1 Persons responsible for executing the WMP

Provide an accounting of the responsibilities of the responsible person(s) executing the plan, including:

1. Executive level with overall responsibility
2. Program owners specific to each component of the plan

Ensure that the plan components described in (2) include an accounting for each of the WMP sections and subsections.

2.1 Lessons learned: how tracking metrics on the 2019 plan has informed the 2020 plan

Describe how the utility's plan has evolved since the 2019 WMP submission. Outline any major themes and lessons learned from the 2019 plan and subsequent implementation of the initiatives. In particular, focus on how utility performance against the metrics used has informed the utility's 2020 WMP.

Table 1: Recent performance on progress metrics, last 5 years

#	Progress metric name				Annual performance					Unit(s)	Comments
					2015	2016	2017	2018	2019		
1	Grid condition findings from inspection	Findings per mile of circuit in HFTD	Level 1		N/A - no data available	N/A - no data available	0.00000	0.00000	0.00949	Number of Level 1, 2, and 3 findings per mile of circuit in HFTD, and per total miles of circuit for each of the following inspection types: 1. Patrol inspections 2. Detailed inspections 3. Other inspection types	Prior to 2017, inspection and other data which had been being maintained in a database system called Automated Line Patrol System (ALPS) were migrated to a new database system called "Partner." While the old database has been archived and retained, data prior to 2017 is not readily available. During that transition all level 1, 2 or 3 deficiencies had either been corrected or were entered into the new Partner system for tracking and remediation.
			Level 2		N/A - no data available	N/A - no data available	0.40321	0.25615	0.36526		
			Level 3		N/A - no data available	N/A - no data available	3.34424	14.93762	0.82539		
		Findings per total circuit miles by inspection type	Patrol Inspections	Level 1	N/A - no data available	N/A - no data available	0.00000	0.00000	0.00949		
				Level 2	N/A - no data available	N/A - no data available	0.36526	0.23244	0.23718		
				Level 3	N/A - no data available	N/A - no data available	1.70296	12.86466	0.09962		
			Detailed Inspections	Level 1	N/A - no data available	N/A - no data available	0.00000	0.00000	0.00000		
				Level 2	N/A - no data available	N/A - no data available	0.00000	0.00000	0.12808		
				Level 3	N/A - no data available	N/A - no data available	0.00474	0.01423	0.72577		
			Other Inspection Types	Level 1	N/A - no data available	N/A - no data available	0.00000	0.00000	0.00000		
				Level 2	N/A - no data available	N/A - no data available	0.03795	0.02372	0.00000		
				Level 3	N/A - no data available	N/A - no data available	1.63654	2.05873	0.00000		
2	Vegetation clearance findings from inspection				N/A - no data available	N/A - no data available	N/A - no data available	N/A - no data available	0.02	Percentage of right-of-way with noncompliant clearance based on applicable rules and regulations at the time of inspection, as a percentage of all right-of-way inspected	2019 figure is from October to December. Unable to locate any data prior to October 2019 with the granularity needed to respond.
3	Extent of grid modularization	1. In HFTD			144	144	144	144	144	Number of sectionalizing devices per circuit mile plus number of automated grid control equipment in: 1. HFTD 2. Non-HFTD	Entire BVES service territory is in HTFD 2 or 3.
		2. In Non-HFTD			N/A - BVES does not have any portions of its service territory in Non-HFTD	N/A - BVES does not have any portions of its service territory in Non-HFTD	N/A - BVES does not have any portions of its service territory in Non-HFTD	N/A - BVES does not have any portions of its service territory in Non-HFTD	N/A - BVES does not have any portions of its service territory in Non-HFTD		
4	Data collection and reporting								97.10%	Percent of data requested in SDR and WMP collected in initial submission	

Note: Values for Table 1.1 "Grid condition findings from inspection" were calculated by dividing the total number of findings of each type by the total number of *overhead* circuit miles in BVES's service territory, assuming underground circuits are unaffected by wind conditions. Including underground circuit miles in this calculation would deflate the actual assessment of risk posed by wind and other wildfire-risk conditions.

Table 2: Recent performance on outcome metrics, last 5 years

Metric type	#	Outcome metric name	Annual performance					Unit(s)	Comments
			2015	2016	2017	2018	2019		
1. Near misses	1.a.	Number of all events (such as unplanned outages, faults, conventional blown fuses, etc.) that could result in ignition, by type according to utility-provided list (total)	28	58	35	20	15	Number per year	
	1.b.	Number of all events (such as unplanned outages, faults, conventional blown fuses, etc.) that could result in ignition, by type according to utility-provided list (normalized)	0.04553	0.01942	0.01057	0.00896	0.01124	Number per RFW circuit mile day per year	
	1.c.	Number of wires down (total)	0	3	0	0	3	Number of wires down per year	
	1.d.	Number of wires down (normalized)	0.00000	0.00100	0.00000	0.00000	0.00225	Number per RFW circuit mile day per year	
2. Utility inspection findings	2.a.	Number of Level 1 findings that could increase the probability of ignition discovered per circuit mile inspected	N/A - no data available	N/A - no data available	0	0	0	Average number of Level 1 findings that could increase the probability of ignition discovered by all inspections per circuit mile per year	Prior to 2017, inspection and other data which had been being maintained in a database system called Automated Line Patrol System (ALPS) were migrated to a new database system called "Partner." While the old database has been archived and retained, data prior to 2017 is not readily available. During that transition all level 1, 2 or 3 deficiencies had either been corrected or were entered into the new Partner system for tracking and remediation.
	2.b.	Number of Level 2 findings that could increase the probability of ignition discovered per circuit mile inspected	N/A - no data available	N/A - no data available	0	0	0	Average number of Level 2 findings that could increase the probability of ignition discovered by all inspections per circuit mile per year	
	2.c.	Number of Level 3 findings that could increase the probability of ignition discovered per circuit mile inspected	N/A - no data available	N/A - no data available	0	0	0	Average number of Level 3 findings that could increase the probability of ignition discovered by all inspections per circuit mile per year	
3. Customer hours of PSPS and other outages	3.a.	Customer hours of planned outaaes includine PSPS (total)	1,467	2,112	88,412	6,725	782	Total customer hours of planned outaaes per year	
	3.b.	Customer hours of planned outages including PSPS (normalized)	2.38563	0.70717	26.69925	3.01434	0.58574	Total customer hours of planned outages per RFW circuit mile day per year	
	3.c.	Customer hours of unplanned outages, not including PSPS (total)	73,785	129,310	155,513	73,619	121,869	Total customer hours of unplanned outages per year	
	3.d.	Customer hours of unplanned outages, not including PSPS (normalized)	119.98873	43.29752	46.96287	32.99817	91.28356	Total customer hours of unplanned outages per RFW circuit mile day per year	
	3.e.	Increase in System Average Interruption Duration Index (SAIDI)	0	0	0	0	0	Change in minutes compared to the previous year	
4. Utility ignited wildfire fatalities	4.a.	Fatalities due to utility-ignited wildfire (total)	0	0	0	0	0	Number of fatalities per year	BVES has not had any utility-ignited wildfires
	4.b.	Fatalities due to utility-ignited wildfire (normalized)	0	0	0	0	0	Number of fatalities per RFW circuit mile day per year	BVES has not had any utility-ignited wildfires
5. Accidental deaths resulting from utility wildfire mitigation initiatives	5.a.	Deaths due to utility wildfire mitigation activities (total)	0	0	0	0	0	Number of fatalities per year	
6. OSHA-reportable injuries from utility wildfire mitigation initiatives	6.a.	OSHA-reportable injuries due to utility wildfire mitigation activities (total)	0	0	0	1	0	Number of OSHA-reportable injuries per year	On July 19, 2018, a line worker and the owner of Teele Tree Services made contact with a high voltage power line and sustained non-fatal injuries. The injury did not require reporting under CalOSHA guidelines but BVES chose to report the incident.
	6.b.	OSHA-reportable injuries due to utility wildfire mitigation activities (normalized)	0	0	0	4.74361	0	Number of OSHA-reportable injuries per year per 1000 line miles of grid	BVES has only 210.81 miles of OH lines. Navigant Consulting interpreted this question to mean BVES would have 0.21081 "thousand line miles of grid."
7. Value of assets destroyed by utility-ignited wildfire, listed by asset type	7.a.	Value of assets destroyed by utility-ignited wildfire (total)	0	0	0	0	0	Dollars of damage or destruction per year	BVES has not had any utility-ignited wildfires
	7.b.	Value of assets destroyed by utility-ignited wildfire (normalized)	0	0	0	0	0	Dollars of damage or destruction per RFW circuit mile day per year	BVES has not had any utility-ignited wildfires
8. Structures damaged or destroyed by utility-ignited wildfire	8.a.	Number of structures destroyed by utility-ignited wildfire (total)	0	0	0	0	0	Number of structures destroyed per year	BVES has not had any utility-ignited wildfires
	8.b.	Number of structures destroyed by utility-ignited wildfire (normalized)	0	0	0	0	0	Number of structures destroyed per RFW circuit mile day per year	BVES has not had any utility-ignited wildfires
9. Acreage burned by utility-ignited wildfire	9.a.	Acreage burned by utility-ignited wildfire (total)	0	0	0	0	0	Acres burned per year	BVES has not had any utility-ignited wildfires
	9.b.	Acreage burned by utility-ignited wildfire (normalized)	0	0	0	0	0	Acres burned per RFW circuit mile day per year	BVES has not had any utility-ignited wildfires
10. Number of utility wildfire ignitions	10.a.	Number of ignitions (total) according to existing ignition data reporting requirement	0	0	0	0	0	Number per year	BVES had not had any ignitions
	10.b.	Number of ignitions (normalized)	0	0	0	0	0	Number per RFW circuit mile day per year	BVES had not had any ignitions
	10.c.	Number of ignitions in HFTD (subtotal)	0	0	0	0	0	Number in HFTD per year	BVES had not had any ignitions
	10.c.i.	Number of ignitions in HFTD Zone 1	0	0	0	0	0	Number in HFTD Zone 1 per year	BVES had not had any ignitions
	10.c.ii.	Number of ignitions in HFTD Tier 2	0	0	0	0	0	Number in HFTD Tier 2 per year	BVES had not had any ignitions
	10.c.iii.	Number of ignitions in HFTD Tier 3	0	0	0	0	0	Number in HFTD Tier 3 per year	BVES had not had any ignitions
	10.d.	Number of ignitions in HFTD (subtotal, normalized)	0	0	0	0	0	Number in HFTD per RFW circuit mile day per year	BVES had not had any ignitions
	10.d.i.	Number of ignitions in HFTD Zone 1 (normalized)	0	0	0	0	0	Number in HFTD Zone 1 per RFW circuit mile day per year	BVES had not had any ignitions
	10.d.ii.	Number of ignitions in HFTD Tier 2 (normalized)	0	0	0	0	0	Number in HFTD Tier 2 per RFW circuit mile day per year	BVES had not had any ignitions
	10.d.iii.	Number of ignitions in HFTD Tier 3 (normalized)	0	0	0	0	0	Number in HFTD Tier 3 per RFW circuit mile day per year	BVES had not had any ignitions
	10.e.	Number of ignitions in non-HFTD (subtotal)	0	0	0	0	0	Number in non-HFTD per year	BVES had not had any ignitions
	10.f.	Number of ignitions in non-HFTD (normalized)	0	0	0	0	0	Number in non-HFTD per RFW circuit mile day per year	BVES had not had any ignitions
11. Critical infrastructure impacted	11.a.	Critical infrastructure impacted by PSPS	0	0	0	0	0	Number of critical infrastructure (in accordance with D.19-05-042) locations impacted per hour multiplied by hours offline per year	BVES has not needed to initiate any PSPS events
	11.b.	Critical infrastructure impacted by PSPS (normalized)	0	0	0	0	0	Number of critical infrastructure (in accordance with D.19-05-042) locations impacted per hour multiplied by hours offline per RFW circuit mile day per year	BVES has not needed to initiate any PSPS events

Table 3: List and description of additional metrics, last 5 years

Metric Category	Metric	Performance					Units	Underlying assumptions	Third-party validation
		2015	2016	2017	2018	2019			
Overall Plan	Number of reportable fire incidents (D14-02-015 Appendix C: Fire Incident Data Collection Plan)	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	0	Number of incidents	Assess overall effectiveness of the plan	Contracted 3rd party analysts or academic researchers could review open as well as closed work orders, BVES GIS databases, staff interviews, as well as spot-checking select items for confirmation of status.
Infrastructure	Number of bare line contact with vegetation	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	0	Number of contact events	Assess if plan has reduced risk events	Contracted 3rd party analysts or academic researchers could review open as well as closed work orders, BVES GIS databases, staff interviews, as well as spot-checking select items for confirmation of status.
	Number of live wire down events	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	0	Number of events	Assess if plan has reduced risk events	
	Number of conventional blown fuse events	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	1	Number of events	Assess if plan has reduced risk events	
	Number of poles assessed	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	553	Number of poles	Determine if plan is on schedule	
	Number of poles that failed assessment (wind loading, age, deterioraton, unfixable GO-95 violation)	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	384	Numer of poles	Determine if plan is on schedule	
	Number of poles replaced as a result of failed assessments	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	215	Number of poles	Determine if plan is on schedule	
	Number of poles remediated as a result of failed assessments	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	61	Number poles	Determine if plan is on schedule	
	Number of Tree Attachments Removed	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	43	Number of attachments	Determine if plan is on schedule	
	Number of new poles installed as a result of Tree Attachments Removed	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	9	Number of poles	Determine if plan is on schedule	
	Length of Bare Wire Covered (Circuit Miles)	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	1	Length of wire (circuit miles)	Determine if plan is on schedule	
	Number of conventional fuses replaced by current limiting fuses	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	285	Number of fuses	Determine if plan is on schedule	
	Number of conventional fuses replaced by fused trip savers (vacuum style)	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	8	Number of fuses	Determine if plan is on schedule	
System Hardening	Number of Conventional fuses in system	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	3,374	Number of fuses	Assess overall system hardening	Contracted 3rd party analysts or academic researchers could review open as well as closed work orders, BVES GIS databases, staff interviews, as well as spot-checking select items for confirmation of status.
	Percent of 34.5 kV System that is Overhead Bare Wire	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	93.93%	Percent of 34.5 kV circuit miles	Assess overall system hardening	
	Percent of 34.5 kV System that is Underground	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	2.74%	Percent of 34.5 kV circuit miles	Assess overall system hardening	
	Percent of 34.5 kV System that is Covered Wire	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	3.33%	Percent of 34.5 kV circuit miles	Assess overall system hardening	
	Percent of 4 kV System that is Overhead Bare Wire	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	71.56%	Percent of 4 kV circuit miles	Assess overall system hardening	
	Percent of 4 kV System that is Underground	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	28.44%	Percent of 4 kV circuit miles	Assess overall system hardening	
	Percent of 4 kV System that is Covered Wire	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	0.00%	Percent of 4 kV circuit miles	Assess overall system hardening	
	Number of Tree Attachments Remaining in System	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	973	Number of attachments	Assess overall system hardening	
Operations	Number of "Urgent" Vegetation Orders Issued (must be corrected w/30 days)	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	34	Number of orders	Assess if vegetation management plan has reduced risk events	Contracted 3rd party analysts or academic researchers could review open as well as closed work orders, BVES GIS databases, staff interviews, as well as spot-checking select items for confirmation of status.
	Number of "Urgent" Vegetation Orders Outstanding	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	0	Number of orders	Determine if plan is on schedule	
	Number of Trees Trimmed	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	5,378	Number of trees	Determine if plan is on schedule	
	Number of Trees Removed	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	87	Number of trees	Determine if plan is on schedule	
	Percent of OH System Cleared by Tree Trimming Crews	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	30.61%	Percent of OH system	Determine if plan is on schedule	
	Number of Level 1 GO-95 Potential Non-Compliance (Immediate risk of high potential impact to safety or reliability) Items Idendified	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	0	Number of Items	Determine if plan is on schedule	
	Number of Level 1 GO-95 Potential Non-Compliance (Immediate risk of high potential impact to safety or reliability) Items Outstanding	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	0	Number of Items	Determine if plan is on schedule	
	Number of Level 2 GO-95 Potential Non-Compliance (Any other risk of at least moderate potential impact to safety or reliability) Items Idendified	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	52	Number of Items	Determine if plan is on schedule	
	Number of Level 2 GO-95 Potential Non-Compliance (Any other risk of at least moderate potential impact to safety or reliability) Items Outstanding	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	0	Number of Items	Determine if plan is on schedule	
	Number of Level 3 GO-95 Potential Non-Compliance (Any risk of low potential impact to safety or reliability) Items Idendified	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	139	Number Items	Determine if plan is on schedule	
	Number of Level 3 GO-95 Potential Non-Compliance (Any risk of low potential impact to safety or reliability) Items Outstanding	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	0	Number Items	Determine if plan is on schedule	
	Number of Circuit Miles Patrolled per GO-165	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	118.61	Number of Circuit Miles	Determine if plan is on schedule	
	Number of Circuit Miles Inspected per GO-165 (detailed inspection)	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	12	Number of Circuit Miles	Determine if plan is on schedule	
	Number of Poles Intrusively Inspected	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	46	Number of Poles	Determine if plan is on schedule	
	Number of Poles Failing Instrusive Inspection	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	9	Number of Poles	Determine if plan is on schedule	

	Number of Circuit Miles of LiDAR Survey	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	0	Number of Circuit Miles	Determine if plan is on schedule	
	Number of LiDAR trouble spots	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	0	Number of spots	Determine if plan is on schedule	
	Number of Circuit Miles of Exacter Survey	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	120	Number of Circuit Miles	Assess if communications plan has reduced customer concerns and risk events	
	Number of Exacter trouble spots	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	10	Number of trouble spots	Assess outage impact on customers as a result of PSPS	
Customer Service	Number of Customer Service Calls about Tree Trimming	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	0	Number of Calls	Monitor changing climatic and weather patterns	Contracted 3rd party analysts or academic researchers could review open as well as closed work orders, BVES GIS databases, staff interviews, as well as spot-checking select items for confirmation of status.
	SAIDI due to PSPS	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	0	System Average Interruption Duration Index	Monitor the need for PSPS events over time as an indicator of changing climatic and weather patterns	
Weather Conditions	Number of NFDRS "Very Dry" and "Dry" Days	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	150	Number of Days	Monitor the need for PSPS events over time as an indicator of changing climatic and weather patterns	Contracted 3rd party analysts or academic researchers could review open as well as closed work orders, BVES GIS databases, staff interviews, as well as spot-checking select items for confirmation of status.
PSPS	Number of PSPS Events	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	0	Number of Events	Monitor the need for PSPS events over time as an indicator of changing climatic and weather patterns	Contracted 3rd party analysts or academic researchers could review open as well as closed work orders, BVES GIS databases, staff interviews, as well as spot-checking select items for confirmation of status.
	Maximum recorded sustained winds Recorded by NWS	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	33	Miles per Hour	Monitor the need for PSPS events over time as an indicator of changing climatic and weather patterns	
	Maximum recorded sustained winds Recorded by BVES Weather Stations	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	77.8	Miles per Hour	Monitor the need for PSPS events over time as an indicator of changing climatic and weather patterns	
	Maximum recorded wind gusts Recorded by NWS	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	53	Miles per Hour	Monitor the need for PSPS events over time as an indicator of changing climatic and weather patterns	
	Maximum recorded wind gusts Recorded by BVES Weather Stations	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	77.8	Miles per Hour	Monitor the need for PSPS events over time as an indicator of changing climatic and weather patterns	
	Frequency of sustained high winds (number of days sustained wind > 50 mph) recorded by NWS	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	0	Number of Days	Monitor the need for PSPS events over time as an indicator of changing climatic and weather patterns	
	Frequency of sustained high winds (number of days sustained wind > 50 mph) recorded by BVES weather stations	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	2	Number of Days	Monitor the need for PSPS events over time as an indicator of changing climatic and weather patterns	
	Frequency of high wind gusts (number of days wind gusts > 50 mph) recorded by NWS	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	1	Number of Days	Monitor the need for PSPS events over time as an indicator of changing climatic and weather patterns	
	Frequency of high wind gusts (number of days wind gusts > 50 mph) recorded by BVES weather stations	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	N/A - metric not recorded prior to 2019 WMP	2	Number of Days	Monitor the need for PSPS events over time as an indicator of changing climatic and weather patterns	

Note: Data from 2015-2018 is unavailble as these metrics were not recorded prior to implementation of the current (2019) WMP, which took effect June 2019.

Table 4: List and description of program targets, last 5 years

Metric Category	Metric	Program target	2019 performance	Units	Underlying assumptions	Third-party validation
Overall Plan	Number of reportable fire incidents (D14-02-015 Appendix C: Fire Incident Data Collection Plan)	0	0	Number of incidents	Assess overall effectiveness of the plan	Contracted 3rd party analysts or academic researchers could review open as well as closed work orders, BVES GIS databases, staff interviews, as well as spot-checking select items for confirmation of status.
Infrastructure	Number of bare line contact with vegetation	<5	0	Number of contact events	Assess if plan has reduced risk events	Contracted 3rd party analysts or academic researchers could review open as well as closed work orders, BVES GIS databases, staff interviews, as well as spot-checking select items for confirmation of status.
	Number of live wire down events	<1	0	Number of events	Assess if plan has reduced risk events	
	Number of conventional blown fuse events	<5	1	Number of events	Assess if plan has reduced risk events	
	Number of poles assessed	500	553	Number of poles	Determine if plan is on schedule	
	Number of poles that failed assessment (wind loading, age, deterioraton, unfixable GO-95 violation)	N/A - this program does not have a specific target	384	Number of poles	Determine if plan is on schedule	
	Number of poles replaced as a result of failed assessments	N/A - this program does not have a specific target	215	Number of poles	Determine if plan is on schedule	
	Number of poles remediated as a result of failed assessments	N/A - this program does not have a specific target	61	Number poles	Determine if plan is on schedule	
	Number of Tree Attachments Removed	75	43	Number of attachments	Determine if plan is on schedule	
	Number of new poles installed as a result of Tree Attachments Removed	N/A - this program does not have a specific target	9	Number of poles	Determine if plan is on schedule	
	Length of Bare Wire Covered (Circuit Miles)	1	1	Length of wire (circuit miles)	Determine if plan is on schedule	
	Number of conventional fuses replaced by current limiting fuses	1,288	583	Number of fuses	Determine if plan is on schedule	
	Number of conventional fuses replaced by fused trip savers (vacuum style)	314	29	Number of fuses	Determine if plan is on schedule	
System Hardening	Number of Conventional fuses in system	N/A - this program does not have a specific target	3374	Number of fuses	Assess overall system hardening	Contracted 3rd party analysts or academic researchers could review open as well as closed work orders, BVES GIS databases, staff interviews, as well as spot-checking select items for confirmation of status.
	Percent of 34.5 kV System that is Overhead Bare Wire	N/A - this program does not have a specific target	93.93%	Percent of 34.5 kV circuit miles	Assess overall system hardening	
	Percent of 34.5 kV System that is Underground	N/A - this program does not have a specific target	2.74%	Percent of 34.5 kV circuit miles	Assess overall system hardening	
	Percent of 34.5 kV System that is Covered Wire	N/A - this program does not have a specific target	3.33%	Percent of 34.5 kV circuit miles	Assess overall system hardening	
	Percent of 4 kV System that is Overhead Bare Wire	N/A - this program does not have a specific target	71.56%	Percent of 4 kV circuit miles	Assess overall system hardening	
	Percent of 4 kV System that is Underground	N/A - this program does not have a specific target	28.44%	Percent of 4 kV circuit miles	Assess overall system hardening	
	Percent of 4 kV System that is Covered Wire	N/A - this program does not have a specific target	0	Percent of 4 kV circuit miles	Assess overall system hardening	
	Number of Tree Attachments Remaining in System	N/A - this program does not have a specific target	973	Number of attachments	Assess overall system hardening	
Operations	Number of "Urgent" Vegetation Orders Issued (must be corrected w/30 days)	N/A - this program does not have a specific target	34	Number of orders	Assess if vegetation management plan has reduced risk events	Contracted 3rd party analysts or academic researchers could review open as well as closed work orders, BVES GIS databases, staff interviews, as well as spot-checking select items for confirmation of status.
	Number of "Urgent" Vegetation Orders Outstanding)	0	0	Number of orders	Determine if plan is on schedule	
	Number of Trees Trimmed	N/A - this program does not have a specific target	5378	Number of trees	Determine if plan is on schedule	
	Number of Trees Removed	N/A - this program does not have a specific target	87	Number of trees	Determine if plan is on schedule	
	Percent of OH System Cleared by Tree Trimming Crews	0.15	0.306122449	Percent of OH system	Determine if plan is on schedule	
	Number of Level 1 GO-95 Potential Non-Compliance (Immediate risk of high potential impact to safety or reliability) Items Idendified	0	0	Number of Items	Determine if plan is on schedule	
	Number of Level 1 GO-95 Potential Non-Compliance (Immediate risk of high potential impact to safety or reliability) Items Outstanding	0	0	Number of Items	Determine if plan is on schedule	
	Number of Level 2 GO-95 Potential Non-Compliance (Any other risk of at least moderate potential impact to safety or reliability) Items Idendified	<50	52	Number of Items	Determine if plan is on schedule	
	Number of Level 2 GO-95 Potential Non-Compliance (Any other risk of at least moderate potential impact to safety or reliability) Items Outstanding	0	0	Number of Items	Determine if plan is on schedule	
	Number of Level 3 GO-95 Potential Non-Compliance (Any risk of low potential impact to safety or reliability) Items Idendified	< 1500	139	Number Items	Determine if plan is on schedule	
	Number of Level 3 GO-95 Potential Non-Compliance (Any risk of low potential impact to safety or reliability) Items Outstanding	0	0	Number Items	Determine if plan is on schedule	
	Number of Circuit Miles Patrolled per GO-165	118	118.61	Number of Circuit Miles	Determine if plan is on schedule	
	Number of Circuit Miles Inspected per GO-165 (detailed inspection)	12	12	Number of Circuit Miles	Determine if plan is on schedule	
	Number of Poles Instrussively Inspected	45	46	Number of Poles	Determine if plan is on schedule	
	Number of Poles Failing Instrussive Inspection	NA	9	Number of Poles	Determine if plan is on schedule	
	Number of Circuit Miles of LiDAR Survey	211	0	Number of Circuit Miles	Determine if plan is on schedule	
	Number of LiDAR trouble spots	N/A - this program does not have a specific target	0	Number of spots	Determine if plan is on schedule	
	Number of Circuit Miles of Exacter Survey	<30	120	Number of Circuit Miles	Assess if communications plan has reduced customer concerns and risk events	
	Number of Exacter trouble spots	N/A - this program does not have a specific target	10	Number of trouble spots	Assess outage impact on customers as a result of PSPS	
Customer Service	Number of Customer Service Calls about Tree Trimming	N/A - this program does not have a specific target	0	Number of Calls	Monitor changing climatic and weather patterns	Contracted 3rd party analysts or academic researchers could review open as well as closed work orders, BVES GIS databases, staff interviews, as well as spot-checking select items for confirmation of status.
	SAIDI due to PSPS	N/A - this program does not have a specific target	0	System Average Interruption Duration Index	Monitor the need for PSPS events over time as an indicator of changing climatic and weather patterns	
Weather Conditions	Number of NFDRS "Very Dry" and "Dry" Days	N/A - this program does not have a specific target	150	Number of Days	Monitor the need for PSPS events over time as an indicator of changing climatic and weather patterns	Contracted 3rd party analysts or academic researchers could review open as well as closed work orders, BVES GIS databases, staff interviews, as well as spot-checking select items for confirmation of status.
	Number of PSPS Events	N/A - this program does not have a specific target	0	Number of Events	Monitor the need for PSPS events over time as an indicator of changing climatic and weather patterns	Contracted 3rd party analysts or
	Maximum recorded sustained winds Recorded by NWS	N/A - this program does not have a specific target	33	Miles per Hour	Monitor the need for PSPS events over time as an indicator of changing climatic and weather patterns	
	Maximum recorded sustained winds Recorded by BVES Weather Stations	N/A - this program does not have a specific target	77.8	Miles per Hour	Monitor the need for PSPS events over time as an indicator of changing climatic and weather patterns	
	Maximum recorded wind gusts Recorded by NWS	N/A - this program does not have a specific target	53	Miles per Hour	Monitor the need for PSPS events over time as an indicator of changing climatic and weather patterns	
	Maximum recorded wind gusts Recorded by BVES Weather Stations	N/A - this program does not have a specific target	77.8	Miles per Hour	Monitor the need for PSPS events over time as an indicator of changing climatic and weather patterns	

