DATA REQUEST RESPONSE Bear Valley Electric Service, Inc. Wildfire Mitigation Plan

Response provided by: Title: Data Request Number: Date Received: Date Due: Date Provided: Paul Marconi President, Treasurer & Secretary CalAdvocates-BVES-2021WMP-3 March 29, 2021 April 5, 2021 April 5, 2021

From Alan Wehrman (California Public Advocates Office) email to BVES dated March 29, 2021. The following questions relate to BVES's Wildfire Mitigation Plan 2021.

1. Page (P.) 111 of BVES's 2021 WMP states, in regard to BVES's Tree Attachment Removal program, "BVES estimates that the remaining 714 tree attachments will be removed by the end of 2026."

P. 127 of BVES's 2020 WMP refile states, in regard to the same program, "BVES estimates that all attachments will be removed by the end of 2022."es.

a. Please explain why BVES pushed back its estimated completion of the Tree Attachment Removal program by 4 years since submitting its 2020 WMP refile.

Response:

The project was mostly planned and estimated in 2016 and submitted for review and approval in the BVES GRC application A.17-05-004 filed on May 1, 2017. The project was approved in Decision 19-08-027 on August 15, 2019. BVES began work on the project in June 2018 ahead of the GRC decision. Over the past three years BVES has determined that the rate at which it will be able to remove the tree attachment is slower than projected. This is due in part to gaining a better understanding through experience on the work involved and also due to other Wildfire Mitigation Plan projects that were originally not projected in 2017 to occur. WMP projects such as the fuse replacement project and the covered wire project were not anticipated when BVES submitted its GRC application in May 2017. Another factor in the delayed Tree Attachment Removal Program has been the length of obtaining permits from the U.S. Forest Service. BVES has evaluated the risk involved in pushing the schedule out 4 years and determined that it is the appropriate balance when viewed in the context of all of the other WMP initiatives to mitigate wildfires risk.

2. P. 113 states, in regard to BVES's Pole Loading Assessment and Remediation program, "As noted above, this is an ongoing project that is expected to be completed by 2026."

P. 129 of BVES's 2020 WMP refile states, in regard to the same program, "As noted above, this is an ongoing project that is expected to be completed by 2022."

a. Please explain why BVES has pushed back its estimated completion of the Pole Loading Assessment and Remediation program by 4 years since submitting its 2020 WMP refile.

Response:

The project was mostly planned and estimated in 2016 and submitted for review and approval in the BVES GRC application A.17-05-004 filed on May 1, 2017. The project was approved in Decision 19-08-027 on August 15, 2019. BVES began work on the project in August 2018 ahead of the GRC decision. Over the past three years BVES has determined that the rate at which it will be able to assess and remediate poles is less than projected. This is due in part to gaining a better understanding through experience on the work involved and also due to other Wildfire Mitigation Plan projects that were originally not projected in 2017 to occur. WMP projects such as the fuse replacement project and the covered wire project were not anticipated when BVES submitted its GRC application in May 2017. BVES has evaluated the risk involved in pushing the schedule out 4 years and determined that it is the appropriate balance when viewed in the context of all of the other WMP initiatives to mitigate wildfires risk. In 2022 BVES will be merging the scope of the remaining portions of its power distribution system to have poles assessed with the covered wire program since pole assessment and remediation is a part of installing covered wire. Currently BVES conducts the pole loading and assessment program in a manner that is coordinated with the covered wire program so that work is not duplicated. For example, poles are assessed to the standard required for covered wire so that no poles that are assessed under the pole loading program need to be replaced when the covered conductor program is executed on those circuits for which the pole loading assessment work has been completed.

3. P. 115 states, "BVES plans to replace distribution bare wire in high risk areas within the HFTD with covered wire over a 10-year period of execution from 2021 to 2030 covering approximately 8.6 miles per year. Based upon this schedule, it will result in 50% of the 4 kV wire being replaced by 2026."

