Public Advocates Office Data Request

No. CalAdvocates-BVES-2023WMP-07
Proceeding: 2023-2025 Wildfire Mitigation Plans

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DATA REQUEST

The following questions relate to your 2023-2025 WMP submission.

Question 1

Page 6 of your WMP states, "BVES made significant progress in migrating its many databases, which were mostly in spreadsheets, to a centralized geographic data repository. BVES engaged the support of a consultant to identify gaps and make recommendations for methods to address its Geographic Information Systems (GIS) process and to immediately update the records in the required format."

a) Please provide a copy of your most recent geographic data repository in .gdb format.

Response:
Refer to Quarter 1, 2023 spatial data .gdb file. (2023-05-01_BVES_2023_DSSR_Q1_R0)

b) Please list the gaps that the consultant identified, noted above.

Response:
Refer to Table 1. GIS Gap Analysis Findings and Recommendations in attached (BVES GIS Gap Analysis Recommendations FINAL 11-30-20)

c) Please list the recommendations made by the consultant to address the gaps listed in part (b).

Response:
Refer to Table 1. GIS Gap Analysis Findings and Recommendations in attached (BVES GIS Gap Analysis Recommendations FINAL 11-30-20)

d) If the consultant submitted a written report or analysis to BVES, please provide a copy of it.

Response:
Refer to (BVES GIS Gap Analysis Recommendations FINAL 11-30-20)

Question 2
Table 4-1 on page 22-23 of your WMP lists your actual and forecast total WMP expenditures for 2020 through 2026.

a) Please explain the large increase between your 2023 forecast ($17.673 million) and your 2024 forecast ($35.081 million). As part of this explanation, describe whether any programs will dramatically increase in scope or unit cost in 2024, and list any new programs that will be initiated in 2024.

Response:
On May 18, 2023 BVES submitted an Errata updating the values in Table 4-1 for 2023, 2024, and 2025. Please see attached file "2023-05-18_BVES_WMP_Errata". The updated Table 4-1 is as follows:

Table 4-1 Summary of WMP Expenditures

Year	**Spend (Thousands $USD)**
2020	Planned = $11,417 Actual = $9,154 ± △ = ($2,262)
2021	Planned = $15,218 Actual = $12,088 ± △ = ($3,130)
2022	Planned = $16,109 Actual = $15,232 ± △ = ($877)
2023	Planned = $25,852
2024	Planned = $43,620
2025	Planned = $18,301

The large increase between the 2023 forecast ($25,852 million) and 2024 forecast ($43,620 million) is due to the following two Microgrids initiatives that BVES is pursuing:

- GD_10 Bear Valley Solar Energy Project $13,578,409
- GD_11 Energy Storage Project $10,342,009

No other projects or programs are expected to dramatically increase in scope or unit cost in 2024.

b) Please explain why your 2025 forecast ($8.948 million) is substantially lower than your 2023 and 2024 forecasts. As part of this explanation, describe whether any programs will dramatically decrease in scope or unit cost in 2025, and list any programs that will be concluded prior to 2025.

Response:
The updated value for the 2025 forecast is $18,301. This is in line with the forecasts for 2023, if one removes the Radford Project Expense and for 2024, if one removes the Bear Valley Solar Energy Project and the Energy Storage Project expenses.

- 2023 Forecast: $19,652,271 (without Radford Project Costs)
- 2024 Forecast: $19,700,149 (without Bear Valley Solar Energy Project and Energy Storage Project)

c) Please provide a version of Table 4-1 that disaggregates each year's total spending into program areas, including at least the following categories: i. Risk assessment and modeling
ii. Grid design and system hardening
iii. Asset management and inspections
iv. Vegetation management and inspections
v. Situational awareness and forecasting
vi. Other spending

Response:

Category	2023	2024	2025
Risk assessment and modeling	$141,165	$141,792	$135,731
Grid design and system hardening	$15,185,562	$37,654,747	$12,402,647
Asset management and inspections	$1,492,296	$1,529,460	$1,553,607
Vegetation management and inspections	$4,004,812	$3,880,840	$3,791,902
Situational awareness and forecasting	$437,460	$155,116	$150,988
Other spending	$251,080	$258,613	$266,371

Question 3

Page 48 of your WMP states, "Initial WRRM results became available to BVES in late February 2023."

a) Please describe the initial WRRM results that were provided to BVES in February.

Response:
The initial WRRM results provided in February were for multiple assets. Each asset has both a conditional and expected risk score output for its ignition point. Results are broken down by percentiles for Buildings Threatened, Estimated Buildings Destroyed, Population Impacted, Fire Size Potential, Fire Behavior Index, Flame Length, and Rate of Spread.

b) What was the format or formats of the initial WRRM results provided to BVES?