PSPS	Frequency of sustained high winds (number of days sustained wind > 50 mph) recorded by NWS	N/A - this program does not have a specific target	0	Number of Days	Monitor the need for PSPS events over time as an indicator of changing climatic and weather patterns	academic researchers could review open as well as closed work orders, BVES GIS databases, staff interviews, as well as spot-checking select items for confirmation of status.
	Frequency of sustained high winds (number of days sustained wind > 50 mph) recorded by BVES weather stations	N/A - this program does not have a specific target	2	Number of Days	Monitor the need for PSPS events over time as an indicator of changing climatic and weather patterns	
	Frequency of high wind gusts (number of days wind gusts > 50 mph) recorded by NWS	N/A - this program does not have a specific target	1	Number of Days	Monitor the need for PSPS events over time as an indicator of changing climatic and weather patterns	
	Frequency of high wind gusts (number of days wind gusts > 50 mph) recorded by BVES weather stations	N/A - this program does not have a specific target	2	Number of Days	Monitor the need for PSPS events over time as an indicator of changing climatic and weather patterns	

Note: The "2019 Performance" column only captures data from June 2019 (2019 WMP implementation start) to January 2020. Some "Program Targets" are estimates for May 2020 (2019 WMP end) based on June 2019-January 2020 performance.

Table 5: Accidental deaths due to utility wildfire mitigation initiatives, last 5 years

Activity	Victim															Total
	Full-time employee					Contractor					Member of public					
Year	2015	2016	2017	2018	2019	2015	2016	2017	2018	2019	2015	2016	2017	2018	2019	
Inspection	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vegetation management	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Utility fuel management	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grid hardening	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Table 6: OSHA-reportable injuries due to utility wildfire mitigation initiatives, last 5 years

Activity	Victim															Total
	Full-time employee					Contractor					Member of public					
Year	2015	2016	2017	2018	2019	2015	2016	2017	2018	2019	2015	2016	2017	2018	2019	
Inspection	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vegetation management	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
Utility fuel management	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grid hardening	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	

Note: On July 19, 2018, a line worker and the owner of Teele Tree Services made contact with a high voltage power line and sustained non-fatal injuries. The injury did not require reporting under CalOSHA guidelines but BVES chose to report the incident.

Table 7: Methodology for potential impact of ignitions

Reponse to WSD data request item BVES-43879-B-135

List of all data inputs used in impact simulation	Sources of data inputs	Data selection and treatment methodologies	Assumptions, including SME input	Equation(s), functions, or other algorithms used to obtain output	Output type(s), e.g., wind speed model	Comments
N/A - Bear Valley Electric Service does not have a proprietary model or methodology for evaluating the potential impact of ignitions. The utility's Subject Matter Expert evaluates the frequency of potential ignition events versus a set of impact categories (reliability, compliance, quality of service, safety and environmental) to develop total risk impact and scores.	N/A - Bear Valley Electric Service does not have a proprietary model or methodology for evaluating the potential impact of ignitions. The utility's Subject Matter Expert evaluates the frequency of potential ignition events versus a set of impact categories (reliability, compliance, quality of service, safety and environmental) to develop total risk impact and scores.	N/A - Bear Valley Electric Service does not have a proprietary model or methodology for evaluating the potential impact of ignitions. The utility's Subject Matter Expert evaluates the frequency of potential ignition events versus a set of impact categories (reliability, compliance, quality of service, safety and environmental) to develop total risk impact and scores.	N/A - Bear Valley Electric Service does not have a proprietary model or methodology for evaluating the potential impact of ignitions. The utility's Subject Matter Expert evaluates the frequency of potential ignition events versus a set of impact categories (reliability, compliance, quality of service, safety and environmental) to develop total risk impact and scores.	N/A - Bear Valley Electric Service does not have a proprietary model or methodology for evaluating the potential impact of ignitions. The utility's Subject Matter Expert evaluates the frequency of potential ignition events versus a set of impact categories (reliability, compliance, quality of service, safety and environmental) to develop total risk impact and scores.	N/A - Bear Valley Electric Service does not have a proprietary model or methodology for evaluating the potential impact of ignitions. The utility's Subject Matter Expert evaluates the frequency of potential ignition events versus a set of impact categories (reliability, compliance, quality of service, safety and environmental) to develop total risk impact and scores.	N/A - Bear Valley Electric Service does not have a proprietary model or methodology for evaluating the potential impact of ignitions. The utility's Subject Matter Expert evaluates the frequency of potential ignition events versus a set of impact categories (reliability, compliance, quality of service, safety and environmental) to develop total risk impact and scores.

Table 8: Map file requirements for recent and modelled conditions of utility service territory, last 5 years

Layer name	Measurements	2015	2016	2017	2018	2019	Average	Units	Attachment location	Comments
Recent weather patterns	Average annual number of Red Flag Warning days per square mile across service territory	0.0912	0.4427	0.4909	0.3307	0.1979	0.3107	Area, days, square mile resolution	N/A - BVES is unable to provide this data at this time	BVES's service territory is 32 square miles
	Average 95th percentile wind speed and prevailing direction (actual)	N/A - BVES is unable to provide this data at this time	N/A - BVES is unable to provide this data at this time	N/A - BVES is unable to provide this data at this time	N/A - BVES is unable to provide this data at this time	N/A - BVES is unable to provide this data at this time	N/A - BVES is unable to provide this data at this time	Area, miles per hour, at a square mile resolution or better, noting where measurements are actual or interpolated		BVES is unable to provide this data for each year at this time.
	Average 99th percentile wind speed and prevailing direction (actual)	N/A - BVES is unable to provide this data at this time	N/A - BVES is unable to provide this data at this time	N/A - BVES is unable to provide this data at this time	N/A - BVES is unable to provide this data at this time	N/A - BVES is unable to provide this data at this time	N/A - BVES is unable to provide this data at this time			
Recent drivers of ignition probability	Date of recent ignitions categorized by ignition probability driver	N/A - No event of this type occurred during the 2015 - 2019 period; not applicable.	N/A - No event of this type occurred during the 2015 - 2019 period; not applicable.	N/A - No event of this type occurred during the 2015 - 2019 period; not applicable.	N/A - No event of this type occurred during the 2015 - 2019 period; not applicable.	N/A - No event of this type occurred during the 2015 - 2019 period; not applicable.	N/A - No event of this type occurred during the 2015 - 2019 period; not applicable.	Point, GPS coordinate, days, square mile resolution	N/A - No event of this type occurred during the 2015 - 2019 period; not applicable.	BVES has not had any recent ignitions
Recent use of PSPS	Duration of PSPS events and area of the grid affected in customer hours per year	N/A - No event of this type occurred during the 2015 - 2019 period; not applicable.	N/A - No event of this type occurred during the 2015 - 2019 period; not applicable.	N/A - No event of this type occurred during the 2015 - 2019 period; not applicable.	N/A - No event of this type occurred during the 2015 - 2019 period; not applicable.	N/A - No event of this type occurred during the 2015 - 2019 period; not applicable.	N/A - No event of this type occurred during the 2015 - 2019 period; not applicable.	Area, customer hours, square mile resolution	N/A - No event of this type occurred during the 2015 - 2019 period; not applicable.	BVES has not had any recent use of PSPS

Note:
BVES is unable to provide the above requested data in GIS map file format at

Table 9: Map file requirements for baseline condition of utility service territory projected for 2020

Note: BVES is unable to provide most of the data requestd in GIS format at this time. The GIS file(s) provided with this WMP submission include information on customer distribution location of all utility assets such as distribution lines (the utility does not operate any transmission lines according to the Commission's definition thereof), substations, generating facilities, switches, etc.
Where such data cannot be provided in GIS format at this time, the utility has provided the data it can in the tables below.
Line items in red text under "Location of Weather Stations" represent planned future additions.

Layer Name	Measurements/Variables	Value	Unit(s)	Appendix Location
Current baseline state of service territory and autility equipment	Non-HFTD vs HFTD (Zone 1, Tier 2, Tier 3) regions of utility service territory	N/A - BVES does not have this information at thist ime	Area, square mile resolution per type	N/A - BVES does not have this information at thist ime
	Urban vs. rural vs. highly rural regions of utility service territory	N/A - BVES does not have this information at thist ime	Area, square mile resolution per type	
	WUI regions of utility service territory	N/A - BVES does not have this information at thist ime	Area, square mile resolution per type	

Layer Name	Measurements/Variables	Critical Facility	Address	GPS Coordinate	Unit(s)	Appendix Location
Current baseline state of service territory and autility equipment	Number and location of critical facilities	City of Big Bear Lake (CBBL)	39707 Big Bear Blvd. Big Bear Lake, CA	34.238138, -116.935334	Point, GPS Coordinate	N/A
		Big Bear Fire Department	41090 Big Bear Blvd. Big Bear Lake CA	34.244454, -116.905308		
		Mountaintop Ranger District, U.S. Forest Service	41374 North Shore Drive, Hiway 38 Fawnskin, CA 92333	34.263421, -116.900904		
		San Bernardino County Sherriff's Deparment Big Bear Lake Patrol Station	477 Summit Blvd. Big Bear Lake, CA 92315	34.243900, -116.887824		
		Big Bear Area Regional Wastewater Agency (BBARWA)	121 Palomino Dr, Big Bear City, CA 92314	34.267869, -116.814973		
		Big Bear City Community Services District (CSD)	139 E. Big Bear Blvd. Ca 92314	34.261530, -116.844248		
		Big Bear Lake Water Department (DWP)	41972 Garstin Dr. Big Bear Lake, CA 92315	34.246650, -116.886294		
		Big Bear Municipal Water District (MWD)	40524 Lakeview CT, Big Bear Lake, CA 92315	34.242787, -116.917948		
		Southwest Gas Corporation	140 Business Center Dr. Big Bear Lake, CA 92315	34.249530, -116.888579		
		Bear Valley Community Hospital	41870 Garstin Dr. Big Bear Lake, Ca 92315	34.246529, -116.881211		
		Bear Valley Unified School District	42271 Moonridge Rd. CA 92315	34.242345, -116.881211		
		Big Bear Chamber of Commerce	630 Bartlett Rd. Big Bear Lake, CA 92315	34.241133, -116.912336		
		Big Bear Airport District	501 W. Valley Blvd. Big Bear City, CA 92314	34.261844, -116.853605		
		Big Bear Mountain Resort/ Summit	880 Summit Blvd. Big Bear Lake, Ca 92315	34.236417, -116.889272		

Layer Name	Measurements/Variables	Value	Unit(s)	Appendix Location
Current baseline state of service territory and autility equipment	Number and location of customers	N/A - BVES does not have this information at thist ime	Area, number of people, square mile resolution	N/A
	Numer and Location of customers belonging to acces and functional needs populations	N/A - BVES does not have this information at thist ime	Area, number of people, square mile resolution	
	Overhead transmission lines	N/A - BVES does not have this information at thist ime	Line, quarter mile resolution	
	Overhead distribution lines	N/A - BVES does not have this information at thist ime	Line, quarter mile resolution	

Layer Name	Measurement/svariables	Weather Station Name	Address	GPS Coordinates	Unit(s)	Appendix Location
Current baseline state of service territory and autility equipment	Location of Substations	Bear City Sub	322 West Meadow Ln. Big Bear city, 92314	34.265381, -116.849596	Point, GPS Coordinate	6.4
		Bear Mountain Sub	Lassen Dr, 1500 Ft W/O Primrose dr. big Bear City, 92314	34.224328, -116.857868		
		Division Sub	150' W/O Division Dr. Big Bear Lake, 92314	34.261855, -116.866588		
		Fawnskin Sub	S/E Corner of Mast Dr. Big Bear Lake, 92314	34.261406, -116.882163		
		Lake Sub	Garstin Dr. N/O Fox Farm Rd, Big Bear Lake, 92315	34.253290, -116.891879		
		Maltby Sub	S/E Corner of Maltby Blvd. & Shore Dr. Big Bear City, 92314	34.266335, -116.830982		
		Maple Sub	N/O Baldwin Ln & 500' W/O Maple Ln. Big Bear City, 92314	34.250630, -116.827014		
		Meadow Sub	N/O 42020 Garstin Dr. Big Bear Lake, 92315	34.247049, -116.885375		
		Moonridge Sub	S/E Corner of Clubview Dr. & Clover Dr. Big Bear Lake, 92315	34.226772, -116.863810		
		Palomino Sub	N/O Shay Rd & E/O Palomino Dr. Big Bear City, 92314	34.268660, -116.814846		
		Pine Knot Sub	S/E Corner of Lahontan Dr. & Georgia St. Big Bear Lake, 92315	34.245323, -116.900342		
		Summit Sub	S/W Corner of Summit Blvd, Snow Summit Parking Lot, Big Bear Lake 92315	34.236216, -116.889647		
		Village Sub	150' W/O Knickerbocker Rd Big Bear Lake, 92315	34.240145, -116.910389		

Layer Name	Measurement/svariables	Weather Station Name	X	Y	Pole #	Unit(s)	Appendix Location
Current baseline state of service territory and autility equipment	Location of Weather Stations	Boulder	6882767.31835688	1910907.25969201	12524BV	Point, GPS Coordinate	N/A
		Radford	6892602.18168080	1897637.83429690	12188BV		
		Clubview	6903791.35668582	1911748.75614971	13117BV		
		Garstin	6897851.88115513	1913880.76244089	13050BV		
		Erwin	6926748.82992281	1909355.71965373	12671BV		
		Sunrise	6917065.08124572	1917065.08124572	9784BV		
		North Shore	6871890.65026930	1913238.01733531	6984BV		
		Lagonita	6883474.20244181	1914092.67622142	11054BV		
		Goldmine	6911505.43455663	1907868.05465005	7319BV		
		Baldwin	6920144.53342013	1931400.02595873	10170BV		
		Pioneer	6927051.82242705	1920353.18781623	11967BV		
		Fawnskin	6883614.95687313	1920094.83006522	12535BV		
		Big Bear Dam	6870626.31191872	1912112.98119956	1210284CTC		
		Sugarloaf	6913024.86393248	1912860.05418047	5026BV		
		Lake Williams	6932440.04655872	1909063.86361015	9607BV		
		2N10	6891981.36336863	1902964.04116414	4254BV		
		Erwin Lake	6924113.84897231	1912944.49659689	7025BV		

Layer Name	Measurement/svariables	Value	Unit(s)	Appendix Location
Current baseline state of service territory and autility equipment	All utility assets by asset type, model, age, specifications, and condition	N/A - BVES does not have this information at thist ime	Point, GPS Coordinate	N/A

Layer Name	Measurement/svariables	Value	Unit(s)	Appendix Location
Location of planned utility equipment additions or removal	Non-HFTD vs HFTD (Zone 1, Tier 2, Tier 3) regions of utility service territory	N/A - BVES does not have this information at thist ime	Line, quarter mile resolution	N/A
	Urban vs. rural vs. highly rural regions of utility service territory	N/A - BVES does not have this information at thist ime	Line, quarter mile resolution	
	WUI regions of utility service territory	N/A - BVES does not have this information at thist ime	Line, quarter mile resolution	
	Circuit miles of overhead transmission lines	N/A - BVES does not have this information at thist ime	Line, quarter mile resolution	
	Circuit miles of overhead distribution lines	N/A - BVES does not have this information at thist ime	Line, quarter mile resolution	
	Location of substations	N/A - BVES does not have this information at thist ime	Point, GPS coordinate	

Layer Name	Measurement/svariables	Value	Unit(s)	Appendix Location
Planned 2020 WMP initiative activity per year	Location of 2020 WMP initiative activity for each activity as planned to be completed by the end of each year of the plan term	N/A - BVES does not have this information at thist ime	Line, quarter mile resolution	N/A

Table 10: Weather patterns, last 5 years
Response to WSD data request item BVES-43879-I-143

Weather measurement	2015	2016	2017	2018	2019	5-year historical average	Unit(s)
Red Flag Warning days	614.93	2,986.55	3,311.40	2,231.00	1,335.06	2,095.79	RFW circuit mile days per year
Days rated at the top 30% of proprietary fire potential index or similar fire risk index measure	107	151	118	129	87	118.40	Circuit mile days where proprietary measure rated above top 30% threshold per year
95th percentile wind conditions	5,691.87	8,221.59	8,643.21	6,956.73	14,967.51	8,896.18	Circuit mile days with wind gusts over 95th percentile historical (meaning the prior 10 years, 2005-2014) conditions per year
99th percentile wind conditions	1,897.29	2,318.91	2,318.91	1,686.48	6,535.11	2,951.34	Circuit mile days with wind gusts over 99th percentile historical (meaning the prior 10 years, 2005-2014) conditions per year
Other	N/A - Bear Valley Electric Service cannot provide data on any other weather patterns to the specificity requested at this time	N/A - Bear Valley Electric Service cannot provide data on any other weather patterns to the specificity requested at this time	N/A - Bear Valley Electric Service cannot provide data on any other weather patterns to the specificity requested at this time	N/A - Bear Valley Electric Service cannot provide data on any other weather patterns to the specificity requested at this time	N/A - Bear Valley Electric Service cannot provide data on any other weather patterns to the specificity requested at this time	N/A - Bear Valley Electric Service cannot provide data on any other weather patterns to the specificity requested at this time	N/A - Bear Valley Electric Service cannot provide data on any other weather patterns to the specificity requested at this time

Note:
BVES uses a contracted meteorologist that integrates data from the NFDRS, National Weather Service, and local real-time data from BVES' distributed weather stations (to account for local micro-climates) to ultimately assess relative local fire danger and risk. Reports are normally given weekly, and more often -- up to several times a day -- during heightened threat conditions. Operations personnel and leadership receive automated real-time alerts from BVES' weather stations when local winds exceed thresholds.

Navigant Consulting, Inc. (Navigant) assessed the NFDRS and estimated fire ratings of Brown ("Very Dry") or more severe as falling within the top 30% of the NFDRS.

When calculating circuit-mile days, Navigant multiplied the corresponding metric (RFW days, 95th/99th percentile wind conditions days) by the total number of *overhead* circuit miles in BVES' service territory, assuming that underground circuit miles are unaffected by wind conditions. Including underground circuit miles in this calculation would deflate the actual assessment of risk posed by wind and other wildfire-risk conditions. When a Red Flag Warning is issued for the San Bernardino Mountains, - including Big Bear Valley, which encompasses the entirey of BVES' service territory - the Warning applies to 100% of BVES' service territory.

Table 11: Key recent drivers of ignition probability, last 5 years

Incident type by ignition probability driver		Near misses tracked (y/n)?	Number of incidents per year						Average percentage probability of ignition per incident						Number of ignitions per year from this driver					
			2015	2016	2017	2018	2019	Average	2015	2016	2017	2018	2019	Average	2015	2016	2017	2018	2019	Average
Contact from object	All types of object contact	Y	6	35	12	8	4	13	0%	0%	0%	0%	0%	0%	0	0	0	0	0	0
	Animal contact	Y	0	0	1	1	1	0.6	0%	0%	0%	0%	0%	0%	0	0	0	0	0	0
	Balloon contact	Y	0	1	0	0	0	0.2	0%	0%	0%	0%	0%	0%	0	0	0	0	0	0
	Veg. contact	Y	6	34	11	7	3	12.2	0%	0%	0%	0%	0%	0%	0	0	0	0	0	0
	Vehicle contact	Y	0	0	0	0	0	0	0%	0%	0%	0%	0%	0%	0	0	0	0	0	0
All types of equipment / facility failure	All types	Y	40	40	42	23	16	32.2	0%	0%	0%	0%	0%	0%	0	0	0	0	0	0
	Capacitor bank failure	Y	0	0	0	0	0	0	0%	0%	0%	0%	0%	0%	0	0	0	0	0	0
	Conductor failure—all	Y	0	3	0	0	3	1.2	0%	0%	0%	0%	0%	0%	0	0	0	0	0	0
	Conductor failure—wires down	Y	0	3	0	0	3	1.2	0%	0%	0%	0%	0%	0%	0	0	0	0	0	0
	Fuse failure—all	Y	18	15	20	12	4	13.8	0%	0%	0%	0%	0%	0%	0	0	0	0	0	0
	Fuse failure—conventional blown fuse	Y	18	15	20	10	4	13.4	0%	0%	0%	0%	0%	0%	0	0	0	0	0	0
	Lightning arrestor failure	Y	0	0	0	0	0	0	0%	0%	0%	0%	0%	0%	0	0	0	0	0	0
	Switch failure	Y	0	0	0	0	0	0	0%	0%	0%	0%	0%	0%	0	0	0	0	0	0
	Transformer failure	Y	4	4	2	1	2	2.6	0%	0%	0%	0%	0%	0%	0	0	0	0	0	0
Wire-to-wire contact / contamination		Y	0	0	1	1	2	0.8	0%	0%	0%	0%	0%	0%	0	0	0	0	0	0
Other		Y	0	1	0	0	0	0.2	0%	0%	0%	0%	0%	0%	0	0	0	0	0	0

Note: In 2018, an umbrella was caught in one of BVES's overhead distribution lines.

