



BENTON RURAL ELECTRIC ASSOCIATION

402 7TH Street • P.O. BOX 1150 • PROSSER, WASHINGTON 99350 • 509/786-2913 • Fax: 509/786-0291

A Touchstone Energy® Cooperative 

PROCEDURE NO. 415.1P:

PROCEDURES FOR IMPLEMENTING GENERAL POLICY 415.1 – Wildfire Risk Mitigation and Response

I **SUBJECT:** WILDFIRE RISK MITIGATION AND RESPONSE

II **OBJECTIVE:**

To provide a plan for reducing the potential risk of Benton REA (BREA) electrical system facilities contributing to wildfires during extreme weather conditions by maintaining such facilities in a manner that reduces such risks, monitoring weather conditions to identify those extreme weather conditions which may increase such risks, and operating the BREA electrical system facilities during such extreme weather conditions in a manner that can reasonably be expected to reduce the potential risk of wildfires.

III **PROCEDURES:**

These Procedures adopt the wildfire risk mitigation and response plan (Plan) attached hereto as Attachment A, which is incorporated into these Procedures as if fully set out herein, and all of which are pursuant to General Policy 415.1.

IV **RESPONSIBILITY:**

The General Manager/Executive Vice President shall be responsible for the overall implementation and enforcement of these Procedures, and the General Manager/Executive Vice President will designate the Operations and Engineering Managers to be responsible for the day to day implementation and supervision of all aspects of the Plan.

V **GENERAL POLICIES TO WHICH THIS PROCEDURE APPLIES:**

This Procedure implements GENERAL POLICY 415.1 – Wildfire Risk Mitigation and Response

This Procedure supersedes any existing Procedure, or portions thereof, which may be in conflict herewith.

Approved by: 
General Manager/Executive Vice President

DATE ADOPTED: July 28, 2021

DATE EFFECTIVE: July 28, 2021

Benton Rural Electric Association Wildfire Mitigation Plan July 2021

Version Date: July 21, 2021

I. OVERVIEW

A. Benton REA Electric Facts

Benton Rural Electric Association (BREA) serves members in Benton and Yakima Counties, and in a portion of Lewis County, Washington. BREA has a wide variety of membership areas, including suburban areas such as the City of West Richland, rural areas with intensive agricultural activity such as the Yakima Valley, and winter recreation areas located in White Pass.

Benton Electric Facts (as of 12-31-20)

15,027 active accounts
1,774 miles of line
74 employees
\$115,000,000 in plant investment
\$40,500,000 annual revenues

B. Wildfire Mitigation Plan Purpose

The purpose of this Wildfire Mitigation Plan (“Plan”) is to ensure that the construction, operation and maintenance of the BREA electrical system, and related facilities, is done in a manner that proactively mitigates the risk of wildfire, with the objective of minimizing the risk of wildfire posed by its electrical lines and equipment, and to set out actions that can be taken, and those responsible for taking them, in the event of the wildfire/environmental emergency.

C. Organization of the Wildfire Mitigation Plan

The Plan includes the following elements:

- Objectives of the Plan
- Roles and responsibilities for executing the Plan
- Implementation of wildfire mitigation strategies
 - General Wildfire Mitigation Actions
 - Specific Plan Implementation Actions
 - Vegetation Management
 - Preventive Vegetation Management
 - Corrective Vegetation Clearance
 - Emergency Vegetation Clearance
 - Post Fire Vegetation Actions
 - Standards for Routine Vegetation Management Activities

- Overview of Electrical System Operations In Response To Wildfire/Environmental Conditions
 - Normal Operations
 - Fire Mitigation/Environmental Operations
 - Conducting Fire Mitigation/Environmental Operations
 - Fire Safety Shutoff
 - Returning to Normal Operations
 - Notifications and Coordination
 - Communicating Plan to Members
 - BREA Staff Training
 - Review and Updating of Plan

D. Objectives of the Plan

The specific objectives of the Plan, based on prudent utility practices, are to:

1. Continue patrols of BREA substation feeders and lines, in conjunction with annual maintenance to harden BREA electrical infrastructure with the goal of mitigating electrical infrastructure as a source of fire ignitions;
2. Ensure continuation of the vegetation management actions under normal and emergency situations as stated in the General Policy 415.0, Vegetation Management and related Procedure 415.0P;
3. Identify environmental conditions (e.g., heightened fire conditions and weather) which could warrant changes from normal operating practices;
4. Specify the changes from normal operating practices that may be implemented to respond to wildfire/environmental conditions;
5. Identify the BREA staff responsible for monitoring wildfire/environmental conditions, such as fire fuel loads and weather conditions, and for considering and initiating appropriate action in response to such conditions;
6. Specify the factors to be considered for implementation of a fire safety shutoff, and actions to be taken in the event a fire safety shutoff is implemented.
7. Specify when and how to return to normal operating practices.
8. Identify the BREA staff responsible for coordinating with fire agencies and local public officials.
9. Identify BREA staff responsible for notifying members regarding departures from and returning to normal operations of the BREA electrical system facilities.
10. Identify BREA staff responsible for and the type of training needed for the Plan.
11. Identify the BREA staff responsible for revising/updating the Plan.