Response:
The initial WRRM results were in the format of a .gdb file.

c) Please provide a copy of the initial WRRM results that were provided to BVES in February. If any portion of this requires a specialized program to view (e.g., proprietary Technosylva software), please also list the type of program(s) required.

Response:
Refer to (BVES_WRRM_Initial). ArcMap or ArcGIS Pro is required to view the WRRM files.

Question 4

The narrative for section 6.2.1 appears to begin on page 58 of your WMP with the following:
and in Section 6.1.1 illustrate BVES's overall utility risk assessment framework. BVES's overall risk is comprised of the risk stemming from both wildfire and PSPS events across its service territory. This includes several likelihood and consequence risk components that are aggregated based on the framework shown in. The following paragraphs define each risk component.
This paragraph appears to be missing text at the beginning, and appears to be missing a referenced table or figure in the second-to-last sentence. If this is the case, please provide an updated version of section 6.2.1.

Response:
The paragraph should read as follows:

"Figures 6-1 and 6-2 in Section 6.1.1 illustrate BVES's overall utility risk assessment framework. BVES's overall risk is comprised of the risk from both wildfire and PSPS events across its service territory. This includes several likelihood and consequence risk components that are aggregated based on the framework shown in Figure 6-4. The following paragraphs define each risk component."

BVES will be submitting a non-substantive errata to correct this omission.

Question 5
Table 6-5 on page 84 of your WMP lists the risk ranking for your circuits. The risk ranking does not appear to correlate to the overall risk score. For example, the Boulder circuit has the lowest overall risk score (882.12) but its risk ranking is 4.

a) Please state how the risk ranking in this table is determined.
b) Please explain why the Boulder Circuit has a high risk ranking despite its low overall risk score.

Response:
The overall utility risk is 81,829. BVES followed the instructions in the WMP Guidance to determine which circuits to include in the table. The risk associated with each circuit is correct. The rank column is in error. The following table provides the risk ranking and risk by circuit.

Circuit	**Risk Ranking**	**Overall Risk Score**
Radford	1	31215
Baldwin	2	6891
North Shore (Fawnskin)	3	6717
Holcomb (Bear City)	4	4746
Goldmine	5	4539
Shay	6	3524
Clubview	7	3225
Pioneer (Palomino)	8	2730
Sunset	9	2374
Sunrise (Maple)	10	1857
Eagle	11	1813
Paradise	12	1810
Lagonita	13	1533
Interlaken	14	1485
Castle Glen (Division)	15	1483
Georgia	16	1384
Garstin	17	1366
Boulder	18	882

BVES will be submitting a non-substantive errata to correct this issue.

Question 6
The supporting table of your response to data request CalAdvocates-BVES-2023WMP-03, question 1, shows that the SAIDI and SAIFI was higher in 2022 compared to 2021 for 19 of your 26 circuits.

a) Please explain, to the best of your current knowledge, why SAIDI was higher in 2022 compared to 2021 for the majority of your circuits.
b) Please explain, to the best of your current knowledge, why SAIFI was higher in 2022 compared to 2021 for the majority of your circuits.

Response:
In 2022, BVES territory encountered high winds in November that caused a system wide outage. This one event is responsible for approximately 60% of the total 2022 SAIDI minutes for unplanned outages. This storm also significantly increased the SAIFI for the entire service territory.

Question 7
The supporting table of your response to data request CalAdvocates-BVES-2023WMP-03, question 1, shows a "1" or "0" for all rows under "number of detailed overhead inspections."

a) Does a "1" indicate that *all* poles or assets in that circuit underwent a detailed inspection in that year?

Response:
Yes. On the supporting table "1" indicates that all poles on that given circuit underwent a detailed inspection.

b) If the answer to part (a) is no, please explain what a "1" indicates.

Response:
N/A

c) Does BVES record a unique detailed inspection record each time a pole or asset is inspected?

Response:
BVES documents a unique record for each pole that has a detailed inspection in our internal database called iRestore

d) If the answer to part (c) is yes, please explain why a maximum of 1 detailed inspection is recorded for each circuit.

Response:
BVES interpreted the column as either completed or not completed. BVES did not input the number of poles that had a detail inspection.

e) If the answer to part (c) is no, please explain why BVES does not record a detailed inspection record each time a pole or asset is inspected.

Response:
N/A

Question 8

a) Please explain the differences in BVES' methods between a patrol inspection of a circuit and a detailed inspection of a circuit.

Response:
Per GO-165:
"Patrol inspection" shall be defined as a simple visual inspection, of applicable utility equipment and structures, that is designed to identify obvious structural problems and hazards. Patrol inspections may be carried out in the course of other company business.

