2448	-116.975	5/1/2020	1	1	
81	Grid Design and System Hardening	5.3.3.18	Removal of Tree Attachments in HFTD	Fawnskin	7	40412049	M_5985	Lease BB Tr #265	INSTALL NEW POLE	14730BV	34.2478	-116.9704	5/5/2020	1	1	
82	Grid Design and System Hardening	5.3.3.18	Removal of Tree Attachments in HFTD	Fawnskin	7	40412049	M_5990	Lease BB Tr #250	INSTALL NEW POLE	14733BV	34.2473	-116.9701	5/4/2020	1	1	