This submission serves as a response to the data request (DR) issued by the Wildfire Safety Division (WSD) on March 13, 2020. Note that there is a second tab of this spreadsheet which is referenced below. Also, this sunmission includes an attached GIS file "BVES_Faults_CoveredWire.gdb"

A. Item Index [For CPUC tracking purposes. Please reference this item index with the response provided.]	C. Relevant section of WMP	D. Relev	E. Relev	F. Specific Data request	BVES Response
BVES-43900-L-612	2.1 Lessons Leanred	NA	NA	Describe the change between Bear Valley's 2019 and 2020 WMP submission (i.e. programmatic or changes in initives changes in 2019 but not kept in 2020; were there strategies or tactics used in 2019 that changed in 2020)?	The 2020 WMP built on, and levererged lessons learned from, the 2019 WMP. With a few exceptions, most programs, strategies, and tactics remain in place, on-track, and continue. - The Exactor inspection program was found to have only identified a few deficiences. That program is paused, allowing us to better allocate resources to more effective programs. - The Covered Conductor Pilot program was completed and BVES found the use of covered conductor to be an effective and appropriate program going forward. The Pilot is done, but BVES is now beginning its long-term 4kV and 34kV covered conductor replacement program. - The Pineknot substation upgrade is complete. The Palomino substation is planned for being upgraded in 2020. - As a cost saving measure, the Radford Covered Conductor project was divided into a design phase and a construction phase. The design phase was completed in 2019 and the construction phase is planned to begin in 2020.
BVES-43900-Z -663	NA	NA	NA	Submit data for circuit risk levels for all transmission lines and distribution lines.	BVES has not tracked risk levels to the circuit level -- only to the service area level. BVES's service area is only 32 square miles (much of which is a large lake) and in the past it was not deemed cost-effective or adding significant wildfire mitigation value to track the risk levels more granularly for such a small (mostly homogenous) service area. BVES will consider shifting to this level of detail in the future. BVES does not have sufficient time or resources to create this data in the short time given for data request responses.
BVES-43900-Z -664	NA	NA	NA	Submit locations for near misses (areas where damage and/or faults nearly caused a fire).	BVES has not had any near misses.
BVES-43900-Z -665	Various	NA	NA	Submit locations of asset faults.	See included GIS file, BVES_Faults_CoveredWire.gdb
BVES-43900-Z -666	5.2.2	NA	NA	Submit locations of vegetation projects (completed in the last 5 years and planned for the future).	BVES contracts out vegetation management services. The contract and project encompass the entire (32 square mile -- most of which is a large lake) service area, which is designed to ensure the entire service area is covered by the service no less than every three years.
BVES-43900-Z -667	5.2.2	NA	NA	Submit vegetation risk index data as attributes associated with transmission and distribution lines.	BVES has not tracked risk index data as attributes associated with transmission (BVES has no transmission) and distribution lines. BVES will consider shifting to this level of detail in the future. BVES does not have sufficient time or resources to create this data in the short time given for data request responses.
BVES-43900-Z -668	6.4: Current baseline state of service territory and utility equipment	NA	NA	Submit line data showing the current locations of covered conductors.	See included GIS file, BVES_Faults_CoveredWire.gdb
BVES-43900-Z -669		NA	NA	Submit point locations for any non-PSPS-related damage locations.	All our "asset faults" are non-PSPS related (BVES has never had a PSPS event). See included GIS file, BVES_Faults_CoveredWire.gdb
BVES-43900-Z -670	6.4: Current baseline state of service territory and utility equipment	NA	NA	Submit any remaining data (not previously submitted) for circuit risk levels (including vegetation risk index data) for all transmission lines and distribution lines	BVES has no remaining data (not previously submitted) for circuit risk levels. BVES has not tracked risk levels to the circuit level -- only to the service area level. BVES's service area is only 32 square miles (much of which is a large lake) and in the past it was not deemed cost-effective or adding significant wildfire mitigation value to track the risk levels more granularly for such a small (mostly homogenous) service area. BVES will consider shifting to this level of detail in the future. BVES does not have sufficient time or resources to create this data in the short time given for data request responses.
