California Public Utilities Commission

# ADVICE LETTER SUMMARY



MUST BE COMPLETED BY UTILITY (Attach additional pages as needed)					
Company name/CPUC Utility No.: Bear Valley E	lectric Service, Inc (913-E)				
tility type:       Contact Person: Nguven Quan         ELC       GAS       WATER         PLC       HEAT       Contact Person: Nguven Quan         Phone #: (909) 394-3600 x664       E-mail: RegulatorvAffairs@bvesinc.com         E-mail Disposition Notice to: RegulatorvAffairs@bvesinc.com					
EXPLANATION OF UTILITY TYPE ELC = Electric GAS = Gas WATER = Water PLC = Pipeline HEAT = Heat	(Date Submitted / Received Stamp by CPUC)				
Advice Letter (AL) #: 436-E	Tier Designation: 1 INFORMATION ONLY				
Subject of AL: Q4 2021 BVES Quarterly WMP Saf	fety Report Pursuant to Public Utilities Code Section 8389(e)(7)				
Keywords (choose from CPUC listing): Complian AL Type: Monthly Quarterly Annual If AL submitted in compliance with a Commissi PUC 8389(e)(7)					
Does AL replace a withdrawn or rejected AL? I	f so, identify the prior AL: $_{ m No}$				
Summarize differences between the AL and th	e prior withdrawn or rejected AL:				
Confidential treatment requested? Yes 🖌 No					
If yes, specification of confidential information: Confidential information will be made available to appropriate parties who execute a nondisclosure agreement. Name and contact information to request nondisclosure agreement/ access to confidential information:					
Resolution required? Yes 🖌 No					
Requested effective date: $1/31/22$ No. of tariff sheets: $0$					
Estimated system annual revenue effect (%):					
Estimated system average rate effect (%):					
When rates are affected by AL, include attachment in AL showing average rate effects on customer classes (residential, small commercial, large C/I, agricultural, lighting).					
Tariff schedules affected:					
Service affected and changes proposed <sup>1:</sup>					
Pending advice letters that revise the same tariff sheets:					

Protests and all other correspondence regarding this AL are due no later than 20 days after the date of this submittal, unless otherwise authorized by the Commission, and shall be sent to:

CPUC, Energy Division Attention: Tariff Unit 505 Van Ness Avenue San Francisco, CA 94102 Email: <u>EDTariffUnit@cpuc.ca.gov</u>	Name: Nguyen Quan Title: Regulatory Affairs Manager Utility Name: Bear Valley Electric Service, Inc Address: 630 E. Foothill Blvd City: San Dimas Telephone (xxx) xxx-xxxx: (909) 394-3600 x664 Facsimile (xxx) xxx-xxxx: (909) 394-7427 Email: RegulatoryAffairs@bvesinc.com; nquan@gswater.com
	Name: Zeng Zhu Title: Rate Analyst Utility Name: Bear Valley Electric Service, Inc Address: 630 E. Foothill Blvd City: San Dimas State: California Telephone (xxx) xxx-xxxx: (909) 394-3600 x495 Facsimile (xxx) xxx-xxxx: (909) 394-7427 Email: RegulatoryAffairs@bvesinc.com; zeng.zhu@bvesinc.com



Bear Valley Electric Service, Inc. P.O. Box 9028 San Dimas, CA 91773-9028 A Subsidiary of American States Water Company

January 31, 2022

Advice Letter No. 436-E

(U 913 E)

## **California Public Utilities Commission**

Bear Valley Electric Service, Inc. ("BVES") hereby transmits for filing the following:

**SUBJECT:** Q4 2021 BVES Quarterly WMP Safety Report Pursuant to Public Utilities Code Section 8389(e)(7)

### **PURPOSE**

Pursuant to Public Utilities Code ("PUC") Section 8389(e)(7), and the February 16, 2021 Office of Energy Infrastructure Safety ("OEIS") Compliance Operational Protocols, Bear Valley Electric Service ("BVES") submits to OEIS this notification.

Statutory provision requires that BVES file a notification "a quarterly basis that details the implementation of both its approved wildfire mitigation plan and recommendations of the most recent safety culture assessments by the commission and office, and a statement of the recommendations of the board of directors safety committee meetings that occurred during the quarter." Section 8389(e)(7) also requires that the notification "shall also summarize the implementation of the safety committee recommendations from the electrical corporation's previous notification and submission."

This notification reports BVES's 2021 fourth quarter ("Q4") Wildfire Mitigation Plan ("WMP") activities, recorded Safety Committee meetings, and recommendations of the most recent safety culture assessment.

This Quarterly Advice Letter ("QAL") notification is BVES's fourth quarterly filing for calendar year 2021.

### BACKGROUND

Governor Newsom signed Assembly Bill ("AB") 1054 into law on July 12, 2019. AB 1054 contains numerous statutory provisions and amendments designed to enhance the mitigation and prevention of catastrophic wildfires – including wildfires linked to utility equipment – in California. AB 1054 is added to the PUC Section 8389(e), which establishes the requirements for annual safety certifications and, inter alia, requires electrical corporations to establish a safety committee of its board of directors composed of members with relevant safety experience, establish board-of-director-level reporting

to the California Public Utilities Commission ("Commission") on safety issues, and file quarterly notifications as described above.

### **IMPLEMENTATION OF BVES'S WILDFIRE MITIGATION PLAN**

To support sustained implementation and improvement of the WMP, BVES continues to track progress through metrics on applicable initiatives in 10 categories for mitigating wildfire in addition to the quarterly data, which conform to OEIS standards. BVES's quarterly initiative summary presentation includes information submitted to the OEIS under the Quarterly Initiative Update ("QIU") and the Quarterly Data Report ("QDR") filings for Q4 2021.

In Attachment A, BVES provides an initiative summary of progress for individual mitigation measures during the fourth quarter of 2021.

### **Overview of Significant Achievements and Issues**

In 2021, BVES made significant progress in achieving targets to wildfire mitigation initiatives, which resulted in a sizable reduction in risk on high-risk circuits as measured by BVES's fire safety matrix (risk scores by circuit). The following table summarizes the progress:

Date	Risk Value (higher value is worse)			
12/31/2019	115,230			
12/31/2020	110,754			
12/31/2021	90,710			

BVES's goals are to reduce risk on all "high risk" circuits and to remediate these high risk conditions. In addition, BVES's goal is to further reduce risk on "medium risk" circuits and to bring all circuits to a lower range of the risk value. The main drivers for the risk reduction achieved in 2021 are: the completion of the fuse replacement program; the replacement of 12.3 circuit miles of high voltage bare overhead conductors with covered conductors; and the reduction of overall vegetation density along power lines.

In 2021, some of the more significant achievements were:

- Completed the fuse replacement project in May 2021, which eliminated all expulsion (conventional) fuses from the BVES system. In total, 2,578 current limiting fuses and 536 electronic fuses replaced 3,114 expulsion fuses.
- Reached its 2021 target to harden 400 poles along evacuation routes to the Big Bear Lake area in June 2021. The target was achieved by installing fire resistant wire mesh on the 400 poles. This puts BVES on schedule to have all of its evacuation routes hardened by 2022.