Table 12: Recent use of PSPS, last 5 years

PSPS characteristic	2015	2016	2017	2018	2019	Unit(s)
Frequency of PSPS events (total)	0	0	0	0	0	Number of instances where utility operating protocol requires de-energization of a circuit or portion thereof to reduce ignition probability, per year
Frequency of PSPS events (normalized)	0	0	0	0	0	Number of instances where utility operating protocol requires de-energization of a circuit or portion thereof in order to reduce ignition probability, per RFW circuit mile day per year
Scope of PSPS events (total)	N/A - BVES did not have any PSPS events in this year	N/A - BVES did not have any PSPS events in this year	N/A - BVES did not have any PSPS events in this year	N/A - BVES did not have any PSPS events in this year	N/A - BVES did not have any PSPS events in this year	Circuit-events, measured in number of events multiplied by number of circuits de-energized per year
Scope of PSPS events (normalized)	N/A - BVES did not have any PSPS events in this year	N/A - BVES did not have any PSPS events in this year	N/A - BVES did not have any PSPS events in this year	N/A - BVES did not have any PSPS events in this year	N/A - BVES did not have any PSPS events in this year	Circuit-events, measured in number of events multiplied by number of circuits targeted for de-energization per RFW circuit mile day per year
Duration of PSPS events (total)	N/A - BVES did not have any PSPS events in this year	N/A - BVES did not have any PSPS events in this year	N/A - BVES did not have any PSPS events in this year	N/A - BVES did not have any PSPS events in this year	N/A - BVES did not have any PSPS events in this year	Customer hours per year
Duration of PSPS events (normalized)	N/A - BVES did not have any PSPS events in this year	N/A - BVES did not have any PSPS events in this year	N/A - BVES did not have any PSPS events in this year	N/A - BVES did not have any PSPS events in this year	N/A - BVES did not have any PSPS events in this year	Customer hours per RFW circuit mile day per year
Other	N/A - no other PSPS-related data to report	N/A - no other PSPS-related data to report	N/A - no other PSPS-related data to report	N/A - no other PSPS-related data to report	N/A - no other PSPS-related data to report	N/A - no other PSPS-related data to report

Note: BVES has not had any recent use of PSPS over the 2015-2019 period.

Table 13: Current baseline state of service territory and utility equipment

Land use	Characteristic tracked	In non-HFTD	In HFTD Zone 1	In HFTD Tier 2	In HFTD Tier 3
In urban areas	Circuit miles	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.
	Circuit miles in WUI	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.
	Number of critical facilities	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.
	Number of critical facilities in WUI	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.
	Number of customers	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.
	Number of customers in WUI	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.
	Number of customers belonging to access and functional needs populations	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.
	Number of customers belonging to access and functional needs populations in WUI	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.
	Circuit miles of overhead transmission lines	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.
	Circuit miles of overhead transmission lines in WUI	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.
	Circuit miles of overhead distribution lines	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.
	Circuit miles of overhead distribution lines in WUI	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.
	Number of substations	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.
	Number of substations in WUI	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.
In rural areas	Circuit miles	N/A - Bear Valley Electric Service's Service Territory is entirely HFTD 2 or 3	N/A - Bear Valley Electric Service's Service Territory is entirely HFTD 2 or 3	263.62	1.27
	Circuit miles in WUI	N/A - Bear Valley Electric Service's Service Territory is entirely HFTD 2 or 3	N/A - Bear Valley Electric Service's Service Territory is entirely HFTD 2 or 3	0.00	0.00
	Number of critical facilities	N/A - Bear Valley Electric Service's Service Territory is entirely HFTD 2 or 3	N/A - Bear Valley Electric Service's Service Territory is entirely HFTD 2 or 3	14	0.00
	Number of critical facilities in WUI	N/A - Bear Valley Electric Service's Service Territory is entirely HFTD 2 or 3	N/A - Bear Valley Electric Service's Service Territory is entirely HFTD 2 or 3	0.00	0.00
	Number of customers	N/A - Bear Valley Electric Service's Service Territory is entirely HFTD 2 or 3	N/A - Bear Valley Electric Service's Service Territory is entirely HFTD 2 or 3	24,424	0.00
	Number of customers in WUI	N/A - Bear Valley Electric Service's Service Territory is entirely HFTD 2 or 3	N/A - Bear Valley Electric Service's Service Territory is entirely HFTD 2 or 3	N/A - no data available	0.00
	Number of customers belonging to access and functional needs populations	N/A - Bear Valley Electric Service's Service Territory is entirely HFTD 2 or 3	N/A - Bear Valley Electric Service's Service Territory is entirely HFTD 2 or 3	0.00	0.00
	Number of customers belonging to access and functional needs populations in WUI	N/A - Bear Valley Electric Service's Service Territory is entirely HFTD 2 or 3	N/A - Bear Valley Electric Service's Service Territory is entirely HFTD 2 or 3	N/A - no data available	0.00
	Circuit miles of overhead transmission lines	N/A - Bear Valley Electric Service's Service Territory is entirely HFTD 2 or 3	N/A - Bear Valley Electric Service's Service Territory is entirely HFTD 2 or 3	N/A - Bear Valley Electric Service does not have any overhead transmission lines. All of the utility's electric lines are below 65kV.	N/A - Bear Valley Electric Service does not have any overhead transmission lines. All of the utility's electric lines are below 65kV.

	Circuit miles of overhead transmission lines in WUI	N/A - Bear Valley Electric Service's Service Territory is entirely HFTD 2 or 3	N/A - Bear Valley Electric Service's Service Territory is entirely HFTD 2 or 3	0.00	0.00
	Circuit miles of overhead distribution lines	N/A - Bear Valley Electric Service's Service Territory is entirely HFTD 2 or 3	N/A - Bear Valley Electric Service's Service Territory is entirely HFTD 2 or 3	209.54	1.27
	Circuit miles of overhead distribution lines in WUI	N/A - Bear Valley Electric Service's Service Territory is entirely HFTD 2 or 3	N/A - Bear Valley Electric Service's Service Territory is entirely HFTD 2 or 3	0.00	0.00
	Number of substations	N/A - Bear Valley Electric Service's Service Territory is entirely HFTD 2 or 3	N/A - Bear Valley Electric Service's Service Territory is entirely HFTD 2 or 3	13	0.00
	Number of substations in WUI	N/A - Bear Valley Electric Service's Service Territory is entirely HFTD 2 or 3	N/A - Bear Valley Electric Service's Service Territory is entirely HFTD 2 or 3	0.00	0.00
In highly rural areas	Circuit miles	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.
	Circuit miles in WUI	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.
	Number of critical facilities	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.
	Number of critical facilities in WUI	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.
	Number of customers	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.
	Number of customers in WUI	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.
	Number of customers belonging to access and functional needs populations	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.
	Number of customers belonging to access and functional needs populations in WUI	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.
	Circuit miles of overhead transmission lines	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.
	Circuit miles of overhead transmission lines in WUI	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.
	Circuit miles of overhead distribution lines	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.
	Circuit miles of overhead distribution lines in WUI	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.
	Number of substations	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.
	Number of substations in WUI	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.

Note: BVES does not have any urban or highly rural areas within its service territory. The utility's service territory is entirely rural and either HFTD Tier 2 or Tier 3.

The utility does not have any transmission lines as all of its lines are below 65 kV.

BVES has not tracked which portions of its distribution system and other utilty-owned infrastructure or assets are located in WUI-designated areas.

Table 14: Summary data on weather station count

Weather station count type	Current count	Unit(s)
Number of weather stations (total)	11	Total number located in service territory and operated by utility
Number of weather stations (normalized)	0.0522	Total number located in service territory and operated by utility, divided by total number of circuit miles in utility service territory
Number of weather stations in non-HFTD (total)	0	Total number located in non-HFTD service territory and operated by utility
Number of weather stations in non-HFTD (normalized)	0	Total number located in non-HFTD service territory and operated by utility, divided by total number of circuit miles in non-HFTD service territory
Number of weather stations in HFTD Zone 1 (total)	0	Total number located in HFTD Zone 1 service territory and operated by utility
Number of weather stations in HFTD Zone 1 (normalized)	0	Total number located in HFTD Zone 1 service territory and operated by utility, divided by total number of circuit miles in HFTD Zone 1 service territory
Number of weather stations in HFTD Tier 2 (total)	10	Total number located in HFTD Tier 2 service territory and operated by utility
Number of weather stations in HFTD Tier 2 (normalized)	0.0477	Total number located in HFTD Tier 2 service territory and operated by utility, divided by total number of circuit miles in HFTD Tier 2 service territory
Number of weather stations in HFTD Tier 3 (total)	1	Total number located in HFTD Tier 3 service territory and operated by utility
Number of weather stations in HFTD Tier 3 (normalized)	0.7874	Total number located in HFTD Tier 3 service territory and operated by utility, divided by total number of circuit miles in HFTD Tier 3 service territory

Note:

The utility's service territory is entirely rural and either HFTD Tier 2 or Tier 3.

Circuit miles were calculated as the total overhead circuit miles, assuming that underground circuit miles are unaffected by wind conditions. Including underground circuit miles in this calculation would deflate the actual assessment of risk posed by wind and other wildfire-risk conditions.

Table 15: Summary data on fault indicator count

Fault indicator count type	Current count	Unit(s)
Number of fault indicators (total)	87	Total number located in service territory and operated by utility
Number of fault indicators (normalized)	0.4127	Total number located in service territory and operated by utility, divided by total number of circuit miles in utility service territory
Number of fault indicators in non-HFTD (total)	0	Total number located in non-HFTD service territory and operated by utility
Number of fault indicators in non-HFTD (normalized)	0	Total number located in non-HFTD service territory and operated by utility, divided by total number of circuit miles in non-HFTD service territory
Number of fault indicators in HFTD Zone 1 (total)	0	Total number located in HFTD Zone 1 service territory and operated by utility
Number of fault indicators in HFTD Zone 1 (normalized)	0	Total number located in HFTD Zone 1 service territory and operated by utility, divided by total number of circuit miles in HFTD Zone 1 service territory
Number of fault indicators in HFTD Tier 2 (total)	87	Total number located in HFTD Tier 2 service territory and operated by utility
Number of fault indicators in HFTD Tier 2 (normalized)	0.4152	Total number located in HFTD Tier 2 service territory and operated by utility, divided by total number of circuit miles in HFTD Tier 2 service territory
Number of fault indicators in HFTD Tier 3 (total)	0	Total number located in HFTD Tier 3 service territory and operated by utility
Number of fault indicators in HFTD Tier 3 (normalized)	0	Total number located in HFTD Tier 3 service territory and operated by utility, divided by total number of circuit miles in HFTD Tier 3 service territory

Note: The utility's service territory is entirely rural and either HFTD Tier 2 or Tier 3.

Circuit miles were calculated as the total overhead circuit miles, assuming that underground circuit miles are unaffected by wind conditions. Including underground circuit miles in this calculation would deflate the actual assessment of risk posed by wind and other wildfire-risk conditions.

Table 16: Location of planned utility equipment additions or removal by end of 3-year plan term

Response to WSD data request item BVES-43879-G-149

Land use	Characteristic tracked	Changes by end-2022			
		In non-HFTD	In HFTD Zone 1	In HFTD Tier 2	In HFTD Tier 3
In urban areas	Circuit miles of overhead transmission lines	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.
	Circuit miles of overhead distribution lines	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.
	Circuit miles of overhead transmission lines in WUI	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.
	Circuit miles of overhead distribution lines in WUI	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.
	Number of substations	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.
	Number of substations in WUI	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.
	Number of weather stations	N/A - Bear Valley Electric Service has not previously tracked the number of weather stations in the WUI and could not determine this data within the timeframe given for this Plan. The utility will do so going forward. Additionally, BVES does not have any urban areas. The utility's service territory is entirely rural	N/A - Bear Valley Electric Service has not previously tracked the number of weather stations in the WUI and could not determine this data within the timeframe given for this Plan. The utility will do so going forward. Additionally, BVES does not have any urban areas. The utility's service territory is entirely rural	N/A - Bear Valley Electric Service has not previously tracked the number of weather stations in the WUI and could not determine this data within the timeframe given for this Plan. The utility will do so going forward. Additionally, BVES does not have any urban areas. The utility's service territory is entirely rural	N/A - Bear Valley Electric Service has not previously tracked the number of weather stations in the WUI and could not determine this data within the timeframe given for this Plan. The utility will do so going forward. Additionally, BVES does not have any urban areas. The utility's service territory is entirely rural
	Number of weather stations in WUI	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.
In rural areas	Circuit miles of overhead transmission lines	N/A - Bear Valley Electric Service does not have any transmission lines. All of the utility's electric lines are below 65 kV.	N/A - Bear Valley Electric Service does not have any transmission lines. All of the utility's electric lines are below 65 kV.	N/A - Bear Valley Electric Service does not have any transmission lines. All of the utility's electric lines are below 65 kV.	N/A - Bear Valley Electric Service does not have any transmission lines. All of the utility's electric lines are below 65 kV.
	Circuit miles of overhead distribution lines	N/A - Bear Valley Electric Service has not planned any overhead distribution line additions or removals in this HFTD over the 3-year plan term	N/A - Bear Valley Electric Service has not planned any overhead distribution line additions or removals in this HFTD over the 3-year plan term	0	0
	Circuit miles of overhead transmission lines in WUI	N/A - Bear Valley Electric Service has not yet tracked the number of overhead transmission lines in WUI	N/A - Bear Valley Electric Service has not yet tracked the number of overhead distribution lines in WUI	N/A - Bear Valley Electric Service has not yet tracked the number of overhead distribution lines in WUI	N/A - Bear Valley Electric Service has not yet tracked the number of overhead distribution lines in WUI
	Circuit miles of overhead distribution lines in WUI	N/A - Bear Valley Electric Service has not yet tracked the number of overhead distribution lines in WUI	N/A - Bear Valley Electric Service has not yet tracked the number of overhead distribution lines in WUI	N/A - Bear Valley Electric Service has not yet tracked the number of overhead distribution lines in WUI	N/A - Bear Valley Electric Service has not yet tracked the number of overhead distribution lines in WUI
	Number of substations	N/A - Bear Valley Electric Service does not have any planned substation additions or removals by end of 3-year plan term in this HFTD	N/A - Bear Valley Electric Service does not have any planned substation additions or removals by end of 3-year plan term in this HFTD	13	0
	Number of substations in WUI	N/A - Bear Valley Electric Service has not yet tracked the number of substations in WUI	N/A - Bear Valley Electric Service has not yet tracked the number of substations in WUI	N/A - Bear Valley Electric Service has not yet tracked the number of substations in WUI	N/A - Bear Valley Electric Service has not yet tracked the number of substations in WUI
	Number of weather stations	N/A - Bear Valley Electric Service does not have any planned weather station additions or removals by end of 3-year plan term in this HFTD	N/A - Bear Valley Electric Service does not have any planned weather station additions or removals by end of 3-year plan term in this HFTD	9	0
	Number of weather stations in WUI	N/A - Bear Valley Electric Service has not previously tracked the number of weather stations in the WUI and could not determine this data within the timeframe given for this Plan. The utility will do so going forward. Additionally, BVES does not have any urban areas. The utility's service territory is entirely rural	N/A - Bear Valley Electric Service has not previously tracked the number of weather stations in the WUI and could not determine this data within the timeframe given for this Plan. The utility will do so going forward. Additionally, BVES does not have any urban areas. The utility's service territory is entirely rural	N/A - Bear Valley Electric Service has not previously tracked the number of weather stations in the WUI and could not determine this data within the timeframe given for this Plan. The utility will do so going forward. Additionally, BVES does not have any urban areas. The utility's service territory is entirely rural	N/A - Bear Valley Electric Service has not previously tracked the number of weather stations in the WUI and could not determine this data within the timeframe given for this Plan. The utility will do so going forward. Additionally, BVES does not have any urban areas. The utility's service territory is entirely rural

In highly rural areas	Circuit miles of overhead transmission lines	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.
	Circuit miles of overhead distribution lines	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.
	Circuit miles of overhead transmission lines in WUI	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.
	Circuit miles of overhead distribution lines in WUI	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.
	Number of substations	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.
	Number of substations in WUI	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.
	Number of weather stations	N/A - Bear Valley Electric Service has not previously tracked weather stations within the WUI but will do so going forward. does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service has not previously tracked weather stations within the WUI but will do so going forward. does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service has not previously tracked weather stations within the WUI but will do so going forward. does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service has not previously tracked weather stations within the WUI but will do so going forward. does not have any highly rural areas. The utility's service territory is entirely rural.
	Number of weather stations in WUI	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.

Transmission lines refer to all lines at or above 65kV, and distribution lines refer to all lines below 65kV.

Note: The utility does not have any transmission lines as all of its lines are below 65kV.

The utility does not plan to add or remove any overhead distribution lines.

BVES does not track which portions of its distribution system and other utilty-owned infrastructure or assets are located in WUI-designated areas.

The utility does not have any urban or highly rural aras. BVES' entire service territory is rural.

Table 17: Location of planned utility infrastructure upgrades

Response to WSD data request item BVES-43879-G-149

Land use	Characteristic tracked	In non-HFTD			In HFTD Zone 1			In HFTD Tier 2			In HFTD Tier 3		
		2020	2021	2022	2020	2021	2022	2020	2021	2022	2020	2021	2022
Total circuit miles planned for hardening each year, all types and locations		N/A - Bear Valley Electric Service's entire Service Territory is in HFTD 2 or 3	N/A - Bear Valley Electric Service's entire Service Territory is in HFTD 2 or 3	N/A - Bear Valley Electric Service's entire Service Territory is in HFTD 2 or 3	N/A - Bear Valley Electric Service's entire Service Territory is in HFTD 2 or 3	N/A - Bear Valley Electric Service's entire Service Territory is in HFTD 2 or 3	N/A - Bear Valley Electric Service's entire Service Territory is in HFTD 2 or 3	6	8	8	2	0	0
Total number of substations planned for hardening each year, all locations		N/A - Bear Valley Electric Service's entire Service Territory is in HFTD 2 or 3	N/A - Bear Valley Electric Service's entire Service Territory is in HFTD 2 or 3	N/A - Bear Valley Electric Service's entire Service Territory is in HFTD 2 or 3	N/A - Bear Valley Electric Service's entire Service Territory is in HFTD 2 or 3	N/A - Bear Valley Electric Service's entire Service Territory is in HFTD 2 or 3	N/A - Bear Valley Electric Service's entire Service Territory is in HFTD 2 or 3	1	1	1	0	0	0
In urban areas	Circuit miles planned for grid hardening of overhead transmission lines	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.
	Circuit miles of overhead transmission lines in WUI to harden	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.
	Circuit miles of overhead distribution lines to harden	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.
	Circuit miles of overhead distribution lines in WUI to harden	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.
	Circuit miles of overhead transmission lines in WUI to harden	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.
	Number of substations to harden	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.
	Number of substations in WUI to harden	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any urban areas. The utility's service territory is entirely rural.
In rural areas	Circuit miles of overhead transmission lines to harden	N/A - Bear Valley Electric Service does not have and is not planning to harden any transmission lines. All of the utility's electric lines are below 65 kV.	N/A - Bear Valley Electric Service does not have and is not planning to harden any transmission lines. All of the utility's electric lines are below 65 kV.	N/A - Bear Valley Electric Service does not have and is not planning to harden any transmission lines. All of the utility's electric lines are below 65 kV.	N/A - Bear Valley Electric Service does not have and is not planning to harden any transmission lines. All of the utility's electric lines are below 65 kV.	N/A - Bear Valley Electric Service does not have and is not planning to harden any transmission lines. All of the utility's electric lines are below 65 kV.	N/A - Bear Valley Electric Service does not have and is not planning to harden any transmission lines. All of the utility's electric lines are below 65 kV.	N/A - Bear Valley Electric Service does not have and is not planning to harden any transmission lines. All of the utility's electric lines are below 65 kV.	N/A - Bear Valley Electric Service does not have and is not planning to harden any transmission lines. All of the utility's electric lines are below 65 kV.	N/A - Bear Valley Electric Service does not have and is not planning to harden any transmission lines. All of the utility's electric lines are below 65 kV.	N/A - Bear Valley Electric Service does not have and is not planning to harden any transmission lines. All of the utility's electric lines are below 65 kV.	N/A - Bear Valley Electric Service does not have and is not planning to harden any transmission lines. All of the utility's electric lines are below 65 kV.	N/A - Bear Valley Electric Service does not have and is not planning to harden any transmission lines. All of the utility's electric lines are below 65 kV.
	Circuit miles of overhead transmission lines in WUI to harden	N/A - Bear Valley Electric Service does not have and is not planning to harden any transmission lines. All of the utility's electric lines are below 65 kV.	N/A - Bear Valley Electric Service does not have and is not planning to harden any transmission lines. All of the utility's electric lines are below 65 kV.	N/A - Bear Valley Electric Service does not have and is not planning to harden any transmission lines. All of the utility's electric lines are below 65 kV.	N/A - Bear Valley Electric Service does not have and is not planning to harden any transmission lines. All of the utility's electric lines are below 65 kV.	N/A - Bear Valley Electric Service does not have and is not planning to harden any transmission lines. All of the utility's electric lines are below 65 kV.	N/A - Bear Valley Electric Service does not have and is not planning to harden any transmission lines. All of the utility's electric lines are below 65 kV.	N/A - Bear Valley Electric Service does not have and is not planning to harden any transmission lines. All of the utility's electric lines are below 65 kV.	N/A - Bear Valley Electric Service does not have and is not planning to harden any transmission lines. All of the utility's electric lines are below 65 kV.	N/A - Bear Valley Electric Service does not have and is not planning to harden any transmission lines. All of the utility's electric lines are below 65 kV.	N/A - Bear Valley Electric Service does not have and is not planning to harden any transmission lines. All of the utility's electric lines are below 65 kV.	N/A - Bear Valley Electric Service does not have and is not planning to harden any transmission lines. All of the utility's electric lines are below 65 kV.	N/A - Bear Valley Electric Service does not have and is not planning to harden any transmission lines. All of the utility's electric lines are below 65 kV.
	Circuit miles of overhead distribution lines to harden	N/A - Bear Valley Electric Service has not planned any overhead distribution line hardening in this HFTD in this year	N/A - Bear Valley Electric Service has not planned any overhead distribution line hardening in this HFTD in this year	N/A - Bear Valley Electric Service has not planned any overhead distribution line hardening in this HFTD in this year	N/A - Bear Valley Electric Service has not planned any overhead distribution line hardening in this HFTD in this year	N/A - Bear Valley Electric Service has not planned any overhead distribution line hardening in this HFTD in this year	N/A - Bear Valley Electric Service has not planned any overhead distribution line hardening in this HFTD in this year	6	8	8	2	0	0
	Circuit miles of overhead distribution lines in WUI to harden	N/A - Bear Valley Electric Service has not yet tracked the number of overhead distribution lines in WUI	N/A - Bear Valley Electric Service has not yet tracked the number of overhead distribution lines in WUI	N/A - Bear Valley Electric Service has not yet tracked the number of overhead distribution lines in WUI	N/A - Bear Valley Electric Service has not yet tracked the number of overhead distribution lines in WUI	N/A - Bear Valley Electric Service has not yet tracked the number of overhead distribution lines in WUI	N/A - Bear Valley Electric Service has not yet tracked the number of overhead distribution lines in WUI	N/A - Bear Valley Electric Service has not yet tracked the number of overhead distribution lines in WUI	N/A - Bear Valley Electric Service has not yet tracked the number of overhead distribution lines in WUI	N/A - Bear Valley Electric Service has not yet tracked the number of overhead distribution lines in WUI	N/A - Bear Valley Electric Service has not yet tracked the number of overhead distribution lines in WUI	N/A - Bear Valley Electric Service has not yet tracked the number of overhead distribution lines in WUI	N/A - Bear Valley Electric Service has not yet tracked the number of overhead distribution lines in WUI
	Circuit miles of overhead transmission lines in WUI to harden	N/A - Bear Valley Electric Service does not have and is not planning to harden any transmission lines. All of the utility's electric lines are below 65 kV.	N/A - Bear Valley Electric Service does not have and is not planning to harden any transmission lines. All of the utility's electric lines are below 65 kV.	N/A - Bear Valley Electric Service does not have and is not planning to harden any transmission lines. All of the utility's electric lines are below 65 kV.	N/A - Bear Valley Electric Service does not have and is not planning to harden any transmission lines. All of the utility's electric lines are below 65 kV.	N/A - Bear Valley Electric Service does not have and is not planning to harden any transmission lines. All of the utility's electric lines are below 65 kV.	N/A - Bear Valley Electric Service does not have and is not planning to harden any transmission lines. All of the utility's electric lines are below 65 kV.	N/A - Bear Valley Electric Service does not have and is not planning to harden any transmission lines. All of the utility's electric lines are below 65 kV.	N/A - Bear Valley Electric Service does not have and is not planning to harden any transmission lines. All of the utility's electric lines are below 65 kV.	N/A - Bear Valley Electric Service does not have and is not planning to harden any transmission lines. All of the utility's electric lines are below 65 kV.	N/A - Bear Valley Electric Service does not have and is not planning to harden any transmission lines. All of the utility's electric lines are below 65 kV.	N/A - Bear Valley Electric Service does not have and is not planning to harden any transmission lines. All of the utility's electric lines are below 65 kV.	N/A - Bear Valley Electric Service does not have and is not planning to harden any transmission lines. All of the utility's electric lines are below 65 kV.
	Number of substations to harden	N/A - Bear Valley Electric Service has not planned any substation hardening in this HFTD in this year	N/A - Bear Valley Electric Service has not planned any substation hardening in this HFTD in this year	N/A - Bear Valley Electric Service has not planned any substation hardening in this HFTD in this year	N/A - Bear Valley Electric Service has not planned any substation hardening in this HFTD in this year	N/A - Bear Valley Electric Service has not planned any substation hardening in this HFTD in this year	N/A - Bear Valley Electric Service has not planned any substation hardening in this HFTD in this year	1	1	1	0	0	0
	Number of substations in WUI to harden	N/A - Bear Valley Electric Service has not yet tracked the number of substations in WUI	N/A - Bear Valley Electric Service has not yet tracked the number of substations in WUI	N/A - Bear Valley Electric Service has not yet tracked the number of substations in WUI	N/A - Bear Valley Electric Service has not yet tracked the number of substations in WUI	N/A - Bear Valley Electric Service has not yet tracked the number of substations in WUI	N/A - Bear Valley Electric Service has not yet tracked the number of substations in WUI	N/A - Bear Valley Electric Service has not yet tracked the number of substations in WUI	N/A - Bear Valley Electric Service has not yet tracked the number of substations in WUI	N/A - Bear Valley Electric Service has not yet tracked the number of substations in WUI	N/A - Bear Valley Electric Service has not yet tracked the number of substations in WUI	N/A - Bear Valley Electric Service has not yet tracked the number of substations in WUI	N/A - Bear Valley Electric Service has not yet tracked the number of substations in WUI
In highly rural areas	Circuit miles of overhead transmission lines to harden	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.
	Circuit miles of overhead transmission lines in WUI to harden	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.
	Circuit miles of overhead distribution lines to harden	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.
	Circuit miles of overhead distribution lines in WUI to harden	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.
	Circuit miles of overhead transmission lines in WUI to harden	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.
	Number of substations to harden	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.
	Number of substations in WUI to harden	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.	N/A - Bear Valley Electric Service does not have any highly rural areas. The utility's service territory is entirely rural.

