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

Response provided by:	Paul Marconi
Title:	President, Treasury & Secretary
Data Request Number:	CalAdvocates-BVES-2021WMP-04
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From Alan Wehrman (California Public Advocates Office) email to BVES dated March 31, 2021. The following questions relate to BVES's Wildfire Mitigation Plan 2021.

1. **Page (p.) 113 of BVES's 2021 WMP states, "BVES has evaluated 2,703 poles since 2018 (191 in 2020); 1,155 failed the inspection criteria; 751 poles were replaced and 113 remediated. Corrective action for the remaining poles that failed inspection is being undertaken."**

   This statement indicates that 291 poles have not been remediated yet as a result of assessments performed from 2018 through 2020.

   a. **How many of the 291 poles awaiting remediation failed the inspection criteria in 2018?**

   b. **How many of the 291 poles awaiting remediation failed the inspection criteria in 2019?**

   c. **How many of the 291 poles awaiting remediation failed the inspection criteria in 2020?**

   d. **Please provide an estimated date for when the 291 poles will be fully replaced or remediated.**

   e. **Does BVES have an estimate of the ignition risk due to a pole that has failed inspection criteria? Please describe if so.**

   Response:

   1.a-d. Since filing the 2021 WMP Update, BVES remediated or replaced 66 of the 291 poles awaiting remediation or replacement. Of the remaining poles, 46 poles failed the inspection criteria in 2018, 179 poles failed the inspection criteria in 2019 and 0 poles failed the inspection criterial in 2020. The findings for each of the remaining poles that failed inspection criteria were evaluated and are being replaced or remediated, in accordance with GO-95 correction timelines. The remaining poles

all fall within the Level 3 category, with a 60 month correction period. The 2018 poles must be corrected by June 1, 2023, and the 2019 poles must be corrected by June 1, 2024. BVES intends to complete the remediation or replacement work by the end of 2021.

1.e. No. To date BVES does not have the capability to calculate the specific ignition probability for these pole failures. However, given they are Level 3 discrepancies, the risk is considered low.

2. Per Table 3, line 12, BVES assessed 924 poles in 2018, 1,588 poles in 2019, and 191 poles in 2020.

a. Please explain why BVES performed far fewer pole assessments in 2020 compared to either 2018 or 2019.

b. Please describe the difference between pole assessments and intrusive pole inspections (line 32 of Table 3).

Response:

2.a. BVES slowed down the assessment portion of the Pole Loading and Assessment Project in 2020 so that resources could be focused on correcting pole failures identified in 2019.
2.b. The Pole Loading and Assessment Program evaluates poles based on the following criteria:

- Stress Loading Analysis (often referred to as "Wind Loading")
- GO-95 Infractions that cannot be corrected without replacement
- GO-95 Infractions that can be remediated
- GO-165 requires that intrusive inspection should be performed if the pole has not been previously inspected by intrusion.

In prior years BVES evaluated many poles intrusively so the failure rate due is low.

3. Per Table 3, row 32, BVES performed nearly 1,000 intrusive pole inspections per year in 2015 through 2017, 155 intrusive pole inspections in 2018, 48 in 2019, and 0 in 2020.

a. Please explain why BVES performed considerably fewer intrusive pole inspections each year in the 2018-2020 period compared to 2015-2017.

b. Please explain the reason for the decreasing trend in the number of intrusive pole inspections performed from 2018 through 2020.

c. Why did BVES perform no intrusive pole inspections in 2020?

d. How many intrusive pole inspections does BVES plan to perform in 2021? Please include inspections already performed in 2021.

e. Can BVES confirm that, as of January 1, 2021, all poles in BVES's territory are compliant with intrusive pole inspection schedules required by General Order 165?

Response:

3.a-e. Prior to 2018, BVES had a standalone intrusive pole inspection program targeting approximately 1,000 per year. In 2018, BVES commenced its Pole Loading and Assessment Program in which poles were to be assessed as described in the response to question 2.b. above. The Pole Loading and Assessment Program targets high risk circuits that had already had many recent intrusive pole inspections performed on them; therefore, the annual number of intrusive pole inspections dropped significantly. As discussed above, very few poles were assessed in 2020 so that BVES could focus on the remediation of failed poles. BVES plans on performing intrusive inspections on poles on the Holcomb Circuit (343 wood poles) and Castle Glen Circuit (615 wood poles). As of January 1, 2021, BVES is compliant with GO-165 requirements.

