

## WILDFIRE MITIGATION PLAN DATA REQUEST RESPONSE

The following questions amend data request CalAdvocates-BVES-2021WMP-01, issued January 15, 2021). In particular, questions 4 and 5 are amended. Deletions are indicated with strikethroughs and additions indicated by red text. One column has been deleted due to inadvertent duplication.

If a full response to a given question is included in your WMP submission, your response to this data request may consist of a citation to the specific page(s) or table(s) of the WMP where the information may be found, a written response to the question, or both.

### Question 1

*Please provide a list of all publicly owned electric utilities and electrical cooperatives (collectively, POU) that you supply in part or whole.*

**BVES Response:**

BVES does not supply, in part or whole, to any publicly owned electrical utilities or electrical cooperatives.

### Question 2

*For each publicly owned electric utility and electrical cooperative (collectively, POU) to which you supply power, please respond to the following:*

**BVES Response:**

BVES does not supply, in part or whole, to any publicly owned electrical utilities or electrical cooperatives.

*a) Have you coordinated with the POU to ensure resilience of the POU during a public safety power shutoff (PSPS) event that you initiate? Please describe the nature of this coordination if so.*

**BVES Response:**

BVES has not activated any PSPS events. Additionally, the adjacent utility jurisdiction is under Southern California Edison (SCE). BVES has not found it necessary to engage any regional POU regarding PSPS activation.

*b) In 2020, what coordination, planning, or other activities took place between you and the POU to mitigate the effect of a potential SCE-initiated PSPS event on the POU and its customers?*

**BVES Response:**

BVES has not activated any PSPS events. Additionally, the adjacent utility jurisdiction is under SCE. BVES has not found it necessary to engage any regional POU regarding PSPS activation within its own service area of that of SCE's and would not be subject to ensuring a neighboring POU impact mitigations are successful.

### Question 3

Regarding your wildfire risk model<sup>1</sup>:

a) Have you developed a risk-estimation model that quantifies the wildfire risk level of each of your circuits?

**BVES Response:**

Yes. BVES has developed and utilizes its Fire Safety Circuit Matrix model, which quantifies the wildfire risk level associated with each circuit. This is described in detail in Section 4.5.1 (page 44) within the 2021 Wildfire Mitigation Plan (WMP).<sup>2</sup>

b) If the answer to question 3(a) is yes, explain the finest level physical granularity (i.e. individual equipment, pole/tower, circuit-segment, circuit) with which you assess the wildfire risk level of your facilities.

**BVES Response:**

In the attached workbook, BVES has included the columns that attribute to the risk calculation development (Tab: "Q4. Supplemental – FSC Matrix"). This includes the current design attributed to that circuit and at-risk equipment devices that are referenced in the mitigation strategies to reduce risk. These determinations support BVES in developing a plan for hardening its system and informing the WMP for equipment to be scheduled for replacement, removal, or upgrades.

c) If the answer to question 3(a) is yes, explain the finest level of temporal granularity (i.e. day, week, month, year) with which you assess the wildfire risk level of your facilities.

**BVES Response:**

BVES plans to enhance its risk modeling capabilities starting in 2021. Currently, BVES updates the Fire Safety Circuit Matrix on a quarterly basis with updates from the mitigation initiatives performed under that term. The analysis also considers monthly weather monitoring conditions that BVES and its consultants track.

d) How are transmission and distribution circuits treated differently in the model referred to in question 3(a)?

**BVES Response:**

BVES does not have transmission circuits equal to or greater than 65 kilovolts (kV).

e) Does the model in question 3(a) allow you to rank circuits or circuit-segments by risk level?

**BVES Response:**

The model does allow BVES to rank circuits by risk level. A segment-level view is not available at this time. Below is the current, three-, and ten-year outlook for circuit-level risk.

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<sup>1</sup> Wildfire risk model refers to a risk-estimation model that quantifies the wildfire risk level of your facilities.

<sup>2</sup> BVES. "2021 Wildfire Mitigation Plan."

[https://www.bvesinc.com/media/managed/wmpq4/BVES\\_2021\\_WMP\\_Signed.pdf](https://www.bvesinc.com/media/managed/wmpq4/BVES_2021_WMP_Signed.pdf).

**Figure 1: Fire Safety Circuit Matrix Outlook**

Circuit	HFD Tier	Current Circuit Status			3-Year Projected Outlook			10-Year Projected Outlook		
		Wildfire Risk Group	Overall Risk Weighting	Risk Ranking	Wildfire Risk Group	Overall Risk Weighting	Risk Ranking	Wildfire Risk Group	Overall Risk Weighting	Risk Ranking
Radford	3	30521	0.2886	1	-623	-0.0174	23	-623	0.020629	11
Shay	2	11585	0.1095	2	-2844	-0.0794	25	-3570	0.118213	25
Baldwin	2	8409	0.0795	3	8309	0.2319	1	-992	0.032848	16
Boulder	2	2951	0.0279	12	2043	0.0570	10	-1689	0.055928	18
North Shore (Fawnskin)	2	7238	0.0684	4	2968	0.0828	6	-5089	0.168512	26
Erwin Lake	2	5053	0.0478	6	-5256	-0.1467	26	-702	0.023245	13
Pioneer (Palomino)	2	2859	0.0270	13	-1022	-0.0285	24	-2226.36	0.073721	23
Clubview	2	3860	0.0365	8	2685	0.0750	9	-1812	0.060001	20
Goldmine	2	5669	0.0536	5	4482	0.1251	2	-1014	0.033577	17
Paradise	2	2754	0.0260	14	2688	0.0750	8	-2013.4	0.06667	22
Sunset	2	3583	0.0339	9	3483	0.0972	4	-1715.63	0.05681	19
Sunrise (Maple)	2	3350	0.0317	10	3250	0.0907	5	-689.31	0.022825	12
Holcomb (Bear City)	2	4516	0.0427	7	4248	0.1186	3	-2658.25	0.088023	24
Georgia	2	1594	0.0151	18	1442	0.0402	14	-886.24	0.029346	14
Eagle	2	2072	0.0196	15	1798	0.0502	11	-553.32	0.018322	9
Harnish (Village)	2	585	0.0055	21	309	0.0086	17	-157.56	0.005217	6
Garstin	2	1470	0.0139	19	1047	0.0292	15	-328.76	0.010886	8
Lagonita	2	3032	0.0287	11	2700	0.0754	7	-1859.94	0.061588	21
Interlaken	2	1891	0.0179	16	1615	0.0451	12	-564.8	0.018702	10
Castle Glen (Division)	2	1733	0.0164	17	1573	0.0439	13	-908.36	0.030079	15
Country Club	2	845	0.0080	20	748	0.0209	16	-191.52	0.006342	7
Fox Farm	2	-8	-0.0001	26	-8	-0.0002	22	-28	0.000927	5
Pump House (Lake)	2	178	0.0017	22	158	0.0044	18	48.24	-0.0016	1
Lift (Summit TOU)	2	30	0.0003	23	30	0.0008	19	24.6	-0.00081	2
Skyline (Summit Res)	2	0	0.0000	24	0	0.0000	20	0	0	3
Geronimo (Bear Mtn.)	2	0	0.0000	24	0	0.0000	20	0	0	3

f) Does the model in question 3(a) rank transmission and distribution circuits together or separately?

**BVES Response:**

BVES does not have transmission circuits equal to or greater than 65kV.

g) Are your wildfire risk model's outputs for transmission and distribution circuits comparable to each other?

**BVES Response:**

BVES does not have transmission circuits equal to or greater than 65kV.

**Question 4 – amended February 1, 2021**

Provide an Excel table of all distribution circuits existing in 2020 (as rows) that includes the following information in separate columns. Items (a) through (k) are features of the circuit. Items (l) through (hhh) pertain to work performed for each circuit.