Transmission lines refer to all lines at or above 65kV. and distribution lines refer to all lines below 65kV.

Note: The utility does not have any transmission lines as all of its lines are below 65kV.

BVES does not track which portions of its distribution system and other utility-owned infrastructure or assets are located in WUI-designated areas.

Table 18: Key drivers of ignition probability

Ignition probability drivers		Number of incidents per year (according to 5-year historical average)	Average likelihood of ignition per incident	Ignitions from this driver (according to 5-year historical average)				
				Total	In non-HFTD	In HFTD Zone 1	In HFTD Tier 2	In HFTD Tier 3
Contact from object	All types of object contact	13	0%	0	N/A - the utility's entire Service Territory is either HFTD 2 or 3	N/A - the utility's entire Service Territory is either HFTD 2 or 3	0	0
	Animal contact	0.6	0%	0	N/A - the utility's entire Service Territory is either HFTD 2 or 3	N/A - the utility's entire Service Territory is either HFTD 2 or 3	0	0
	Balloon contact	0.2	0%	0	N/A - the utility's entire Service Territory is either HFTD 2 or 3	N/A - the utility's entire Service Territory is either HFTD 2 or 3	0	0
	Vegetation contact	12.2	0%	0	N/A - the utility's entire Service Territory is either HFTD 2 or 3	N/A - the utility's entire Service Territory is either HFTD 2 or 3	0	0
	Vehicle contact	0	0%	0	N/A - the utility's entire Service Territory is either HFTD 2 or 3	N/A - the utility's entire Service Territory is either HFTD 2 or 3	0	0
All types of equipment / facility failure	All types	32.2	0%	0	N/A - the utility's entire Service Territory is either HFTD 2 or 3	N/A - the utility's entire Service Territory is either HFTD 2 or 3	0	0
	Capacitor bank failure	0	0%	0	N/A - the utility's entire Service Territory is either HFTD 2 or 3	N/A - the utility's entire Service Territory is either HFTD 2 or 3	0	0
	Conductor failure—all	1.2	0%	0	N/A - the utility's entire Service Territory is either HFTD 2 or 3	N/A - the utility's entire Service Territory is either HFTD 2 or 3	0	0
	Conductor failure—wires down	1.2	0%	0	N/A - the utility's entire Service Territory is either HFTD 2 or 3	N/A - the utility's entire Service Territory is either HFTD 2 or 3	0	0
	Fuse failure—all	13.8	0%	0	N/A - the utility's entire Service Territory is either HFTD 2 or 3	N/A - the utility's entire Service Territory is either HFTD 2 or 3	0	0
	Fuse failure—conventional blown fuse	13.4	0%	0	N/A - the utility's entire Service Territory is either HFTD 2 or 3	N/A - the utility's entire Service Territory is either HFTD 2 or 3	0	0
	Lightning arrestor failure	0	0%	0	N/A - the utility's entire Service Territory is either HFTD 2 or 3	N/A - the utility's entire Service Territory is either HFTD 2 or 3	0	0
	Switch failure	0	0%	0	N/A - the utility's entire Service Territory is either HFTD 2 or 3	N/A - the utility's entire Service Territory is either HFTD 2 or 3	0	0
	Transformer failure	2.6	0%	0	N/A - the utility's entire Service Territory is either HFTD 2 or 3	N/A - the utility's entire Service Territory is either HFTD 2 or 3	0	0
Wire-to-wire contact / contamination		0.8	0%	0	N/A - the utility's entire Service Territory is either HFTD 2 or 3	N/A - the utility's entire Service Territory is either HFTD 2 or 3	0	0
Other		0.2	0%	0	N/A - the utility's entire Service Territory is either HFTD 2 or 3	N/A - the utility's entire Service Territory is either HFTD 2 or 3	0	0

Note: The utility's service territory is in either HFTD Tier 2 or Tier 3

4.1 The Objectives of the Plan

The objectives of the plan shall, at a minimum, be consistent with the requirements of California Public Utilities Code §8386(a). Describe utility WMP objectives, categorized by each of the following timeframes:

- Before the upcoming wildfire season, as defined by the California Department of Forestry and Fire Protection (CAL FIRE),
- Before the next annual update,
- Within the next 3 years, and
- Within the next 10 years.

4.2.1 Service territory fire-threat evaluation and ignition risk trends

Discuss fire-threat evaluation of the service territory to determine whether an expanded High Fire Threat District (HFTD) is warranted (i.e., beyond existing Tier 2 and Tier 3 areas). This section shall include a discussion of any fire threat assessment of its service territory performed by the electrical corporation. In the event that the electrical corporation's assessment determines the fire threat rating for any part of its service territory is insufficient (i.e., the actual fire threat is greater than what is indicated in the CPUC Fire Threat Map and High Fire Threat District designations), the corporation shall identify those areas for consideration of HFTD modification, based on the new information or environmental changes. To the extent this identification relies upon a meteorological or climatological study, a thorough explanation and copy of the study shall be included.

BVES has not performed any study in 2019 to determine whether expansion of the HFTD tiers are necessary, though is aware of the need to reevaluate these designations from time to time and will consider this effort in subsequent WMP filings. BVES operates with the inherent risk factor of the service area's mountainous, alpine terrain, which makes up Tier 2 and Tier 3 regions of the HFTD. Field operational practices that include fire-threat conditions/stipulations are considered as part of general business practice. BVES did not meet trigger thresholds to initiate a PSPS event during the 2019 fire season, leading to the understanding that the Commission has suitably mapped the fire threat profile for the service territory at this time.

An immediate activity the utility will pursue before the next wildfire season will be addressing the Wildland Urban Interface (WUI) designations, as the utility has not previously tracked these zones in wildfire mitigation planning. BVES understands that the risk area for the WUI maps atop the Tier 2 and 3 designations from the HFTD. The utility does not have any urban or highly rural areas; the entire service territory is rural.

4.2 Understanding major trends impacting ignition probability and wildfire consequence

Describe how the utility assesses wildfire risk in terms of ignition probability and estimated wildfire consequence, including use of Multi-Attribute Risk Score (MARS) and Multi-Attribute Value Function (MAVF) as in the Safety Model and Assessment Proceeding (S-MAP) and Risk Assessment Mitigation Phase (RAMP). Include description of how the utility distinguishes between these risks and the risks to safety and reliability. List and describe each "known local condition" that the utility monitors per GO 95, Rule 31.1, including how the condition is monitored and evaluated. In addition:

A. Describe how the utility monitors and accounts for the contribution of weather to ignition probability and estimated wildfire consequence in its decision-making, including describing any utility-generated Fire Potential Index or other measure (including input variables, equations, the scale or rating system, an explanation of how uncertainties are accounted for, an explanation of how this index is used to inform operational decisions, and an explanation of how trends in index ratings impact medium-term decisions such as maintenance and longer-term decisions such as capital investments, etc.).

B. Describe how the utility monitors and accounts for the contribution of fuel conditions to ignition probability and estimated wildfire consequence in its decision-making, including describing any proprietary fuel condition index (or other measures tracked), the outputs of said index or other measures, and the methodology used for projecting future fuel conditions. Include discussion of measurements and units for live fuel moisture content, dead fuel moisture content, density of each fuel type, and any other variables tracked. Describe the measures and thresholds the utility uses to determine extreme fuel conditions, including what fuel moisture measurements and threshold values the utility considers "extreme" and its strategy for how fuel conditions inform operational decision-making.

Table 19: Macro trends impacting ignition probability and/or wildfire consequence

Rank	Macro trends impacting utility ignited ignition probability and estimated wildfire consequence by year 10	Comments
1	Change in ignition probability and estimated wildfire consequence due to climate change	The utility expects climate change to produce significant increase in ignition probability over the 10-year period. Based on 2017 Climate Change and Health Profile Report San Bernardino County (UC Davis), California Fourth Climate Assessment.
3	Change in ignition probability and estimated wildfire consequence due to relevant invasive species, such as bark beetles	The Big Bear Lake region has previously been affected by bark beetles, notably in the Summer of 2018 as a result of the then-ongoing drought in California. While the utility has not experienced any ignition events, increased dead tree density is likely as climate change creates more favorable Summer conditions for bark beetle populations.
2	Change in ignition probability and estimated wildfire consequence due to other drivers of change in fuel density and moisture	The utility's service territory is in a heavily forested alpine environment. Any increase in fuel density and dryness creates a disproportionate increase in ignition probability and/or estimated wildfire consequences.
5	Population changes (including Access and Functional Needs population) that could be impacted by utility ignition	The utility's service territory is entirely in a mountain resort region. BVES does not expect significant population changes within its service territory and does not foresee measurable changes impacting ignition probability and/or wildfire consequence as a result thereof.
6	Population changes in HFTD that could be impacted by utility ignition	The utility's service territory is entirely in a mountain resort region. BVES does not expect significant population changes within its service territory and does not foresee measurable changes impacting ignition probability and/or wildfire consequence as a result thereof.
4	Population changes in WUI that could be impacted by utility ignition	The utility's service territory is entirely in a mountain resort region. BVES does not expect significant population changes within its service territory and does not foresee measurable changes impacting ignition probability and/or wildfire consequence as a result thereof.
7	Utility infrastructure location in HFTD vs non-HFTD	The utility's service territory is entirely in HFTD 2 or HFTD3. As a result, BVES does not foresee any differentiated impacts in ignition probability and/or wildfire consequence due to the location of utilit infrastructure in HFTD vs non-HFTD
8	Utility infrastructure location in urban vs rural vs highly rural areas	The utility's service territory is entirely rural. As a result, BVES does not foresee any differentiated impacts in ignition probability and/or wildfire consequence due to the location of utility infrastrucutre in urban vs rural vs highly rural areas

List and describe any additional macro trends impacting ignition probability and estimated wildfire consequence within utility service territory, including trends within the control of the utility, trends within the utility's ability to influence, and externalities (i.e., trends beyond the utility's control, such as population changes within the utility's territory).

~~**In addition to the comments laid out in Table 19, see BVES 2020 WMP Section 3.2 through subsection 3.2.1.**~~

List and describe all relevant drivers of ignition probability and estimated wildfire consequences and the mitigations that are identified in the Risk Assessment Mitigation Phase (RAMP) and not included in the above, including how these are expected to evolve. Rank these drivers from highest to lowest risk and describe how they are expected to evolve.

The CPUC has not required BVES to conduct a Risk Assessment and Mitigation Phase (RAMP) in prior GRC filings, however through its risk-based decision-making framework, BVES has created a list of risks and a prioritized list of mitigation measures.
~~**BVES 2020 WMP Section 3.2**~~

4.3 Change in Ignition Probability Drivers

Based on the implementation of the above wildfire mitigation initiatives, explain how the utility sees its ignition probability drivers evolving over the 3 year term of the WMP. Focus on ignition probability and estimated wildfire consequence reduction by ignition probability driver, detailed risk driver, and include a description of how the utility expects to see incidents evolve over the same period, both in total number (of occurrence of a given incident type, whether resulting in a near miss or in an ignition) and in likelihood of causing an ignition by type. Outline methodology for determining ignition probability from events, including data used to determine likelihood of ignition probability, such as past ignition events, number of near misses, and description of events (including vegetation and equipment condition).

4.4 Directional Vision for Necesity of PSPS

Describe any lessons learned from PSPS since the utility's last WMP submission and expectations for how the utility's PSPS program will evolve over the coming 1, 3, and 10 years. Be specific by including a description of the utility's protocols and thresholds for PSPS implementation. Include a quantitative description of how the circuits and numbers of customers that the utility expects will be impacted by any necessary PSPS events is expected to evolve over time. The description of protocols must be sufficiently detailed and clear to enable a skilled operator to follow the same protocols. When calculating anticipated PSPS, consider recent weather extremes, including peak weather conditions over the past 10 years as well as recent weather years and how the utility's current PSPS protocols would be applied to those years.

BVES did not initiate a PSPS event in 2019, therefore has no direct lessons learned to apply to 2020.

Table 20: Anticipated characteristics of PSPS use over next 10 years

Rank order 1-9	PSPS characteristic	Significantly increase; increase; no change; decrease; significantly decrease	Comments
N/A - BVES does not anticipate and has not had any PSPS events	Number of customers affected by PSPS events (total)	No change	BVES has not implemented any PSPS does not anticipate the need for PSPS over the next 10 years
N/A - BVES does not anticipate and has not had any PSPS events	Number of customers affected by PSPS events (normalized by fire weather, e.g., Red Flag Warning line mile days)	No change	BVES has not implemented any PSPS does not anticipate the need for PSPS over the next 10 years
N/A - BVES does not anticipate and has not had any PSPS events	Frequency of PSPS events in number of instances where utility operating protocol requires de-energization of a circuit or portion thereof to reduce ignition probability (total)	No change	BVES has not implemented any PSPS does not anticipate the need for PSPS over the next 10 years
N/A - BVES does not anticipate and has not had any PSPS events	Frequency of PSPS events in number of instances where utility operating protocol requires de-energization of a circuit or portion thereof to reduce ignition probability (normalized by fire weather, e.g., Red Flag Warning line mile days)	No change	BVES has not implemented any PSPS does not anticipate the need for PSPS over the next 10 years
N/A - BVES does not anticipate and has not had any PSPS events	Scope of PSPS events in circuit-events, measured in number of events multiplied by number of circuits targeted for de-energization (total)	No change	BVES has not implemented any PSPS does not anticipate the need for PSPS over the next 10 years
N/A - BVES does not anticipate and has not had any PSPS events	Scope of PSPS events in circuit-events, measured in number of events multiplied by number of circuits targeted for de-energization (normalized by fire weather, e.g., Red Flag Warning line mile days)	No change	BVES has not implemented any PSPS does not anticipate the need for PSPS over the next 10 years
N/A - BVES does not anticipate and has not had any PSPS events	Duration of PSPS events in customer hours (total)	No change	BVES has not implemented any PSPS does not anticipate the need for PSPS over the next 10 years
N/A - BVES does not anticipate and has not had any PSPS events	Duration of PSPS events in customer hours (normalized by fire weather, e.g., Red Flag Warning line mile days)	No change	BVES has not implemented any PSPS does not anticipate the need for PSPS over the next 10 years
N/A - BVES does not anticipate and has not had any PSPS events	Other	No change	BVES has not implemented any PSPS does not anticipate the need for PSPS over the next 10 years

5.1 Wildfire mitigation strategy

Describe organization-wide wildfire mitigation strategy and goals for each of the following time periods:

1. Before the upcoming wildfire season, as defined by the California Department of Forestry and Fire Protection (CAL FIRE),
2. Before the next annual update,
3. Within the next 3 years, and
4. Within the next 10 years.

The description of utility wildfire mitigation strategy shall:

A. Discuss the utility's approach to determining how to manage wildfire risk (in terms of ignition probability and estimated wildfire consequence) as distinct from managing risks to safety and/or reliability. Describe how this determination is made both for (1) the types of activities needed and (2) the extent of those activities needed to mitigate these two different groups of risks. Describe to what degree the activities needed to manage wildfire risk may be incremental to those needed to address safety and/or reliability risks.

B. Include a summary of what major investments and implementation of wildfire mitigation initiatives achieved over the past year, any lessons learned, any changed circumstances for the 2020 WMP term (i.e., 2020-2022), and any corresponding adjustment in priorities for the upcoming plan term. Organize summaries of initiatives by the wildfire mitigation categories listed in Section 5.3.

C. List and describe all challenges associated with limited resources and how these challenges are expected to evolve over the next 3 years.

D. Outline how the utility expects new technologies and innovations to impact the utility's strategy and implementation approach over the next 3 years, including the utility's program for integrating new technologies into the utility's grid.

5.2 Wildfire Mitigation Plan Implementation

Describe the processes and procedures the electrical corporation will use to do all the following:

A. Monitor and audit the implementation of the plan. Include what is being audited, who conducts the audits, what type of data is being collected, and how the data undergoes quality assurance and quality control.
B. Identify any deficiencies in the plan or the plan's implementation and correct those deficiencies.
C. Monitor and audit the effectiveness of inspections, including inspections performed by contractors, carried out under the plan and other applicable statutes and commission rules.
D. For all data that is used to drive wildfire-related decisions, including grid operations, capital allocation, community engagement, and other areas, provide a thorough description of the utility's data architecture and flows. List and describe 1) all dashboards and reports directly or indirectly related to ignition probability and estimated wildfire consequences and reduction, and 2) all available GIS data and products. For each, include metadata and a data dictionary that defines all information about the data. For each, also describe how the utility collects data, including a list of all wildfire-related data elements, where it is stored, how it is accessed, and by whom. Explain processes for QA/QC, cleaning and analyzing, normalizing, and utilizing data to drive internal decisions. Include list of internal data standards and cross-reference for they datasets or map products to which the standards apply.

5.3.1 Risk assessment and mapping

Description of programs to reduce ignition probability and wildfire consequence

For each of the below initiatives, provide a detailed description and approximate timeline of each, whether already implemented or planned, to minimize the risk of its equipment or facilities causing wildfires. Include a description for the utility's programs, the utility's rationale behind each of the elements of this program, the utility's prioritization approach/methodology to determine spending and deployment of human and other resources, how the utility will conduct audits or other quality checks on each program, how the utility plans to demonstrate over time whether
each component is effective and, if not, how the utility plans to evolve each component to ensure effective spend of ratepayer funds.

Include descriptions across each of the following initiatives. Input the following initiative names into a spreadsheet formatted according to the template below and input information for each cell in the row.

1. A summarized risk map showing the overall ignition probability and estimated wildfire consequence along electric lines and equipment
2. Climate-driven risk map and modelling based on various relevant weather scenarios
3. Ignition probability mapping showing the probability of ignition along the electric lines and equipment
4. Initiative mapping and estimation of wildfire and PSPS risk-reduction impact
5. Match drop simulations showing the potential wildfire consequence of ignitions that occur along the electric lines and equipment
6. Weather-driven risk map and modelling based on various relevant weather scenarios
7. Other / not listed [only if an initiative cannot feasibly be classified within those listed above]

For each of the above initiatives, describe the utility's current program and provide an explanation of how the utility expects to evolve the utility's program over each of the following time periods:

1. Before the upcoming wildfire season
2. Before the next annual update,
3. Within the next 3 years, and
4. Within the next 10 years.

Table 21: Risk assessment and mapping

Initiative activity	Year	Total per-initiative spend	Subtotal A: Capital expenditure	Subtotal B: Operating expenses	Line miles to be treated	Spend/ treated line mile	Ignition probability drivers targeted	Risk reduction	Risk-spend efficiency	Other risk drivers addressed	Existing/ new	Existing: What proceeding has reviewed program	If new: Memorandum account	In / exceeding compliance with regulations	Cite associated rule	Comments
1. A summarized risk map showing the overall ignition probability and estimated wildfire consequence along electric lines and equipment	2019 plan															
	2019 actual	Bear Valley Electric Service has implemented the CPUC Fire-Threat Map Adopted January 2018 throughout its service territory. This map shows the CPUC-designated fire hazard zone tiers within BVES' service territory , which quantify specific geography that could be subject to elevated fire risk under historically viable fire weather conditions. The utility has also identified seven sections of "at-risk" areas within its service territory based on the type of distribution facilities (overhead bare conductors, high voltage, etc.), tree and vegetation density, available dry fuel, and other factors that make certain locations vulnerable to wildfire risk. The "at-risk" line sections are shown and further outlined in the utility's WMP submission. BVES' wildfire mapping efforts are foundational to determing and executing on priorities amongst the utilities's risk mitigation efforts as well as its day-to-day operations. BVES employs tier designations to inform inspection, vegetation management, correction timeframes, and prioritized hardening efforts. Wildfire risk mapping is foundational to prioritizing efforts for a variety of activities undertaken throughout the business.													
	2020															
	2021															
	2022															
	2020-2022 plan total	There are no specifically designated expenses, risk reductions, or any of the other column headings above associated with this initiative. Bear Valley Electric Service is very small, compared to the other IOUs (only 31 square miles in the entire service area) and its initiatives, which are described in detail in this plan, apply generally throughout its mostly homogeneous area.														
2. Climate-driven risk map and modelling based on various relevant weather scenarios	2019 plan															
	2019 actual	Bear Valley Electric Service has implemented the CPUC Fire-Threat Map Adopted January 2018 throughout its service territory. This map shows the CPUC-designated fire hazard zone tiers within BVES' service territory , which quantify specific geography that could be subject to elevated fire risk under historically viable fire weather conditions. The utility has also identified seven sections of "at-risk" areas within its service territory based on the type of distribution facilities (overhead bare conductors, high voltage, etc.), tree and vegetation density, available dry fuel, and other factors that make certain locations vulnerable to wildfire risk. The "at-risk" line sections are shown and further outlined in the utility's WMP submission. BVES' wildfire mapping efforts are foundational to determing and executing on priorities amongst the utilities's risk mitigation efforts as well as its day-to-day operations. BVES employs tier designations to inform inspection, vegetation management, correction timeframes, and prioritized hardening efforts. Wildfire risk mapping is foundational to prioritizing efforts for a variety of activities undertaken throughout the business.													
	2020															
	2021	Bear Valley Electric Service does not have a proprietary model or methodology for evaluating the potential impact of ignitions. The utility's Subject Matter Expert evaluates the frequency of potential ignition events versus a set of impact categories (reliability, compliance, quality of service, safety and environmental) to develop total risk impact and scores.														
	2022															
	2020-2022 plan total	There are no specifically designated expenses, risk reductions, or any of the other column headings above associated with this initiative. Bear Valley Electric Service is very small, compared to the other IOUs (only 31 square miles in the entire service area) and its initiatives, which are described in detail in this plan, apply generally throughout its mostly homogeneous area.														
3. Ignition probability mapping showing the probability of ignition along the electric lines and equipment	2019 plan															
	2019 actual	Bear Valley Electric Service has implemented the CPUC Fire-Threat Map Adopted January 2018 throughout its service territory. This map shows the CPUC-designated fire hazard zone tiers within BVES' service territory , which quantify specific geography that could be subject to elevated fire risk under historically viable fire weather conditions. The utility has also identified seven sections of "at-risk" areas within its service territory based on the type of distribution facilities (overhead bare conductors, high voltage, etc.), tree and vegetation density, available dry fuel, and other factors that make certain locations vulnerable to wildfire risk. The "at-risk" line sections are shown and further outlined in the utility's WMP submission. BVES' wildfire mapping efforts are foundational to determing and executing on priorities amongst the utilities's risk mitigation efforts as well as its day-to-day operations. BVES employs tier designations to inform inspection, vegetation management, correction timeframes, and prioritized hardening efforts. Wildfire risk mapping is foundational to prioritizing efforts for a variety of activities undertaken throughout the business.													
	2020															
	2021	Bear Valley Electric Service does not have a proprietary model or methodology for evaluating the potential impact of ignitions. The utility's Subject Matter Expert evaluates the frequency of potential ignition events versus a set of impact categories (reliability, compliance, quality of service, safety and environmental) to develop total risk impact and scores.														
	2022															
	2020-2022 plan total	There are no specifically designated expenses, risk reductions, or any of the other column headings above associated with this initiative. Bear Valley Electric Service is very small, compared to the other IOUs (only 31 square miles in the entire service area) and its initiatives, which are described in detail in this plan, apply generally throughout its mostly homogeneous area.														
4. Initiative mapping and estimation of wildfire and PSPS risk-reduction impact	2019 plan															
	2019 actual	Bear Valley Electric Service has implemented the CPUC Fire-Threat Map Adopted January 2018 throughout its service territory. This map shows the CPUC-designated fire hazard zone tiers within BVES' service territory , which quantify specific geography that could be subject to elevated fire risk under historically viable fire weather conditions. The utility has also identified seven sections of "at-risk" areas within its service territory based on the type of distribution facilities (overhead bare conductors, high voltage, etc.), tree and vegetation density, available dry fuel, and other factors that make certain locations vulnerable to wildfire risk. The "at-risk" line sections are shown and further outlined in the utility's WMP submission. BVES' wildfire mapping efforts are foundational to determing and executing on priorities amongst the utilities's risk mitigation efforts as well as its day-to-day operations. BVES employs tier designations to inform inspection, vegetation management, correction timeframes, and prioritized hardening efforts. Wildfire risk mapping is foundational to prioritizing efforts for a variety of activities undertaken throughout the business.													
	2020															
	2021	Bear Valley Electric Service does not have a proprietary model or methodology for evaluating the potential impact of ignitions. The utility's Subject Matter Expert evaluates the frequency of potential ignition events versus a set of impact categories (reliability, compliance, quality of service, safety and environmental) to develop total risk impact and scores.														
	2022															
	2020-2022 plan total	There are no specifically designated expenses, risk reductions, or any of the other column headings above associated with this initiative. Bear Valley Electric Service is very small, compared to the other IOUs (only 31 square miles in the entire service area) and its initiatives, which are described in detail in this plan, apply generally throughout its mostly homogeneous area.														
5. Match drop simulations showing the potential wildfire consequence of ignitions that occur along the electric lines and equipment	2019 plan															
	2019 actual	Bear Valley Electric Service does not, at this time, have a specific wilfire mitigation risk assessment and mapping initiative focused on conducting match drop simulations showing the potential wildfire consequence of ignitions that occur along the utility's electric lines and equipment.														
	2020															
	2021	The utility's Subject Matter Expert evaluates the frequency of potential ignition events versus a set of impact categories (reliability, compliance, quality of service, safety and environmental) to develop total risk impact and scores.														
	2022															
	2020-2022 plan total	There are not specifically designated expenses, risk reductions, or any of the other column headings above associated with this initiative. Bear Valley Electric Service is very small, compared to the other IOUs (only 31 square miles in the entire service area) and its initiatives, which are described in detail in this plan, apply generally throughout its mostly homogeneous area.														
6. Weather-driven risk map and modelling based on various relevant weather scenarios	2019 plan															
	2019 actual	Bear Valley Electric Service has implemented the CPUC Fire-Threat Map Adopted January 2018 throughout its service territory. This map shows the CPUC-designated fire hazard zone tiers within BVES' service territory , which quantify specific geography that could be subject to elevated fire risk under historically viable fire weather conditions. The utility has also identified seven sections of "at-risk" areas within its service territory based on the type of distribution facilities (overhead bare conductors, high voltage, etc.), tree and vegetation density, available dry fuel, and other factors that make certain locations vulnerable to wildfire risk. The "at-risk" line sections are shown and further outlined in the utility's WMP submission. BVES' wildfire mapping efforts are foundational to determing and executing on priorities amongst the utilities's risk mitigation efforts as well as its day-to-day operations. BVES employs tier designations to inform inspection, vegetation management, correction timeframes, and prioritized hardening efforts. Wildfire risk mapping is foundational to prioritizing efforts for a variety of activities undertaken throughout the business.													
	2020															
	2021	Bear Valley Electric Service does not have a proprietary model or methodology for evaluating the potential impact of ignitions. The utility's Subject Matter Expert evaluates the frequency of potential ignition events versus a set of impact categories (reliability, compliance, quality of service, safety and environmental) to develop total risk impact and scores.														
	2022															
	2020-2022 plan total	There are no specifically designated expenses, risk reductions, or any of the other column headings above associated with this initiative. Bear Valley Electric Service is very small, compared to the other IOUs (only 31 square miles in the entire service area) and its initiatives, which are described in detail in this plan, apply generally throughout its mostly homogeneous area.														
7. Other / not listed	2019 plan															
	2019 actual															
	2020															
	2021	Bear Valley Electric Services does not have any risk assessment and mapping initiatives other than those provided above at this time.														
	2022															
	2020-2022 plan total															