4. Per Table 7.1, row 54, BVES had 9 outages in 2020 due to "Lightning arrestor damage or failure- Distribution." Prior to 2020, BVES reports 0 outages due to this cause for all reporting years.

a. What factors contributed to an increase in outages due to lightning arrestor damage or failure in 2020?

b. What actions has BVES taken to mitigate further outages due to this cause?

Response:

4.a. In 2020 BVES experienced 9 overload events due to lightning strikes. In the comment section of Table 7.1 Row 54, BVES made the following comment: "Overload-Lightening were counted here because BVES's categories don't align 1 to 1 and a reference to a blown fuse or transformer was not made in the comments." There were no lightning arrestor damage nor failure events in 2020.

4.b. N/A.

5. Per Table 4-4 on pp. A-187 and A-188 of BVES's Public Safety Power Shutoff Plan, BVES will initiate a PSPS event if actual sustained wind or 3-second wind gusts exceed 55 mph, and the NFDRS rating is brown, orange, or red.

a. Please state the basis for choosing the threshold of 55 mph.

b. In 2020, how many days did wind speeds along one or more of BVES's circuits exceed 55 mph?

c. On the days in part (b), did BVES observe any damage to its assets following the high wind conditions?

d. In 2020, how many days did wind speeds along one or more of BVES's circuits equal or exceed 45 mph?

e. Please disaggregate the days in part (c) by the NFDRS rating on the days when the wind speeds equaled or exceeded 45 mph.

f. Were there any days in 2020 when BVES considered itself on "PSPS Watch" where a PSPS event would be necessary if conditions worsened?

g. If the answer to part (f) is yes, please list for each day: the date, the maximum wind speed, the NFDRS rating, and whether any damage to BVES assets was found following the high wind conditions.

Response:

5.a. BVES performs the stress analysis by applying various wind speeds on its most common pole construction standard. In the analytical formula used by BVES, BVES initially assumes that there is no safety factor, which is zero, and based on this assumption BVES determines that the limiting wind speed at which poles may begin to fail is 85 mph. However, it should be noted that according to GO 95 Grade "A" Construction that new facilities are required to use a 4.0 safety factor, while upgraded facilities must use a 2.67 safety factor in stress analyses. Based on these two safety factors BVES determines an upper and lower limit safety range within which BVES can subsequently calculate the wind speed limit that provides the necessary safety margin. Taking a conservative position, BVES establishes that a wind speed limit of 55 mph is within the safety margin.

5.b. Number of days in 2020 in which wind speed exceeded 55 mph: 0 days

5.c. N/A.

5.d. Number of days in 2020 in which wind speed exceeded 45 mph: 0 days

5.e. N/A.

5.f. No.

5.g. N/A.

6. p. 120 states, with regard to BVES's infrared inspections, "BVES completed a full survey of its overhead facilities using these methods in 2019."

Table 24 of BVES's 2020 WMP refile states, on p. 151, that BVES performed infrared inspections on 70.27 line miles in 2019

a. Please explain the apparent discrepancy between the two statements listed above.

b. In 2019, on how many overhead circuit miles (as defined in the glossary on page 1 of BVES's 2021 WMP update) did BVES perform infrared inspections?

Response:

6.a. BVES commenced infrared inspection in 2018, and in 2019, BVES completed infrared inspection of the remaining sections in its system, which is approximately 70 circuit miles. Table 24 should have indicated circuit miles instead of line miles.

6.b. Approximately 70 circuit miles were inspected using infrared techniques in 2019.

7. p. 120 states, with regard to BVES's infrared inspections, "BVES completed a full survey of its overhead facilities using these methods in 2019. The number of problem areas identified were few and minor. As a result, BVES determined to pause this program and conduct it every 5 years."

a. Did BVES perform the 2019 infrared survey under peak summer/fall loading conditions?

b. Please provide the specific date(s) the 2019 infrared survey was performed.

c. How many level 1 findings resulted from the 2019 infrared survey?

d. How many level 2 findings resulted from the 2019 infrared survey?

e. How many level 3 findings resulted from the 2019 infrared survey?

f. Was the Radford Line energized and included in the 2019 infrared survey?

g. Did BVES perform an infrared survey in 2020? If so, please answer parts (a) through (f) for the 2020 survey.

Response:

7.a-b. The inspection was performed in June 2019. BVES worked with the contractor Subject Matter Expert and it was determined that the infrared inspection would be effective for the proposed dates. Specific infrared discrepancies were noted on June 14 and 21, 2019.

7.c. 0

7.d. 2

7.e. 0

7.f. The Radford Line was not included in the 2019 portion of the survey.

7.g. No.