On p. 69, Supporting Table 5.3-2 indicates that, in 2026, the Covered Wire Program (4 kV distribution) will be only 30% complete.

a. Please explain the apparent discrepancy between the statements on pages 115 and 69 of BVES's 2021 WMP regarding the schedule for covered conductor installation.

b. What is BVES's current planned schedule for covered conductor installation on 4 kV distribution?

Response:

3.a.-b. BVES intends to replace all of its 4 kV bare wire. BVES has 178 circuit miles of bare conductor on its 4 kV distribution system. Replacing bare wire with covered wire on approximately 8.6 circuit miles per year will result in 86 circuit miles of covered wire in 10 years which is approximately 50% of the 4 kV system. The first 10-years are aimed at reducing the higher risk areas. By 2026, approximately 25% of the 4 kV system will be covered; BVES rounded up in Table 5.3-2 to 30%.

4. P. 120 of BVES's 2021 WMP states, "BVES conducts one LIDAR sweep per year to evaluate the effectiveness of clearance efforts and identify potential wildfire hazards."

P. 147 of BVES's 2020 WMP refile states, "Consequently, BVES proposes the pilot continue to perform two LIDAR inspections performed per year. If substandard conditions are not found after running the pilot for 2 years, then the pilot would be concluded and discontinued."

- a. Please explain why BVES reduced the number of LIDAR sweeps from two inspections per year to one inspection per year since submitting its 2020 WMP refile.
- b. In LIDAR inspections conducted in 2020, did BVES find "substandard conditions"? What percentage of miles covered had "substandard conditions" on each sweep?

Response:

4.a. Given the size of its overhead system of 211 circuit miles, the number of discrepancies discovered by LiDAR surveys, the growth rate of vegetation, and in the context of other inspections and patrols performed on the overhead its system, BVES determined that one annual LiDAR inspection was sufficient to achieve the desired objective for wildfires mitigation.

4.b. Yes, BVES's LiDAR contractor found substandard conditions that required BVES's vegetation management contractor to investigate and correct, if they are actually substandard. Note that due to the angle of LiDAR data capture, many instances of possible substandard conditions are in fact not substandard when investigated. However, it should be noted that even with a high false positive rate, LiDAR is highly effective in identifying areas with potential problems and it is an invaluable survey to ensure that vegetation management resources are applied to areas with the most need of vegetation clearance.

BVES does not maintain data that would allow a calculation of percentage of miles covered that had "substandard conditions" on each sweep. Each substandard item is recorded as a discrete point. The LiDAR survey in 2020 covered 211 miles of overhead facilities. There were 8 instances on the 34.5 kV system that required the vegetation management contractor to investigate and remediate as necessary. Regarding the 4 kV system there were 343 instances that required the vegetation management contractor to investigate and remediate as necessary. Therefore, the total number of potential substandard items was 351 or 1.7 potential substandard instances per circuit mile.

5. P. 122 of BVES's 2021 WMP describes the program "Sub-transmission and Distribution System Facilities Fly-over Unmanned Aerial Vehicle (UAV) Inspection."

- a. What is BVES's planned cycle (i.e., frequency) for these inspections? In other words, will BVES perform these inspections annually, or on some other cycle?
- b. Does BVES plan to perform detailed inspections of assets as part of this program? In other words, will the UAV slow down at each pole to take detailed photos of distribution assets, or will the UAV fly along the right-of-way at a more or less constant speed?
- c. Will the photos and video recordings from the UAV flights be reviewed by BVES staff, by the UAV vendor, or by third-party contractors?

Response:

5.a. Annual inspection of the overhead facilities of approximately 211 circuit miles.

5.b. It is BVES's intent that the UAV will fly along the right-of-way at a slow enough speed to take detailed video, photographic images and thermography. BVES recently issued its RFP for the UAV inspections and will evaluate what bidders propose for various inspection options. Bids are due on April 20, 2021. At that time BVES will carefully review the various proposals by bidders and costs and determine the optimal UAV fly over survey.

5.c. It is BVES's intent that photos and video recordings will be analyzed by the contractor and will also be provided to BVES staff to review.

