DATA REQUEST RESPONSE Bear Valley Electric Service (BVES)

Request Date: Thursday August 24, 2023

Response Provided by: Paul Marconi

Title: President, Treasurer & Secretary

Response Date: Tuesday August 29, 2023

Originated by: Blythe Denton, Wildfire Safety Analyst blythe.denton@energysafety.ca.gov

Data Request No: OEIS-P-WMP_2023-BVES-006

Subject: Q01. Regarding pole loading assessments

DATA REQUEST

Q01. Regarding pole loading assessments:

- a. In the BVES 2023 WMP Appendices, page 64, BVES states that pole loading assessments are being merged with the covered wire program and asset inspection program. In BVES 2023- 2025 WMP, 2023 Revision 0, pole loading assessments are mentioned on pages 133, 150, and 151. Please answer the following questions regarding pole loading assessments.
 - i. Will stress calculations be performed during intrusive pole inspections?
 - (1) If so, please provide the percentage of intrusive pole inspections that will feature stress calculations.
 - ii. Will stress calculations be performed during the covered wire program?
 - (1) If so, please provide the estimated number of poles that will have stress calculations performed as part of this project in 2023, 2024, and 2025.

Response:

a.i. No, the intrusive pole-testing program is a separate inspection and is performed for the purpose of periodic pole testing in accordance with General Order 165, Inspection Requirements for Electric Distribution and Transmission Facilities, (GO-165). The purpose of intrusive pole inspection testing is to identify decay internal to wood poles and measure defects of the below ground condition of wood poles. Using a drilling tool such as the Instrumenta

Mechanik Labor (IML) pole testing drill tool, the wood inspection drill measures the force of the needle turning through the wood pole. For example, when the bit hits any soft decay the force on the graph will drop and, if the needle hits a hard, brittle decay the graph will spike. If the bit runs through a cavity area the graph will drop measuring no resistance for the bit. The measurements are then electronically recorded and a resistograph is produced, which estimates the poles remaining strength to determine pass/fail.

Stress testing, such as SPIDA®Calc analysis, is a separate test that is performed in accordance with GO-95, Rules for Overhead Electric Line Construction Rule 43. This test is not a periodic test but rather a situational test that is performed when planning the addition of facilities to a pole such as replacing bare conductors with covered conductors.

a.i.(1) N/A

a.ii. Yes, stress calculations will be performed during the covered wire program. Any poles that BVES plans to add an additional load are required to have stress calculations performed per GO-95, Rule 43, which BVES follows. Specifically, BVES follows GO-95 Grade A construction standard safety factors and utilizes software by Spida®Calc to develop pole stress calculations to ensure the pole is able to withstand the additional load and still meet the require safety factors of Rule 43. If the existing pole cannot withstand the additional load, BVES will replace it with a new pole that meets the load requirements. In this process, any loading calculations performed for wood poles more than 15 years old shall incorporate the results of intrusive inspections performed within the previous five years, per Rule 43.

Because of the covered wire program, involves performing stress calculations on all of the poles on the spans where bare conductors will be replaced by covered conductors, for the next three years, this program has been merged with the "pole loading program". From a risk prioritization, standpoint, this also is consistent with BVES's policy to target the highest risk areas since the covered wire program is targeting the highest risk areas. For circuits, not included in the covered wire program, they are significantly lower risk and the poles in those spans will be eventually tested as a separate program articulated in a future WMP or WMP Update.

a.ii.(1) In 2023, the BVES estimates on performing stress calculations for the covered wire program as follows:

Year	2023	2024	2025
Estimated Number Of Poles That			
Will Have Stress Calculations	260	260	260
Performed			