- Completed the installation of all planned weather stations in the BVES service area. BVES now has 20 weather stations operation throughout it 32 square mile service area.
- Completed installing HD ALERTWildfire Cameras there are now 15 cameras installed in seven locations providing complete coverage of the Big Bear Lake area.
- Replaced 4.3 circuit miles of 34.5 kV sub-transmission bare wire with covered conductor, which was on target.
- Replaced 8.0 circuit miles of 4 kV distribution bare wire with covered conductor, which was 0.6 circuit miles short of target. This was due to a small delay in execution because of storms that affected the Big Bear Lake area in November and December 2021. The remaining 0.6 circuit miles of 4 kV distribution bare wire was replaced with covered conductor in January 2022.
- Vegetation density along overhead power lines was reduced by 16.3 percent as measured by LiDAR surveys in 2020 and 2021.
- Improved identification of AFN populations served by BVES.
- Improved ability to deploy community resource center assets if a Public Safety Power Shutoff ("PSPS") were to be invoked. BVES did not experience conditions that would have caused it to invoke a PSPS; therefore, no PSPS events occurred in the BVES service area.

The Radford Line Replacement Project, which replaces bare wire with covered conductor and wood poles with fire resistant poles in the High Fire Threat District Tier 3, was delayed by one year due to not receiving approval on the permit to construct by the United States Forest Service ("USFS") in time to start and complete construction before the winter weather season in 2021. BVES is working closely with the USFS and anticipates approval to execute the project starting May 2022. In the interim, BVES will continue to de-energize the Radford Line when load requirements do not require its operation, which is generally from the end of March through November of each year.

### Implementation of BVES's Most Recent Safety Culture Assessment

BVES completed its safety culture assessment in accordance with Resolution WSD-011. BVES staff conducted safety culture assessment surveys during the period of May 12, 2021 to May 26, 2021.

On October 27, 2021, OEIS issued the Safety Culture Assessment ("SCA") report to BVES. BVES accepted the report on October 28, 2021 by letter to OEIS. BVES has initiated action to implement the recommendations of the report, which are:

1. Embed leadership skills development into the "Engaged Management" 12month objective to improve the Bear Valley safety culture. Specific training for managers, supervisors and foreman has been scheduled for February 2022 to improve leadership skills in monitoring for job hazards and leading with safety as the primary focus in everything BVES does. 2. In collaboration with its vegetation management contractor, BVES develops and implements an action plan to address safety culture issues, in particular regarding the flow of information about wildfire hazard mitigation. In addition, BVES has been working closely with its vegetation management contractor to ensure that the action plan to address safety culture issues are successfully implemented.

### Safety and Operations Committee

On November 10, 2021, BVES's Safety and Operations Committee ("Committee") convened. Chairman Paul Marconi briefed the Committee on the following topics:

- Current COVID-19 situation, its impact on employees, and the plan to re-open offices;
- Safety items and performance; the results of the recent SCA and its recommendations;
- PSPS planning and policies;
- Progress on achieving targets for the 2021 WMP initiatives; and
- Ignition probability and risk modeling that BVES is using to aid in resource allocation.

Committee discussions focused on the following matters presented by Chairman Marconi:

- Details on the results of employee and contractor survey provided in the SCA. and the Committee agreed that it was appropriate to implement the SCA recommendations;
- Results of the ignition model prepared by an expert in wildfires and utility caused ignitions. The model results depict the consequence of ignitions along the Corporation's electric facilities with respect to wildfire size and structure damage. The Committee discussed the briefed items, asked questions, which Chairman Marconi addressed, and, based on the information briefed, the Committee did not see the need to alter the initiatives or provide additional direction to management; and
- Update on the status of the BVES's Safety Certification and a detailed presentation on the renewal process. He described the conditions required by statute that the Corporation must meet in order to renew its Safety Certification. Chairman Marconi noted that the Corporation's Executive Compensation Plan was approved on August 12, 2021, 2021. The WMP Update was approved on September 9, 2021 and the Safety Certification was approved on September 14, 2021. The Committee discussed the Safety Certification renewal process, asked questions, which Chairman Marconi addressed, and, based on the information briefed, the Committee did not see the need to alter the initiative or provide additional direction to management.

### COMPLIANCE

This advice letter requests approval in compliance with Public Utilities Code Section 8389(e)(7).

### **ATTACHMENT**

Attachment A: WMP QAL Initiative Report Q4 2021.

### TIER DESIGNATION

This advice letter is submitted with a Tier 1 INFORMATION ONLY designation.

### **EFFECTIVE DATE**

BVES respectfully requests this advice letter becomes effective on January 31, 2022.

### NOTICE AND PROTESTS

A protest is a document objecting to the granting in whole or in part of the authority sought in this advice letter. A response is a document that does not object to the authority sought, but nevertheless presents information that the party tendering the response believes would be useful to the CPUC in acting on the request.

A protest must be mailed within 20 days of the date the CPUC accepts the advice letter for filing. The Calendar is available on the CPUC's website at <u>www.cpuc.ca.gov</u>.

A protest must state the facts constituting the grounds for the protest, the effect that approval of the advice letter might have on the protestant, and the reasons the protestant believes the advice letter, or a part of it, is not justified. If the protest requests an evidentiary hearing, the protest must state the facts the protestant would present at an evidentiary hearing to support its request for whole or partial denial of the advice letter.

The utility must respond to a protest within five days.

All protests and responses should be sent to: California Public Utilities Commission, Energy Division ATTN: Tariff Unit 505 Van Ness Avenue San Francisco, CA 94102 E-mail: <u>EDTariffUnit@cpuc.ca.gov</u>

Copies should also be mailed to the attention of the Director, Energy Division, Room 4004 (same address above).

Copies of any such protests should be sent to this utility at:

Bear Valley Electric Service, Inc. ATTN: Nguyen Quan 630 East Foothill Blvd. San Dimas, CA 91773 Fax: 909-394-7427 E-mail: <u>RegulatoryAffairs@bvesinc.com</u>

If you have not received a reply to your protest within 10 business days, contact Nguyen Quan at (909) 394-3600 ext. 664.

### **Correspondence:**

Any correspondence regarding this compliance filing should be sent by regular mail or e-mail to the attention of:

Nguyen Quan Manager, Regulatory Affairs Bear Valley Electric Service, Inc. 630 East Foothill Blvd. San Dimas, California 91773 Email: <u>RegulatoryAffairs@bvesinc.com</u>

The protest shall set forth the grounds upon which it is based and shall be submitted expeditiously. There is no restriction on who may file a protest.