BVES-43900-E-671	5.3.9 Emergency Planning and Preparedness	NA	NA	Explain why "5.3.9 Emergency planning and preparedness" has not been included in Bear Valley's WMP?	This question was asked in the previous Data Request (BVES-43895-E-402). The following answer that was provided as a response remains valid: "BVES has restructured the Plan to appropriately include the discussion on emergency planning and preparedness under Section 5.3.9 based on the Attachment 1 framework. The associated Table 29 is also included and updated in the revised WMP and supplemental workbook. Please see refiled Plan and Data Request response submitted on 3/6/2020."
BVES-43900-I-748	5.3.5	NA	NA	Provide all of BVES' vegetation management procedures relating to reducing wildfire risk.	See tab "VM Procedures" below
BVES-43900-I-749	5.3.5	NA	NA	Provide BVES' "slash" management procedures.	Once trees are trimmed, if on private property, the slash or mulch is first offered to the property owner. If they do not want it, it is removed to a disposal yard, an authorized landfill, other private property in which the land-owner uses for ground cover, or green waste dumps. The specific method or site varies based on location of trimming and market variations in cost to the Vegetation Management contractor.
BVES-43900-I-750	5.3.5	NA	NA	How does BVES ensure contractors are available or on stand-by for emergency vegetation clearance?	During a major storm event or other disaster, Contractor shall be capable of working extended hours and on weekends and holidays as necessary to clear lines as directed by BVES Representative. • When the BVES Representative requests Contractor vegetation clearance services to clear fallen trees and branches from BVES's facilities in response to an emergency event, such as a major storm, Contractor shall mobilize as soon as possible to the designated area and be onsite within 4 hours of the request. • Overtime may be authorized for emergency vegetation management action. If overtime is necessary, Contractor will obtain the BVES Representative's authorization prior to utilizing overtime. • Contractor shall provide a telephone number where a responsible individual may be contacted at any hour to receive notification that emergency vegetation clearance is needed.
BVES-43900-I-751	5.3.5	NA	NA	What is BVES' timeline for implementing LiDAR for vegetation inspections?	BVES contracted a LiDAR inspection that begin in Auguest, 2019. The first inspection was completed and the data assessement result is due this month (March, 2020). BVES currently plans to conduct LiDAR ispections of the all of its lines each year.
BVES-43900-I-752	5.3.5	NA	NA	What percentage of vegetation work is audited?	10% is specifically audited yearly by the director, managers, and supervisors. Additionally, all BVES employees live in our relatively small service area (32 square miles) and constantly are looking at lines and vegetation as they go about their daily lives -- this results in a non-trivial number additional looks, by our entire staff, at the status of our tree trimming program on a daily basis.
BVES-43900-I-753	5.3.5	NA	NA	What are the qualifications required by BVES for inspectors and tree crew?	BVES requires that all personnel employed at the jobsite or in support of the work are properly trained, skilled, qualified, certified, and/or licensed as required by applicable laws, codes, and/or regulations to perform assigned tasks. That all employees and subcontractors performing overhead and/or underground transmission and distribution line work are qualified to perform the work per California Code of Regulations, Title 8 Chapter 4, Subchapter 5, Electrical Safety Orders and comply with the requirements of such orders as well as other applicable Title 8 requirements. BVES' contracted vegetation management workers additionally meet the following requirements: - QLCA - Line Clearance qualified/Certification – Meeting Ansi 133/ TCIA accredited trainer - EHAP – Electrical Hazard Awareness - CPR Certification – Min 1 per crew - Safety Training program including Code of Safe Practices , HIPP, IIPP, First Aid and CPR - Contractors License C61/D49