- a. *Circuit Name*
- b. *Circuit ID Number*
- c. *Total Circuit Miles*
- d. *Circuit Miles in non-High Fire Threat District (HFTD) Areas*
- e. *Circuit Miles in HFTD Tier 2*
- f. *Circuit Miles in HFTD Tier 3*
- g. *Circuit Voltage*
- h. *Wildfire Risk Level<sup>3</sup>*
- i. *Circuit SAIDI (System Average Interruption Duration Index) for 2020*
- j. *Circuit SAIFI (System Average Interruption Frequency Index) for 2020*
- k. *Circuit MAIFI (Momentary Average Interruption Frequency Index) for 2020*
- l. *Miles of Enhanced Vegetation Management (EVM) Work in Non-High-Fire Threat District (HFTD) Areas in 2020*
- m. *Miles of EVM Work in HFTD Tier 2 in 2020*
- n. *Miles of EVM Work in HFTD Tier 3 in 2020*
- o. *Miles of Routine Vegetation Management Work in Non-High-Fire Threat District (HFTD) Areas in 2020*
- p. *Miles of Routine Vegetation Management Work in HFTD Tier 2 in 2020*
- q. *Miles of Routine Vegetation Management Work in HFTD Tier 3 in 2020*
- r. *Miles of Covered Conductor Installed in Non-HFTD in 2018*
- s. *Miles of Covered Conductor Installed in Non-HFTD in 2019*
- t. *Miles of Covered Conductor Installed in Non-HFTD in 2020*
- u. *Miles of Covered Conductor Installed in HFTD Tier 2 in 2018*
- v. *Miles of Covered Conductor Installed in HFTD Tier 2 in 2019*
- w. *Miles of Covered Conductor Installed in HFTD Tier 2 in 2020*
- x. *Miles of Covered Conductor Installed in HFTD Tier 3 in 2018*
- y. *Miles of Covered Conductor Installed in HFTD Tier 3 in 2019*
- z. *Miles of Covered Conductor Installed in HFTD Tier 3 in 2020*
- aa. *Number of Poles Replaced in Non-HFTD in 2018*
- bb. *Number of Poles Replaced in Non-HFTD in 2019*

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<sup>3</sup> This refers to the risk calculated for each given circuit, as an output of your quantitative wildfire risk model, if the answer to Question 3(a) is “yes”.

- cc. Number of Poles Replaced in Non-HFTD in 2020*
- dd. Number of Poles Replaced HFTD Tier 2 in 2018*
- ee. Number of Poles Replaced HFTD Tier 2 in 2019*
- ff. Number of Poles Replaced HFTD Tier 2 in 2020*
- gg. Number of Poles Replaced HFTD Tier 3 in 2018*
- hh. Number of Poles Replaced HFTD Tier 3 in 2019*
- ii. Number of Poles Replaced HFTD Tier 3 in 2020*
- jj. Miles of Underground Conductor Installation in Non-HFTD in 2018*
- kk. Miles of Underground Conductor Installation in Non-HFTD in 2019*
- ll. Miles of Underground Conductor Installation in Non-HFTD in 2020*
- mm. Miles of Underground Conductor Installation in HFTD Tier 2 in 2018*
- nn. Miles of Underground Conductor Installation in HFTD Tier 2 in 2019*
- oo. Miles of Underground Conductor Installation in HFTD Tier 2 in 2020*
- pp. Miles of Underground Conductor Installation in HFTD Tier 3 in 2018*
- qq. Miles of Underground Conductor Installation in HFTD Tier 3 in 2018*
- rr. Miles of Underground Conductor Installation in HFTD Tier 3 in 2019*
- ss. Miles of Underground Conductor Installation in HFTD Tier 3 in 2020*
- tt. Miles of Light Detection and Ranging (LiDAR) Inspection in Non-HFTD in 2020*
- uu. Miles of LiDAR Inspection HFTD Tier 2 in 2020*
- vv. Miles of LiDAR Inspection HFTD Tier 3 in 2020*
- ww. Number of Detailed Overhead Inspections in Non-HFTD in 2020*
- xx. Number of Detailed Overhead Inspections HFTD Tier 2 in 2020*
- yy. Number of Detailed Overhead Inspections HFTD Tier 3 in 2020*
- zz. Number of Sectionalization Devices Installed in Non-HFTD in 2018*
- aaa. Number of Sectionalization Devices Installed in Non-HFTD in 2019*
- bbb. Number of Sectionalization Devices Installed in Non-HFTD in 2020*
- ccc. Number of Sectionalization Devices Installed HFTD Tier 2 in 2018*
- ddd. Number of Sectionalization Devices Installed HFTD Tier 2 in 2019*
- eee. Number of Sectionalization Devices Installed HFTD Tier 2 in 2020*
- fff. Number of Sectionalization Devices Installed HFTD Tier 3 in 2018*

*ggg. Number of Sectionalization Devices Installed HFTD Tier 3 in 2019*

*hhh. Number of Sectionalization Devices Installed HFTD Tier 3 in 2020*

**BVES Response:**

BVES has provided responses to several of the data requests in an accompanying excel workbook. This response is presented in that workbook with associated tabs corresponding to each applicable question.

**Question 5**

*Provide an Excel table of all transmission circuits (as rows) that includes the same information listed above in Question 4(a)-(hhh).*

**BVES Response:**

BVES does not have transmission circuits equal to or greater than 65kV.

**Question 6**

*For each WMP initiative listed below, please state how the Wildfire Risk Levels provided in the Excel spreadsheet for Questions 4 and 5 influenced where you performed work in 2020 and how work was sequenced.*

- a) EVM*
- b) Covered conductor installation*
- c) Pole replacement*
- d) Undergrounding*
- e) Grid sectionalization*
- f) Detailed inspections of distribution assets*
- g) Detailed inspections of transmission assets*
- h) Aerial inspections of transmission assets*
- i) Aerial inspections of distribution assets*
- j) LiDAR inspections of distribution assets*
- k) LiDAR inspections of transmission assets*

**BVES Response:**

Please refer to the accompanying excel workbook.

### Question 7

*For each WMP initiative listed below, please complete Table A below, showing how much of the work you completed in 2020 was performed on distribution circuit-segments in each risk quintile.*

**BVES Response:**

Please refer to the accompanying excel workbook.

### Question 8

*For each WMP initiative listed below, please complete Table B below, showing how much of the work you completed in 2020 was performed on transmission circuit-segments in each risk quintile.*

**BVES Response:**

BVES does not have transmission circuits equal to or greater than 65kV.

### Question 9

*Regarding your PSPS circuit modeling capabilities:*

*a) Please describe your present circuit modeling capabilities with regard to PSPS thresholds (“PSPS circuit modeling capabilities”), including with what level of granularity they are able to determine how circuit hardening efforts or other changes to a line segment will affect PSPS thresholds.*

**BVES Response:**

BVES’s Public Safety Power Shutoff (PSPS) policy for threshold criteria considers extreme fire threat conditions in part with fuel loading and humidity levels, in addition to monitoring the National Weather Service issued Red Flag Warning and High Wind Warning days. BVES’s Risk Register model<sup>4</sup> is the singular tool used to account for potential PSPS impact. PSPS risk also considers executed WMP initiatives that further reduce the potential need to activate a PSPS.

Based on the Fire Safety Circuit Matrix 10-year outlook, the probability to activate a PSPS decreases overtime as hardening efforts are implemented.

As described in BVES’s PSPS Plan (see Appendix A of the 2021 WMP):

In determining whether to invoke PSPS, BVES staff considers a number of factors affecting whether or not “extreme fire weather and threat conditions” exist including the following:

- Design strength and other characteristics of distribution overhead facilities.
- Vegetation density.
- National Fire Danger Rating System (NFDRS) for 7-day fire threat outlook.
- National Weather Service advisories.
- Local weather forecasts and advisories.
- BVES meteorologist’s forecast.

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<sup>4</sup> Section 4.5.1 of the 2021 WMP, page 37.

- Information from BVES installed weather stations.
- Real-time information from trained personnel positioned in high-risk areas.
- Input from state and local authorities and Emergency Management Personnel.

“Extreme fire weather conditions” are deemed to be forecasted or exist when the National Fire Danger Rating System forecast is “red,” “orange,” or “brown” for area SC-10, high winds (45 mph or greater) are forecasted or measured, and the BVES meteorologist forecasts high fire threat conditions.

Once it is determined that “extreme fire weather conditions” are forecasted or exist, BVES Staff will implement BVES Public Safety Power Shutoff Procedures per Section 4 at the direction of the Utility Manager. BVES has identified seven sections of “at risk” areas based on the type of distribution facilities (overhead bare conductions, high voltage, etc.), tree and vegetation density, available dry fuel, and other factors that make certain locations more vulnerable to wildfire risk. As previously stated, BVES’s entire service area is in the High Fire Threat District (HFTD) Tiers 2 and 3. The “at risk” areas are identified shown in Appendix A map. These areas may be selectively de-energized by “opening” the Auto-Reclosers (AR) designated in Table 4-5, Switches to De-energize “At Risk” Areas, below.