Sincerely,

<u>/s/Zeng Zhu</u> Zeng Zhu Rate Analyst, Regulatory Affairs

cc: Franz Cheng, Energy Division R. Mark Pocta, California Public Advocates Office BVES General Order 96-B Service List

#### **BEAR VALLEY ELECTRIC SERVICE, INC.**

### <u>G.O. 96-B</u> SERVICE LIST

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COUNTY COUNSEL COUNTY OF SAN BERNARDINO 385 N. ARROWHEAD AVENUE – 4<sup>th</sup> Floor SAN BERNARDINO, CA 92415-0140

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HERSCHEL T. ELKINS ASST ATTORNEY GENERAL OFFICE OF THE ATTORNEY GENERAL STATE OF CALIFORNIA 300 SOUTH SPRING STREET LOS ANGELES, CA 90013

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LIBERTY UTILITIES 9750 WASHBURN ROAD DOWNEY, CA 90241 AdviceLetterService@libertyutilities.com NAVAL FACILITIES ENGINEERING COMMAND REA. D. ESTRELLA SOUTHWEST DIVISIONM 1220 PACIFIC HIGHWAY SAN DIEGO, CA 92132 <u>REA.ESTRELLA@NAVY.MIL</u>

## ATTACHMENT A

Wildfire Mitigation Plan Quarterly Advice Letter Initiative Report for Q4 2021



# Wildfire Mitigation Plan Quarterly Advice Letter

(now an Information Only Report)

**Initiatives Update** 



**Bear Valley Electric Service, Inc.** 

Q4 2021

# WMP Activity Summary

on Utility Ignition

and/or Wildfire

7.3.7.2

Repository

for Data

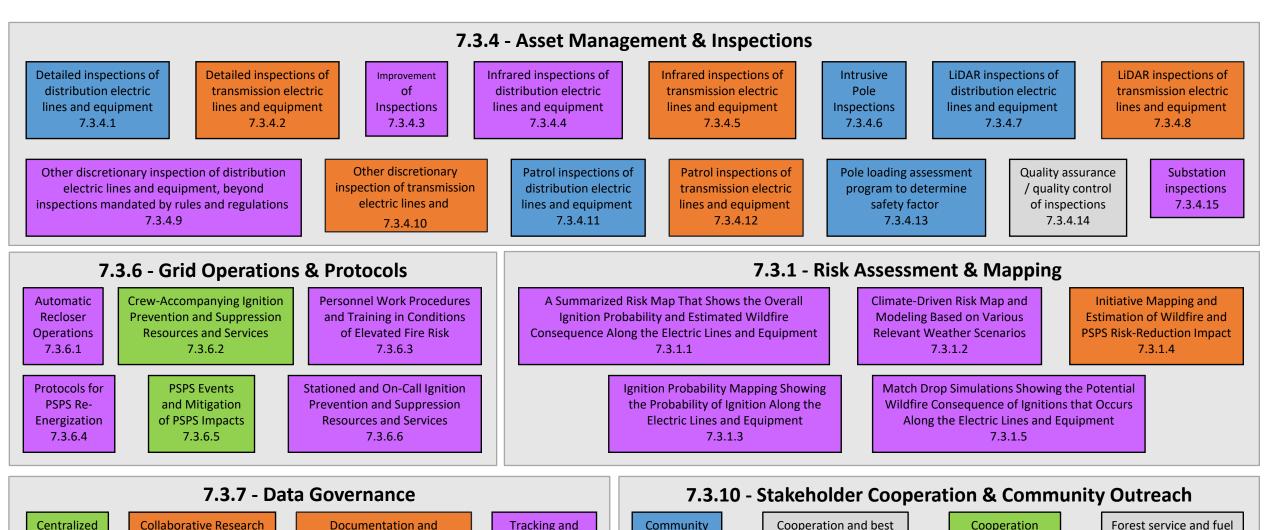
7.3.7.1

📃 Not Started 🔜 Completed/Ongoing 🔜 Ahead of Plan 🔛 On Track 💻 Off Track 💻 Not Currently Scheduled\*

Disclosure of Wildfire-

**Related Data and Algorithms** 

7.3.7.3



Engagement

7.3.10.1

practice sharing with

agencies outside CA

7.3.10.2

with suppression

agencies

7.3.10.3

reduction cooperation

and joint roadmap

7.3.10.4

(\*) Not Currently Scheduled – BVES included this Status Icon to indicate where an initiative is not currently identified for this WMP cycle, or, that it is not applicable (BVES does not own or operate assets equal to or greater than 65kV).

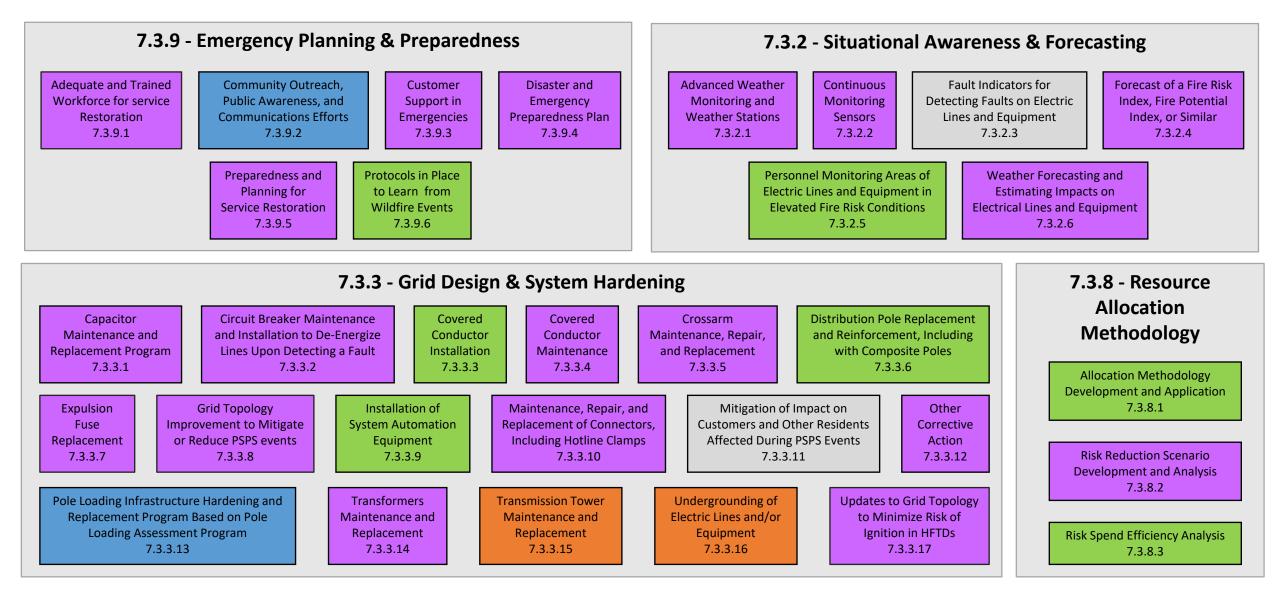
Analysis of

Near Miss Data

7.3.7.4

# WMP Activity Summary

📃 Not Started 🔜 Completed/Ongoing 🔜 Ahead of Plan 🔛 On Track 💻 Off Track 💻 Not Currently Scheduled\*