BVES-43900-I-754	5.3.5	NA	NA	Does BVES enforce pole brushing or pole clearing as part of the VM program? If so, provide such procedures or a description of such if no procedures exist.	BVES's Vegetation Management contractor will clear out to 10 feet around the base of any poles on our request. The Service area is almost entirely alpine forest, and while there is an abundance of trees, there is little brush around our poles. Our service area is small (approximately 32 square mile) and our crews, inspectors and other staff routinely work near, or drive by almost all our poles regularly and the teams are trained to look for any excessive brush, in the limited locations it could become an issue, and take appropriate action to clear around the pole if needed.
BVES-43900-I-755	5.3.5	NA	NA	What specific procedures or practices does BVES enforce for substation VM?	Annual weed abatement spreading pelleted weed killer inside/outside 13 Substations in conjunction with Garstin location. Annual weed abatement clean up inside/outside 13 Substation, cutting down weeds, raking up, disposal, within 20ft perimeter of fence line/clear path to gate. Perform second, later ad-hoc weed abatement clean up inside/outside 13 Substaions, cutting down weeds, raking up, disposal, within 20ft perimeter of fence line/clear path to gate.
BVES-43900-I-756	5.3.5	NA	NA	What defensible space does BVES manage around substations regarding vegetation?	BVES maintains 20 feet defensible space around substations. Additionally, substation defensible space is verified by the local fire department.
BVES-43900-I-757	5.3.5	NA	NA	Does BVES' current vegetation work tracker also keep track of individual trees?	BVES' current vegetation work tracker tracks individual trees.
BVES-43900-I-758	5.3.5	NA	NA	How does BVES prioritize vegetation work (i.e. prioritization score similar to Rule 18, risk ranking, etc.)?	BVES uses the following (internally as well as with the Vegetation Management contractor): Discrepancies will be designated and corrected as follows: • Emergency (Priority 1) vegetation orders will be corrected immediately (or mitigated to reduce the priority level to at least Priority 2). • Urgent (Priority 2) vegetation orders will be corrected within 30 days. • Routine (Priority 3) vegetation orders will document non urgent items that will be addressed during the regular tree trimming cycle.
BVES-43900-E-780	2.1	NA	NA	Describe the change between Bear Valley's 2019 and 2020 WMP submission (i.e. programmatic or changes in initives changes in 2019 but not kept in 2020; were there strategies or tactics used in 2019 that changed in 2020)?	The 2020 WMP built on, and levererged lessons learned from, the 2019 WMP. With a few exceptions, most programs, strategies, and tactics remain in place, on-track, and continue. - The Exactor inspection program was found to have only identified a few deficiences. That program is paused, allowing us to better allocate resources to more effective programs. - The Covered Conductor Pilot program was completed and BVES found the use of covered conductor to be an effective and appropriate program going forward. The Pilot is done, but BVES is now beginning its long-term 4kV and 34kV covered conductor replacement program. - The Pineknot substation upgrade is complete. The Palomino substation is planned for being upgraded in 2020. - As a cost saving measure, the Radford Covered Conductor project was divided into a design phase and a construction phase. The design phase was completed in 2019 and the construction phase is planned to begin in 2020.
BVES-43903-Y-9	6.6: Planned 2020 WMP initiative activity per year	NA	NA	Provide planned initiative data at the most granular level possible for each initiative activity (e.g., each asset location for each activity under an initiative). The exact schema for the spatial data can be found in the attaced excel file, "20200311_Initiative_schema", in the sheet "Initiative schema for utilities". The priority for each field is listed in the "priority" column. An example of the table is provided in the sheet "Initiative Template". Table should be organized as shown in "Initiative Template" sheet with the column names matching "Field Name Shapefile" column in the "Schema" sheet. Each field is explained in the "Field description" column, and type of data for each field is in the "Field Type". Attached to this dataset should be lat/lon points corresponding to each row in the data	BVES has not previously broken down intiatives more granularly than by its service area. BVES will consider doing so in the future. Currently this data does not exist and would be impossible to create this GIS file with BVES' limited GIS resources and in the time requre
BVES-43903-Y-10	5.3.4 Asset management and inspections	NA	NA	Provide asset spatial data at the individual asset level for each of the asset categories listed (substations, weather stations, capacitor banks, conductors, poles, transmission lines and distribution lines). The exact schema for the spatial data can be found in the attaced excel file, "20200311_Asset_schema", in the sheets "Asset schema for utils - points" and "Asset schema for utils - lines". The priority for each field is listed in the "priority" column. An example of the table is provided in the "Asset Template" sheets. Table should be organized as shown in "Asset Template" sheets with the column names matching "Field Name Shapefile" column in the "Schema" sheet. Each field is explained in the "Field description" column, and type of data for each field is in the "Field Type". Attached should be two spatial files, one for points data and one for lines data, where each dataset should have its respective shape features (lat/lon points or lines) corresponding to each row in the data	BVES has not tracked this data in GIS. BVES does not have sufficient time or resources to create this data and GIS file in the short time given for data request responses.
BVES-43903-Y-19	6.1 Recent weather patterns and use of PSPS	NA	NA	Provide PSPS event data at the circuit level (i.e., each circuit shut-off in an event should have its own row in the shapefile dataset). The exact schema for the spatial data can be found in the attaced excel file, "20200303_PSPS_schema", in the sheet "PSPS Schema for utilities". "Risk drivers" should be the same across circuits in an event, but all other values should be unique to each circuit. The priority for each field is listed in the "priority" column. An example of the table is provided in the sheet "PSPS Event Template". Table should be organized as shown in "Example onlyPSPS Event Template" sheet with the column names matching "Field Name Shapefile" column in the "Schema" sheet. Each field is explained in the "Field description" column, and type of data for each field is in the "Field Type", and priority of data being received by CPUC is in the "Priority" column	BVES has never had a PSPS event.