**Table 1: Switches to De-energize “At Risk” Areas**

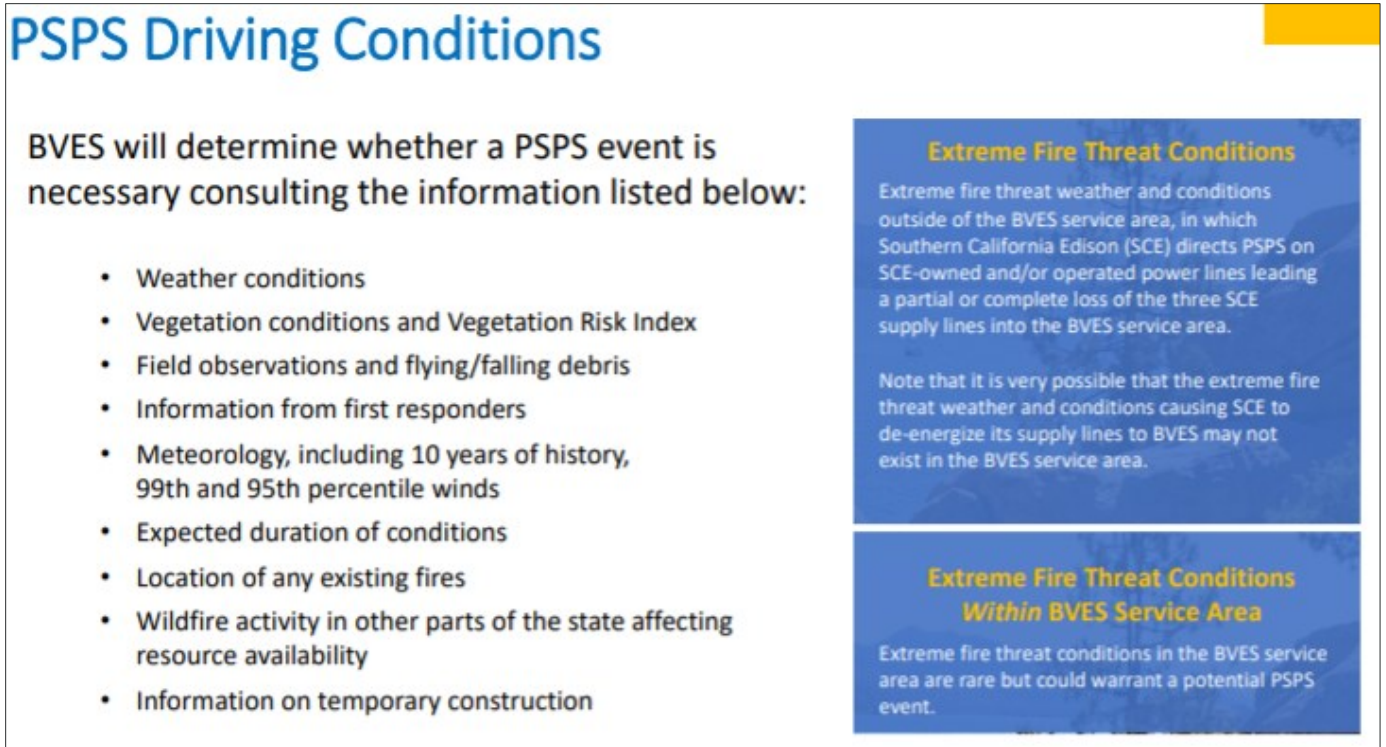
<b>Circuit (AR To Be Opened)</b>	<b>Number of Customers</b>
Radford 34kV	0 <sup>1</sup>
North Shore 4kV (Open AR) 805)	1021
Erwin 4 kV (Open AR 1128)	197
Boulder 4kV (Open AR 105)	1063
Lagonita 4kV (Open AR 145)	946
Club View 4kV (Open AR 424)	740
Goldmine 4kV (Open AR 405)	950

<sup>1</sup>Load is shifted to Shay 34kV line.

It is expected that if PSPS is necessary, in most cases it would be limited to one or more of these “high risk” areas. However, the Operations Team must monitor the entire service area and invoke PSPS as a measure of last resort on any BVES circuit when condition warrant such action.



Figure 2: PSPS Criteria Public Presentation<sup>5</sup>



**PSPS Driving Conditions**

BVES will determine whether a PSPS event is necessary consulting the information listed below:

- Weather conditions
- Vegetation conditions and Vegetation Risk Index
- Field observations and flying/falling debris
- Information from first responders
- Meteorology, including 10 years of history, 99th and 95th percentile winds
- Expected duration of conditions
- Location of any existing fires
- Wildfire activity in other parts of the state affecting resource availability
- Information on temporary construction

**Extreme Fire Threat Conditions**  
Extreme fire threat weather and conditions outside of the BVES service area, in which Southern California Edison (SCE) directs PPS on SCE-owned and/or operated power lines leading a partial or complete loss of the three SCE supply lines into the BVES service area.  
Note that it is very possible that the extreme fire threat weather and conditions causing SCE to de-energize its supply lines to BVES may not exist in the BVES service area.

**Extreme Fire Threat Conditions Within BVES Service Area**  
Extreme fire threat conditions in the BVES service area are rare but could warrant a potential PPS event.

b) Please describe any improvements to the present PPS circuit modeling capability that you expect to enact in 2021.

**BVES Response:**

BVES plans to engage a consultant in 2021 to develop enhanced risk models that will include better analytics to determining PPS risk reduction, current impacts, and qualitative thresholds suitable for the service area. This will include understanding PPS conditions based on forecasted conditions due to increased climate change impacts as well as viewing a historical look for when PPS activations would have been necessary.

c) Please describe the expected state of your PPS circuit modeling capabilities at the conclusion of the 2020-2022 WMP cycle.

**BVES Response:**

BVES plans to have an updated series of risk models that expand the utility's current ability to monitor current and future conditions in addition to those described above. The methodology will include calculating

<sup>5</sup> BVES. "2020 Wildfire Mitigation & PPS Preparation."  
[https://www.bvesinc.com/media/managed/psps/BVES\\_PSPS\\_PPT\\_2020\\_Final.pdf](https://www.bvesinc.com/media/managed/psps/BVES_PSPS_PPT_2020_Final.pdf).

the impact or risk reduction through its executed initiatives. This includes the development of a Fire Potential Index, climatological risk modeling, and enhancing the existing Risk Register tool.

**Question 10**

For each program identified in WMP section 5.3, Plan Program Targets:

- a) Provide the annual program targets from the year 2019 onward as identified in the 2019 WMP filing.
- b) Provide the annual program targets from the year 2020 onward as identified in the 2020 WMP filing.
- c) List the actual work completed for 2019.
- d) List the actual work completed for 2020.

**BVES Response:**

For Question 10a see the table below (located in Section 5.1, Supporting Table 5-1 in the 2020 Final Action Statement WMP).<sup>6</sup>

**Table 2: Prevention Strategy Program Description & Updates**

Mitigation Measure	Description	Status	Lessons Learned	Objective Period	Standard or Augmented Wildfire Operations
<i>Risk Assessment and Mapping</i>					
BVES does not have unique or specialized initiatives under this category for this filing.					
<i>Grid Design and System Hardening</i>					
Pineknut Substation Upgrades	Technical and safety upgrades to prevent equipment exposure to the vegetation and human contact	Completed	Underground vaults for pad mounted equipment design for cold temperatures required more time than expected.	Completed before the 2020 wildfire season	Standard Operations
Palomino Substation Upgrade	Safety and technical upgrades to Palomino Substation. Converts substation from overhead-type to pad-mounted design with dead front SCADA enabled equipment.	Design completed. Equipment on order. Construction bids being evaluated. On track to complete by end of 2020.		Complete before the 2021 wildfire season	Standard Operations

<sup>6</sup> BVES. “2020 Final Action Statement WMP.”  
[https://www.bvesinc.com/media/managed/wmp/BVES\\_2020\\_WMP\\_Refile\\_09182020A.pdf](https://www.bvesinc.com/media/managed/wmp/BVES_2020_WMP_Refile_09182020A.pdf).