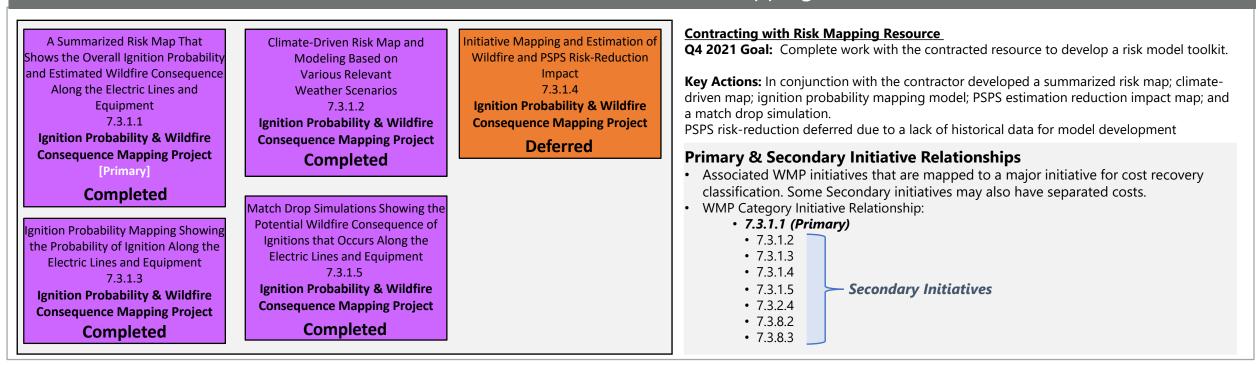
(\*) Not Currently Scheduled – BVES included this Status Icon to indicate where an initiative is not currently identified for this WMP cycle, or, that it is not applicable (BVES does not own or operate assets equal to or greater than 65kV).

# WMP Activity Summary

Not Started Completed/Ongoing Ahead of Plan On Track Off Track Not Currently Scheduled\*

7.3.5 - Vegetation Management & Inspections							
Additional efforts to manage community and environmental impacts 7.3.5.1	Detailed inspections of vegetation around distribution electric lines and equipment 7.3.5.2	Detailed inspections of vegetation around transmission electric lines and equipment 7.3.5.3	Emergency response vegeta management due to red f warning or other urgent cond 7.3.5.4	flag of "slash" from ve	getation of inspections		
LiDAR inspections of vegetation around distribution electric lines and equipment 7.3.5.7	LiDAR inspections of vegetation around transmission electric lines and equipment 7.3.5.8	Other discretionary inspections of vegetation around distribution electric lines and equipment 7.3.5.9	Other discretionary inspection of transmission electric lines and 7.3.5.10	Patrol inspections of vegetation around distribution electric lines and equipment 7.3.5.11	Patrol inspections of vegetation around transmission electric lines and equipment 7.3.5.12		
Quality assurance / quality control of vegetation inspections 7.3.5.13	of vegetationof amanagement personnelspe	diation t-risk cies 5.15 Removal and remediation trees with strike potenti electric lines and equipm 7.3.5.16	al to inspection	SubstationVegetationvegetationinventorymanagementsystem7.3.5.187.3.5.19	Vegetation management to achieve clearances around electric lines and equipment 7.3.5.20		

## 7.3.1 - Risk Assessment & Mapping



## 7.3.7 - Data Governance

1		
	Centralized Repository for	GIS Data Collection & Sharing Improvements:
	Data	BVES continues to work towards a class leading Data Repository.
	7.3.7.1	Key Actions: BVES continue to work with its contracted experts to
	GIS Data Collection &	update its GIS database as well as develop a more streamlines method
	Sharing [Primary]	for reporting and sharing of information
	On Track	

Tracking and Analysis of Near Miss Data 7.3.7.4 WMP Metrics Tracking Ongoing

#### WMP Metrics Tracking:

BVES has an established program in place and continues to monitor all aspects of the program for compliance. During the period Q4 of 2021 there were no compliance issues identified.

**Key Actions:** BVES recorded necessary metrics for inclusion in quarterly reporting

## 7.3.2 - Situational Awareness & Forecasting

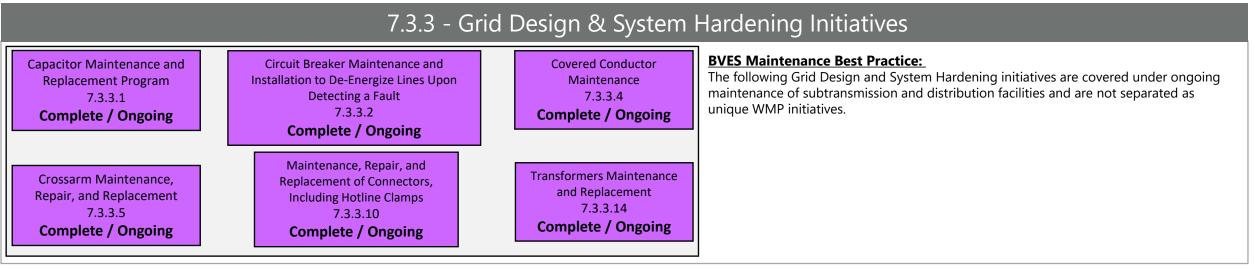
	5					
Advanced Weather Monitoring and Weather Stations 7.3.2.1 Situational Awareness Hardware Program [Primary] Completed	<ul> <li>Revised Schedule for 2021 Planned Deployment &amp; Additional Installation:</li> <li>Volume vs 2021 Goal: BVES adjusted its plan to complete the second weather station installation in Q3 where it had originally planned to complete both weather stations in Q2.</li> <li>Key Actions: The two weather station instillations planned for 2021 have been completed.</li> </ul>	<ul> <li>Situational Awareness Hardware Program</li> <li>Primary &amp; Secondary Initiative Relationships</li> <li>Associated WMP initiatives that are mapped to a major initiative for cost recovery classification. Some Secondary initiatives may also have separated costs.</li> <li>WMP Category Initiative Relationship:         <ul> <li>7.3.2.1 (Primary)</li> <li>7.3.2.2</li> </ul> </li> </ul>				
Continuous Monitoring Sensors 7.3.2.2 Situational Awareness Hardware Program Completed Fault Indicators for Detecting Faults on Electric Lines and Equipment 7.3.2.3 Situational Awareness Hardware Program Planned Personnel Monitoring Areas of Electric Lines and Equipment in Elevated Fire Risk Conditions 7.3.2.5 Grid Operations & Protocols	<ul> <li>Situational Awareness Hardware Program:</li> <li>Volume vs 2021 Goal: BVES was not able to meet its plan for Q2 and was forced to adjust the instillation of its two HD cameras to Q3. The volume targets for Q3 was two HD cameras. WMP Initiative 7.3.2.1 is the primary for the subtasks included in this category.</li> <li>Key Actions: The two HD camera installations planned for 2021 have been completed.</li> <li>Situational Awareness Hardware Program:</li> <li>Volume vs Q4 2021 Goal: This is currently a planned program for BVES in 2022. WMP Initiative 7.3.2.1 is the primary for the subtasks included in this category.</li> <li>Key Actions: Currently on track to begin work.</li> <li>Grid Operations &amp; Protocol:</li> <li>Volume vs 2021 Goal: BVES has established a resource allocation level for the instance where a high fire risk condition occurs.</li> <li>Key Actions: BVES currently has the resource pool available to combat high fire risk conditions in its operating area.</li> </ul>	<ul> <li>7.3.2.3</li> <li>Forecast of a Fire Risk Index, Fire Potential Index, or Similar 7.3.2.4</li> <li>Weather Consultant / Risk Mapping Completed</li> <li>Weather Forecasting and Estimating Impacts on Electrical Lines and Equipment 7.3.2.6</li> <li>Weather Consultant Primary]</li> <li>Support Requirement Met</li> <li>Met</li> <li>Contracting with Risk Mapping Resource Volume vs Q4 2021 Goal: Work with the contracted reso to complete a risk model toolkit.</li> <li>Key Actions: In conjunction with the contractor developed summarized risk map; climate-driven map; ignition probal mapping model; PSPS estimation reduction impact map; a match drop simulation. These models were completed in 0 meeting the goal for 2021.</li> <li>Weather Forecasting and Estimating Impacts on Electrical Lines and Equipment 7.3.2.6</li> <li>Weather Consultant for Weekly Reporting: 2021 Goal: BVES currently has a weather consultant on pa who supports the weather forecasting and analysis necess Key Actions: Additional task for quarterly aggregation of Wind Warning and Red Flag Warning accounts to support Quarterly Data Reports.</li> <li>Associated WMP initiatives that are mapped to a major initiative for cost recovery classification. Some Secondar initiatives may also have separated costs.</li> </ul>	ped a ability ; and a n Q4 payroll ssary. of High ort			
No High-Risk Events Occurred		<ul> <li>WMP Category Initiative Relationship:</li> <li>7.3.2.6 (Primary)</li> <li>7.3.2.4</li> </ul>				