E. Responsible BREA Employees

The General Manager/Executive Vice President is responsible for the content and execution of this Plan. The BREA Operations and Engineering Managers are responsible for the day-to-day implementation of this Plan. In addition, the following responsibilities for actions pursuant to the Plan are assigned as follows:

1. The System Engineer and/or Distribution Engineer are responsible for assisting the Operations and Engineering Managers with actions to be taken through SCADA to change the mode of system operations as necessary, as well as other duties detailed herein.
2. The Operations Manager is responsible for coordinating with the Incident Commander, and the Operations Superintendent is responsible for coordinating with local fire and emergency agencies, during a wildfire/environmental emergency.
3. The Manager of Member Services is responsible for notifications to be provided to the membership, and for providing liaison with the news media and local public officials, during a wildfire/environmental emergency.
4. The Operations Manager is responsible for ensuring that each BREA employee with assigned responsibilities under the Plan are aware of such responsibilities, and how and when to discharge them.
5. Operations and Engineering Managers are responsible for annual review and updating of the Plan.

II. IMPLEMENTATION OF MITIGATION STRATEGIES

A. General Wildfire Mitigation Actions

It must be recognized that no fire mitigation plan can be sufficiently comprehensive as to address all possible contingencies that may emerge during an adverse environmental or wildfire situation. In recognition of this fact, this Plan addresses as many contingencies as practicable, while using as its core principle adaptability in response to emergent situations. In turn, employees are expected to use common sense and good judgement in mitigating fire risk, both in their day-to-day activities and in emergent situations. If actions are necessary outside of the scope of this Plan, consistent with prudent utility practices, BREA employees are empowered and expected to use their best judgement to take necessary actions to safeguard the public, BREA employees and the BREA electrical system facilities from potential and actual fire threats.

Wildfire mitigation is a utility-wide responsibility that is part of all aspects of utility facilities design, operations, maintenance and upkeep. BREA employees will conduct their day-to-day business consistent with the following general guidance:

1. Conduct work in a manner that will minimize potential fire dangers;
2. Take all reasonable and practicable actions to prevent fires resulting from BREA's electric facilities;
3. Immediately report fires, pursuant to specified procedures;
4. Take corrective action when observing or having been notified that fire protection measures have not been properly installed or maintained.

B. Specific Plan Implementation Actions

1. Maintenance of the Electrical System

Use proactive maintenance programs and line patrols to identify potential problem areas and harden BREA's electrical infrastructure to mitigate potential fire ignitions caused by equipment malfunction/failure.

- a. Test poles over the entire BREA electrical system on a 10-year rotation, and replace as needed.
- b. Maintain the electrical system equipment so that it works properly, identify areas that need maintenance to prevent failures that potentially could cause a fire.
- c. Identify and address electrical system infrastructure that could pose potential fire ignitions when not performing properly in extreme weather conditions.

2. Vegetation Management

The effective management of vegetation in close proximity to power lines is a major component of wildfire mitigation. The goal of vegetation management is to proactively maintain vegetation in a manner that keeps it from coming into contact with BREA's electrical system facilities, thereby reducing the likelihood of outages and fires. The facets of vegetation management are:

- a) **Preventive Vegetation Management:** The systematic, preemptive and routine identification and removal of vegetation growing within and along BREA powerlines. This includes periodic trimming on a consistent 5-year cycle as dictated by the vegetation growing in and along established rights-of-way. Educating BREA members on proper planting to prevent growth under power lines and other electrical equipment. In high-risk areas, placing sterilant around poles to help prevent them from burning in case of fire.
- b) **Corrective Vegetation Clearance:** The removal of individual trees and vegetation threatening BREA power lines that warrant removal in addition to normal preventive vegetation management. When these types of issues are identified, they will be followed up on by BREA's Operations Manager and Tree Coordinator to ensure the vegetation threat is mitigated. If designated as a high priority, BREA will prioritize the vegetation removal and take immediate corrective action. Actions of this nature will be actively monitored by the Operations Manager and the Tree Coordinator to ensure that these issues are being resolved in a timely manner.
- c) **Emergency Vegetation Clearance:** Uncustomary maintenance necessitated by storms, disasters, wildfires and other emergencies will be identified and resolved promptly. This may include the removal and cleanup of fallen trees and branches resulting from storms.
- d) **Post Fire Vegetation Actions:** After the fire has been extinguished, assigned employees will survey poles, rights of way and wire/other facilities and recommend repairs as needed.