Mitigation Measure	Description	Status	Lessons Learned	Objective Period	Standard or Augmented Wildfire Operations
Energy Storage Project	Construct an energy storage facility within BVES's Service Territory.	Project in concept development stage.		Ongoing over the next three-year planning period.	Standard Operations
Ute Undergrounding	<i>Transfer SCE Ute Line assets to BVES and undergrounding to mitigate proximity to forested areas.</i>	<i>Due to several factors, BVES is no longer proposing the acquisition and subsequent undergrounding of the Ute Line.</i>	<i>BVES is no longer considering this initiative</i>	N/A	<i>Augmented Wildfire Operations</i>
Fuse Upgrades	Two-year project to replace conventional fuses with current-limiting fuses or electronic programmable (vacuum switch) TripSaver technology.	In progress. 50% complete.	Electronic Fuse TripSavers are long lead items in high demand.  It is more efficient to send a TripSaver programming technician out in field with the Line Crew performing the installation work.	Ongoing over the next WMP planning cycle.	Augmented Wildfire Operations
Tree Attachment Removal Project	Five-year project for removal of tree attachments to avoid proximity to fuel and ignition sources.	In progress. 35.5% complete.	Coordination with "Lease Cabin" residents in US Forestry areas can be challenging. BVES will work to account for these anticipated delays for part-time residents in future ongoing efforts.	Ongoing over the next three-year planning period.	Standard Operations
Pole Loading Assessment & Remediation Program	Five-year program to perform an engineering assessment of pole strength to identify pole issues which can result in wildfires.	In progress. 28.9% complete.	A large number of poles failed due to communications lines that were added to the poles, could not be in compliance with minimum distance from power lines and minimum distance off the ground. These lines were largely installed over 20 years ago.	Ongoing over the next three-year planning period.	Standard Operations
Covered Conductor Replacement Pilot Program	Pilot program to determine the effectiveness of using covered tree wire (molded) conductor to mitigate ignition and to develop work methods for a larger initiative rollout	100% Complete.	The covered conductor proved to be very effective and reasonable to install.  Performing the pilot program allowed utility staff to gain invaluable experience in working with the product on a small scale before	Completed before the 2020 wildfire season.	Augmented Wildfire Operations

Mitigation Measure	Description	Status	Lessons Learned	Objective Period	Standard or Augmented Wildfire Operations
			moving to larger installation projects.		
Covered Conductor Wrap Pilot Program	<i>Pilot program using wire wrap for high-risk wires to test feasibility for a larger initiative rollout.</i>	<i>The pilot project indicated that the wire wrap product does not meet BVES's specifications, primarily due to ampacity limitations on existing wire and information not being readily available for research and testing. Because of these issues, it was determined that the product was not ready to be deployed in the field.</i>	Comprehensive pilot programs provide valuable information related to engineering properties and installation and, as in this case, Protected the utility from investing in a product that turned out to not be effective.	<i>No longer applicable.</i>	<i>Augmented Wildfire Operations</i>
Covered Wire Program (34.5 kV sub-transmission)	Covered Wire Program (34.5 kV sub-transmission): All bare wire in Tier 3 to be covered by end of calendar year 2021 and all bare wire in Tier 2 to be covered by end of 2025	Six-year program to replace bare overhead wire with covered wire starting 2020.		Ongoing over the next ten-year planning period.	Augmented Wildfire Operations
Covered Wire Program (4 kV distribution)	Covered Wire Program (4 kV distribution): All bare wire in Tier 2 dense vegetation areas to be covered by end of calendar year 2030. This is approximately 47.5% of current bare 4 kV wire (86 circuit miles).	Ten-year program to replace bare overhead wire with covered wire starting 2021.		Ongoing over the next ten-year planning period.	Augmented Wildfire Operations
Radford Line Covered Conductor Replacement Project	Radford Line replacement with a covered conductor to mitigate bare wire contact with fuel sources in HFTD Tier 3 area.	Design complete. Construction expected completion date (ECD) October 2021.	US Forest Service permitting process has proven to be longer and more cumbersome than in previous projects.	Ongoing over the next WMP planning cycle.	Augmented Wildfire Operations

Mitigation Measure	Description	Status	Lessons Learned	Objective Period	Standard or Augmented Wildfire Operations
Evacuation Route Hardening (Pilot Project)	Hardening of overhead facilities along evacuation routes to prevent facilities from falling into evacuation routes during a wildfire.	Pilot program installed two different technologies to date. Utility staff also conducting product reviews on technologies used by other utilities.	Working with local stakeholders is essential to get acceptance for the change in appearance of hardened overhead facilities.	Ongoing over the next WMP planning cycle.	Augmented Wildfire Operations
<i>Situational Awareness &amp; Forecasting</i>					
GIS-Based Applications (e.g. Outage Management System)	Implementation of GIS-based systems, outage management systems, and interactive voice response systems, which allow BVES to locate outages and respond to customers more promptly in the case of a wildfire or related emergency.	Completed.		Implemented. Ongoing program	Standard Operations
SCADA Installations	Included in the four-year Grid Automation project.	In progress. ECD December 2022.		Ongoing over the next three-year planning period.	Standard Operations
Web-Based Weather Resources	Monitoring of publicly available weather resources to evaluate forecasted weather and monitor for potential extreme fire conditions to prepare the system during high-risk events.	Completed.		Implemented. Ongoing program	Standard Operations
Situational Awareness Enhancement	BVES plans to install a complete distribution management control center with equipment and applications that provide full information capabilities available to distribution decision makers.	The conceptual planning will start in 2021. A detailed design plan will be developed in 2022 with the actual facility being constructed in 2023.		Ongoing over the next ten-year planning period	Augmented Wildfire Operations
BVES-Owned Weather Stations	Monitoring of BVES-specific weather stations in strategic locations to evaluate forecasted weather and monitor potential extreme fire conditions	90% complete. ECD December 2020.	Permitting and access conditions can lengthen the installation process.	Do not expect to install any further weather station over next three years.	Augmented Wildfire Operations

Mitigation Measure	Description	Status	Lessons Learned	Objective Period	Standard or Augmented Wildfire Operations
iRestore App Implementation	Implementing the iRestore App provides first responders and internal damage assessment teams with tools to quickly document and report facility and equipment problems to Dispatch.	Completed.	Training outside organizations is challenging.	Implemented. Ongoing program	Augmented Wildfire Operations
Weather Forecasting	Analysis of weather feeds to predict, prepare for, and respond to extreme weather events, which may result in wildfires. BVES currently analyzes this in-house but proposes to contract out the services on a weekly basis for additional analysis.	Completed.		Implemented. Ongoing program	Augmented Wildfire Operations
Remote Monitoring	Monitoring of system and assets in remote areas using HD cameras to improve situational awareness and maintenance of key assets.	In progress. ECD April, 2020	Gaining access to certain areas to install cameras requires significant coordination.	Ongoing over the next WMP planning cycle	Augmented Wildfire Operations
Grid Automation	Four-year project to install fiber network and automate the grid to improve system responses to prevent wildfires and enhance safety.	In progress. 25% complete.		Ongoing over the next three-year planning period.	Standard Operations
<i>Asset Management and Inspections</i>					
First Annual On-Ground Inspection (GO 165)	One annual system patrol to inspect the condition of assets to avoid faults, which can result in wildfires.	Completed.		Implemented. Ongoing program	Standard Operations
Second Annual On-Ground Inspection	One additional system patrol by an independent 3 <sup>rd</sup> party in addition to the annual GO 165 patrol to ensure all assets are in good condition to avoid faults, which can result in wildfires.	Completed.	3rd party's first patrol took longer than planned due to ramp up in learning service area and its features.	Implemented. Ongoing program	Augmented Wildfire Operations
Electrical Preventative Maintenance Program	System examination using additional diagnostics on assets to further inspect asset conditions.	Completed.		Implemented. Ongoing program	Standard Operations
LIDAR Inspection	Light Detection and Ranging (LIDAR) inspections of overhead facilities in difficult-to-patrol areas to visualize vegetation growth proximity to the system for targeted maintenance.	Completed.	Initial LiDAR survey results required significant effort by Contractors interpreting the results. Follow-on survey results are ready much sooner due to system model being in place.	Implemented. Ongoing program	Augmented Wildfire Operations

Mitigation Measure	Description	Status	Lessons Learned	Objective Period	Standard or Augmented Wildfire Operations
<i>Vegetation Management and Inspections</i>					
Vegetation Management Plan	Vegetation maintenance program to avoid system encroachment and blow-ins, which may cause wildfires. Vegetation inspections are performed during first and second annual patrols and are included under vegetation management procedures, but not captured separately as a unique initiative.	Completed.		Implemented. Ongoing program	Standard Operations
Forester Consulting Service	Engage full-time utility forester services for the service area	In contracting process. Expect to implement by October 2020.		Ongoing over the next three-year planning period	Augmented Wildfire Operations
<i>Grid Operations and Protocols</i>					
Operational Considerations / Special Work Procedures	Protocols and procedures for staff during high-risk fire conditions.	Completed.		Implemented. Ongoing program	Augmented Wildfire Operations
Automatic Recloser Upgrades	Recloser replacement to reduce electrical sparking, while also helping mitigate power outages and equipment damage.	Completed.	Important to ensure vendor communications equipment compatible with Company network.	Implemented. Ongoing program	Augmented Wildfire Operations
PSPS Protocols	Protocols and procedures to respond to and recover from de-energization events to proactively prevent wildfires.	Completed.		Implemented. Ongoing program	Augmented Wildfire Operations
Wildfire Infrastructure Protection Teams	Roles and responsibilities for staff to respond to protect system infrastructure in case of emergencies.	Completed.		Implemented. Ongoing program	Augmented Wildfire Operations
<i>Data Governance</i>					
GIS Data Collection & Sharing	Geographic Information System (GIS) database on system infrastructure for asset management and planning with key stakeholders. Performing gap analysis to proposed Implement WSD GIS Standards and plan to resolve any gaps by 2021.	In progress.	Having a dedicated GIS Specialist and access to temporary GIS data entry is key to keeping the GIS up to date and useful.  BVES is hiring for a new role dedicated to collecting and organizing related information and is investing in GIS training and capability	Ongoing over the next WMP planning cycle.	Augmented Wildfire Operations