## 7.3.3 - Grid Design & System Hardening

		7.5.5 GHA EC	esig			
Covered Conductor Installation 7.3.3.3	2019-2020 Cor Volume vs Q4 2 pilot.	npleted Pilot: 2021 Goal: BVES has no outstanding goals for the	C	Other Corrective Action 7.3.3.12 Tree Attachment	<b>Completion Toward 70 Attachment Removals for the Year:</b> <b>Volume vs 2021 Goal:</b> Due to constraints BVES adjusted its target for the year to 70 and moved all 70 tree attachment removals to Q4	
Covered Conductor Program - Pilot	Z.OZ CITCUIT IVII	Miles Planned for 2022 Hardening: 021 Goal: BVES will begin construction in 2022 ith permitting approvals for completion by the end of Currently no activities to report.		Removal Program	<b>Key Actions:</b> BVES was able to remove 74 tree attachments meeting its goal of 70 tree attachments for 2021	
2 Radford Covered Conductor	contingent with the year			Evacuation Route Hardening <b>Complete</b>	<b>400 Poles Hardened on Route to Date:</b> <b>Volume vs 2021 Goal:</b> BVES initiated a pilot program to test fire-resistant solutions protect wood poles. 400 of 400 wood poles were hardening with a wire mesh protective coating.	
Covered Conductor Replacement Program On Track	Replacement Programby the close of Q4, meeting annual targets.Key Actions:BVES met annual targets for its planned circuit mile				Key Actions: The target for 2021 was hit at the close of Q2. BVES achieved its goal of 400 poles hardened in 2021. No activities occurred in Q4 as the targets were met in a prior quarter.	
Reinforcement, Includi Pole 7.3.3 Pole Loading & Repla	Distribution Pole Replacement and Reinforcement, Including with Composite Poles 7.3.3.6       100% Patrolled within the Service Area to Date: Volume vs Q4 2021 Goal: The goal for Q4 was to have 200 poles replaced as part of the assessment process. BVES has currently replaced 216 poles in 2021. This initiative is secondary to 7.3.3.13. Key Actions: BVES has meet its target of 200 by replacing 216 poles for 2021.					
2 Radford Covere	<ol> <li>216 Poles Replaced</li> <li>Radford Covered Conductor Replacement</li> <li>2.82 Circuit Miles Planned for 2022 Hardening: Volume vs 2021 Goal: BVES will begin construction in 2022 contingent with permitting approvals for completion by the end of the year Key Actions: Currently no activities to report.</li> </ol>					
	3       Evacuation Route Hardening- Pilot       2020 Completed Route Hardening Pilot:         Volume vs 2021 Goal:       The BVES does not have an established goal for this pilot as it was completed the year prior.					
400 Poles Hardened in 2021 400 Poles Hardened in 2021 Volume vs 2021 Goal: BVES initiated a pilot program to test fire-resistant solutions to protect wood poles. 400 of 400 wood poles were hardening with a wire me protective coating. Key Actions: The target for 2021 was hit at the close of Q2. BVES achieved its goal of 400 poles hardened in 2021						

## 7.3.3 - Grid Design & System Hardening

Expulsive Fuse Replacement 7.3.3.7 Fuse Replacement Program O Remaining	<b>O Conventional Fuses Remaining:</b> <b>Volume vs 2021 Goal:</b> BVES replaced 3,114 conventional expulsion fuses with 2,578 current limiting fuses (non-expulsion fuses) and 536 electronic fuses. <b>Key Actions:</b> BVES completed this initiative.	Grid Topology Improvement to Mitigate or Reduce PSPS events 7.3.3.8 Grid Topology Improvements	Grid Topology Improvements - Completed: Volume vs Goal: BVES will install sectionalizing devices as the need is determined. Currently, zero are planned in 2021. WMP Initiative 7.3.3.8 is the primary for the subtasks included in this category. Key Actions: BVES has completed the effort as identified within
Mitigation of Impact on Customers and Other Residents Affected During PSPS Events 7.3.3.11 Energy Storage Project Planned	<ul> <li>8 MW/ 4 MWh Energy Storage Facility Planned in 2023:</li> <li>2021 Goal: BVES has began working to select the appropriate site and contracting needs to plan for construction/operation by mid-2023.</li> <li>Key Actions: BVES is on track with this initiative.</li> </ul>	[Primary] Completed Updates to Grid Topology to Minimize Risk of Ignition in HFTDs 7.3.3.17	<ul> <li>this WMP cycle.</li> <li>Primary &amp; Secondary Initiative Relationships</li> <li>Associated WMP initiatives that are mapped to a major initiative for cost recovery classification. Some Secondary initiatives may also have separated costs.</li> <li>WMP Category Initiative Relationship:</li> </ul>
Installation of System Automation Equipment 7.3.3.9 Grid Automation Program [Primary] 10% Reached	<b>10% Annual Target for Grid Automation:</b> <b>Volume vs Q4 2021 Goal:</b> BVES has reached 10% of the milestone for this initiative in Q4, which is on track with goals. <b>Key Actions:</b> Currently on track to complete annual targets.	Grid Topology Improvements Completed	<ul> <li>7.3.3.8 (Primary)</li> <li>7.3.3.17</li> </ul>
Pole Loading Infrastructure Hardening and Replacement Program Based on Pole Loading Assessment Program 7.3.3.13 Pole Loading & Replacement Program [Primary] 5557 Poles Assessed	Pole Assessment Program: Volume vs Q4 2021 Goal: The goal for Q4 was to assess an add poles by Q4 of 2021. Key Actions: 157 poles were assessed in Q4. BVES met its goal of		ssessment process. BVES has currently assessed 557 of its targeted 550 g 557 poles in 2021