6. In response to Data Request CalAdvocates-BVES-2021WMP-01A, BVES provided its FSC Matrix in the Excel file included with its response. According to this matrix, the circuit "Skyline (Summit Res)" has zero overhead miles, zero underground miles, and zero poles. Please provide more information on this circuit to explain these numbers

Response:

The "Skyline" circuit is a single circuit serving the Snow Summit Ski Resort, which takes the service at 4,160 volts from an underground feed about 15 feet from the "Snow Summit Substation". The circuit is essentially 15 feet long and underground. In terms of circuit miles, it is essentially 0.00284091 circuit miles underground or "0" when rounded in accordance with basic math rounding principles.

7. In response to Data Request CalAdvocates-BVES-2021WMP-01A, Question 6, BVES stated, "All of BVES's vegetation management work is enhanced vegetation management (EVM) due to BVES's entire service area being in the HFTD Tier 2 and 3. BVES's EVM program trims its circuits approximately every 2 years."

P. 126 of BVES's 2021 WMP makes reference to "the 3-year vegetation management program cycle."

- a. Please explain the apparent discrepancy between the above two statements in regards to BVES's vegetation management cycle.
- b. What is BVES's current vegetation management cycle?

Response:

7.a-b. BVES vegetation cycle is 3-years. In 2018 BVES implemented an enhanced clearance specifications per CPUC Decision D.17-12-024, which required its vegetation management contractor to accelerate its cycle to achieve the new specifications in a shorter period than the normal 3-year cycle. This shorter period turned out to be about a 2-year cycle.

- 8. In 2019 and 2020, how many times did BVES find that vegetation had encroached within four feet of the conductor? For each instance, please include the following:
 - a. When the encroachment was discovered.
 - b. When it was remediated.
 - c. The species of vegetation involved.
 - d. How the encroachment was discovered (e.g. ground patrol, LIDAR, etc.)

Response:

8.a-d. BVES does not maintain data on how many times vegetation encroached within four feet of its conductors. BVES uses a 72-inch minimum clearance zone and initiates trimming when vegetation is within 72-inches or will grow to within 72-inches before the next trim cycle. BVES's vegetation management contractor trimmed 29,517 trees during the period of 2019 and 2020.

- 9. In response to Data Request CalAdvocates-BVES-2021WMP-01A, Question 10, Table 2, BVES stated, in regards to the Radford Line Covered Conductor Replacement Project, "US Forest Service permitting process has proven to be longer and more cumbersome than in previous projects."
 - a. Has BVES secured USFS permits for the Radford Line Covered Conductor Replacement Project?
 - b. If the answer to part (a) is yes, provide the date the permits were secured.
 - c. If the answer to part (a) is no, when does BVES anticipate securing these permits?

Response:

9.a. No.

9.b. N/A.

9.c. BVES is currently working with USFS to secure the permits. BVES does not control the USFS permitting process; therefore, is unable to provide an accurate response to the question. USFS has not indicated when it will approve the permit. BVES has made it very clear to USFS the importance of the project for its wildfire mitigation efforts.

10. In BVES's response to Data Request CalAdvocates-BVES-2020WMP-03 on October 13, 2020, BVES stated, "In January 2020, BVES hired a GIS Specialist. The Specialist made significant improvements in the BVES GIS. Unfortunately, the Specialist left BVES in September 2020. BVES is actively engaged in hiring another GIS Specialist."

P. 97 of BVES's 2021 WMP states, "BVES expects to fill a vacant GIS administrator role by mid-March 2021. This role has been vacant since Q3 2020."

- a. Has BVES hired another GIS Specialist?
- b. If the answer to part (a) is no, what is BVES's status on hiring a new GIS Specialist?
- c. Is the GIS administrator role mentioned on p. 97 the same as the GIS Specialist role mentioned in the above data request?

d. If the answer to part (c) is no, please answer parts (a) and (b) for the GIS administrator role.

Response:

10.a. Yes. The GIS Specialist started in mid-March 2021..

10.b. N/A.

10.c. Yes.

10.d. N/A.