Mitigation Measure	Description	Status	Lessons Learned	Objective Period	Standard or Augmented Wildfire Operations
			enhancements over the next year.		
<i>Resource Allocation Methodology</i>					
BVES does not have unique or specialized initiatives under this category for this filing.					
<i>Emergency Planning &amp; Preparedness</i>					
Post Incident Recovery, Restoration & Remediation	Protocols and procedures to respond to and recover from any wildfire or related emergency events.	Completed.		Implemented. Ongoing program	Augmented Wildfire Operations
Emergency Reporting	Protocols and procedures for staff when third parties (e.g. customers) report potential fires, including "arcing, sparks, smoldering, smoke, or fire."	Completed.		Implemented. Ongoing program	Standard Operations
<i>Stakeholder Cooperation and Community Engagement</i>					
Community Engagement	Program to gain input from and inform and educate community on WMP and PSPS Policy through community briefs, advertising, website and social media, newsletters, and other media venues. Engagement includes languages as indicated in D.20-03-004.	Completed.	Significant advertising necessary to encourage attendance at community briefs. Use of Zoom meetings effective during COVID-19 restrictions.	Implemented. Ongoing program	Augmented Wildfire Operations
Local Government, and Agency Briefs	Program to gain input from, and to inform and educate, first responders, local government, and agencies and other stakeholder organizations on WMP and PSPS Policy through community briefs, advertising, website and social media, newsletters, and other media venues. Engagement includes languages as indicated in D.20-03-004.	Completed.	Use of Zoom meetings effective during COVID-19 restrictions.	Implemented. Ongoing program	Augmented Wildfire Operations

Completed or Implemented as Ongoing Program
On Track
Not Started
Reconsidered / Delayed



For Questions 10b-d see the table below (located in Section 5.3, Table 5.3-1 in the 2021 WMP).

**Table 3: List and Description of Program Targets, Last 5 Years**

Program Target	2019 Perf.	2020 Perf.	Projected Target by End of 2021	Projected Target by End of 2022	Units	Underlying Assumptions	Update Frequency	Third-Party Validation
A summarized risk map that shows the overall ignition probability and estimated wildfire consequence along the electric lines and equipment	NA	NA	50%	100%	Percent Project Milestones Completed	Project Starts June 2021	Quarterly	Analyst/IE
Climate-driven risk map and modelling based on various relevant weather scenarios	NA	NA	50%	100%	Percent Project Milestones Completed	Project Starts June 2021	Quarterly	Analyst/IE
Ignition probability mapping showing the probability of ignition along the electric lines and equipment	NA	NA	50%	100%	Percent Project Milestones Completed	Project Starts June 2021	Quarterly	Analyst/IE
Initiative mapping and estimation of wildfire and PSPS risk-reduction impact	NA	NA	50%	100%	Percent Project Milestones Completed	Project Starts June 2021	Quarterly	Analyst/IE
Match drop simulations showing the potential wildfire consequence of ignitions that occur along the electric lines and equipment	NA	NA	50%	100%	Percent Project Milestones Completed	Project Starts June 2021	Quarterly	Analyst/IE
Advanced weather monitoring and weather stations	10	8	2	NA	# of Weather Stations Installed	Total of 20 Weather Stations to be Installed	Quarterly	Analyst/IE
Continuous monitoring sensors	NA	NA	Not planned yet. BVES still has not found a commercially reliable technology.					
Fault indicators for detecting faults on electric lines and equipment	100%	100%	100%	217	# of FIs Installed	117 additional FIs to be installed at 39 locations	Quarterly	Analyst/IE
Forecast of a fire risk index, fire potential index, or similar	100%	100%	100%	100%	Index in use	Index in use	NA	Analyst/IE
Personnel monitoring areas of electric lines and equipment in elevated fire risk conditions	100%	100%	100%	100%	Program in Place and Operating	NA	NA	Analyst/IE
Weather forecasting and estimating impacts on electric lines and equipment	100%	100%	100%	100%	Program in Place and Operating	NA	NA	Analyst/IE
Capacitor maintenance and replacement program	Program covered in BVES ongoing maintenance of sub-transmission and distribution facilities.							
Circuit breaker maintenance and installation to de-energize lines upon detecting a fault	Program covered in BVES ongoing maintenance of sub-transmission and distribution facilities.							

Program Target	2019 Perf.	2020 Perf.	Projected Target by End of 2021	Projected Target by End of 2022	Units	Underlying Assumptions	Update Frequency	Third-Party Validation
Covered conductor installation	0.5	7.8	12.9	12.9	Circuit Miles	4.3 circuit miles per year of sub-transmission & 8.6 circuit miles per year of distribution	Quarterly	Analyst/IE
Covered conductor maintenance	Program covered in BVES ongoing maintenance of sub-transmission and distribution facilities.							
Crossarm maintenance, repair, and replacement	Program covered in BVES ongoing maintenance of sub-transmission and distribution facilities.							
Distribution pole replacement and reinforcement, including with composite poles	Program covered in pole loading infrastructure hardening and replacement program based on pole loading assessment program.							
Expulsion fuse replacement	302	2001	901	NA	# of Expulsion Fuses Replaced	Project complete when all 3,204 expulsion fuses replaced	Quarterly	Analyst/IE
Grid topology improvements to mitigate or reduce PSPS events	100%	NA	NA	NA	# of section devices installed divided by # of section devices needed	NA	NA	Analyst/IE
Installation of system automation equipment	25%	35%	50%	65%	Percent Project Milestones Completed	Based on project milestones	Quarterly	Analyst/IE
Maintenance, repair, and replacement of connectors, including hotline clamps	Program covered in BVES ongoing maintenance of sub-transmission and distribution facilities.							
Mitigation of impact on customers and other residents affected during PSPS event	25%	25%	30%	35%	Percent Project Milestones Completed	Sectional Devices Installed (25%) Energy Storage Project (75%)	NA	Analyst/IE
Other corrective action	BVES currently does not have other corrective action.							
Pole loading infrastructure hardening, and replacement program based on pole loading assessment program	1,588	191	500	500	# of Poles assessed for loading criteria	NA	Quarterly	Analyst/IE
Transformers maintenance and replacement	Program covered in BVES ongoing maintenance of sub-transmission and distribution facilities.							
Transmission tower maintenance and replacement	BVES does not have any transmission facilities.							
Undergrounding of electric lines and/or equipment	NA	NA	BVES currently does not have any programmed projects for undergrounding of electric lines and/or equipment.					
Updates to grid topology to minimize risk of ignition in HFTDs	BVES's entire service area is in the HFTD 2 & 3. Sectionalizing between HFTD 2 and 3 already in place. Further sectionalizing within the HFTD to isolate "higher risk areas" already in place.							