e) Standards for Routine Vegetation Management Activities:

1. All vegetation growing within the BREA right of way or easement will be managed at least every 5 years. At a minimum, vegetation growing within 10 feet of energized primary conductors will be removed when this management is performed.
2. Dead, rotten, or diseased trees or portions of otherwise healthy trees that are dead, rotten, or diseased (also known as “hazard trees”) that overhang or lean toward, and may fall into, a powerline will be removed. BREA will remove identified hazard trees growing outside its established rights-of-way at no cost to the property owner providing permission is first granted. If permission is not granted, the property owner will be notified of their liability associated with the hazard trees remaining in place.
3. Fast growing trees such as aspens and poplars may be managed more frequently and aggressively than stated above.

3. Overview of Electrical System Operations In Response To Wildfire/Environmental Conditions

- a) **Normal Operations** – BREA Management will operate its electrical system in a hybrid manner. Weather, fire danger and other environmental data from multiple sites will be used to track the fire danger and other environmental dangers for BREA service area on a daily or weekly basis, as conditions warrant. Shown below is the wildfire danger rating system based on weather conditions. When the wildfire risk is rated low, medium or high, the BREA electric system will be operated with a focus on providing optimal reliability and continuity of service to all BREA members, but with heightened awareness of wildfire risk when it is rated as high. This mode of operations is referred to as “Normal Operations.”

Normal Operations will be in effect during periods of the year when the fire forecast is low, medium or high fire risk, as determined by the data reporting fire and weather dangers obtained by the Operations and Engineering Managers. Weather, fire danger and other environmental risk data will be obtained from the following sources:

1. Esri US Wildfire reports Esri Disaster Response Program
2. The National Oceanic and Atmospheric Administration (NOAA)
3. United States National Weather Service (NWS)
4. United States Forest Service Wildland Fire Assessment System
5. National Fire Danger Rating System
6. Internal knowledge of local conditions

- b) **Fire Mitigation/Environmental Operations** – During times when the risk of fire is very high to extreme, the BREA electrical system facilities can be operated in a manner that reduces the risk of electrically induced fires. This mode of operation

is referred to as “Fire Mitigation/Environmental Operations.”

Fire Mitigation/Environmental Operations will be in effect when the fire and weather dangers data for the BREA service area obtained by the Operations and Engineering Managers is forecasting fire danger as Very High to Extreme, and/or ‘Red Flag Conditions’ are forecast or in effect, or when the Operations and Engineering Managers determine that conditions warrant commencement of Fire Mitigation/Environmental Operations.

Changes in operating practices are made to safeguard the public, reduce the possibility of electrically induced fires and protect BREA’s electrical system and facilities from damage. Such practices include system monitoring through SCADA, patrolling lines that have experienced any interruptions of power before reenergizing, and placing power line reclosers or circuit breakers on “non-reclose” to prevent multiple recloses during these occurrences.

The following wildfire risk categories, which are based on weather and fuel indicators, will be used in assessing wildfire risk:

Low	Weather and fuel indicators show the probability of fire occurrence low.
Medium	Weather and fuel conditions indicate some potential for fire occurrence. Expect predictable fire behavior with moderate rate of spread.
High	Fires are active. Expect moderate and occasional high rates of spread.
Very High	Fires spread rapidly and show erratic behavior. Dangerous burning conditions exist.
Extreme	Potential for large fires exist. Fires spread rapidly. Extreme fire behavior is probable. Critical conditions exist.

- c. **Conducting Fire Mitigation/Environmental Operations** – Upon the commencement of Fire Mitigation/Environmental Operations, the BREA System Engineer will monitor closely the substation circuit breakers and line reclosers based on the exposure to combustibility risk of the lines they protect. This will be accomplished remotely where SCADA permits, or using line workers and additional personnel to patrol specific powerlines as needed. Fire Mitigation/Environmental Operations do not mandate the use of alternate trip settings, non-reclose settings, or de-energization of circuits entirely based upon data obtained. These modes will be considered by the Operations and Engineering Managers, and implemented when such actions are warranted, in the professional judgment of the Operations and Engineering Managers, based on the then current wildfire and/or environmental conditions.

While BREA is in Wildfire Mitigation/Environmental Operations, the following actions are available to mitigate wildfire risk, and will be

implemented when deemed necessary and appropriate based on the fire risk, all in the judgment of the Operations and Engineering Managers.