5.3.2 Situational awareness and forecasting

Description of programs to reduce ignition probability and wildfire consequence

For each of the below initiatives, provide a detailed description and approximate timeline of each, whether already implemented or planned, to minimize the risk of its equipment or facilities causing wildfires. Include a description of the utility's initiatives, the utility's rationale behind each of the elements of the initiatives, the utility's prioritization approach/methodology to determine spending and deployment of human and other resources, how the utility will conduct audits or other quality checks on each initiative, how the utility plans to demonstrate over time whether each component of the initiatives is effective and, if not, how the utility plans to evolve each component to ensure effective spend of ratepayer funds.

Include descriptions across each of the following initiatives. Input the following initiative names into a spreadsheet formatted according to the template below and input information for each cell in the row.

1. Advanced weather monitoring and weather stations
2. Continuous monitoring sensors
3. Fault indicators for detecting faults on electric lines and equipment
4. Forecast of a fire risk index, fire potential index, or similar
5. Personnel monitoring areas of electric lines and equipment in elevated fire risk conditions
6. Weather forecasting and estimating impacts on electric lines and equipment
7. Other / not listed [only if an initiative cannot feasibly be classified within those listed above]

For each of the above initiatives, describe the utility's current program and provide an explanation of how the utility expects to evolve the utility's program over each of the following time periods:

1. Before the upcoming wildfire season,
2. Before the next annual update,
3. Within the next 3 years, and
4. Within the next 10 years.

Table 22: Situational awareness and forecasting
Response to WSD data request item BVES-43879-D-138

Initiative activity	Year	Total per-initiative spend	Subtotal A: Capital expenditure	Subtotal B: Operating expenses	Line miles to be treated	Spend/ treated line mile	Ignition probability drivers targeted	Risk reduction	Risk-spend efficiency	Other risk drivers addressed	Existing/ new	Existing: What proceeding has reviewed program	If new: Memorandum account	In / exceeding compliance with regulations	Cite associated rule	Comments
1. Advanced weather monitoring and weather stations	2019 plan	$ 244,000.00	$ 244,000.00	$ -	N/A - this is a System Wide Initiative	N/A - this is a System Wide Initiative	Dry conditions, high wind speeds, inclement weather that could increase ignition risk (e.g. lightning)	1,024,621.77	8.40	Wildfire-Significant Loss of Property	Existing	GRC	Memorandum Account and GRC	In compliance	GO95	Installs 20 weather stations throughout the BVES service area. Allows BVES to prepare response ahead of time and take precautionary and/or avidance action. Also, allows BVES to validate actual conditions in the field such as before and after PSPS events.
	2019 actual	$ 134,200.00	$ 134,200.00	$ -												
	2020	$ 109,800.00	$ 109,800.00	$ -												
	2021	$ -	$ -	$ -												
	2022	$ -	$ -	$ -												
	2020-2022 plan total	$ 109,800.00	$ 109,800.00	$ -												
1. Advanced weather monitoring and weather stations (b)	2019 plan	$ -	$ -	$ -	N/A - this is a System Wide Initiative	N/A - this is a System Wide Initiative	Contact from object, all types of equipment/facility failure, wire-to-wire contact/contamination	N/A - BVES has not yet calculated a risk-spend efficiency for this initiative	N/A - BVES has not yet calculated a risk reduction for this iniative	N/A - no other risk drivers addressed	New	N/A - this is a new initiative	WMP Memorandum Account	Exceeding compliance	GO95	Integrate all 20 weather stations with Scada. Est. $27,000 CapEx, likely to occur in 2021.
	2019 actual	$ -	$ -	$ -												
	2020	$ -	$ -	$ -												
	2021	$ 27,000.00	$ 27,000.00	$ -												
	2022	$ -	$ -	$ -												
	2020-2022 plan total	$ 27,000.00	$ 27,000.00	$ -												
2. Continuous monitoring sensors	2019 plan	$ -	$ -	$ -	N/A - this is a System Wide Initiative	N/A - this is a System Wide Initiative	Contact from object, all types of equipment/facility failure, wire-to-wire contact/contamination	994,609.51	3.98	Wildfire-Significant Loss of Property	New	N/A - this is a new initiative	WMP Memorandum Account	Exceeding compliance	GO95	Installs ALERT Wildfire HD Cameras throughout the service area allowing rapid detection and direction of first responders to any fires.
	2019 actual	$ -	$ -	$ -												
	2020	$ 250,000.00	$ 250,000.00	$ -												
	2021	$ 250,000.00	$ 250,000.00	$ -												
	2022	$ -	$ -	$ -												
	2020-2022 plan total	$ 500,000.00	$ 500,000.00	$ -												
3. Fault indicators for detecting faults on electric lines and equipment	2019 plan	$ -	$ -	$ -	N/A - this is a System Wide Initiative	N/A - this is a System Wide Initiative	Contact from object, all types of equipment/facility failure, wire-to-wire contact/contamination	1,143,068.47	0.48	Wildfire-Significant Loss of Property	New	N/A - this is a new initiative	Cost Recovery TBD	Exceeding compliance	GO95	Down Wire Detection Relay Installment Program. Installs fast-acting smart switches and detection relays to detect and de-energize down wires. Planned 2022-2024 (3-year execution period), $2,371,200.00 CapEx/year.
	2019 actual	$ -	$ -	$ -												
	2020	$ -	$ -	$ -												
	2021	$ -	$ -	$ -												
	2022	$ 2,371,200.00	$ 2,371,200.00	$ -												
	2020-2022 plan total	$ 2,371,200.00	$ 2,371,200.00	$ -												
4. Forecast of a fire risk index, fire potential index, or similar	2019 plan	Bear Valley Electric Service has not established a plan to develop a forecast of a fire risk index, fire potential index, or similar beyond that which it is communicated in its 2019 and 2020 WMPs at this time. The utility's Subject Matter Expert evaluates the frequency of potential ignition events versus a set of impact categories (reliability, compliance, quality of service, safety and environmental) to develop total risk impact and scores. In addition, no specific incremental spend has been identified for this initiative. Bear Valley Electric Service does not have a proprietary model or methodology for evaluating the potential impact of ignitions.													
	2019 actual															
	2020															
	2021															
	2022															
	2020-2022 plan total															
5. Personnel monitoring areas of electric lines and equipment in elevated fire risk conditions	2019 plan	Bear Valley Electric Service does not have a specific wildfire mitigation situational awareness and forecasting initiative focused on personnel monitoring areas of electric lines and equipment in elevated fire risk conditions in addition to the situational awareness and forecasting initiatives described in Table 22 as well as the asset management and inspection initiatives described in Table 24.													
	2019 actual															
	2020															
	2021															
	2022															
	2020-2022 plan total															
6. Weather forecasting and estimating impacts on electric lines and equipment	2019 plan	$ -	$ -	$ -	N/A - this is a System Wide Initiative	N/A - this is a System Wide Initiative	Contact from object, all types of equipment/facility failure, wire-to-wire contact/contamination	1,022,629.33	14.52	Contact from object, all types of equipment/facility failure, wire-to-wire contact/contamination	New	N/A - this is a new initiative	WMP Memorandum Account	Exceeding compliance	ESRB-8	Weather Consulting Services. Provides BVES staff service area specific forecasts to better understand possible fire threat weather as well as storm conditions that may affect service. Allows BVES to prepare response ahead of time and take precautionary and/or avoidance action. Est. $45,000 O&M annually.
	2019 actual	$ -	$ -	$ -												
	2020	$ 70,436.28	$ -	$ 70,436.28												
	2021	$ 70,436.28	$ -	$ 70,436.28												
	2022	$ 70,436.28	$ -	$ 70,436.28												
	2020-2022 plan total	$ 211,308.84	$ -	$ 211,308.84												
7. Other / not listed	2019 plan	$ -	$ -	$ -	N/A - this is a System Wide Initiative	N/A - this is a System Wide Initiative	Dry conditions, high wind speeds, inclement weather that could increase ignition risk (e.g. lightning)	1,143,068.47	3.34	Wildfire-Significant Loss of Property.	New	N/A - this is a new initiative	WMP Memorandum Account	Exceeding compliance	ESRB-8	Situational Awareness Enhancement Project. Installs complete Distribution Management Control Center with the following equipment and applications that provide full information capabilities available to Distribution decision makers relevant to the following functional areas: (1) Energy Resources (2) T&D Assets (3) SCADA, Outage Management System & GIS Other Applications (4) Weather Information (5) HD Cameras (6) Media access (Internet, BVES Website & Social Media, Local Radio, TV, etc. (7) Communications Equipment and (8) Dispatch services. Scheduled for 2022-2024, 3-year execution period, $342,000.00 CapEx/year.
	2019 actual	$ -	$ -	$ -												
	2020	$ -	$ -	$ -												
	2021	$ -	$ -	$ -												
	2022	$ 342,000.00	$ 342,000.00	$ -												
	2020-2022 plan total	$ 342,000.00	$ 342,000.00	$ -												
8. Other / not listed	2019 plan	$ 85,775.61	$ -	$ 85,775.61	N/A - this is a System Wide Initiative	N/A - this is a System Wide Initiative	Contact from object, all types of equipment/facility failure, wire-to-wire contact/contamination	148,458.96	3.2	Wildfire-Significant Loss of Property. Loss of Energy Supplies.	Existing	D 19-08-027	GRC	Exceeding compliance	ESRB-8	GIS-based applications (e.g. Outage Management System).Implementation of GIS-based systems, such as outage management systems and interactive voice response systems, which allow BVES to locate outages and respond to customers more promptly in the case of a wildfire or related emergency
	2019 actual	$ 85,775.61	$ -	$ 85,775.61												
	2020	$ 85,775.61	$ -	$ 85,775.61												
	2021	$ 85,775.61	$ -	$ 85,775.61												
	2022	$ 85,775.61	$ -	$ 85,775.61												
	2020-2022 plan total	$ 257,326.83	$ -	$ 257,326.83												
9. Other/ not listed	2019 plan	$ -	$ -	$ -	N/A - this is a System Wide Initiative	N/A - this is a System Wide Initiative	Contact from Object. All types of equipment/facility failure, wire-wire contact/contamination	148,458.96	2.19	Wildfire-Significant Loss of Property	New	N/A - this is a new initiative	GRC	Exceeding compliance	ESRB-8	Implement iRestore APP.Provides First Responders and internal Damage Assessment Teams tool to quickly document and report T&D facility problems to Dispatch.
	2019 actual	$ -	$ -	$ -												
	2020	$ 67,860.00	$ 67,860.00	$ -												
	2021	$ 67,860.00	$ 67,860.00	$ -												
	2022	$ 67,860.00	$ 67,860.00	$ -												
	2020-2022 plan total	$ 203,580.00	$ 203,580.00	$ -												

5.3.3 Grid design and system hardening

Describe utility approach to the following categories of maintenance of transmission lines, distribution lines, and equipment, respectively:

1. Routine maintenance programs and protocols (i.e., covering general maintenance approach and programmatic structure),
2. Non-routine maintenance, further delineated into:
    a. Emergency response maintenance/repair, and
    b. Inspection response maintenance/repair.

Discuss proactive replacement programs versus run-to-failure models for each group, including:

1. Whether there are specific line elements or equipment that are prioritized for preventive maintenance or replacement,
2. How those programs are established,
3. What data or information is utilized to make those determinations, and
4. What level of subjectivity is implemented in making those determinations

Description of programs to reduce ignition probability and wildfire consequence

For each of the below initiatives, provide a detailed description and approximate timeline of each, whether already implemented or planned, to minimize the risk of its equipment or facilities causing wildfires. Include a description of the utility's initiatives, the utility's rationale behind each of the elements of the initiatives, the utility's prioritization approach/methodology to determine spending and deployment of human and other resources, how the utility will conduct audits or other quality checks on each initiative, how the utility plans to demonstrate over time whether each component of the initiatives is effective and, if not, how the utility plans to evolve each component to ensure effective spend of ratepayer funds.

Include descriptions across each of the following initiatives. Input the following initiative names into a spreadsheet formatted according to the template below and input information for each cell in the row.

1. Capacitor maintenance and replacement program
2. Circuit breaker maintenance and installation to de-energize lines upon detecting a fault
3. Covered conductor installation
4. Covered conductor maintenance
5. Crossarm maintenance, repair, and replacement
6. Distribution pole replacement and reinforcement, including with composite poles
7. Expulsion fuse replacement
8. Grid topology improvements to mitigate or reduce PSPS events
9. Installation of system automation equipment
10. Maintenance, repair, and replacement of connectors, including hotline clamps
11. Mitigation of impact on customers and other residents affected during PSPS event
12. Other corrective action
13. Pole loading infrastructure hardening and replacement program based on pole loading assessment program
14. Transformers maintenance and replacement
15. Transmission tower maintenance and replacement
16. Undergrounding of electric lines and/or equipment
17. Updates to grid topology to minimize risk of ignition in HFTDs
18. Other / not listed [only if an initiative cannot feasibly be classified within those listed above]

For each of the above initiatives, describe the utility's current program and provide an explanation of how the utility expects to evolve the utility's program over each of the following time periods:

1. Before the upcoming wildfire season,
2. Before the next annual update,
3. Within the next 3 years, and
4. Within the next 10 years.

Table 23: Grid design and system hardening
Response to WSD data request item BVES-43879-G-152