Program Target	2019 Perf.	2020 Perf.	Projected Target by End of 2021	Projected Target by End of 2022	Units	Underlying Assumptions	Update Frequency	Third-Party Validation
Detailed inspections of distribution electric lines and equipment	100%	100%	100%	100%	Percent of Scheduled Circuits Completed	Complete inspection on circuits scheduled for each specific year. Each circuit is on a 5-year schedule. Detailed inspections of circuits are staggered spread the entire system of over 5 years.	Quarterly	Analyst/IE
Detailed inspections of transmission electric lines and equipment	BVES does not have any transmission facilities.							
Improvement of inspections	100%	100%	100%	100%	Continuous Improvement Program in place and ongoing	NA	NA	Analyst/IE
Infrared inspections of distribution electric lines and equipment	211	BVES paused use of this inspection methodology. Intends to conduct every 5 years. Next inspection is programmed for 2024.			Circuit Miles	Complete at least 211 circuit miles of Infrared Inspections on Overhead Facilities	Analyst/IE	
Infrared inspections of transmission electric lines and equipment	BVES does not have any transmission facilities.							
Intrusive pole inspections	100%	100%	100%	100%	Percent of Scheduled Circuits Completed	# of Poles Inspected divided by # of Poles Due for Inspection	Quarterly	Analyst/IE
Light Detection and Ranging (LiDAR) inspections of distribution electric lines and equipment	211	211	211	211	Circuit Miles	Complete at least 211 circuit miles of LiDAR on Overhead Facilities	Quarterly	Analyst/IE
LiDAR inspections of transmission electric lines and equipment	BVES does not have any transmission facilities.							
Third Party Ground Patrol  Other discretionary inspection of distribution electric lines and equipment, beyond inspections mandated by rules and regulations	211	211	211	211	Circuit Miles	Complete at least 211 circuit miles of Third-Party Ground Patrol on Overhead Facilities	Quarterly	Analyst/IE

Program Target	2019 Perf.	2020 Perf.	Projected Target by End of 2021	Projected Target by End of 2022	Units	Underlying Assumptions	Update Frequency	Third-Party Validation
Unmanned Aerial Vehicle (UAV) Inspection  Other discretionary inspection of distribution electric lines and equipment, beyond inspections mandated by rules and regulations	NA	NA	211	211	Circuit Miles	Complete at least 211 circuit miles of Fly-over UAV Inspection on Overhead Facilities	Quarterly	Analyst/IE
Other discretionary inspection of transmission electric lines and	BVES does not have any transmission facilities.							
Patrol inspections of distribution electric lines and equipment	211	211	211	211	Circuit Miles	Complete at least 211 circuit miles of Patrol on Overhead Facilities	Quarterly	Analyst/IE
Patrol inspections of transmission electric lines and equipment	BVES does not have any transmission facilities.							
Pole loading assessment program to determine safety factor	Program covered in pole loading infrastructure hardening and replacement program based on pole loading assessment program.							
Quality assurance / quality control of inspections	NA	NA	NA	100%	Percent Completed Base on Milestones	BVES is able to implement Inspection QC program in 2022.	NA	Analyst/IE
Substation inspections	144	144	144	156	GO-174 monthly substation inspection	Inspect each in-service substation monthly (GO 174)	Quarterly	Analyst/IE
Additional efforts to manage community and environmental impacts	BVES currently has not encountered the need for additional efforts to manage community and environmental impacts							
Detailed inspections of vegetation around distribution electric lines and equipment	This inspection is combined with Detailed inspections of distribution electric lines and equipment.							
Detailed inspections of vegetation around transmission electric lines and equipment	BVES does not have any transmission facilities.							
Emergency response vegetation management due to red flag warning or other urgent conditions	100%	100%	100%	100%	Program in place and ready for use	NA	NA	Analyst/IE
Fuel management and reduction of "slash" from vegetation management activities	BVES VM contractor removes vegetation wastes as part of contract.							
Improvement of inspections LiDAR inspections of vegetation around distribution electric lines and equipment	This inspection is combined with LiDAR inspections of distribution electric lines and equipment.							

Program Target	2019 Perf.	2020 Perf.	Projected Target by End of 2021	Projected Target by End of 2022	Units	Underlying Assumptions	Update Frequency	Third-Party Validation
LIDAR inspections of vegetation around transmission electric lines and equipment	BVES does not have any transmission facilities.							
Other discretionary inspections of vegetation around distribution electric lines and equipment	These inspections are combined with other discretionary inspections of vegetation around distribution electric lines and equipment. See Third Party Ground Patrol and Fly-over UAV inspections.							
Other discretionary inspections of vegetation around transmission electric lines and equipment	BVES does not have any transmission facilities.							
Patrol inspections of vegetation around distribution electric lines and equipment	This inspection is combined with Patrol inspections of distribution electric lines and equipment.							
Patrol inspections of vegetation around transmission electric lines and equipment	BVES does not have any transmission facilities.							
Quality assurance / quality control of vegetation inspections	100%	100%	100%	100%	QC program in place and in periodicity	QC schedule determines periodicity	NA	Analyst/IE
Recruiting and training of vegetation management personnel	100%	100%	100%	100%	No gaps in VM personnel (contractor)	Gaps in VM Crews	NA	Analyst/IE
Remediation of at-risk species	Currently BVES has not had this issue. BVES has discussed this with its VM contractor should this be a future problem. Additionally, BVES will be bringing on a Forester in April 2021 to review this more closely.							
Removal and remediation of trees with strike potential to electric lines and equipment	100%	100%	100%	100%	Percent of trees designated for removal actually removed	# of trees designated for removal changes each year	Quarterly	Analyst/IE
Substation inspection	This inspection is combined with substation equipment inspections (GO 174).							
Substation vegetation management	100%	100%	100%	100%	Program in place and being executed ongoing basis	Each substation evaluated and remediated annually. BVES has 13 substations	Annual	Analyst/IE
Vegetation inventory system	50%	100%	100%	100%	Milestone Completion	VM Contractor entered all trees in right of way in VM cycle.	NA	Analyst/IE
Vegetation management to achieve clearances around electric lines and equipment	50%	100%	100%	100%	Milestone Completion	VM Contractor implemented enhanced clearance standards and completed VM cycle	NA	Analyst/IE

Program Target	2019 Perf.	2020 Perf.	Projected Target by End of 2021	Projected Target by End of 2022	Units	Underlying Assumptions	Update Frequency	Third-Party Validation
Automatic recloser operations	100%	100%	100%	100%	Auto Recloser policy and procedures established and in place (ongoing)	NA	NA	Analyst/IE
Crew-accompanying ignition prevention and suppression resources and services	100%	100%	100%	100%	Plan in place and ongoing	NA	NA	Analyst/IE
Personnel work procedures and training in conditions of elevated fire risk	100%	100%	100%	100%	Program in place and ongoing	NA	NA	Analyst/IE
Protocols for PSPS re-energization	100%	100%	100%	100%	Protocols in place and ready for use	NA	NA	Analyst/IE
PSPS events and mitigation of PSPS impacts	100%	100%	100%	100%	BVES has not had any PSPS events. Protocols in place and ready for use	NA	NA	Analyst/IE
Stationed and on-call ignition prevention and suppression resources and services	BVES does not have fire suppression resources. BVES works with Big Bear Fire Department, San Bernardino County Fire Department and CALFIRE closely to provide crews on-call for ignition prevention and suppression.							
Centralized repository for data	50%	75%	100%	100%	Percent Complete Based on Milestones	GIS Data Update Needed to Complete Project	Quarterly	Analyst/IE
Collaborative research on utility ignition and/or wildfire	While BVES is open to collaborative research on utility ignition and/or wildfire, it has not had any opportunities to date.							
Documentation and disclosure of wildfire-related data and algorithms	100%	100%	100%	100%	This is an ongoing process.	NA	NA	Analyst/IE
Tracking and analysis of near miss data	100%	100%	100%	100%	Program in place and ongoing	NA	NA	Analyst/IE
Allocation methodology development and application	100%	100%	100%	100%	Program in place and ongoing	NA	NA	Analyst/IE
Risk reduction scenario development and analysis	100%	100%	100%	100%	Program in place and ongoing	NA	NA	Analyst/IE
Risk spend efficiency analysis	100%	100%	100%	100%	Program in place and ongoing	NA	NA	Analyst/IE
Adequate and trained workforce for service restoration	100%	100%	100%	100%	# of Staff for Service Restoration/# of Required Staff for Service Restoration	Recruitment Program in place and ongoing	NA	Analyst/IE
Community outreach, public awareness, and communications efforts	100%	100%	100%	100%	Community outreach program in place and ongoing	NA	NA	Analyst/IE
Customer support in emergencies	100%	100%	100%	100%	Customer support procedures and policy in place and ready for use	NA	NA	Analyst/IE
Disaster and emergency preparedness plan	100%	100%	100%	100%	Disaster and emergency preparedness plan in place and ready for use	NA	NA	Analyst/IE

Program Target	2019 Perf.	2020 Perf.	Projected Target by End of 2021	Projected Target by End of 2022	Units	Underlying Assumptions	Update Frequency	Third-Party Validation
Preparedness and planning for service restoration	100%	100%	100%	100%	Preparedness and planning for service restoration plan in place and ready for use	NA	NA	Analyst/IE
Protocols in place to learn from wildfire events	100%	100%	100%	100%	Protocols in place to learn from wildfire events and ongoing	NA	NA	Analyst/IE
Community engagement	100%	100%	100%	100%	Community engagement program in place and ongoing	NA	NA	Analyst/IE
Cooperation and best practice sharing with agencies outside CA	BVES does not have a formal program for this but is actively engaged in reviewing and learning from T&D industry best practices and new techniques and technologies.							
Cooperation with suppression agencies	100%	100%	100%	100%	Cooperation with suppression agencies program in place and ongoing	NA	NA	Analyst/IE
Forest service and fuel reduction cooperation and joint roadmap	NA	NA	50%	100%	Progress measured by achieving milestones	Develop cooperation and joint roadmap with Forest Service (2021 – 50%) Implement cooperation and joint roadmap with Forest Service (2022 – 50%)		

### Question 11

For each mitigation initiative identified in WMP section 7.3.1, Financial data on mitigation initiatives:

- Provide the spending forecasts from the year 2019 onward as identified in the 2019 WMP filing.
- Provide the spending forecasts from the year 2020 onward as identified in the 2020 WMP filing.
- Provide the actual spending for 2019.
- Provide the actual spending for 2020.