Operational Action	Low	Moderate	High	Very High	Extreme
Substation CircuitBreaker Settings	Automatic Reclose	Automatic Reclose	Non-Reclose on Red Flag Warning days	Non-Reclose	Non-Reclose
Line Crew Patrol following circuit Outage	Normal until fault condition identified		All outages and operations on lines fully patrolled		
Line Reclosers in Predetermined hazard areas	Automatic Reclose	Automatic Reclose	Automatic Reclose	Non-Reclose	Non-Reclose
Increased Number of 'On Call' Personnel	No	No	No	Yes	Yes
Increased Number of 'On Call' Personnel During High Wind or Lightning Events	No	No	As needed	As needed	As needed

d. **Fire Safety Shutoffs (FSS)** – In addition to the actions set out above, BREA has the authority to shut off power on specific line segments due to fire-threat conditions. This option will only be used in the most extraordinary of circumstances, and only when other strategies would not be effective. The Operations and Engineering Managers, in consultation with the General Manager/Executive Vice President, will make a case-by-case decision whether to shut off power based on any one or more of the following considerations:

1. Red-Flag Warnings issued by the National Weather Service for fire weather zones that contain BREA circuits
2. BREA staff assessments of local conditions, including wind speed (sustained and gust), humidity and temperature, fuel moisture, fuel loading and data from weatherstations
3. Real-time information from BREA staff located in areas identified as at risk of being subject to extreme weather conditions
4. Awareness of mandatory or voluntary evacuation orders in place
5. Expected impact of de-energizing circuits on essential services
6. Other operational considerations to minimize potential wildfire

- ignitions, including the blocking of reclosers on the identified circuit(s)
7. On-going fire activity throughout the area
 8. Ability to notify members, local governments and public officials
 9. Potential impacts to communities and members

Should a decision to implement a FSS be made, the Members Service Manager will be immediately informed of the decision by the Operations Manager. The Member Services Manager will endeavor to notify as soon as practicable all members impacted by the FSS regarding the pendency of the FSS, when it is expected to be implemented and its estimated duration. All available means will be used to disseminate this information.

- e. **Returning to Normal Operations** – The Operations and Engineering Managers will be responsible for jointly monitoring weather and environmental conditions to determine when the weather and/or environmental conditions that prompted Wildfire/Environmental Operations have abated sufficiently to warrant a return to normal system operations. The System Engineer and/or Distribution Engineer will assist with actions to be taken through SCADA to change the mode of system operations as necessary. The Operations and Engineering Managers will jointly make the decision whether the weather and/or environmental circumstances warrant resumption of normal operations, and the action(s) to be taken to do so. However, if such decision cannot be timely achieved jointly, it will be referred to the General Manager/Executive Vice President for resolution.
- f. **Notifications and Coordination** – When an emergent situation occurs which does, or has, the potential of involving BREA electrical system facilities, the following notifications will be made:
 1. The Operations Manager will promptly notify the Member Services Manager regarding the nature of the event, the portions of the BREA service area impacted, and the estimated duration of the event;
 2. The Member Services Manager will as soon as practicable implement communications attempting to notify members in the BREA service area impacted by the event of its pendency and possible impacts. The Member Services Manager will provide liaison services to the news media and may also coordinate with local public officials (such as elected officials) in the affected area to provide them with information as needed.
 3. The Operations Manager will coordinate with the Incident Commander to ensure, among other matters, that the location(s) of BREA staff are known at all times, and that their activities with regard to safeguarding BREA electrical system facilities are coordinated with overall fire suppression activities. The Operations Superintendents will coordinate with fire and emergency agency personnel on the event site.
 4. The Operations and Engineering Managers will periodically assess the ability of BREA to respond to the emergency, and determine if additional

resources are necessary to fully respond to emergent situations involving BREA electrical system facilities. Examples of additional resources that BREA may need to call upon include line contractors and aerial patrols.

5. Whenever there is a departure from normal operations, such change in operations will be promptly communicated to the Member Services Manager and to the General Manager/Executive Vice President.

g. Sharing the Plan with Members – The Member Services Manager will use various methods of communicating with members and the public to ensure that the Plan is widely disseminated and well understood. These forms of communications with the members and the public may include:

1. Newsletter articles
2. News articles
3. Ruralite
4. BREA Website
5. E-Mail
6. Text messages
7. Member Forums
8. Neighborhood meetings
9. Social Media

The Member Services Manager will determine which of these methods will be used and in which circumstances.

h. BREA Staff Training – The key to an effective Wildfire Mitigation Plan is ensuring that each BREA employee who is assigned a duty under this Plan fully understands what they are responsible for, how it fits into the overall Plan, and when they will be expected to act. To that end, the Operations Manager will manage an annual training schedule that will include all BREA employees with responsibilities under the Plan, and will ensure that each such employee is aware of their responsibilities under the Plan.

i. Plan Review and Updating – This Plan is a living document, and will be reviewed and modified as needed to reflect changes in regulations, advances in technology and changes in operational circumstances. The Operations and Engineering Managers are responsible for conducting an annual review of the Plan, and recommending to the General Manager/Executive Vice President any revisions or changes to the Plan.