BVES-43903-Y-20	6.4: Current baseline state of service territory and utility equipment	NA	WMP: Summarized risk map: Operation wildfire risk reduction model used to prioritize long-term hardening efforts. Referred to on	Provide the most recent map of overhead distribution, transmission, and substation facilities (as was provided earlier) in high-fire threat regions with additional fields for… 1. Ignition probability – projected likelihood of target asset causing an ignition in the next year (0.0 – 1.0) 2. Failure probability – projected likelihood of target asset failing in the next year (0.0 – 1.0) 3. Wildfire spread and consequence score (normalized from 0.0 – 1.0) – relative ability ignition spread and quantity of homes or timber affected if ignition occurs 4. Prioritization ranking of assets for maintenance – calculated ranking of assets for prioritizing asset maintenance, upgrades, and equipment replacement. This is a percentile ranking with 99th percentile being highest priority and 0th percentile being lowest priority for asset maintenance	BVES has not tracked the data in the additional fields and thefore can not include it in GIS at this time. BVES does not have sufficient time or resources to create this data and GIS file in the short time given for data request responses.

BVES Vegetation Management Procedures

Contractor will provide all the necessary supervision, labor, transportation, materials, equipment and all tools to safely, properly and promptly provide for vegetation trimming services for power line clearance of the BVES sub-transmission (34.5 kV) and distribution (up to 4.160 kV) systems. Contractor will implement and execute a full service vegetation management program for the BVES Service Area that includes:

- Comprehensive preventative vegetation management cyclic program approved by BVES that aims to keep power lines clear of vegetation per specifications identified below.
- Corrective vegetation clearance response that aims to correct vegetation clearance discrepancies around power lines that the Contractor discovers, BVES Representative identifies, and/or other competent party approved by BVES notes.
- Emergency vegetation clearance response as requested by the BVES Representative.
- Complete documentation of vegetation trimming activities as identified below.

Preventative Vegetation Management Program: Contractor shall establish a vegetation management program that ensures vegetation along all BVES overhead sub-transmission and distribution lines are trimmed per clearance specifications identified below on a 3-year cycle. Contractor may propose an alternate cycle schedule; however, this must be clearly stated and explained.

- Contractor shall document and present a proposed vegetation management cycle plan to BVES for approval at least two months prior to the start date of the contract.
- Contractor shall obtain BVES' prior approval for any changes to or deviations from the approved plan.
- Contractor's plan shall be based on working normal 8-hour daytime shifts Monday through Friday. Contractor may propose an alternate schedule to BVES.
- Contractor should not require the use of overtime to execute the preventative vegetation management program. If overtime is required, Contractor will obtain the BVES Representative's authorization prior to utilizing overtime.

Corrective Vegetation Clearance Response: Contractor shall be responsible for completing corrective and emergent vegetation orders that aim to correct vegetation clearance discrepancies around power lines that the Contractor discovers, BVES Representative identifies, and/or other competent party approved by BVES notes.

- Contractor should factor in the vegetation management plan that approximately 15 percent of the normal work will be corrective in nature as a result of vegetation orders developed during BVES routine circuit patrols and inspections. The balance of the work will be executing the preventative vegetation management plan. Therefore, normal overtime should not be required for routine corrective vegetation orders.
- When the BVES Representative designates a vegetation order as High Priority (Level 1), Contractor shall take the directed action as soon as possible and be onsite at least within 4 hours of the directive to perform the requested work. Level 1 vegetation orders are considered safety related discrepancies that must be corrected immediately.
- Overtime may be authorized for High Priority (Level 1) vegetation orders. If overtime is necessary, Contractor will obtain the BVES Representative's authorization prior to utilizing overtime.

Emergency Vegetation Clearance Response: During a major storm event or other disaster, Contractor shall be capable of working extended hours and on weekends and holidays as necessary to clear lines as directed by BVES Representative.