"Detailed inspection" shall be defined as one where individual pieces of equipment and structures are carefully examined, visually and through use of routine diagnostic test, as appropriate, and (if practical and if useful information can be so gathered) opened, and the condition of each rated and recorded.

b) Please describe what records or reports BVES creates when it conducts a patrol inspection.

Response:
Patrol inspections are documented by circuit with a sign off sheet that are signed and dated by the field inspector. Any findings are recorded in our internal database called iRestore.

c) Please describe what records or reports BVES creates when it conducts a detailed inspection.

Response:
Detailed inspections are documented by circuit with a sign off sheet that are signed and dated by the field inspector. Any findings are recorded in our internal database called iRestore.

Question 9

Attachment 1 of your response to CalAdvocates-BVES-2023WMP-05 states, "BVES cross-checks detailed inspection findings with findings from other inspections (patrol, 3rd party, UAV, LiDAR) to verify quality."

a) What percentage of detailed inspections does BVES cross check with other inspections in this manner?
b) How many such cross-checks did BVES perform in 2022?
c) Please describe the process for the cross-checks described above.
d) How does BVES record the findings or results of these cross-checks?
e) If a cross-check suggests that the detailed inspection missed or incorrectly classified an issue, how does BVES resolve this discrepancy?
f) Please provide records of the cross-checks described above that were performed in 2022. If this would result in more than 25 documents, please provide a sample of 25 records of cross-checks performed in 2022.

Response for a) through f):
BVES utilizes cross-checks in a couple different ways. Every quarter BVES personnel cross-checks detailed inspections with the many other inspection types that BVES conducts, to help identify trends and possible errors that may have been found during the detailed inspection. Another way BVES utilizes cross-checks is by helping BVES crews to help gather more information about potential findings. Detailed inspections are cross-checked with the high resolution pictures provided by the UAV. The photos are able to provide angles and images not

able to be seen by an inspector. When an error is found, the violation is reclassified to the appropriate level. BVES does not formally document cross-checks that are conducted and does not have any records of cross-checks.

Question 10

The Excel file for your response to CalAdvocates-BVES-2023WMP-05, question 4, includes the following two work orders related to poles:
10216BV_20220728104533, "cracked pole top," opened 7/28/2022, due 7/28/2023
8180BV_20220804083125, "pole top split," opened 8/4/2022, due 8/4/2027

a) Please explain the difference between these two defect types.

Response:
The two defects in the above work orders are the same type of defect. The wording used by the inspector was just slightly different in the work order record.

b) Please explain why the first work order has a due date of 7/28/2023, one year after the work order was opened.
c) Please explain why the second work order has a due date of 8/4/2027, five years after the work order was opened.

Response
b) and c): The work orders have different due dates because of the severity of the findings. Work order "10216BV_20220728104533" is classified as a level 2 finding and work order "8180BV_20220804083125" is classified as a level 3 finding. The completion date assigned to the work orders reflect the level of severity that was identified.

Question 11

Attachment 1 of your response to CalAdvocates-BVES-2023WMP-06 lists the actual and forecast costs and mileage of covered conductor installation from 2022 through 2024. Dividing cost by mileage provides the following unit costs:
2022 (actual): $740,000/mile
2023 (forecast): $530,000/mile
2024 (forecast): $530,000/mile

a) Please state the basis for the forecast decrease in the unit cost of covered conductor from 2022 to 2023.

Response:
The forecast for 2023 and 2024 is the average cost of 2020-2022 cover conductor project. The covered conductor costs differences are mostly driven by the number of poles needed to be replaced. Pole replacements will vary each year depending on the age and condition of existing poles where the covered conductor is being installed.

b) Does either the 2023 forecast or the 2024 forecast include the costs of the Radford line covered conductor project? Please explain your response.

Response:
The 2024 forecast does not include the cost of the Radford Line cover conductor project which is a separate WMP project.

Question 12

a) What is your forecast total cost for the Radford line covered conductor project?

Response:
Forecasted total cost for the Radford line covered conductor project is $6,200,347

b) What is your forecast unit cost (per circuit mile of covered conductor installed) for the Radford line covered conductor project?

Response:
The circuit is 2.9 circuit miles long so on a per circuit mile basis, the unit cost is $2,138,051/circuit mile. It should be noted that the terrain is steep without access roads that would permit trucks to access the area. Therefore approximately 59 poles will need to be set by helicopter. This significantly drives up the cost of the project. Likewise, due to the steep slope and lack of access roads, undergrounding the line is not feasible. Furthermore, undergrounding would cause significant disturbance to the area controlled by U.S. Forest Service.

END OF REQUEST