## 7.3.10 - Stakeholder Cooperation & Community Outreach

**Community engagement** 7.3.10.1 **Community Outreach** Program initiative. **Exceeded** Targets

### **Community Outreach Program:**

Volume vs Q4 2021 Goal: BVES had planned to conducted at minimum 90 outreach activities. BVES recorded 180 outreach activities 200% of target for Q4. See 7.3.9.2 as the primary WMP

Key Actions: Grizzly Newspaper advertisements are posted during the week (M-F) for either WMP or PSPS and BVES will have 1 advertisement broadcasted each month.

Cooperation and best practice sharing with agencies outside CA 7.3.10.2 Planned

#### **Cooperation and sharing with agencies outside CA:**

Volume vs 2021 Goal: Currently BVES does not participate in cooperation and best practice sharing with agencies outside of CA. BVES plans to have discussion with other agencies within CA to determine how they are approaching this initiative. Key Actions: No actions have currently been taken

Cooperation with suppression			
agencies			
7.3.10.3			
Coordination On			
Track			

#### **Cooperation with suppression agencies:**

Volume vs 2021 Goal: Currently BVES does not participate in cooperation with suppression agencies currently. BVES plans to have discussion with suppression agencies and determine if there are additional actions that can be taken to improve their program.

Key Actions: No actions have currently been taken

Forest service and fuel reduction cooperation and joint roadmap 7.3.10.4 Planned

### **Cooperation with forest service and fuel reduction:**

Volume vs 2021 Goal: Currently BVES does not participate in forest service and fuel reduction cooperation and joint roadmap programs. BVES plans to have discussion with their forest service contacts to determine the applicability of these programs to improve their overall program. Key Actions: No actions have currently been taken

## 7.3.4 - Asset Management & Inspection

Detailed inspections of distribution		
electric lines and equipment		
7.3.4.1		
Detailed Inspection Program		
[Primary]		
Yearly Target Exceeded		

#### Mid-Year Detailed Inspection Activities

**Volume vs 2021 Goal:** BVES set a target of 50 circuit miles by end of Q4. BVES was able to complete 54.9 circuit miles in 2021. **Key Actions:** BVES meet its annual target of 50 circuit miles by completing 54.9 circuit miles.

Infrared inspections of distribution electric lines and equipment 7.3.4.4 UAV Thermography Program Yearly Target Met

#### Mid-Year UAV Inspection Activities

Volume vs 2021 Goal: BVES had targeted completing 211 circuit miles (entire system) of inspection in 2021. This would fulfil the goal of conducting infrared inspections of the entire system annually Key Actions: BVES completed 211 circuit miles of inspection in 2021

Intrusive Pole Inspections 7.3.4.6 Intrusive Pole Inspection Program Yearly Target Exceeded

### Mid-Year Intrusive Pole Inspections

**Volume vs 2021 Goal:** 850 Poles are planned for assessment in Q3 of 2021. 850 poles assessed is the new target for 2021. **Key Actions:** BVES was able to assess 876 poles through Q4 2021.

LiDAR inspections of distribution electric lines and equipment 7.3.4.7 LiDAR Inspection Program [Primary] Yearly Target Exceeded

#### Performed Annually Across the Entire Service Area

**Volume vs 2021 Goal:** BVES had targeted surveying 211 circuit miles as part of its annual LiDAR Inspection. **Key Actions:** BVES was able to survey 289.56 circuit miles, exceeding the goal it had set out for 2021.

Other discretionary inspection of distribution electric lines and equipment, beyond inspections mandated by rules and regulations 7.3.4.9 Third Party Ground Patrol Yearly Target Met

Third Party UAV Program
Yearly Target Met

Improvement of Inspections 7.3.4.3 Ongoing Effort

#### **Improvement of Inspections:**

**Key Actions:** BVES is always trying to optimize its inspections and is open to changes/adaptations leading to a better process.

### **LiDAR Inspection Program**

### **Primary & Secondary Initiative Relationships**

- Associated WMP initiatives that are mapped to a major initiative for cost recovery classification. Some Secondary initiatives may also have separated costs.
- WMP Category Initiative Relationship:
  - 7.3.4.7 (Primary)
    - 7.3.5.7

### Contracted Third Party Inspection

**Volume vs 2021 Goal:** BVES had targeted 211 circuit miles of 3<sup>rd</sup> Party Ground Patrol in Q3 to fulfill the annual target of 211.

**Key Actions:** While BVES was not able to complete the target miles for Q3, they were able to meet the annual target of 211 circuit miles in Q4 2021.

### UAV Thermography Program

**Volume vs 2021 Goal:** BVES had targeted completing 211 circuit miles (entire system) of inspection in 2021. **Key Actions:** BVES completed 211 circuit miles of inspection in 2021.

## 7.3.4 - Asset Management & Inspection

### Patrol inspections of distribution electric lines and equipment 7.3.4.11 Patrol Inspection Program [Primary] Annual Target Exceeded

Pole loading assessment program to

determine safety factor

7.3.4.13

**Pole Loading & Replacement** 

Program

**Annual Target Exceeded** 

#### Patrol Inspection within the Service Area

**Volume vs 2021 Goal:** BVES targeted 255 circuit miles inspected in 2021. BVES was able to conduct 460.11 circuit miles of inspection in 2021.

Volume vs 2021 Goal: The goal for Q4 was to assess an additional 157

poles as part of the assessment process. BVES has currently assessed

Key Actions: BVES exceeded its target of 550 poles by assessing 557

Key Actions: Currently completed annual targets.