#### BVES Response:

For Questions 10a and 10c, please refer to Attachment 1 of the 2020 FAS WMP.<sup>7</sup>

<sup>7</sup> BVES. “Attachment 1: 2020 FAS WMP Filing.”

[https://www.bvesinc.com/media/managed/bveswmp/bves\\_fas\\_2020\\_wmp\\_attachment\\_1\\_clean.xlsx](https://www.bvesinc.com/media/managed/bveswmp/bves_fas_2020_wmp_attachment_1_clean.xlsx).

For Questions 10b and 10d, please refer to BVES's Q4 Quarterly Data Report, Table 12 associated with the 2021 WMP.<sup>8</sup>

### **Question 12**

*Please identify and provide a copy of all quality assurance or quality control (QA/QC) reports — conducted by both internal and external entities — that were completed since January 1, 2020 and that examined any programs, initiatives, or strategies described in your 2020 Wildfire Mitigation Plan. External entities include, but are not limited to, contractors, auditors, and Independent Evaluators.*

#### **BVES Response:**

BVES has provided the available QA/QC reports since January 1, 2020 as Attachments A and B.

### **Question 13**

*Provide an Excel table of all defects in the year 2020 found by the Wildfire Safety Division's Compliance Branch (as rows) that includes the following information in separate columns.*

- a) *Associated Circuit Name*
- b) *Defect Type*
- c) *Description of defect*
- d) *WMP initiative associated with defect*
- e) *Date that defect was identified*
- f) *Date that defect was corrected*
- g) *Priority level of corresponding corrective tag*
- h) *Location of defect (latitude/longitude)*

#### **BVES Response:**

Please refer to the attached excel workbook. Attachment A also provides the WSD service area inspection results.

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<sup>8</sup> BVES. "BVES Q4 QDR." <https://www.bvesinc.com/media/managed/wmp/bves-q4-03052021.xlsx>.



## ATTACHMENTS

### Attachment A: Wildfire Safety Division Inspection Report

# Wildfire Safety Division Inspection Report




California Public  
 Utilities Commission

WILDFIRE SAFETY DIVISION  
 COMPLIANCE BRANCH

<b>Lead Inspector</b>	Ivan Garcia	<b>Record ID</b>	IG-BVES-001				
<b>Inspector Signature</b>	[REDACTED]	<b>Inspection Date</b>	October 27, 2020				
		<b>Utility ID</b>	BV				
<b>Utility Rep. Name</b>	Tom Chou	<b>Utility Name</b>	Bear Valley				
<b>Utility Rep. Title</b>	Regulatory Compliance Project Engineer		<b>Utility Address</b>	42020 Garstin Dr., Big Bear Lake, CA 92315			
<b>Utility Rep. Signature</b>							
<b>City</b>	Big Bear Lake	<b>County</b>	San Bernardino				
<input type="checkbox"/> SED Notification <input type="checkbox"/> CalFire Notification <input checked="" type="checkbox"/> Job Briefing Performed <input type="checkbox"/> Transmission Line <input type="checkbox"/> Distribution Line <input type="checkbox"/> Substation							
<b>Inspection Notes</b>							
On 10/27/2020 at approximately 1303 hours, I performed a walking inspection of the vegetation and weather stations of Bear Valley Electric in Bear Valley. Was accompanied by Eric Wu and Ed Chavez and BVE. The weather was 61 degrees with 2.5 mph wind.							
<b>Activity Code</b>	WMP2	WMP5	GO95				
<b>Activity Units</b>	2	3	2				
<b>Accompany Inspector</b>	Edward M. Chavez, Eric Wu						
<b>Item</b>	<b>Location</b>					<b>HFTD (Tier 1-3)</b>	




1	Big Bear Dam, Big Bear Lake	Tier 2
<b>Activity Code</b>	General	
<b>Defect Code</b>		
General		
<b>Defect Code Description</b>		

Comments to Utility	
<b>Equipment Description / ID #</b>	
CTC 1210284p	
<b>Latitude</b>	<b>Longitude</b>
34.2422864	-116.9777148
<b>Description of Location</b>	
Intersection of NE corner of Highway 38 and Highway 18	
	
<b>Description of Defects or Comments</b>	
I verified Big Bear Dam weather station was installed at this location. The fuse was replaced by ELF Expulsion Limiting Fuse.	
<b>Circuit ID</b>	

Item	Location	HFTD (Tier 1-3)
2	Forest Lease 229, Big Bear Lake	Tier 2
<b>Activity Code</b>	General	
<b>Defect Code</b>		
General		

Defect Code Description	
Comments to Utility	

Equipment Description / ID #	
Pole #14207BVp	
Latitude	Longitude
34.2488752	-116.966872
Description of Location	
	
Description of Defects or Comments	
Hazard pine tree cut because of overhand over primary conductors.	
Circuit ID	

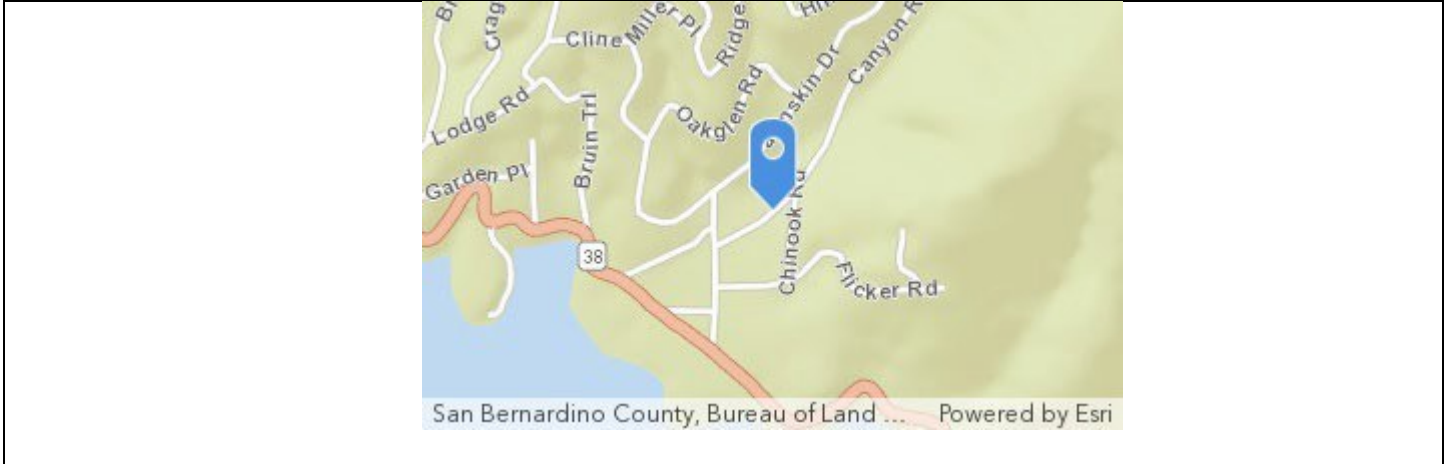
Item	Location	HFTD (Tier 1-3)
3	987 Canyon Road, Fawnskin	Tier 2
Activity Code	General	
Defect Code	General	
Defect Code Description		

Comments to Utility	
<b>Equipment Description / ID #</b>	
Pole 31476 CIT	
<b>Latitude</b>	<b>Longitude</b>

34.2672571	-116.9368127
------------	--------------

**Description of Location**

Vegetation clearance of pine tree next to pole 31476 CIT



**Description of Defects or Comments**

**Circuit ID**

Item	Location	HFTD (Tier 1-3)
4	1247 Canyon Rd., Fawnskin	Tier 2
<b>Activity Code</b>	General	
<b>Defect Code</b>	General	
<b>Defect Code Description</b>	Comments to Utility	
<b>Equipment Description / ID #</b>		
Next to 5150BV		