- When the BVES Representative requests Contractor vegetation clearance services to clear fallen trees and branches from BVES's facilities in response to an emergency event, such as a major storm, Contractor shall mobilize as soon as possible to the designated area and be onsite within 4 hours of the request.
- Overtime may be authorized for emergency vegetation management action. If overtime is necessary, Contractor will obtain the BVES Representative's authorization prior to utilizing overtime.
- Contractor shall provide a telephone number where a responsible individual may be contacted at any hour to receive notification that emergency vegetation clearance is needed.

Clearance Specifications: Contractor shall ensure all BVES electric lines are clear of vegetation per California Public Utilities Commission (CPUC) General Order 95 (GO-95), Rules for Overhead Electric Line Construction, Rule 35 Vegetation Management and Appendix E Guidelines to Rule 35 (trimming guidelines).

- For reference, BVES' Service Area is entirely within a "High Fire Threat District" with areas classified as Zone 1 (Tier 1) and Tiers 2 and 3 per Rule 21.1 of GO-95. Based on the operating voltages of the BVES bare conductors, the basic minimum allowable radial clearance of bare line conductors from vegetation was 48 inches prior to the time of the revision of the contract. Based upon new GO 95 requirements and on the local climate, likelihood of icing conditions, tree limbs and branches subject to weakening due to high winds and snow weight, elevation, local conditions and access to vegetation for trimming, and species growth rate
- Contractor shall ensure the minimum 72-inch safe clearance along bare line conductors is maintained throughout the BVES service area during the entire length of the vegetation management program cycle (3-years) as follows:
  - Vegetation that is within the minimum 72-inch safe clearance distance will be trimmed to at least 12 feet in accordance with Appendix E Guidelines to Rule 35 of GO-95. Taking into account vegetation species and growth rates and characteristics, Contractor will trim beyond 12 feet if necessary to ensure that the vegetation remains outside the minimum 72-inch safe clearance distance for the entire length of the vegetation management program cycle (3-years).
  - Vegetation that is outside the minimum 72-inch safe clearance distance but is expected taking into account vegetation species and growth rates and characteristics to encroach the 72-inch safe clearance distance prior to the next scheduled preventative vegetation management visit (normally 3 years) will be trimmed to at least 12 feet in accordance with Appendix E Guidelines to Rule 35 of GO-95. Taking into account vegetation species and growth rates and characteristics, Contractor will trim beyond 12 feet if necessary to ensure that the vegetation remains outside the minimum 72-inch safe clearance distance
  - Anytime it is determined that trimming of vegetation is necessary, Contractor shall trim to least 12 feet in accordance with Appendix E Guidelines to Rule 35 of GO-95. Taking into account vegetation species and growth rates and characteristics, Contractor will trim beyond 12 feet if necessary to ensure that the vegetation remains outside the minimum 72-inch safe clearance distance for the entire length of the vegetation management program cycle (3-years). If Contractor cannot achieve this minimum standard, Contractor shall inform BVES Representative.
  - No vertical coverage shall be allowed above BVES sub-transmission lines (34.5 kV). If Contractor cannot achieve this minimum standard, Contractor shall inform BVES Representative.
  - All fast growing trees (poplar, aspen, cottonwood...) will be trimmed to at least 12 feet and removal will be considered.
  - Contractor may determine that additional clearance would be prudent based on growth factors, wind, ice, etc. In such cases, Contractor should inform BVES Representative and trim accordingly.
  - All vegetation within the drip line of primary conductors that has the potential of growing into the secondary system or within 12 feet of the energized primary conductors within the 3-year vegetation management program cycle will be removed.
  - Tree Trunk and Major Limb Exception: At the primary conductor level, mature tree trunks that are greater than 18 inches in diameter and major limbs that are greater than 10 inches in diameter with sufficient strength and rigidity may encroach within the minimum safe distance (72-inches) but not within 18 inches of the bare line conductors. The rigidity of the tree trunk or major limb must be such that it would be impossible for it to encroach within 12 inches of the bare conductor at any time during high wind, heavy icing and snow, or other conditions.
- In so far as possible, trimming shall be designed to achieve the appropriate clearance from the power lines without damaging the structural integrity or health of the tree(s).
- When a Contractor discovers in the course of the services or is informed by BVES Representative (normally through vegetation order) of dead, rotten or diseased trees or dead, rotten or diseased portions of otherwise healthy trees overhang or lean toward and may fall into a span of power lines, said trees or portions thereof should be removed. Contractor shall inform BVES Representative of any tree removals. Note that this may apply to trees outside the clearance zone (for example, a dead tree across the street may pose a danger to BVES power lines).