Initiative activity	Year	Total per-initiative spend	Subtotal A: Capital expenditure	Subtotal B: Operating expenses	Line miles to be treated	Spend/ treated line mile	Ignition probability drivers targeted	Risk reduction	Risk-spend efficiency	Other risk drivers addressed	Existing/ new	Existing: What proceeding has reviewed program	If new: Memorandum account	In / exceeding compliance with regulations	Cite associated rule	Comments
1. Capacitor maintenance and replacement program	2019 plan 2019 actual 2020 2021 2022 2020-2022 plan total	Bear Valley Electric Service does not have a specific wildfire mitigation grid design and system hardening initiative focused on capacitor maintenance and replacement at this time. Capacitor maintenance and replacement is included in the company's standard inspection, maintenance, and replacement protocols. Any enhanced inspections or accelerated correction timeframe/replacements are captured in Table 24 Asset management and inspections.														
2. Circuit breaker maintenance and installation to de-energize lines upon detecting a fault	2019 plan 2019 actual 2020 2021 2022 2020-2022 plan total	Bear Valley Electric Service does not have a specific wildfire mitigation grid design and system hardening initiative focused on circuit breaker maintenance and replacement at this time. Circuit breakers are generally installed for all distribution circuits to detect fault current and protect equipment in the event that a fault is detected. Circuit breaker replacement and maintenance is included in the company's standard inspection, maintenance, and replacement protocols. Any enhanced inspections or accelerated correction timeframe/replacements are captured in Table 24 Asset management and inspections. Replacements of specific, targeted circuit breakers as a part of BVES' WMP to support overall advanced coordination and detection efforts are better captured in Table 23 initiative 9. Installation of system automation equipment.														
3. Covered conductor installation	2019 plan	$ 750,000.00	$ 750,000.00	$ -	6.00	$ 125,000.00	Contact from object.	872,292.38	0.48	Wildfire-Significant Loss of Property	New	N/A - request by approval of 2020 WMP	WMP Memorandum Account	N/A - this initiative is not associated with specific regulations. The program exceeds standard design.	N/A - this initiative is not associated with a specific rule	Replaces all 28.93 circuit miles of overhead sub-transmission lines (34.5 kV) with covered wire over a 6-year period, 2020-2025. Total CapEx estimated at $10,931,962. 2019 Plan figures include $458,000 for the Covered Conductor Replacement Pilot Program and $292,000 for the Covered Conductor Wrap Pilot Program.
	2019 actual	$ 750,000.00	$ 750,000.00	$ -	6.00	$ 125,000.00										
	2020	$ 1,821,993.60	$ 1,821,993.60	$ -	4.82	$ 378,006.97										
	2021	$ 1,821,993.60	$ 1,821,993.60	$ -	4.82	$ 378,006.97										
	2022	$ 1,821,993.60	$ 1,821,993.60	$ -	4.82	$ 378,006.97										
	2020-2022 plan total	$ 5,465,980.80	$ 5,465,980.80	$ -	14.46	$ 378,006.97										
4. Covered conductor maintenance	2019 plan 2019 actual 2020 2021 2022 2020-2022 plan total	Bear Valley Electric Service does not have specific wildfire mitigation grid design and system hardening initiatives focused on covered conductor maintenance. As BVES progresses with its implementation of its wildfire mitigation initatives, the utility will continue to evaluate covered conductor maintenance initiatives specific to wildfire mitigation.														
5. Crossarm maintenance, repair, and replacement	2019 plan 2019 actual 2020 2021 2022 2020-2022 plan total	Bear Valley Electric Service does not have a specific wildfire mitigation grid design and system hardening initiative focused on crossarm maintenance, repair, and replacement at this time. Routine crossarm maintenance, repair, and replacement are included in the company's standard inspection and correction programs, with an accelerated timeline for correction under the company's inspection program improvement, as included in Table 24 Asset management and inspections.														
6. Distribution pole replacement and reinforcement, including with composite poles	2019 plan 2019 actual 2020 2021 2022 2020-2022 plan total	Bear Valley Electric Service's distribution pole replacement and reinforcement efforts, including with composite poles, are encompassed by and address in Table 24 Initiative 6. Intrusive pole inspections. Under this initiative, BVES tests all poles to loading standards, GO95 requirements, intrusive inspection criteria and age, and then replaces or remediates non-compliant poles.														
7. Expulsion fuse replacement	2019 plan	$ 2,600,000.00	$ 2,600,000.00	$ -	N/A - this is a System Wide Initiative	N/A - this is a System Wide Initiative	Fuse failure-all.	872,292.38	0.34	Wildfire-Significant Loss of Property	New	N/A - this is an existing initiative	WMP Memorandum Account	Exceeds	GO 95	Replaces all conventional (expulsion) fuses with current limiting (ELF) and electronic fuses (Fuse TripSavers).
	2019 actual	$ 572,000.00	$ 572,000.00	$ -												
	2020	$ 4,628,000.00	$ 4,628,000.00	$ -												
	2021	$ -	$ -	$ -												
	2022	$ -	$ -	$ -												
	2020-2022 plan total	$ 5,200,000.00	$ 5,200,000.00	$ -												
8. Grid topology improvements to mitigate or reduce PSPS events	2019 plan 2019 actual 2020 2021 2022 2020-2022 plan total	Bear Valley Electric Service does not have a specific wildfire mitigation grid design and system hardening initiative focused on grid topology improvements to mitigate or reduce PSPS events in addition to those described elsewhere in Table 23 such as initiatives 16(a)-16(f).														
9. Installation of system automation equipment	2019 plan	$ 1,940,844.50	$ 1,940,844.50	$ -	N/A - this is a System Wide Initiative	N/A - this is a System Wide Initiative	Contact from object, all types of equipment/facility failure, wire-to-wire contact/contamination	1,148,135.45	0.59	Wildfire-Significant Loss of Property. Loss of Energy Supplies	Existing	D. 19-08-027	GRC	N/A - this initiative is not associated with a specific regulation	N/A - this initiative is not associated with a specific rule	Install grid automation. Fully instruments and automates BVES grid. Consists of installing a service area wide network operating on a SCADA system, substation automation, remote fault indicators, remote metering and power sensors and remote switching equipment to enable BVES to significantly improve its capability to detect and isolate faults rapidly before ever rolling out a crew. 8% complete as of January 2020. Total CapEx of $7,763,368 over 4-year Execution Period, 2019-2022.
	2019 actual	$ 155,267.56	$ 155,267.56	$ -												
	2020	$ 2,536,036.81	$ 2,536,036.81	$ -												
	2021	$ 2,536,036.81	$ 2,536,036.81	$ -												
	2022	$ 2,536,036.81	$ 2,536,036.81	$ -												
	2020-2022 plan total	$ 7,763,378.00	$ 7,763,378.00	$ -												
10. Maintenance, repair, and replacement of connectors, including hotline clamps	2019 plan 2019 actual 2020 2021 2022 2020-2022 plan total	Bear Valley Electric Service does not have a specific wildfire mitigation grid design and system hardening initiative focused on maintenance, repair, and replacement of connectors, including hotline clamps at this time. Replacement of connectors, where applicable, is included in other programs such as installation of covered conductor.														
11. Mitigation of impact on customers and other residents affected during PSPS event	2019 plan 2019 actual 2020 2021 2022 2020-2022 plan total	Bear Valley Electric Service does not have specific wildfire mitigation grid design and system hardening initiatives focused on mitigation of impact on customers and other residents affected during PSPS event in addition to the initiatives in Table 23. Both of these programs are combined as relevant grid topology improvements pertaining to grid design and system hardening that reduce PSPS events inherently also mitigate the impact on customers. Furthermore,the utility's additional programs or efforts to mitigate the impact on customers and other residents affected during a PSPS event are captured in Table 28 Item 5.														
12. Other corrective action	2019 plan	$ -	$ -	$ -	$ -	$ -	Contact from object. Conductor failure-all.	1,148,135.45	0.22	Wildfire-Significant Loss of Property. Wildfire-Public Safety.	New	N/A - this is a new initiative	WMP Memorandum Account	Exceeds	GO 95	Replaces the 34.5 kV Radford Line (2.82 overhead circuit miles) with covered power lines and poles that are resistant to fire.
	2019 actual	$ -	$ -	$ -	$ -	$ -										
	2020	$ 5,600,000.00	$ 5,600,000.00	$ -	2.82	$ 1,985,815.60										
	2021	$ -	$ -	$ -	$ -	$ -										
	2022	$ -	$ -	$ -	$ -	$ -										
	2020-2022 plan total	$ 5,600,000.00	$ 5,600,000.00	$ -	2.82	$ 1,985,815.60										
13. Pole loading infrastructure hardening and replacement program based on pole loading assessment program	2019 plan 2019 actual 2020 2021 2022 2020-2022 plan total	Bear Valley Electric Service's pole loading infrastructure hardening and replacement program based on pole loading assessment program is encompassed by and addressed in Table 24 Initiative 6. Intrusive pole inspections. Under this initiative, BVES tests all poles to loading standards, GO95 requirements, intrusive inspection criteria and age, and then replaces or remediates non-compliant poles.														
14. Transformers maintenance and replacement	2019 plan 2019 actual 2020 2021 2022 2020-2022 plan total	Bear Valley Electric Service does not have a specific wildfire mitigation grid design and system hardening initiative focused on transformer maintenance and replacement. Transformer replacement and maintenance is included in the company's standard inspection, maintenance, and replacement protocols. .														
15. Transmission tower maintenance and replacement	2019 plan 2019 actual 2020 2021 2022 2020-2022 plan total	Bear Valley Electric Service does not have a specific wildfire mitigation grid design and system hardening initiative focused on transmission tower maintenance and replacement outside of standard inspection and correction programs described in Table 24.														
16. Undergrounding of electric lines and/or equipment (a)	2019 plan	$ -	$ -	$ -	N/A - this is a System Wide Initiative	N/A - this is a System Wide Initiative	Contact from object. All types of equipment/facility failure. Wire-to-wire contact/contamination.	1,146,143.02	1.57	Wildfire-Significant Loss of Property. Wildfire-Public Safety.	Existing	D. 19-08-027	GRC	Exceeding	GO 95	Replaces all tree attachments in the BVES service area with over head or underground lines. Covered in BVES' General Rate Case A. 17-05-004.
	2019 actual	$ 732,018.00	$ 732,018.00	$ -												
	2020	$ 732,018.00	$ 732,018.00	$ -												
	2021	$ 732,018.00	$ 732,018.00	$ -												
	2022	$ 732,018.00	$ 732,018.00	$ -												
	2020-2022 plan total	$ 2,928,072.00	$ 2,928,072.00	$ -												
16. Undergrounding of electric lines and/or equipment (b)	2019 plan				N/A - this iniative does not have a specific line mileage associated with its implementation	N/A - this iniative does not have a specific line mileage associated with its implementation	Contact from object. All types of equipment/facility failure.	1,143,068.47	0.39	Wildfire-Significant Loss of Property.	Existing	D. 19-08-027	GRC	N/A - this initiative is not associated with a specific regulation	N/A - this initiative is not associated with a specific rule	Safety and Technical Upgrades to Pineknot substation. Converts substation from overhead-type to underground and pad-mounted design with deadfront SCADA enabled equipment. Estimated $2,936,929.00 CAPEX over 1 year 2019-2020. 90% complete as of January 2020. Covered in BVES' General Rate Case A.17-05-004.
	2019 actual	$ 2,643,236.10	$ 2,643,236.10	$ -												
	2020	$ 293,692.90	$ 293,692.90	$ -												
	2021	$ -	$ -	$ -												
	2022	$ -	$ -	$ -												
	2020-2022 plan total	$ 2,936,929.00	$ 2,936,929.00	$ -												
16. Undergrounding of electric lines and/or equipment (c)	2019 plan	$ -	$ -	$ -	N/A - this iniative does not have a specific line mileage associated with its implementation	N/A - this iniative does not have a specific line mileage associated with its implementation	Contact from object. All types of equipment/facility failure.	1,143,069.47	1.04	Wildfire-Significant Loss of Property.	New	D. 19-08-027	GRC	N/A - this initiative is not associated with a specific regulation	N/A - this initiative is not associated with a specific rule	Safety and Technical Upgrades to Snow Summit Substation. Converts substation from overhead-type to underground and pad-mounted design with deadfront SCADA enabled equipment.
	2019 actual	$ -	$ -	$ -												
	2020	$ -	$ -	$ -												
	2021	$ 1,103,830.18	$ 1,103,830.18	$ -												
	2022	$ -	$ -	$ -												
	2020-2022 plan total	$ 1,103,830.18	$ 1,103,830.18	$ -												
16. Undergrounding of electric lines and/or equipment (d)	2019 plan	$ -	$ -	$ -	N/A - this iniative does not have a specific line mileage associated with its implementation	N/A - this iniative does not have a specific line mileage associated with its implementation	Contact from object. All types of equipment/facility failure.	1,143,070.47	0.72	Wildfire-Significant Loss of Property.	Existing	D. 19-08-027	GRC	N/A - this initiative is not associated with a specific regulation	N/A - this initiative is not associated with a specific rule	Safety and Technical Upgrades to Palomino Substation. Converts substation from overhead-type to underground and pad-mounted design with deadfront SCADA enabled equipment.
	2019 actual	$ -	$ -	$ -												
	2020	$ 1,587,675.00	$ 1,587,675.00	$ -												
	2021	$ 1,587,675.00	$ 1,587,675.00	$ -												
	2022	$ 1,587,675.00	$ 1,587,675.00	$ -												
	2020-2022 plan total	$ 4,763,025.00	$ 4,763,025.00	$ -												
16. Undergrounding of electric lines and/or equipment (e)	2019 plan	$ -	$ -	$ -	0.00	$ -	Contact from object. All types of equipment/facility failure. Wire-to-wire contact/contamination.	872,292.38	0.07	Wildfire-Significant Loss of Property.	New	N/A - this is a new initiative	WMP Memorandum Account	Exceeding	GO 95	Underground Overhead Bare Wire Program - 34.5 kV System. Replaces all overhead sub-transmission bare wire with underground facilities. 10-year execution period (2020-2029), estimated $13,224,000.00 CapEx/year.
	2019 actual	$ -	$ -	$ -	0.00	$ -										
	2020	$ 13,224,000.00	$ 13,224,000.00	$ -	2.89	$ 4,571,033.53										
	2021	$ 13,224,000.00	$ 13,224,000.00	$ -	2.89	$ 4,571,033.53										
	2022	$ 13,224,000.00	$ 13,224,000.00	$ -	2.89	$ 4,571,033.53										
	2020-2022 plan total	$ 39,672,000.00	$ 39,672,000.00	$ -	8.68	$ 4,571,033.53										
16. Undergrounding of electric lines and/or equipment (e)	2019 plan	$ -	$ -	$ -	0.00	$ -	Contact from object. All types of equipment/facility failure. Wire-to-wire contact/contamination.	872,292.38	0.02	Wildfire-Significant Loss of Property.	New	N/A - this is a new initiative	Separate Application to Commission	Exceeding	GO 95	Underground Overhead Bare Wire Program - 4 kV System. Replaces all overhead 4 kV distribution bare wire with underground facilities. 10-year execution period 2020-2029, estimated $39,252,480.000 CapEx/year.
	2019 actual	$ -	$ -	$ -	0.00	$ -										
	2020	$ 39,252,480.00	$ 39,252,480.00	$ -	23.51	$ 1,669,323.81										
	2021	$ 39,252,480.00	$ 39,252,480.00	$ -	23.51	$ 1,669,323.81										
	2022	$ 39,252,480.00	$ 39,252,480.00	$ -	23.51	$ 1,669,323.81										
	2020-2022 plan total	$ 117,757,440.00	$ 117,757,440.00	$ -	70.54	$ 1,669,323.81										
16. Undergrounding of electric lines and/or equipment (f)	2019 plan	$ -	$ -	$ -	0.00	$ -	Contact from object. All types of equipment/facility failure. Wire-to-wire contact/contamination.	1,022,629.33	0.13	Wildfire-Significant Loss of Property. Loss of Energy Supplies	New	N/A - this is a new initiative	Separate Applicaton to Commission	Exceeding	GO 95	Underground the UTE line. Transfers SCE Ute Line 1&2 assets to BVES and undergrounds the facilities from Goldhill to BVES Shay and Baldwin Auto Reclosers. Planned for 2023 at $3.5 million CapEx.
	2019 actual	$ -	$ -	$ -	0.00	$ -										
	2020	$ -	$ -	$ -	0.00	$ -										
	2021	$ -	$ -	$ -	0.00	$ -										
	2022	$ -	$ -	$ -	0.00	$ -										
	2020-2022 plan total	$ -	$ -	$ -	0.00	$ -										
17. Updates to grid topology to minimize risk of ignition in HFTDs	2019 plan 2019 actual 2020 2021 2022 2020-2022 plan total	Bear Valley Electric Service does not have any specific grid design and system hardening wildfire mitigation initiatives focused on updates to grid topology to minimize risk of ignition in HFTDs at this time. The utility recognizes that it should continue to evaluate upates to grid topology as weather patterns change and overall modeling and assessments evolve. Other grid design and system hardening programs include, as a component, grid topology improvements to minimize the risk of ignition in the HFTD. BVES recognizes that it is challenging to mitigate wildfire risk through grid topology changes alone and therefore focuses more on augmentation of existing circuitry through system hardening efforts included throughout Table 23.														
18. Other / not listed	2019 plan	$ -	$ -	$ -	0.00	$ -	Contact from object.	872,292.38	0.25	Wildfire-Significant Loss of Property	New	N/A - this is a new initiative	WMP Memorandum Account	Exceeding	GO 95	Replaces all 181.97 circuit miles of overhead distribution 4 kV bare wire in High Risk Areas with covered wire over a 10 year period, 2020-2029. Estimated $35,130,371 total CapEx.
	2019 actual	$ -	$ -	$ -	0.00	$ -										
	2020	$ 3,513,037.13	$ 3,513,037.13	$ -	18.20	$ 193,024.02										
	2021	$ 3,513,037.13	$ 3,513,037.13	$ -	18.20	$ 193,024.02										
	2022	$ 3,513,037.13	$ 3,513,037.13	$ -	18.20	$ 193,024.02										
	2020-2022 plan total	$ 10,539,111.39	$ 10,539,111.39	$ -	54.60	$ 193,024.02										
19. Other / not listed	2019 plan						Loss of Energy Supplies.	2,658,561.70	0.19	N/A - this initiative does not address any other risk drivers	New	Ongoing proceeding under BVES Application 19-03-008	Cost Recovery TBD - will be addressed in the project application to the commission	N/A - this initiative is not associated with a specific regulation	N/A - this initiative is not associated with a specific rule	Bear Valley Solar Energy Project. Constructs 7.9 MW single axis tilt solar generating facility within BVES service area.
	2019 actual															
	2020	$ 14,269,000.00	$ 14,269,000.00	$ -	N/A	N/A										
	2021	$ -	$ -	$ -	N/A	N/A										
	2022	$ -	$ -	$ -	N/A	N/A										
	2020-2022 plan total	$ 14,269,000.00	$ 14,269,000.00	$ -	N/A	N/A										
20. Other / not listed	2019 plan				N/A	N/A	Loss of Energy Supplies.	2,638,046.13	0.29	N/A - this initiative does not address any other risk drivers	New	N/A - this is a new initiative	Separate Application to Commission.	N/A - this initiative is not associated with a specific regulation	N/A - this initiative is not associated with a specific rule	Construct Energy Storage Facility within BVES Service Territory. Constructs 5MW/15Mwh (3-hour) Lithium-Ion NMC BESS utility grade battery connected to the Bear Valley Solar Energy Project. Costs are estimates.
	2019 actual															
	2020															
	2021	$ 4,575,675.00	$ 4,575,675.00	$ -												
	2022	$ 4,575,675.00	$ 4,575,675.00	$ -												
	2020-2022 plan total	$ 9,151,350.00	$ 9,151,350.00	$ -												
21. Other / not listed	2019 plan				N/A	N/A	Loss of Energy Supplies.	346,994.67	0.51	N/A - this initiative does not address any other risk drivers	New	N/A - this is a new initiative	Cost Recovery TBD	N/A - this initiative is not associated with a specific regulation	N/A - this initiative is not associated with a specific rule	Critical Infractructure PSPS Renewable Avoidance Package. Installs utility owned (or partially owned)solar+battery sets at critical infrastructure. 5-year execution period, 2020-2025, estimated $684,000.00 CapEx/year.
	2019 actual															
	2020	$ 684,000.00	$ 684,000.00	$ -												
	2021	$ 684,000.00	$ 684,000.00	$ -												
	2022	$ 684,000.00	$ 684,000.00	$ -												
	2020-2022 plan total	$ 2,052,000.00	$ 2,052,000.00	$ -												

22. Other / not listed	2019 plan				N/A	N/A	Wildfire-Public Safety.	1,022,629.33	0.6	Wildfire-Significant Loss of Property	New	N/A - this is a new initiative	WMP Memorandum Account	N/A - this initiative is not associated with a specific regulation	N/A - this initiative is not associated with a specific rule	Hardening of overhead facilities along evacuation routes to prevent facilities from falling into evacuation routes during a wildfire. Estimated $1,710,000 CAPEX in each year 2021-2025. Pilot program cost $200,000.
	2019 actual															
	2020	$ -	$ -	$ -												
	2021	$ 1,710,000.00	$ 1,710,000.00	$ -												
	2022	$ 1,710,000.00	$ 1,710,000.00	$ -												
	2020-2022 plan total	$ 3,420,000.00	$ 3,420,000.00	$ -												
23. Other / not listed	2019 plan				N/A	N/A	Loss of Energy Supplies.	2,602,297.79	2.81	N/A - this initiative does not address any other risk drivers	New	D. 19-08-027	GRC	N/A - this initiative is not associated with a specific regulation	N/A - this initiative is not associated with a specific rule	BVPP Reliability Upgrades. Upgrades power plant electronic controls, emissions monitoring systems, catalist reliability, and engine performance.
	2019 actual															
	2020	$ 925,484.50	$ 925,484.50	$ -												
	2021	$ 925,484.50	$ 925,484.50	$ -												
	2022	$ -	$ -	$ -												
	2020-2022 plan total	$ 1,850,969.00	$ 1,850,969.00	$ -												
24. Other / not listed	2019 plan				N/A	N/A	Contact from object. All types of equipment/facility failure. Wire-to-wire contact/contamination.	1,143,068.47	0.48	Wildfire-Significant Loss of Property	New	N/A - this is a new initiative	Cost Recovery TBD	N/A - this initiative is not associated with a specific regulation	N/A - this initiative is not associated with a specific rule	Alternative Tehcnologies (Down Wire Detection Relay installment Program, Rapid-Earth Fault Current Limiter, install On-line Diagnostic Technology Insertion, etc.). Estimated $7,113,600 CapEx over 3-year execution period 2023-2025.
	2019 actual															
	2020	$ -	$ -	$ -												
	2021	$ -	$ -	$ -												
	2022	$ -	$ -	$ -												
	2020-2022 plan total	$ -	$ -	$ -												

5.3.4 Asset management and inspections

Explain the rationale for any utility ignition probability-specific inspections (e.g., "enhanced inspections") within the HFTD as deemed necessary over and above the standard inspections. This shall include information about how (i.e., criteria, protocols, etc.) the electrical corporation determines additional inspections are necessary.

Describe the utility's maintenance protocols relating to maintenance of any electric lines or equipment that could, directly or indirectly, relate to wildfire ignition. Include in the description the threshold by which the utility makes decisions of whether to (1) repair, or (2) replace electric lines and equipment. Describe all electric lines and equipment that the utility "runs-to-failure", those that the utility maintains on a risk-based maintenance plan, and those that are managed by other approaches; describe each approach. Explain the maintenance program that the utility follows and rationale for all lines and equipment.

Description of programs to reduce ignition probability and wildfire consequence

For each of the below initiatives, provide a detailed description and approximate timeline of each, whether already implemented or planned, to minimize the risk of its equipment or facilities causing wildfires. Include a description for the utility's programs, the utility's rationale behind each of the elements of this program, the utility's prioritization approach/methodology to determine spending and deployment of human and other resources, how the utility will conduct audits or other quality checks on each program, how the utility plans to demonstrate over time whether each component is effective and, if not, how the utility plans to evolve each component to ensure effective spend of ratepayer funds.

Include descriptions across each of the following initiatives. Input the following initiative names into a spreadsheet formatted according to the template below and input information for each cell in the row.

1. Detailed inspections of distribution electric lines and equipment
2. Detailed inspections of transmission electric lines and equipment
3. Improvement of inspections
4. Infrared inspections of distribution electric lines and equipment
5. Infrared inspections of transmission electric lines and equipment
6. Intrusive pole inspections
7. LiDAR inspections of distribution electric lines and equipment
8. LiDAR inspections of transmission electric lines and equipment
9. Other discretionary inspection of distribution electric lines and equipment, beyond inspections mandated by rules and regulations
10. Other discretionary inspection of transmission electric lines and equipment, beyond inspections mandated by rules and regulations
11. Patrol inspections of distribution electric lines and equipment
12. Patrol inspections of transmission electric lines and equipment
13. Pole loading assessment program to determine safety factor
14. Quality assurance / quality control of inspections
15. Substation inspections
16. Other / not listed [only if an initiative cannot feasibly be classified within those listed above]

For each of the above initiatives, describe the utility's current program and provide an explanation of how the utility expects to evolve the utility's program over each of the following time periods:

1. Before the upcoming wildfire season,
2. Before the next annual update,
3. Within the next 3 years, and
4. Within the next 10 years.

Table 24: Asset management and inspections

Initiative activity	Year	Total per-initiative spend	Subtotal A: Capital expenditure	Subtotal B: Operating expenses	Line miles to be treated	Spend/ treated line mile	Ignition probability drivers targeted	Risk reduction	Risk-spend efficiency	Other risk drivers addressed	Existing/ new	Existing: What proceeding has reviewed program	If new: Memorandum account	In / exceeding compliance with regulations	Cite associated rule	Comments
1. Detailed inspections of distribution electric lines and equipment	2019 plan	Bear Valley Electric Service has not specified a wildfire mitigation asset management and inspections initiative for detailed inspections of distribution lines and equipment. The utility's distribution inspection initiatives are best captured in Table 24 Item 11. Patrol inspections of distribution lines and equipment														
	2019 actual															
	2020															
	2021															
	2022															
	2020-2022 plan total															
2. Detailed inspections of transmission electric lines and equipment	2019 plan	Bear Valley Electric Service does not have any transmission lines or equipment as all the utility's lines are below 65kV.														
	2019 actual															
	2020															
	2021															
	2022															
	2020-2022 plan total															
3. Improvement of inspections	2019 plan															
	2019 actual	N/A - Elements already captured in other relevant programs	N/A - Elements already captured in other relevant programs	N/A - Elements already captured in other relevant programs	N/A - Elements already captured in other relevant programs	N/A - Elements already captured in other relevant programs	All types of equipment failure; Contact from object	N/A - Elements already captured in other relevant programs	N/A - Elements already captured in other relevant programs	N/A - Elements already captured in other relevant programs	New in 2019	CA GO 95 & 165	N/A - Elements already captured in other relevant programs	In compliance with Regulation	GO 95 & 165	Improvements of Bear Valley Electric Service's inspections have already been captured in other initiatives
	2020															
	2021															
	2022															
	2020-2022 plan total															
4. Infrared inspections of distribution electric lines and equipment	2019 plan	$ 125,220.05	$ -	$ 125,220.05	70.27	$ 1,781.98	Contact from object, all types of equipment/facility failure, wire-to-wire contact/contamination	151,260.94	1.21	Wildfire-Significant Loss of Property	Existing	GRC	N/A - this is an existing initiative	Exceeding	GO-95	Contract Exacter Services. Conduct survey of BVES overhead system on 3-year cycle using infrared, ultrasonic and EMI sensors. Approximately 1/3 of OH system surveyed each year.
	2019 actual	$ 125,220.05	$ -	$ 125,220.05	70.27	$ 1,781.98										
	2020	$ 125,220.05	$ -	$ 125,220.05	70.27	$ 1,781.98										
	2021	$ 125,220.05	$ -	$ 125,220.05	70.27	$ 1,781.98										
	2022	$ 125,220.05	$ -	$ 125,220.05	70.27	$ 1,781.98										
	2020-2022 plan total	$ 375,660.15	$ -	$ 375,660.15	210.81	$ 1,781.98										
5. Infrared inspections of transmission electric lines and equipment	2019 plan	Bear Valley Electric Service does not have any transmission lines or equipment as all the utility's lines are below 65kV.														
	2019 actual															
	2020															
	2021															
	2022															
	2020-2022 plan total															
6. Intrusive pole inspections	2019 plan	$ 2,444,130.60	$ 2,444,130.60	$ -	N/A - this is a System Wide Initiative	N/A - this is a System Wide Initiative	All types of equipment/facility failure, wire-wire contact/contamination	872,292.38	0.36	Wildfire-Significant Loss of Property	Existing	D. 19-08-027	GRC	In compliance with Regulation	GO-95	Test all poles to loading standards, GO95 requirements, intrusive inspection criteria and age and then, replaces or remediates non-compliant poles.
	2019 actual	$ 2,444,130.60	$ 2,444,130.60	$ -												
	2020	$ 2,444,130.60	$ 2,444,130.60	$ -												
	2021	$ 2,444,130.60	$ 2,444,130.60	$ -												
	2022	$ 2,444,130.60	$ 2,444,130.60	$ -												
	2020-2022 plan total	$ 7,332,391.80	$ 7,332,391.80	$ -												
7. LiDAR inspections of distribution electric lines and equipment	2019 plan	$ 220,000.00	$ -	$ 220,000.00	210.81	$ 1,043.59	Contact from object, all types of equipment/facility failure, wire-to-wire contact/contamination	1,145,870.45	3.05	Wildfire-Significant Loss of Property	New	A - this is a new initiat	WMP Memorandum Account	Exceeding	GO-165	Conduct LiDAR surveys of BVES overhead system on a semi-annual basis.
	2019 actual	$ 220,000.00	$ -	$ 220,000.00	210.81	$ 1,043.59										
	2020	$ 375,660.14	$ -	$ 375,660.14	210.81	$ 1,781.98										
	2021	$ 375,660.14	$ -	$ 375,660.14	210.81	$ 1,781.98										
	2022	$ 375,660.14	$ -	$ 375,660.14	210.81	$ 1,781.98										
	2020-2022 plan total	$ 1,126,980.42	$ -	$ 1,126,980.42	632.43	$ 1,781.98										
8. LiDAR inspections of transmission electric lines and equipment	2019 plan	Bear Valley Electric Service does not have any transmission lines or equipment as all the utility's lines are below 65kV.														
	2019 actual															
	2020															
	2021															
	2022															
	2020-2022 plan total															
9. Other discretionary inspection of distribution electric lines and equipment, beyond inspections mandated by rules and regulations	2019 plan	Bear Valley Electric Service does not have any wildfire mitigation asset management and inspection initiatives focused on other discretionary inspections of distribution electric lines and equipment beyond inspections mandated by rules and regulations at this time that have not been captured in other initiatives.														
	2019 actual															
	2020															
	2021															
	2022															
	2020-2022 plan total															
10. Other discretionary inspection of transmission electric lines and equipment, beyond inspections mandated by rules and regulations	2019 plan	Bear Valley Electric Service does not have any transmission lines or equipment as all the utility's lines are below 65kV.														
	2019 actual															
	2020															
	2021															
	2022															
	2020-2022 plan total															
11. Patrol inspections of distribution electric lines and equipment	2019 plan	$ -	$ -	$ -	0.00	$ -	Contact from object, all types of equipment/facility failure, wire-to-wire contact/contamination	1,024,621.77	7.27	N/A - all risk drivers have been captured in the ignition probability drivers targeted	New	N/A - this is a new initiative	WMP Memorandum Account.	Exceeding	GO-165	Conduct annual 2nd Ground Patrol of overhead facilities by 3rd party. This is in addition to BVES GO-165 annual ground patrol.
	2019 actual	$ -	$ -	$ -	0.00	$ -										
	2020	$ 140,872.55	$ -	$ 140,872.55	210.81	$ 668.24										
	2021	$ 140,872.55	$ -	$ 140,872.55	210.81	$ 668.24										
	2022	$ 140,872.55	$ -	$ 140,872.55	210.81	$ 668.24										
	2020-2022 plan total	$ 422,617.65	$ -	$ 422,617.65	$ 632.43	$ 668.24										
12. Patrol inspections of transmission electric lines and equipment	2019 plan	Bear Valley Electric Service does not have any transmission lines or equipment as all the utility's lines are below 65kV.														
	2019 actual															
	2020															
	2021															
	2022															
	2020-2022 plan total															
13. Pole loading assessment program to determine safety factor	2019 plan	Bear Valley Electric Service's wildfire mitigation asset management and inspections pole loading assessment program to determine safety factor is fully captured in Table 24 Initiative 6. Intrusive pole inspections.														
	2019 actual															
	2020															
	2021															
	2022															
	2020-2022 plan total															
14. Quality assurance / quality control of inspections	2019 plan															
	2019 actual	N/A - Elements already captured in other relevant initiatives	N/A - Elements already captured in other relevant initiatives	N/A - Elements already captured in other relevant initiatives	N/A - Elements already captured in other relevant initiatives	N/A - Elements already captured in other relevant initiatives	All	N/A - Elements already captured in other relevant initiatives	N/A - Elements already captured in other relevant initiatives	N/A - Elements already captured in other relevant initiatives	Existing	N/A - Elements already captured in other relevant initiatives	N/A - Elements already captured in other relevant initiatives	N/A - Elements already captured in other relevant initiatives	N/A - Elements already captured in other relevant initiatives	General initiative and best practices applied to and accounted for in other relevant initiatives
	2020															
	2021															
	2022															
	2020-2022 plan total															
15. Substation inspections	2019 plan	Bear Valley Electric Service's substation inspections are fully captured in Table 24 Item 11. Patrol inspections of distribution electric lines and equipment														
	2019 actual															
	2020															
	2021															
	2022															
	2020-2022 plan total															
16. Other / not listed	2019 plan	$ 165,238.29	$ -	$ 165,238.29	N/A - this is a System Wide Initiative	N/A - this is a System Wide Initiative	Contact from object, all types of equipment/facility failure, wire-to-wire contact/contamination	1,145,870.45	6.93	N/A - all risk drivers have been captured in the ignition probability drivers targeted	Existing	D. 19-08-027	GRC	N/A - this initiative is not associated with specific regulations	N/A - this initiative is not associated with specific regulations	Electrical Preventative Maintenance Program. Program to conduct preventive maintenance and safety checks on major substation and field equipment. RSE is an estimate based on latest available risk assessment.
	2019 actual	$ 165,238.29	$ -	$ 165,238.29												
	2020	$ 165,238.29	$ -	$ 165,238.29												
	2021	$ 165,238.29	$ -	$ 165,238.29												
	2022	$ 165,238.29	$ -	$ 165,238.29												
	2020-2022 plan total	$ 495,714.87	$ -	$ 495,714.87												

5.3.5 Vegetation management and inspections

Explain the rationale for any utility ignition probability-specific inspections (e.g., "enhanced inspections") within the HFTD as deemed necessary over and above the standard inspections. This shall include information about how (i.e., criteria, protocols, etc.) the electrical corporation determines additional inspections are necessary.