### **Patrol Inspection Program**

#### **Primary & Secondary Initiative Relationships**

- Associated WMP initiatives that are mapped to a major initiative for cost recovery classification. Some Secondary initiatives may also have separated costs.
- WMP Category Initiative Relationship:
  - 7.3.4.11 (Primary)
    - 7.3.5.11

### Pole Loading & Replacement Program

#### **Primary & Secondary Initiative Relationships**

- Associated WMP initiatives that are mapped to a major initiative for cost recovery classification. Some Secondary initiatives may also have separated costs.
- WMP Category Initiative Relationship:
  - 7.3.3.13 (Primary)
    - 7.3.3.6
    - 7.3.4.13

Quality assurance / quality control of inspections 7.3.4.14 Quality Control of Inspections [Primary] Planned

Quality Control for Electrical Inspections Program

**Volume vs Goal:** BVES has not yet established quantitative or qualitative targets for the planned quality control program and therefore, have no quarterly units to report in the Quarterly Advice Letter.

Key Actions: Currently on track to discuss framework for formal controls development for internal and third-party inspection patrols.

#### Substation inspections 7.3.4.15 GO-174 Substation Inspection Program [Primary] Annual Target Met

#### Substations Inspected

**Pole Loading & Replacement** 

557 poles in 2021.

poles in 2021.

**Volume vs 2021 Goal:** BVES has executed physical inspections of 36 additional substations within the service area bringing the annual total to 144 substations inspected.

Key Actions: BVES met its target of 144 substations inspections in 2021.

### **GO-174 Substation Inspection Program**

### Primary & Secondary Initiative Relationships

- Associated WMP initiatives that are mapped to a major initiative for cost recovery classification. Some Secondary initiatives may also have separated costs.
- WMP Category Initiative Relationship:
  - 7.3.4.15 (Primary)
    - 7.3.5.17

## 7.3.5 - Vegetation Management & Inspection

	5 5		-
Detailed inspections of vegetation around distribution electric lines and equipment 7.3.5.2 Detailed Inspection Program Yearly Target	<ul> <li>Mid-Year Detailed Inspection Activities</li> <li>Volume vs Q3 2021 Goal: BVES targeted 50 circuit miles inspected for Q4. 54.9 circuit miles were inspected in Q4 exceeding the Q4 target as well as completing the annual goal of 50 circuit miles.</li> <li>Key Actions: Completed/exceeded annual targets.</li> <li>Primary &amp; Secondary Initiative Relationships         <ul> <li>Associated WMP initiatives that are mapped to a major initiative for cost recovery classification. Some Secondary initiatives may also</li> </ul> </li> </ul>	LiDAR inspections of vegetation around distribution electric lines and equipment 7.3.5.7 LiDAR Inspection Program Yearly Target Exceeded	Performed Annually Across the Entire Service Area Volume vs Q4 2021 Goal: BVES had targeted surveying 211 circuit miles by Q3 as part of its annual LiDAR Inspection. Key Actions: BVES was able to survey 289.56 circuit miles, exceeding the goal it had set out for the year. No activities occurred in Q4 2021 as the activity was ahead of schedule in performed inspections.
Exceeded	<ul> <li>have separated costs.</li> <li>WMP Category Initiative Relationship: <ul> <li>7.3.4.1 (Primary)</li> <li>7.3.5.2</li> </ul> </li> </ul>	Other discretionary inspections of vegetation around distribution electric lines and equipment 7.3.5.9	Mid-Year UAV Inspection Activities Volume vs Q4 2021 Goal: BVES had targeted completing 211 circuit miles (entire system) of inspection in Q3. This would fulfil the goal of conducting UAV & Ground Patrol inspections of the entire system annually. No activities occurred in Q4 as targets
Emergency response vegetation management due to red flag warning or	<b>Emergency Preparedness and Response Program:</b> <b>Volume vs Goal:</b> BVES did not record an emergency in Q4 of 2021. This means that the use of the Emergency Preparedness & Response Program	UAV & Ground Patrol Annual Targets Met	were met in the prior quarter. <b>Key Actions:</b> BVES completed 211 circuit miles of inspection.
other urgent conditions 7.3.5.4 Emergency Preparedness & Response Program In Place	was not required. See initiative 7.3.9.4 as the primary.	Patrol inspections of vegetation around distribution electric lines and equipment 7.3.5.11 Patrol Inspection Program	<ul> <li>Patrol Inspection within the Service Area</li> <li>Volume vs Q4 2021 Goal: BVES continued to exceed targets for Q4 and was able to conduct 97.83 additional circuit miles of inspection. This brings the annual total to 460.11 (255 was the annual goal set at the beginning of 2021).</li> <li>Key Actions: Exceeded/completed annual targets.</li> </ul>
Improvement of inspections 7.3.5.6	Improvement of Inspections: Key Actions: BVES is always trying to optimize its	Yearly Target Exceeded	
Ongoing Practice	inspections and is open to changes/adaptations leading to a better process. There are no formalized metrics to be reported in the quarterly initiative update.	Remediation of at-risk species 7.3.5.15 <b>Planned</b>	Remediation of At-Risk Species:Key Actions: BVES and its contractors account for at riskspecies when doing field work and evaluation. Cycle Breakervegetation is are an example of what may be recorded.Remediation as a separate initiative is considered for the futurewith no set program/project at this time.