Latitude	Longitude
34.2721483	-116.9324322
Description of Location	





**Description of Defects or Comments**

**Circuit ID**

Item	Location	HFTD (Tier 1-3)
5	40159 North Shore Dr., Fawnskin	Tier 2
<b>Activity Code</b>	G095 General Order 95	
<b>Defect Code</b>	1109	
<b>Defect Code Description</b>	1109.1 Ground wire broken or uncovered	
<b>Equipment Description / ID #</b>		
BV11050		
<b>Latitude</b>	<b>Longitude</b>	
34.2618513	-116.9253189	
<b>Description of Location</b>		

Fawnskin Weather Station

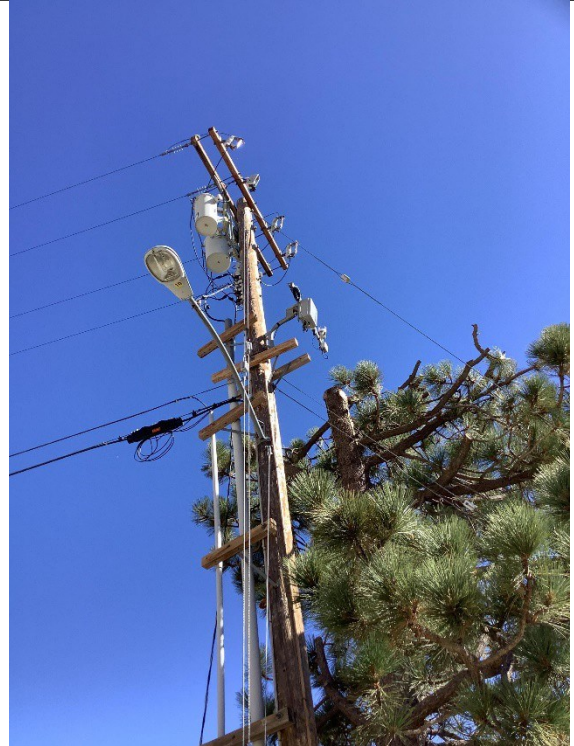


**Description of Defects or Comments**

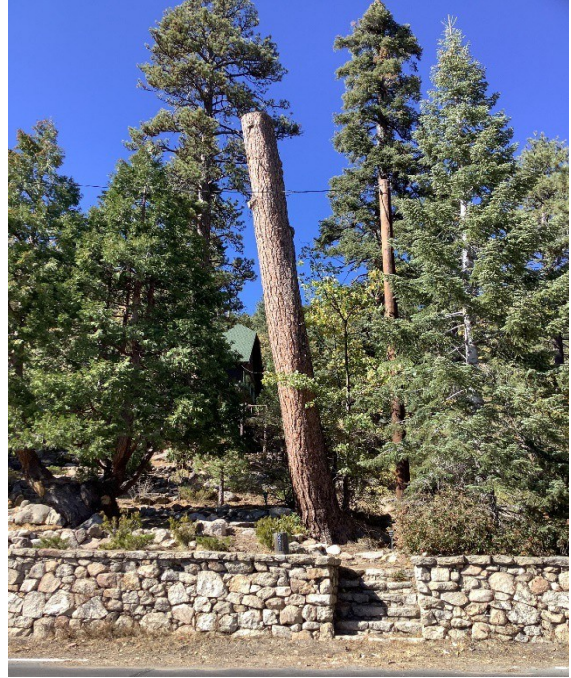
I verified the weather station was installed at this location.

**Circuit ID**

**Item 1:**



**Item 2:**



Stress cracking inside tree

**Item 3:**



**Item 4:**



Tree topped off

Tree next to 5150BV pole

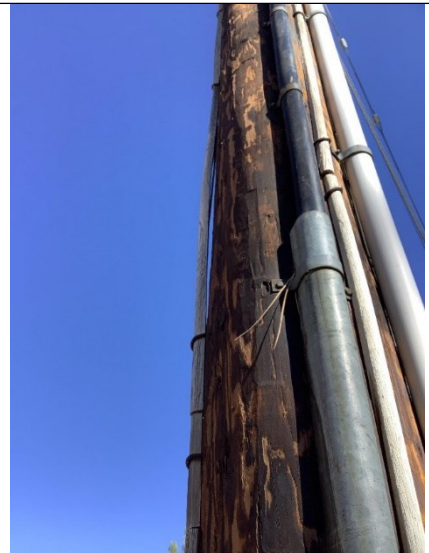
**Item 5:**



Weather station



Exposed ground wire at 4 feet on pole BV11050  
BV11050



Exposed ground wire at 8-10 feet on pole



## Attachment B: Tree Trimming QC Report

Record number	Assigned to	Status	Location:	Date Inspected:	Efficiency
124	SJames	Completed	Ursa Major bet Crystal Lake and Northern Cross	3/4/2021	100
123	Anthony	Not started	Wolf Rd 7390BV - 7172BV, Moonridge		
122	Paul	Not started	Bow Canyon bet 5038BV&5537BV		
121	JBarber	Completed	Juniper near Lodgepole Pl & Mountain Lake Rd., BBL	3/4/2021	100
120	SJames	Completed	Thrush Dr. bet Brownie & BB Blvd., BBL		
119	Anthony	Not started	Sand Canyon Rd 4962BV to Ridge Crest 5093BV_Moonridge.pdf		
118	Paul	Not started	Deer Canyon bet Siskiyou and Sand Canyon, Moonridge		
117	JBarber	Completed	Catalina bet Avalon & Alta Vista	3/4/2021	100
116	SJames	Completed	Menlo bet Butte and Sheephorn, Moonridge		
115	Anthony	Completed	Comstock bet Golden West and St Moritz, BBL		100
114	Paul	Completed	Olympic Dr 11987BV to Snow Crest Dr 12488BV, BBL	12/21/2020	
113	JBarber	Completed	Minnelusa Rd bet 9595 BV & 9565BV, Fawnskin	12/9/2020	
112	SJames Anthony	Completed	Poplar St bet La Cerena & La Placida, Moonridge	12/4/2020	
111	SJames Anthony	Completed	Villa Grove bet P2240 and 63863 CTC	11/16/2020	
110	Anthony	Completed	St. Moritz bet Brownie & Comstock, BBL	10/30/2020	100
109	Paul	Completed	Willow near Fir, Moonridge, BBL	11/2/2020	
108	JBarber	Completed	Rockspray bet 5293BV & 5295 BV. Moonridge, BBL	12/9/2020	
107	Anthony	Completed	Division Dr near Sugarloaf Blvd, BBC	9/11/2020	100
106	Paul	Completed	Swan Drive bet Tanager & 1210144CTC, BBL	11/2/2020	
105	JBarber	Completed	E Rainbow bet Rose Hill & Star, BBC	8/12/2020	
104	Anthony	Completed	Gold Mountain North of Fairway, BBC	9/10/2020	100
103	Paul	Completed	Blue Water South of W Aeroplane Blvd, BBC		
102	Anthony	Completed	Encino bet 42929 & 42665, BBL	9/11/2020	
101	JBarber	Completed	Sonoma bet Douglas & 60448CIT	7/1/2020	100
100	Anthony	Completed	Talbot bet BB Blvd & Cove		100
99	Paul	Completed	Sheephorn near Butte, BBL	7/6/2020	
98	MStern	Completed	Bet 433 Catalina & 453 Catalina, BBL		100

Record number	Assigned to	Status	Location:	Date Inspected:	Efficiency
97	JBarber	Completed	Fawnskin Dr & Oak Glen Rd, Fawnskin	6/17/2020	
96	Ecardella	Completed	Modoc Dr bet 4645BV & 2212015CTC, BBL	4/29/2020	100
95	Anthony	Completed	Millcreek between Talmadge and Highland, BBL	4/29/2020	100
94	Paul	Completed	Crocus west of Hill, BBL	5/11/2020	
93	MStern	Completed	Carter bet Merced & Knight Ave, BBL	4/15/2020	100
92	JBarber	Completed	Prairie Ln South of Big Bear Blvd.	4/3/2020	100
91	Ecardella	Completed	Stocker Rd. bet 5182 BV & 5184BV, BBL	3/24/2020	
90	Anthony	Completed	Cherry Ln bet 11381BV & 8519BV, BBL		100
89	Paul	Completed	Vista Ln bet Narrow Ln and Glen Rd, BBL	5/11/2020	
88	MStern	Completed	Constellation bet Crystal Lake and Hauptstrasse	2/23/2020	100
87	JBarber	Completed	Marin, School, Berkley, Main, BBL	2/11/2020	100
86	Ecardella	Completed	Forest Rd bet 6975BV & 1210385CTC	1/30/2020	100