Describe the utility's vegetation treatment protocols relating to treatment of any vegetation that could pose a grow-in or fall-in risk to utility equipment. Include in the description the threshold by which the utility makes decisions of whether to (1) treat, or (2) remove vegetation.

Discuss the overall objectives, strategies, and tactics of the electrical corporation for vegetation management. In the discussion,

1. Address how the electrical corporation has collaborated with local land managers to leverage opportunities for fuel treatment activities and fire break creation, and compliance with other local, state, and federal forestry and timberregulations.
2. Discuss how the electrical corporation identifies and determines which vegetation is at risk of ignition from utility electric lines and equipment.
3. Describe how (i.e., criteria, data, protocols, studies, etc.) the utility made the determination to trim any vegetation beyond required clearances in GO 95.
4. Describe utility plan to mitigate identified trees with strike potential, including information about how (i.e., criteria, protocols, data, statutes, etc.) the electrical corporation identifies and defines "hazard trees" and "trees with strike potential" based on height and feasible path to strike powerlines or equipment. Describe utility plan to identify reliability/at-risk tree species to trim or remove, where feasible, per location-specific criteria.
5. Include a discussion of how the utility's overall vegetation management initiatives address risks that may arise from trimming or removing trees, including but not limited to erosion, wind, flooding, etc.

Description of programs to reduce ignition probability and wildfire consequence

For each of the below initiatives, provide a detailed description and approximate timeline of each, whether already implemented or planned, to minimize the risk of its equipment or facilities causing wildfires. Include a description of the utility's initiatives, the utility's rationale behind each of the elements of the initiatives, the utility's prioritization approach/methodology to determine spending and deployment of human and other resources, how the utility will conduct audits or other quality checks on each initiative, how the utility plans to demonstrate over time whether each component of the initiatives is effective and, if not, how the utility plans to evolve each component to ensure effective spend of ratepayer funds.

Include descriptions across each of the following initiatives. Input the following initiative names into a spreadsheet formatted according to the template below and input information for each cell in the row.

1. Additional efforts to manage community and environmental impacts
2. Detailed inspections of vegetation around distribution electric lines and equipment
3. Detailed inspections of vegetation around transmission electric lines and equipment
4. Emergency response vegetation management due to red flag warning or other urgent conditions
5. Fuel management and reduction of "slash" from vegetation management activities
6. Improvement of inspections
7. LiDAR inspections of vegetation around distribution electric lines and equipment
8. LiDAR inspections of vegetation around transmission electric lines and equipment
9. Other discretionary inspection of vegetation around distribution electric lines and equipment, beyond inspections mandated by rules and regulations
10. Other discretionary inspection of vegetation around transmission electric lines and equipment, beyond inspections mandated by rules and regulations
11. Patrol inspections of vegetation around distribution electric lines and equipment
12. Patrol inspections of vegetation around transmission electric lines and equipment
13. Quality assurance / quality control of inspections
14. Recruiting and training of vegetation management personnel
15. Remediation of at-risk species
16. Removal and remediation of trees with strike potential to electric lines and equipment
17. Substation inspections
18. Substation vegetation management
19. Vegetation inventory system
20. Vegetation management to achieve clearances around electric lines and equipment
21. Other / not listed [only if an initiative cannot feasibly be classified within those listed above]

For each of the above initiatives, describe the utility's current program and provide an explanation of how the utility expects to evolve the utility's program over each of the following time periods:

1. Before the upcoming wildfire season,
2. Before the next annual update,
3. Within the next 3 years, and
4. Within the next 10 years.

Table 25: Vegetation management and inspections
Response to WSD data request item BVES-4387Q-I-144

Initiative activity	Year	Total pre-initiative spend	Subtotal A: Capital expenditure	Subtotal B: Operating expenses	Line miles to be treated	Spend/ treated line mile	Ignition probability drivers targeted	Risk reduction	Risk-spend efficiency	Other risk drivers addressed	Existing/ new	Existing: What proceeding has reviewed program	If new: Memorandum account	In/ exceeding compliance with regulations	Cite associated rule	Comments
1. Additional efforts to manage community and environmental impacts	2019 plan 2019 actual 2020 2021 2022 2020-2022 plan total	Bear Valley Electric Service does not have a specific wildfire mitigation vegetation management and inspection initiative dedicated to this effort at this time. The utility recognizes that additional efforts to manage community and environmental impacts are critical to reducing wildfire risk and conducts such efforts on an as-needed basis, as well as incorporating additional efforts within other programs such as those in Table 29 and Table 30.														
2. Detailed inspections of vegetation around distribution electric lines and equipment	2019 plan 2019 actual 2020 2021 2022 2020-2022 plan total	$ 3,265,112.69 $ 3,265,112.69 $ 3,265,112.69 $ 3,265,112.69 $ 3,265,112.69 $ 9,795,338.07	$ - $ - $ - $ - $ - $ -	$ 3,265,112.69 $ 3,265,112.69 $ 3,265,112.69 $ 3,265,112.69 $ 3,265,112.69 $ 9,795,338.07	N/A - this is a System Wide initiative	N/A - this is a System Wide initiative	Contact from object, all types of equipment/facility failure, wire-to-wire contact/contamination	872,292.38	0.27	Wildfire-Significant Loss of Property	Existing	D. 19-08-027	FHPMA (not new)	Exceeding	GO-95	Increases vegetation clearances, criterial for tree removals, and eliminates overhang on sub-transmission. These are above the 2017 baseline vegetation clearances that were in effect before CPUC Decision 17-12-024 December 14, 2017 was adopted.
3. Detailed inspections of vegetation around transmission electric lines and equipment	2019 plan 2019 actual 2020 2021 2022 2020-2022 plan total	Bear Valley Electric Service does not have any transmission lines or equipment as all the utility's lines are below 65kV.														
4. Emergency response vegetation management due to red flag warning or other urgent conditions	2019 plan 2019 actual 2020 2021 2022 2020-2022 plan total	Bear Valley Electric Service does not have a specific wildfire mitigation vegetation management and inspection initiative dedicated to this effort at this time. The utility recognizes that emergency response vegetation management due to red flag warnings or other urgent conditions are critical to reducing wildfire risk and has already incorporated these efforts into the utility's existing Emergency Response and Preparedness Plan as well as the initiatives described in Table 26 Grid Operations and Protocols.														
5. Fuel management and reduction of "slash" from vegetation management activities	2019 plan 2019 actual 2020 2021 2022 2020-2022 plan total	Bear Valley Electric Service does not have a specific wildfire mitigation vegetation management and inspection initiative dedicated to this effort at this time. Fuel management and reduction of "slash" from vegetation management activities have been incorporated into the utility's ongoing and newly proposed vegetation management initiatives as described in Table 25.														
6. Improvement of inspections	2019 plan 2019 actual 2020 2021 2022 2020-2022 plan total	N/A - Elements already captured in other relevant initiatives	N/A - Elements already captured in other relevant initiatives	N/A - Elements already captured in other relevant initiatives	N/A - Elements already captured in other relevant initiatives	N/A - Elements already captured in other relevant initiatives	Contact from object	N/A - Elements already captured in other relevant initiatives	N/A - Elements already captured in other relevant initiatives	Reduces escalation should an ignition event occur through removal of fuel	Existing	2017 GRC & 2019 WMP	N/A - Elements already captured in other relevant initiatives	In compliance with Regulation	GO95	Program incorporated new requirements in 2019
7. LIDAR inspections of vegetation around distribution electric lines and equipment	2019 plan 2019 actual 2020 2021 2022 2020-2022 plan total	Bear Valley Electric Service's LiDAR inspections of vegetation around distribution electric lines and equipment are captured in Table 24 Initiative 7. LiDAR inspections of distribution electric lines and equipment.														
8. LiDAR inspections of vegetation around transmission electric lines and equipment	2019 plan 2019 actual 2020 2021 2022 2020-2022 plan total	Bear Valley Electric Service does not have any transmission lines or equipment as all the utility's lines are below 65kV.														
9. Other discretionary inspection of vegetation around distribution electric lines and equipment, beyond inspections mandated by rules and regulations	2019 plan 2019 actual 2020 2021 2022 2020-2022 plan total	Bear Valley Electric Service does not have any other discretionary inspections of vegetation around distribution electric lines and equipment beyond inspections mandated by rules and regulations and other described initiatives at this time.														
10. Other discretionary inspection of vegetation around transmission electric lines and equipment, beyond inspections mandated by	2019 plan 2019 actual 2020 2021 2022 2020-2022 plan total	Bear Valley Electric Service does not have any transmission lines or equipment as all the utility's lines are below 65kV.														
11. Patrol inspections of vegetation around distribution electric lines and equipment	2019 plan 2019 actual 2020 2021 2022 2020-2022 plan total	Bear Valley Electric Service's patrol inspections of vegetation around distribution electric lines and equipment are fully captured in Table 25 Initiative 2. Detailed inspection of vegetation around distribution electric lines and equipment and Table 24 Initiative 11. Patrol inspections of distribution electric lines and equipment.														
12. Patrol inspections of vegetation around transmission electric lines and equipment	2019 plan 2019 actual 2020 2021 2022 2020-2022 plan total	Bear Valley Electric Service does not have any transmission lines or equipment as all the utility's lines are below 65kV.														
13. Quality assurance / quality control of inspections	2019 plan 2019 actual 2020 2021 2022 2020-2022 plan total	N/A - Elements already captured in other relevant initiatives	N/A - Elements already captured in other relevant initiatives	N/A - Elements already captured in other relevant initiatives	N/A - Elements already captured in other relevant initiatives	N/A - Elements already captured in other relevant initiatives	All	N/A - Elements already captured in other relevant initiatives	N/A - Elements already captured in other relevant initiatives	N/A - Elements already captured in other relevant initiatives	Existing	N/A - Elements already captured in other relevant initiatives	N/A - Elements already captured in other relevant initiatives	N/A - Elements already captured in other relevant initiatives	N/A - Elements already captured in other relevant initiatives	General initiative and best practices applied to and accounted for in other relevant initiatives
14. Recruiting and training of vegetation management personnel	2019 plan 2019 actual 2020 2021 2022 2020-2022 plan total	$ - $ - $ 226,961.33 $ 226,961.33 $ 226,961.33 $ 680,883.99	$ - $ - $ - $ - $ - $ -	$ - $ - $ 226,961.33 $ 226,961.33 $ 226,961.33 $ 680,883.99	N/A - this is a System Wide initiative	N/A - this is a System Wide initiative	Contact from object, all types of equipment/facility failure, wire-to-wire contact/contamination	151,260.94	0.67	Wildfire-Significant Loss of Property	New	N/A - this is a new initiative	WMP Memorandum Account	Exceeding	GO95	Places a full time contract utility forester as part of the BVES team. The job duties of the contract forester would include: Inspections: Inspect and evaluate circuits for hot spot locations, hazard tree identification and outage investigations. Auditing: Perform site-specific work audits to ensure contractors are performing within the specifications set forth by BVES. Customer Contacts/Issue Resolution: Initiate or follow up in a timely and professional manner on all customer issues that may arise in a manner that will support the policies and procedures of BVES. This includes customer notifications, permit negotiations, conflict resolution, outage support/investigations and providing shared resources to construction, substation, lines and/or various work groups related to BVES's Vegetation Management group. Administrative: Perform data entry, spreadsheet work, monitor crew activity sheets, track completed work, capture photo documentation of specific conditions and other administrative tasks as needed. Developing Work Plans: Develop work plans that specify the pruning and removal requirements to maintain the utility ROWs. These plans will be developed in an efficient and straightforward manner for a seamless transition to the tree contractors. Specialized Projects: Develop and manage specialized projects with an emphasis on reliability and risk management. Perform enhanced outage investigations, integrated storm hardening projects, performed risk assessment and prioritization studies, developed storm response protocols and implemented hazard tree programs that are focused on improving system safety. Contractor Safety Observations: Observe contractors as they work and provide safety behavior modification to help ensure a program that is best-in class not only in vegetation management, but safety as well.
15. Remediation of at-risk species	2019 plan 2019 actual 2020 2021 2022 2020-2022 plan total	Remediation of at-risk species is a subset to the company's vegetation management practices to achieve clearances around electric lines and equipment as described in Table 25, particularly Table 24 Item 14. As such, Bear Valley Electric Service does not have a specific wildfire mitigation initiative for remediation of at-risk species at this time.														
16. Removal and remediation of trees with strike potential to electric lines and equipment	2019 plan 2019 actual 2020 2021 2022 2020-2022 plan total	Removal and remediation of trees with strike potential to electric lines and equipment is a subset to the company's vegetation management practices to achieve clearances around electric lines and equipment as described in Table 25, particularly Table 24 Item 14. As such, Bear Valley Electric Service does not have a specific wildfire mitigation initiative for removal and remediation of trees with strike potential at this time.														
17. Substation inspections	2019 plan 2019 actual 2020 2021 2022 2020-2022 plan total	Substation vegetation management is a subset to the company's overall vegetation management initiatives as described in Table 25.														
18. Substation vegetation management	2019 plan 2019 actual 2020 2021 2022 2020-2022 plan total	Substation inspections are a subset to the company's overall vegetation management inspections as described in Table 25 initiatives 2. and 14.														
19. Vegetation inventory system	2019 plan 2019 actual 2020 2021 2022 2020-2022 plan total	Bear Valley Electric Service does not have a specific wildfire mitigation initiative dedicated to the creation and management of a vegetation inventory system at this time. The company's utility forester, as described in Table 25 Item 14., maintains such a system.														
20. Vegetation management to achieve clearances around electric lines and equipment	2019 plan 2019 actual 2020 2021 2022 2020-2022 plan total	Vegetation management to achieve clearances around electric lines and equipment is captured in Table 25 Items 2. and 14.														
21. Other / not listed	2019 plan 2019 actual 2020 2021 2022 2020-2022 plan total	N/A - the utility does not have any other or unlisted vegetation management initiatives	N/A - the utility does not have any other or unlisted vegetation management initiatives	N/A - the utility does not have any other or unlisted vegetation management initiatives	N/A - the utility does not have any other or unlisted vegetation management initiatives	N/A - the utility does not have any other or unlisted vegetation management initiatives	N/A - the utility does not have any other or unlisted vegetation management initiatives	N/A - the utility does not have any other or unlisted vegetation management initiatives	N/A - the utility does not have any other or unlisted vegetation management initiatives	N/A - the utility does not have any other or unlisted vegetation management initiatives	N/A - the utility does not have any other or unlisted vegetation management initiatives	N/A - the utility does not have any other or unlisted vegetation management initiatives	N/A - the utility does not have any other or unlisted vegetation management initiatives	N/A - the utility does not have any other or unlisted vegetation management initiatives	N/A - the utility does not have any other or unlisted vegetation management initiatives	N/A - the utility does not have any other or unlisted vegetation management initiatives

5.3.6 Grid operations and protocols

Description of programs to reduce ignition probability and wildfire consequence

For each of the below initiatives, provide a detailed description and approximate timeline of each, whether already implemented or planned, to minimize the risk of its equipment or facilities causing wildfires. Include a description of the utility's initiatives, the utility's rationale behind each of the elements of the initiatives, the utility's prioritization approach/methodology to determine spending and deployment of human and other resources, how the utility will conduct audits or other quality checks on each initiative, how the utility plans to demonstrate over time whether each component of the initiatives is effective and, if not, how the utility plans to evolve each component to ensure effective spend of ratepayer funds.

Include descriptions across each of the following initiatives. Input the following initiative names into a spreadsheet formatted according to the template below and input information for each cell in the row.

1. Automatic recloser operations
2. Crew-accompanying ignition prevention and suppression resources and services
3. Personnel work procedures and training in conditions of elevated fire risk
4. Protocols for PSPS re-energization
5. PSPS events and mitigation of PSPS impacts
6. Stationed and on-call ignition prevention and suppression resources and services
7. Other / not listed [only if an initiative cannot feasibly be classified within those listed above]

For each of the above initiatives, describe the utility's current program and provide an explanation of how the utility expects to evolve the utility's program over each of the following time periods:

1. Before the upcoming wildfire season,
2. Before the next annual update,
3. Within the next 3 years, and
4. Within the next 10 years.

Table 26: Grid operations and protocols

Initiative activity	Year	Total per-initiative spend	Subtotal A: Capital expenditure	Subtotal B: Operating expenses	Line miles to be treated	Spend/ treated line mile	Ignition probability drivers targeted	Risk reduction	Risk-spend efficiency	Other risk drivers addressed	Existing/ new	Existing: What proceeding has reviewed program	If new: Memorandum account	In / exceeding compliance with regulations	Cite associated rule	Comments
1. Automatic recloser operations	2019 plan	$ 100,000.00	$ 100,000.00	$ -	N/A - this is a System Wide Initiative	N/A - this is a System Wide Initiative	Contact from object, all types of equipment/facility failure, wire-to-wire contact/contamination	1,115,048.65	3.72	Wildfire-Significant Loss of Property	Existing	D. 19-08-027	GRC	N/A - this initiative is a non-standard operating practice unassociated with any specific regulation	N/A - this initiative is a non-standard operating practice unassociated with any specific regulation	Automatic Recloser Upgrades. Recloser replacement to reduce electrical sparking, while also helping mitigate power outages and equipment damage. Estimated 33% completion in 2019.
	2019 actual	$ 100,000.00	$ 100,000.00	$ -												
	2020	$ 200,000.00	$ 200,000.00	$ -												
	2021	$ -	$ -	$ -												
	2022	$ -	$ -	$ -												
	2020-2022 plan total	$ 200,000.00	$ 200,000.00	$ -												
2. Crew-accompanying ignition prevention and suppression resources and services	2019 plan	Bear Valley Electric Service does not currently deploy crew-accompanying ignition prevention and suppression resources and services as part of its routine operational practices. When an emergency occurs, the utility communicates and collaborates with local emergency response teams as described in Section 5.3.9, which can include crew-accompanying ignition prevention and suppression resources and services. Additionally, during elevated risk conditions or during fire season, BVES leverages specific work practices and protocols and makes available specific resources and tools for use by operations personnel as included in Table 26. However, the utility does not currently have a specific grid operations and protocols wildfire mitigation initiative focused on crew-accompanying ignition prevention and suppression resources and services. The use of these services will be re-evaluated and considered for future incorporation as part of the annual WMP review process.													
	2019 actual															
	2020															
	2021															
	2022															
	2020-2022 plan total															
3. Personnel work procedures and training in conditions of elevated fire risk	2019 plan	$ 65,740.52	$ -	$ 65,740.52	N/A - this is a System Wide Initiative	N/A - this is a System Wide Initiative	Contact from object, all types of equipment/facility failure, wire-to-wire contact/contamination	146,466.53	2.23	Wildfire-Significant Loss of Property	Existing	D. 19-08-027	GRC	N/A - this initiative is a non-standard operating practice unassociated with any specific regulation	N/A - this initiative is a non-standard operating practice unassociated with any specific regulation	Wildfire Infrastructure Protection Teams. Roles and responsibilities for staff to respond to protect system infrastructure in case of emergencies.
	2019 actual	$ 65,740.52	$ -	$ 65,740.52												
	2020	$ 65,740.52	$ -	$ 65,740.52												
	2021	$ 65,740.52	$ -	$ 65,740.52												
	2022	$ 65,740.52	$ -	$ 65,740.52												
	2020-2022 plan total	$ 197,221.56	$ -	$ 197,221.56												
4. Protocols for PSPS re-energization	2019 plan	Bear Valley Electric Service considers re-energization after a PSPS event to be a subset of outage restoration and re-energization protocols generally included in Table 26. Therefore, the utility does not have a separate protocol for PSPS.														
	2019 actual															
	2020															
	2021															
	2022															
	2020-2022 plan total															
5. PSPS events and mitigation of PSPS impacts	2019 plan	$ 42,000.00	$ -	$ 42,000.00	N/A - this is a System Wide Initiative	N/A - this is a System Wide Initiative	All	777,385.29	18.51	Wildfire-Significant Loss of Property	Existing/New	D. 19-08-027	GRC and WMP Memorandum Account	In compliance	R. 18-12-005	PSPS Protocols. Protocols and procedures to respond to and recover from de-energization events, which proactively prevent wildfires. Costs partially recovered. RSE is an estimate based on latest risk assessment.
	2019 actual	$ -	$ -	$ -												
	2020	$ 42,000.00	$ -	$ 42,000.00												
	2021	$ 42,000.00	$ -	$ 42,000.00												
	2022	$ 42,000.00	$ -	$ 42,000.00												
	2020-2022 plan total	$ 126,000.00	$ -	$ 126,000.00												
6. Stationed and on-call ignition prevention and suppression resources and services	2019 plan	Bear Valley Electric Service does not currently have stationed and on-call ignition prevention and suppression resources and services not captured in existing initiatives.														
	2019 actual															
	2020															
	2021															
	2022															
	2020-2022 plan total															
7. Other / not listed	2019 plan	N/A - costs recovered in BVES' General Rate Case a. 17-05-004.	N/A - costs recovered in BVES' General Rate Case a. 17-05-004.	N/A - costs recovered in BVES' General Rate Case a. 17-05-004.	N/A - this is a System Wide Initiative	N/A - this is a System Wide Initiative	Contact from object, all types of equipment/facility failure, wire-to-wire contact/contamination	1,022,629.33	N/A - this initiative is not associated with a specific Risk-Spend Efficiency	Wildfire-Significant Loss of Property	Existing	D. 19-08-027	GRC	N/A - this initiative is a non-standard operating practice unassociated with any specific regulation	N/A - this initiative is not associated with any specific regulation	Operational Considerations/Special Work Procedures. Operational procedures that are conditions-based to optimize the distribution system for wildfire mitigation. Costs recovered in BVES' General Rate Case A.17-05-004.
	2019 actual															
	2020															
	2021															
	2022															
	2020-2022 plan total															

5.3.7 Data Governance

Description of programs to reduce ignition probability and wildfire consequence

For each of the below initiatives, provide a detailed description and approximate timeline of each, whether already implemented or planned, to minimize the risk of its equipment or facilities causing wildfires. Include a description of the utility's initiatives, the utility's rationale behind each of the elements of the initiatives, the utility's prioritization approach/methodology to determine spending and deployment of human and other resources, how the utility will conduct audits or other quality checks on each initiative, how the utility plans to demonstrate over time whether each component of the initiatives is effective and, if not, how the utility plans to evolve each component to ensure effective spend of ratepayer funds.

Include descriptions across each of the following initiatives. Input the following initiative names into a spreadsheet formatted according to the template below and input information for each cell in the row.

1. Centralized repository for data
2. Collaborative research on utility ignition and/or wildfire
3. Documentation and disclosure of wildfire-related data and algorithms
4. Tracking and analysis of near miss data
5. Other / not listed [only if an initiative cannot feasibly be classified within those listedabove]

The list provided is non-exhaustive and utilities shall add additional initiatives to this table as their individual programs are designed and structured. Do not create a new initiative if the utility's initiatives can be classified under a provided initiative.
For each of the above initiatives, describe the utility's current program and provide an explanation of how the utility expects to evolve the utility's program over each of the following time periods:

1. Before the upcoming wildfire season,
2. Before the next annual update,
3. Within the next 3 years, and
4. Within the next 10 years.