## 7.3.5 - Vegetation Management & Inspection

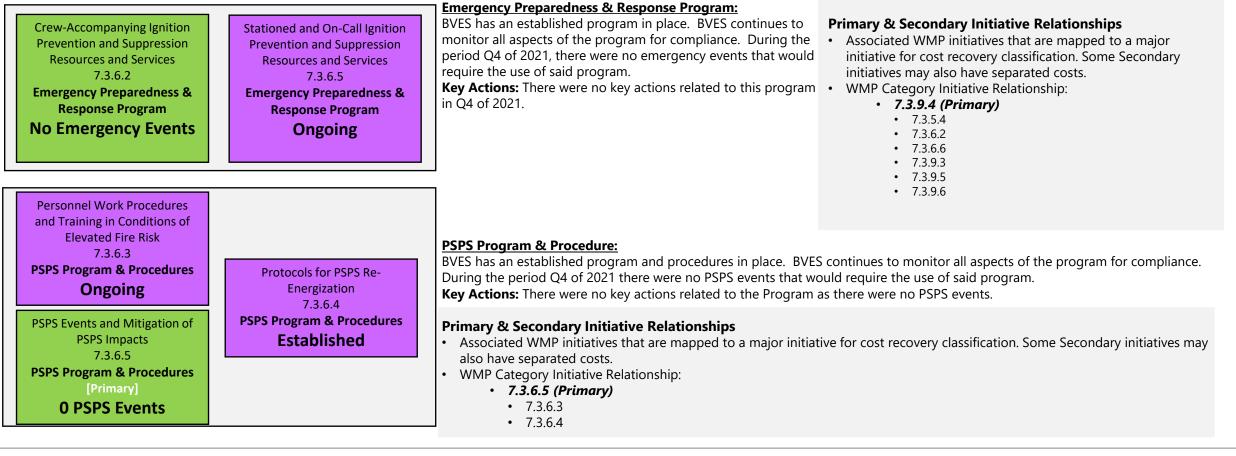
Quality assurance / quality control of vegetation inspections 7.3.5.13 Quality Control of Inspections 112 QC Reviews	Volume vs Q4 2021 Ge vegetation managemen were conducted in Q4 e	<b>Extrical Inspections Program</b> <b>bal:</b> BVES plans to execute 18 audit reviews of it work per quarter. An additional 38 reviews exceeding the quarterly goals for the year. exceeded its annual goal of 72 quality control	Substation inspection 7.3.5.17 GO-174 Substation Inspection Program Inspected & Cleared Vegetation	<b>100% of Substations Inspected</b> <b>Volume vs Q4 2021 Goal:</b> BVES has executed physical inspections of 36 additional substations within the service area bringing the annual total to 144 substations inspected. <b>Key Actions:</b> BVES has met its annual targets
Recruiting and training of vegetation management personnel 7.3.5.14Resource Allocation & Training: BVES has an established program in place and continues to monitor all aspects of the program for compliance. During the period Q4 of 2021, there were no compliance issues identified. Key Actions: BVES reviewed staffing program and methodology		Substation vegetation management 7.3.5.18 Substation Vegetation Management Inspections & Corrections	100% of Substations Inspected Volume vs Q4 2021 Goal: BVES has executed physical inspections of 144 substations within the service area at the close of Q4. BVES has met its target of 36 inspections per quarter. Key Actions: BVES has met its annual targets	
Removal and remediation of trees we strike potential to electric lines an equipment 7.3.5.16 Enhanced Vegetation Managemere Program [Primary] Removals Occurred within Day Window Fuel management and reduction of "se from vegetation management activit 7.3.5.5 Enhanced Vegetation Managemere Program Contractor Meetss Requirements	d management to achieve clearances around electric lines and equipment 7.3.5.20 Enhanced Vegetation Management Program	<ul> <li>Mid-Year Detailed Inspection Activities Volume vs Q4 2021 Goal: BVES did not have a quarterly target established for circuit miles inspected over the second quarter in 2021.</li> <li>Key Actions: Currently completed annual targets.</li> <li>Primary &amp; Secondary Initiative Relationships</li> <li>Associated WMP initiatives that are mapped to a major initiative for cost recovery classification. Some Secondary initiatives may also have separated costs.</li> <li>WMP Category Initiative Relationship:         <ul> <li>7.3.4.1 (Primary)</li> <li>7.3.5.2</li> <li>7.3.5.20</li> </ul> </li> </ul>	Inspected & Cleared Vegetation Vegetation inventory system 7.3.5.19 GIS Data Collection & Sharing Trimmed Trees Logged	GIS Data Collection & Sharing: Volume vs Q4 2021 Goals: BVES continues to work towards a class leading Data Repository. WMP Initiative 7.3.7.1 is the primary associated with this ongoing inventory scope. Key Actions: BVES continue to work with its contracted experts to update its GIS database as well as develop a more streamlines method for reporting and sharing of information.

## 7.3.6 - Grid Operations & Operating Protocols

### Automatic Recloser Operations 7.3.6.1 Grid Automation Program Completed

#### Fault Interrupters – IntelliRupters Pulsing Auto Reclosers – Completed Cycle Work:

**Volume vs Goal:** BVES plans to install S&C's Pulse Closer Fault Interrupters across its major 34 kV system auto-reclosers that was completed in 2020. BVES has installed Fault Indicators (FIs) at key locations to reduce the time it takes to locate faults; thereby, reducing the time to isolate faults from the system or correcting the damage. Prior to the start of the program, BVES had 110 FIs installed in its system at key locations. As part of the WMP, BVES will install an additional 117 FIs at 39 key locations to provide optimal FI coverage in the system in 2022. This initiative is secondary to 7.3.3.9. **Key Actions:** BVES has completed the effort as identified within this WMP cycle.



7.3.9 - Emergency Planning & Preparedness			7.3.8 - Resource Allocation Methodology	
Adequate and Trained Workforce for Service Restoration 7.3.9.1 Resource Allocation Methodology Completed	<b>Resource Allocation Methodology:</b> BVES has an established program in place and continues to monitor all aspects of the program for compliance. During the period Q4 of 2021, there were no compliance issues identified. See WMP initiative 7.3.8.1 as the primary. <b>Key Actions:</b> Staffing for service restoration was reviewed and declared adequate. In the instance of a service restoration event BVES will review the results and re-evaluate staffing if necessary.		Allocation Methodology Development and Application 7.3.8.1 Resource Allocation Methodology [Primary] Program In Process	<b>Resource Allocation Methodology [Primary]:</b> BVES has an established program in place and continues to monitor all aspects of the program for additional staff. During the period Q4 of 2021, there were no gap issues identified. <b>Key Actions:</b> BVES routinely reviewed staffing program needs.
Community Outreach, Public Awareness, and Communications Efforts 7.3.9.2 Community Outreach Program [Primary] Targets Exceeded	Community Outreach Program: Volume vs Q4 2021 Goal: BVES had planned to conducted at minimum 90 outreach activities. BVES recorded 180 outreach activities 200% of target for Q4. BVES achieved 602 (target was 360) outreach activities in 2021 Key Actions: Grizzly Newspaper advertisements are posted during the week (M-F) for either WMP or PSPS and BVES will have 1 advertisement broadcasted each month.		Risk Reduction Scenario Development and Analysis 7.3.8.2 Ignition Probability & Wildfire Consequence Mapping Completed	Contracting with Risk Mapping Resource Volume vs 2021 Goal: Developed request for support in producing a package of risk mapping products and match drop simulations to accurately identify BVES's ignition risk potential under climate change forecasts. WMP Initiative 7.3.1.1 is the primary for the subtasks included in this category. Key Actions: Developed plan to engage external
Disaster and Emergency Preparedness Plan 7.3.9.4 Emergency Preparedness & Response Program [Primary] Established	Preparedness and Planning for Service Restoration 7.3.9.5 Emergency Preparedness & Response Program Ongoing	Emergency Preparedness and Response Program: Volume vs Q4 2021 Goal: BVES did not record an emergency in Q4 of 2021. This means that the use of the Emergency Preparedness & Response Program was not required. Initiative 7.3.9.4 is the primary initiative for this grouping.	resources to support BVES in developing these risk maps.Risk Spend Efficiency Analysis 7.3.8.3 Ignition Probability & Wildfire Consequence Mapping In ProgressContracting with Risk Mapping Resource Volume vs 2021 Goal: Developed request for support in producing a package of risk mapping products and match drop simulations to accurately identify BVES's ignition risk potential under climate change forecasts. WMP Initiative 7.3.1.1 is the primary for the subtasks included in this category. Key Actions: Developed plan to engage external resources to support BVES in developing these risk maps.	
Customer Support in Emergencies 7.3.9.3 Emergency Preparedness & Response Program Established	Protocols in Place to Learn from Wildfire Events 7.3.9.6 Emergency Preparedness & Response Program In Progress			primary for the subtasks included in this category. <b>Key Actions:</b> Developed plan to engage external resources to support BVES in developing these risk