Table 27: Data governance

Response to WSD data request item BVES-43879-K-14: 33 $ 420.00

Initiative activity	Year	Total per-initiative spend	Subtotal A: Capital expenditure	Subtotal B: Operating expenses	Line miles to be treated	Spend/ treated line mile	Ignition probability drivers targeted	Risk reduction	Risk-spend efficiency	Other risk drivers addressed	Existing/ new	Existing: What proceeding has reviewed program	If new: Memorandum account	In / exceeding compliance with regulations	Cite associated rule	Comments
1. Centralized repository for data	2019 plan	$ 46,382.29	$ -	$ 46,382.29	N/A - this is a System Wide Initiative	N/A - this is a System Wide Initiative	All	148,458.96	3.20	Wildfire-Significant Loss of Property.	Existing	D. 19-08-027	GRC	N/A - this initiative is unassociated with any specific regulation	N/A - this initiative is unassociated with any specific regulation	GIS Data Collection & Sharing. Maintain and share Geographic Information System (GIS) database on system infrastructure for asset management and planning with key stakeholders.
	2019 actual	$ 46,382.29	$ -	$ 46,382.29												
	2020	$ 46,382.29	$ -	$ 46,382.29												
	2021	$ 46,382.29	$ -	$ 46,382.29												
	2022	$ 46,382.29	$ -	$ 46,382.29												
	2020-2022 plan total	$ 139,146.87	$ -	$ 139,146.87												
2. Collaborative research on utility ignition and/or wildfire	2019 plan	Bear Valley Electric Service does not have a specific wildfire mitigation data governance plan focused on collaborative research on utility ignition and/or wildfire at this time. The company generally collaborates with Mutual Aid Partners and first responders to develop protocols, procedures, and communication plans to prevent, manage, and respond to utility ignition and/or wildfire.														
	2019 actual															
	2020															
	2021															
	2022															
	2020-2022 plan total															
3. Documentation and disclosure of wildfire-related data and algorithms	2019 plan	Bear Valley Electric Service does not have a specific data governance wildfire mitigation program focused on documentation and disclosure of wildfire-related data and algorithms that maps to the tracking and level of detail requested in this table at this time.														
	2019 actual															
	2020															
	2021															
	2022															
	2020-2022 plan total															
4. Tracking and analysis of near miss data	2019 plan	Bear Valley Electric Service does not have a specific wildfire mitigation data governance initiative focused on tracking and analysis of near-miss data that maps to the tracking and level of detail requested in this table at this time.														
	2019 actual															
	2020															
	2021															
	2022															
	2020-2022 plan total															
5. Other / not listed	2019 plan	Bear Valley Electric Service dose not have any other wildfire mitigation data governance initiatives at this time.														
	2019 actual															
	2020															
	2021															
	2022															
	2020-2022 plan total															

5.3.8 Resource allocation methodology

Description of programs to reduce ignition probability and wildfire consequence

For each of the below initiatives, provide a detailed description and approximate timeline of each, whether already implemented or planned, to minimize the risk of its equipment or facilities causing wildfires. Include a description of the utility's initiatives, the utility's rationale behind each of the elements of the initiatives, the utility's prioritization approach/methodology to determine spending and deployment of human and other resources, how the utility will conduct audits or other quality checks on each initiative, how the utility plans to demonstrate over time whether each component of the initiatives is effective and, if not, how the utility plans to evolve each component to ensure effective spend of ratepayer funds.

Include descriptions across each of the following resource allocation methodology and sensitivities initiatives, including a description of the data flow into the calculations involved in each. Input the following initiative names into a spreadsheet formatted according to the template below
and input information for each cell in the row.

1. Allocation methodology development and application
2. Risk reduction scenario development and analysis
3. Risk spend efficiency analysis
4. Other / not listed [only if an initiative cannot feasibly be classified within those listed above]

For each of the below initiatives, describe the utility's current program and provide an explanation of how the utility expects to evolve the utility's program over each of the following time periods:

1. Before the upcoming wildfire season
2. Before the next annual update
3. Within the next 3 years
4. Within the next 10 years

The list provided is non-exhaustive and utilities shall add additional initiatives to this table as their individual programs are designed and
structured. Do not create a new initiative if the utility's initiatives can be classified under a provided initiative. Where the columns listed do not apply or cannot be meaningfully calculated for a given resource allocation methodology and sensitivities initiative, "N/A" may be logged in the corresponding cell.

Table 28: Resource allocation methodology **356**

Initiative activity	Year	Total per-initiative spend	Subtotal A: Capital expenditure	Subtotal B: Operating expenses	Line miles to be treated	Spend/ treated line mile	Ignition probability drivers targeted	Risk reduction	Risk-spend efficiency	Other risk drivers addressed	Existing/ new	Existing: What proceeding has reviewed program	If new: Memorandum account	In / exceeding compliance with regulations	Cite associated rule	Comments
1. Allocation methodology development and application	2019 plan 2019 actual 2020 2021 2022 2020-2022 plan total	N/A - While the utility is committed to the continued development and improvement of the company's risk-based decision making framework, many of the elements requested in this 2020 CA WMP filing may not be applicable to Bear Valley Electric Service, specifically many of the components requested in this section. Bear Valley Electric Service cannot provide information regarding the utility's wildifre mitigation resouce allocation methodology focused on allocation methodology development and application to the level of tracking and detail requested in this table at this time. At the guidance of the Wildfire Safety Division of the California Public Utilities Commission, these elements are marked "N/A" to indicate "does not apply" or "not applicable," with supplementary explanations where applicable througout the company's filing.													
2. Risk reduction scenario development and analysis	2019 plan 2019 actual 2020 2021 2022 2020-2022 plan total	N/A - While the utility is committed to the continued development and improvement of the company's risk-based decision making framework, many of the elements requested in this 2020 CA WMP filing may not be applicable to Bear Valley Electric Service, specifically many of the components requested in this section. Bear Valley Electric Service cannot provide information regarding the utility's wildifre mitigation resouce allocation methodology focused on risk reduction scenario development and analysis to the level of tracking and detail requested in this table at this time. At the guidance of the Wildfire Safety Division of the California Public Utilities Commission, these elements are marked "N/A" to indicate "does not apply" or "not applicable," with supplementary explanations where applicable througout the company's filing.													
3. Risk spend efficiency analysis	2019 plan 2019 actual 2020 2021 2022 2020-2022 plan total	N/A - While the utility is committed to the continued development and improvement of the company's risk-based decision making framework, many of the elements requested in this 2020 CA WMP filing may not be applicable to Bear Valley Electric Service, specifically many of the components requested in this section. Bear Valley Electric Service cannot provide information regarding the utility's wildifre mitigation resouce allocation methodology focused on risk spend efficiency analysis to the level of tracking and detail requested in this table at this time. At the guidance of the Wildfire Safety Division of the California Public Utilities Commission, these elements are marked "N/A" to indicate "does not apply" or "not applicable," with supplementary explanations where applicable througout the company's filing.													
4. Other / not listed	2019 plan 2019 actual 2020 2021 2022 2020-2022 plan total	N/A - While the utility is committed to the continued development and improvement of the company's risk-based decision making framework, many of the elements requested in this 2020 CA WMP filing may not be applicable to Bear Valley Electric Service, specifically many of the components requested in this section. Bear Valley Electric Service cannot provide information regarding the utility's wildifre mitigation resouce allocation methodology focused on any other unlisted initiative(s) to the level of tracking and detail requested in this table at this time. At the guidance of the Wildfire Safety Division of the California Public Utilities Commission, these elements are marked "N/A" to indicate "does not apply" or "not applicable," with supplementary explanations where applicable througout the company's filing.													

5.3.9 Emergency planning and preparedness

Description of programs to reduce ignition probability and wildfire consequence

For each of the below initiatives, provide a detailed description and approximate timeline of each, whether already implemented or planned, to minimize the risk of its equipment or facilities causing wildfires. Include a description of the utility's initiatives, the utility's rationale behind each of the elements of the initiatives, the utility's prioritization approach/methodology to determine spending and deployment of human and other resources, how the utility will conduct audits or other qInclude a general description of the overall emergency preparedness and response plan, and detail:

1. A description of how plan is consistent with disaster and emergency preparedness plan prepared pursuant to Public Utilities Code Section 768.6, including:
    a. Plans to prepare for and restore service, including workforce mobilization (including mutual aid and contractors) and prepositioning equipment and employees
    b. Emergency communications, including community outreach, public awareness, and communications efforts before, during, and after a wildfire in English, Spanish, and the top three primary languages used in California other than English or Spanish, as determined byUnited States Census data
    c. Showing that the utility has an adequate and trained workforce to promptly restore service after a major event, taking into account mutual aid and contractors
2. Customer support in emergencies, including protocols for compliance with requirements adopted by the CPUC regarding activities to support customers during and after a wildfire, including:
    a. Outage reporting
    b. Support for low income customers
    c. Billing adjustments
    d. Deposit waivers
    e. Extended payment plans
    f. Suspension of disconnection and nonpayment fees
    g. Repair processing and timing
    h. Access to utility representatives

1. Coordination with Public Safety Partners, such as stationing utility personnel in county Emergency Operations Centers

Describe utility efforts to identify which additional languages are in use within the utility's service territory, including plan to identify and mitigate language access challenges.

Description of programs to reduce ignition probability and wildfire consequence

For each of the below initiatives, provide a detailed description and approximate timeline of each, whether already implemented or planned, to minimize the risk of its equipment or facilities causing wildfires. Include a description of the utility's initiatives, the utility's rationale behind each of the elements of the initiatives, the utility's prioritization approach/methodology to determine spending and deployment of human and other resources, how the utility will conduct audits or other quality checks on each initiative, how the utility plans to demonstrate over time whether each component of the initiatives is effective and, if not, how the utility plans to evolve each component to ensure effective spend of ratepayer funds.

Include descriptions across each of the following initiatives. Input the following initiative names into a spreadsheet formatted according to the template below and input information for each cell in the row.

1. Adequate and trained workforce for service restoration
2. Community outreach, public awareness, and communications efforts
3. Customer support in emergencies
4. Disaster and emergency preparedness plan
5. Preparedness and planning for service restoration
6. Protocols in place to learn from wildfire events
7. Other / not listed [only if an initiative cannot feasibly be classified within those listed above]

The list provided is non-exhaustive and utilities shall add additional initiatives to this table as their individual programs are designed and structured. Do not create a new initiative if the utility's initiatives can be classified under a provided initiative.

uality checks on each initiative, how the utility plans to demonstrate over time whether each component of the initiatives is effective and, if not, how the utility plans to evolve each component to ensure effective spend of ratepayer funds.

Include descriptions across each of the following resource allocation methodology and sensitivities initiatives, including a description of the data flow into the calculations involved in each. Input the following initiative names into a spreadsheet formatted according to the template below
and input information for each cell in the row.

1. Allocation methodology development and application
2. Risk reduction scenario development and analysis
3. Risk spend efficiency analysis
4. Other / not listed [only if an initiative cannot feasibly be classified within those listed above]

For each of the below initiatives, describe the utility's current program and provide an explanation of how the utility expects to evolve the utility's program over each of the following time periods:

1. Before the upcoming wildfire season
2. Before the next annual update
3. Within the next 3 years
4. Within the next 10 years

The list provided is non-exhaustive and utilities shall add additional initiatives to this table as their individual programs are designed and
structured. Do not create a new initiative if the utility's initiatives can be classified under a provided initiative. Where the columns listed do not apply or cannot be meaningfully calculated for a given resource allocation methodology and sensitivities initiative, "N/A" may be logged in the corresponding cell.

For each of the above initiatives, describe the utility's current program and provide an explanation of how the utility expects to evolve the utility's program over each of the following time periods:

1. Before the upcoming wildfire season,
2. Before the next annual update,
3. Within the next 3 years, and
4. Within the next 10 years.

Table 29: Emergency planning and preparedness

Response to WSD data request item BVES-43879-E-139 72 588

Initiative activity	Year	Total per-initiative spend	Subtotal A: Capital expenditure	Subtotal B: Operating expenses	Line miles to be treated	Spend/ treated line mile	Ignition probability drivers targeted	Risk reduction	Risk-spend efficiency	Other risk drivers addressed	Existing/ new	Existing: What proceeding has reviewed program	If new: Memorandum account	In / exceeding compliance with regulations	Cite associated rule	Comments
1. Adequate and trained workforce for service restoration	2019 plan 2019 actual 2020 2021 2022 2020-2022 plan total	N/A - this is not a specifically budgeted program	N/A - this is not a specifically budgeted program	N/A - this is not a specifically budgeted program	N/A - this is a System Wide Initiative	N/A - this is a System Wide Initiative	N/A - response related	N/A - as a System Wide Initiative, this initiative does not have a specified risk reduction	N/A - as a System Wide Initiative, this initiative does not have a specific risk-spend efficiency	Reduces impact to customers and comunity from an event causing interrupting of service; reduces risk of escalation	Existing	GRC	N/A - this is an Existing initiative	In compliance	GO 166	N/A - no additional comments
2. Community outreach, public awareness, and communications efforts	2019 plan 2019 actual 2020 2021 2022 2020-2022 plan total	N/A - this is not a specifically budgeted program	N/A - this is not a specifically budgeted program	N/A - this is not a specifically budgeted program	N/A - this is a System Wide Initiative	N/A - this is a System Wide Initiative	Contact from object	N/A - as a System Wide Initiative, this initiative does not have a specified risk reduction	N/A - as a System Wide Initiative, this initiative does not have a specific risk-spend efficiency	Reduces impact to customers and comunity from an event causing interrupting of service; reduces risk of escalation	Existing	GRC	N/A - this is an Existing initiative	In compliance	GO 167	N/A - no additional comments
3. Customer support in emergencies	2019 plan 2019 actual 2020 2021 2022 2020-2022 plan total	N/A - this is not a specifically budgeted program	N/A - this is not a specifically budgeted program	N/A - this is not a specifically budgeted program	N/A - this is a System Wide Initiative	N/A - this is a System Wide Initiative	N/A - response related	N/A - as a System Wide Initiative, this initiative does not have a specified risk reduction	N/A - as a System Wide Initiative, this initiative does not have a specific risk-spend efficiency	Reduces impact to customers and comunity from an event causing interrupting of service; reduces risk of escalation	Existing	GRC	N/A - this is an Existing initiative	In compliance	R. 18-12-005	N/A - no additional comments
4. Disaster and emergency preparedness plan	2019 plan 2019 actual 2020 2021 2022 2020-2022 plan total	N/A - this is not a specifically budgeted program	N/A - this is not a specifically budgeted program	N/A - this is not a specifically budgeted program	N/A - this is a System Wide Initiative	N/A - this is a System Wide Initiative	Contact from object, all types of equipment/facility failure, wire-to-wire contact/contamination	146,466.53	N/A - this initiative does not have a specific Risk-spend efficiency	Wildfire-Significant Loss of Property	Existing	D. 19-08-027	N/A	In compliance	GO 166	Emergency Reporting & Procedures. Protocols and procedures for staff to respond to faults, emergencies, outages, dissaster events (such as earthquake, wildfire, etc.), etc.
5. Preparedness and planning for service restoration	2019 plan 2019 actual 2020 2021 2022 2020-2022 plan total	N/A - this is not a specifically budgeted program	N/A - this is not a specifically budgeted program	N/A - this is not a specifically budgeted program	N/A - this is a System Wide Initiative	N/A - this is a System Wide Initiative	N/A - response related	146,466.53	N/A - this initiative does not have a specific Risk-spend efficiency	Wildfire-Significant Loss of Property	Existing	D. 19-08-027	CEMA if applicable	In compliance	GO 166	Post-Incident Recovery, Restoration & Remediation. Protocols and procedures to respond to and recover from any wildfire or related emergency events.
6. Protocols in place to learn from wildfire events	2019 plan 2019 actual 2020 2021 2022 2020-2022 plan total	Bear Valley Electric Service leverages the protocols included in the company's Emergency Preparedness and Response Plan to learn from wildfire events in the same manner the utility learns from any emergency event. Therefore, Bear Valley Electric Service does not have specific protocols in place to learn from wildfire events that are not already covered in a previous program.														
7. Other / not listed	2019 plan 2019 actual 2020 2021 2022 2020-2022 plan total	Bear Valley Electric Service does not have emergency planning and preparedness initiatives other than those listed above at this time.														

5.3.10 Stakeholder cooperation and community engagement

Description of programs to reduce ignition probability and wildfire consequence

For each of the below initiatives, provide a detailed description and approximate timeline of each, whether already implemented or planned, to minimize the risk of its equipment or facilities causing wildfires. Include a description of the utility's initiatives, the utility's rationale behind each of the elements of the initiatives, the utility's prioritization approach/methodology to determine spending and deployment of human and other resources, how the utility will conduct audits or other quality checks on each initiative, how the utility plans to demonstrate over time whether each component of the initiatives is effective and, if not, how the utility plans to evolve each component to ensure effective spend of ratepayer funds.

Include descriptions across each of the following initiatives. Input the following initiative names into a spreadsheet formatted according to the template below and input information for each cell in the row.

1. Community engagement
2. Cooperation and best practice sharing with agencies outside CA
3. Cooperation with suppression agencies
4. Forest service and fuel reduction cooperation and joint roadmap
5. Other / not listed [only if an initiative cannot feasibly be classified within those listedabove]

The list provided is non-exhaustive and utilities shall add additional initiatives to this table as their individual programs are designed and structured. Do not create a new initiative if the utility's initiatives can be classified under a provided initiative.

For each of the above initiatives, describe the utility's current program and provide an explanation of how the utility expects to evolve the utility's program over each of the following time periods:

1. Before the upcoming wildfire season,
2. Before the next annual update,
3. Within the next 3 years, and
4. Within the next 10 years.

Table 30: Stakeholder cooperation and community engagement

Response to WSD data request item BVES-43879-E-140

Initiative activity	Year	Total per-initiative spend	Subtotal A: Capital expenditure	Subtotal B: Operating expenses	Line miles to be treated	Spend/ treated line mile	Ignition probability drivers targeted	Risk reduction	Risk-spend efficiency	Other risk drivers addressed	Existing/ new	Existing: What proceeding has reviewed program	If new: Memorandum account	In / exceeding compliance with regulations	Cite associated rule	Comments
1. Community engagement	2019 plan 2019 actual 2020 2021 2022 2020-2022 plan total	Bear Valley Electric Service does not have a community engagement program specific to wildfire mitigation at this time. The utility values community engagement as a wildfire risk mitigation strategy and has incorporated community engagement as a component of its overall Emergency Preparedness and Response Programs as included in Section X.														
2. Cooperation and best practice sharing with agencies outside CA	2019 plan 2019 actual 2020 2021 2022 2020-2022 plan total	N/A - this is not a specifically budgeted program	N/A - this is not a specifically budgeted program	N/A - this is not a specifically budgeted program	N/A - this is a System Wide Initiative	N/A - this is a System Wide Initiative	This initiative targets all ignition probabilty drivers	N/A - as a System Wide Initiative, this initiative does not have a specified risk reduction	N/A - as a System Wide Initiative, this initiative does not have a specific risk-spend efficiency	Reduces risk of escalation through support of accelerated restoration	Existing	N/A - none	N/A - this is an Existing initiative	N/A - there is not a clear threshold for compliance for this initiative	N/A - none	N/A - none
3. Cooperation with suppression agencies	2019 plan 2019 actual 2020 2021 2022 2020-2022 plan total	During emergency situations, Bear Valley Electric Service's [emergency management group] communicates and collaborates with federal and state emergency responders and mutual assistance groups, including fire suppression agencies. The emergency manager has contact information for [state, county and tribal emergency managers, the state's Emergency Operations Center Emergency Support Functions (ESF) personnel, and the Geographic Area Coordination Centers dispatch centers for fire-related emergency response.] Bear Valley Electric Service views cooperation with suppression agencies as a component of the company's Emergency Planning and Preparedness Programs outlined in Section X and does not have a separate program for cooperation with suppression agencies specific to this Wildfire Mitigation Plan at this time as such.														
4. Forest service and fuel reduction cooperation and joint roadmap	2019 plan 2019 actual 2020 2021 2022 2020-2022 plan total	While collaboration such as this is critical to the overall reduction of wildfire risk in the state of CA, Bear Valley Electric Service does not have program dedicated to cooperation with the forest service and fuel reduction and the development of a joint roadmap specific to this Wildfire Mitigation Plan . The utility views these efforts on an as-needed basis and incorporates additional efforts to manage community environments within other programs, such as those included in Section X and Section XX and the company's overall vegetation management and inspections programs described in Section XXX.														
5. Other / not listed	2019 plan 2019 actual 2020 2021 2022 2020-2022 plan total	Bear Valley Electric Service does not have stakeholder cooperation and community engagement initiatives other than those listed above.														

5.4 Methodology for enterprise-wide safety risk and wildfire-related risk assessment

Describe methodology for identifying and evaluating enterprise wide safety risk and wildfire related risk, and how that methodology is consistent with the methodology used by other electric utilities or electrical corporations. If the risk identification and evaluation methodology is different, the utility shall explain why in this section.

5.5 Planning for workforce and other limited resources

Include a showing that the utility has an adequately sized and trained workforce to promptly restore service after a major event, taking into account employees of other utilities pursuant to mutual aid agreements and employees of entities that have entered into contracts with the utility.

5.6.1 Planned utility infrastructure construction and upgrades

Explain how the utility expects the geographic location of transmission and distribution lines to shift over the three-year plan period and discuss its impact on 1) the utility's risk exposure and 2) the utility's wildfire mitigation strategy. Outline portions of grid within HFTD that are highest cost to serve, by highlighting circuits or portions of circuits that exceed $0.5M per customer in capital cost required to harden. Provide justification for the level of hardening required and why the lowest cost path to harden this equipment exceeds $0.5M per customer, including by describing the various alternatives that were considered to reduce ignition probability and estimated wildfire consequence. For each of these sections of the grid, outline any analysis that was conducted around islanding, serving with microgrids, or providing backup generation, all to reduce the impact of PSPS events and reduce ignition probability and estimated wildfire consequence at the lowest possible cost.

Discuss how the utility wildfire mitigation strategy influenced its plan for infrastructure construction (in terms of additions or removal of overhead lines, including undergrounding of overhead lines) as detailed in Section 3.4.2. Discuss how the utility wildfire mitigation strategy influenced its plan for upgrades to overhead lines and substations as detailed in the Section 3.4.2.

BVES does not have plans in the foreseeable future for new circuit construction for either transmission or distribution. The Ute Undergrounding initiative is still under the preliminary planning and discussion phase.

Table 31: Change in drivers of ignition probability taking into account planned initiatives, for each year of plan

Incident type by ignition probability driver	Detailed risk driver	Are near misses tracked?	Number of incidents per year			Average percentage likelihood of ignition per incident			Number of ignitions per year		
			2020	2021	2022	2020	2021	2022	2020	2021	2022
Contact from object	All types of object contact	Y	4	4	2	0.00%	0.00%	0.00%	0	0	0
	Animal contact	Y	1	1	0	0.00%	0.00%	0.00%	0	0	0
	Balloon contact	Y	0	0	0	0.00%	0.00%	0.00%	0	0	0
	Vegetation contact	Y	3	3	2	0.00%	0.00%	0.00%	0	0	0
	Vehicle contact	Y	0	0	0	0.00%	0.00%	0.00%	0	0	0
All types of equipment / facility failure	All types	Y	16	14	11	0.00%	0.00%	0.00%	0	0	0
	Capacitor bank failure	Y	0	0	0	0.00%	0.00%	0.00%	0	0	0
	Conductor failure—all	Y	3	3	2	0.00%	0.00%	0.00%	0	0	0
	Conductor failure—wires down	Y	3	3	2	0.00%	0.00%	0.00%	0	0	0
	Fuse failure—all	Y	4	3	3	0.00%	0.00%	0.00%	0	0	0
	Fuse failure—conventional blown fuse	Y	4	3	3	0.00%	0.00%	0.00%	0	0	0
	Lightning arrestor failure	Y	0	0	0	0.00%	0.00%	0.00%	0	0	0
	Switch failure	Y	0	0	0	0.00%	0.00%	0.00%	0	0	0
	Transformer failure	Y	2	2	1	0.00%	0.00%	0.00%	0	0	0
Wire-to-wire contact / contamination		Y	2	1	0	0.00%	0.00%	0.00%	0	0	0
Other		Y	0	0	0	0.00%	0.00%	0.00%	0	0	0

5.6.2 Protocols on Public Safety Power Shut-Off

Describe protocols on Public Safety Power Shut-off (PSPS or de-energization), to include:

1. Strategy to minimize public safety risk during high wildfire risk conditions and details of the considerations, including but not limited to list and description of community assistance locations and services provided during a de-energization event.
2. Outline of tactical and strategic decision-making protocol for initiating a PSPS/de-energization (e.g., decision tree).
3. Strategy to provide for safe and effective re-energization of any area that was de-energized due to PSPS protocol.
4. Company standards relative to customer communications, including consideration for the need to notify priority essential services – critical first responders, public safety partners, critical facilities and infrastructure, operators of telecommunications infrastructure, and water utilities/agencies. This section, or an appendix to this section, shall include a complete listing of which entities the electrical corporation considers to be priority essential services. This section shall also include description of strategy and protocols to ensure timely notifications to customers, including access and functional needs populations, in the languages prevalent within the utility's service territory.
5. Protocols for mitigating the public safety impacts of these protocols, including impacts on first responders, health care facilities, operators of telecommunications infrastructure, and water utilities/agencies.

6 Utility GIS attachments

- 6.1 Recent weather patterns **the utillity is unable to provide this data in GIS format at this time**
- 6.2 Recent drivers of ignition probability **the utillity is unable to provide this data in GIS format at this time**
- 6.3 Recent use of PSPS **the utillity is unable to provide this data in GIS format at this time**
- 6.4 Current baseline state of service territory and utility equipment
- 6.5 Location of planned utility equipment additions or removal **the utillity is unable to provide this data in GIS format at this time**
- 6.6 Planned 2020 WMP initiative activity by end-2022 **the utillity is unable to provide this data in GIS format at this time**