WELLS RURAL ELEC. CO.
"owned by those we serve"
Your Touchstone Energy® Cooperative

WELLS RURAL ELECTRIC COMPANY

P. O. Box 365
Wells, Nevada 89835
(775) 752-3328

May 31, 2022

State of Utah
Public Service Commission
P. O. Box 4558
Salt Lake City, Utah 84114-4558

Re: Annual Filing of Wildfire Mitigation Plan

Pursuant to Utah Code 54-24-101 through 54-24-103 and 54-24-201 through 54-24-203 enacted through House Bill 66 of the 2020 General Session of the Utah Legislature, Wells Rural Electric Company hereby submits its updated Wildfire Mitigation Assessment and Plan for your review. We would welcome your input on elements of the plan and on possible improvements that would enhance our ability to better protect our members in Utah.

Should you have any questions, please contact me by sending an email to tballard@wrec.coop or by calling (775) 752 – 0926.

Respectfully submitted,

Thad S. Ballard
Director of Administration and Power Supply

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UTAH PUBLIC SERVICE COMMISSION

WELLS RURAL ELEC. CO.

WILDFIRE MITIGATION ASSESSMENT

DATE: MAY 17, 2022

PROJECT: WL20-001

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BROWN & KYSAR, INC.

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Wildfire Mitigation Assessment

Executive Summary

Due to the escalation of devastating wildfires in the West, the Utah legislature enacted legislation (H.B. 66) which mandates that all Consumer-Owned Utilities (COUs) establish Wildland Fire Protection Plans (WFPPs). This assessment is intended to be a guide for the future development of a WFPP by capturing the existing operations programs and recommending additional activities geared toward improving wildfire mitigation efforts.

This assessment will identify any areas of policy and/or documentation that would need to be developed in order to satisfy HB 66 WFPP requirements.

We will also identify any programs that would assist in reducing the likelihood of an ignition, improve the response to a wildfire, and to help develop a coordinated approach to mitigation.

Goal

The identification of action items that serve to improve preparedness, resistance, and response to wildfires in Wells Rural Electric Company's (WREC's) service area, and to create the foundation for a comprehensive WFPP.

A. Situational Assessment and Awareness

Situational Assessment is the process by which current operating conditions are determined. Situational Awareness is the understanding of the working environment, which creates a foundation for successful decision making and the ability to predict how it might change due to various factors. Examples of situational assessment sources are; remote automatic weather stations (RAWS), NOAA Web Cameras, daily web-based fire weather monitoring, SCADA, etc.

Current Practice:

While WREC does not own or operate weather stations (WS) or cameras, they do monitor state wildfire cameras to gauge fire status and fire starts. The utility does have a specific staff member assigned to monitor weather conditions. County fire dispatch radio alerts are also monitored. From approximately May to the end of fire season, lightning forecasts and Red Flag Warnings are monitored. Additional information is derived from the Elko Interagency Dispatch Center which provides daily and weekly fire prediction outlooks.

Information gathering and coordination with fire incident commanders during wildfires is ongoing as needed.

The utility does have SCADA monitoring at substations with remote control capabilities.

Recommendation:

Continue with current practices. It is possible to have NOAA alerts emailed to the WREC operations department. Utah Department of Natural Resources (UDNR) fire restrictions levels

should be monitored via the Utah Fire Restrictions web portal[1]. The New Severe Fire Weather Potential Interface[2] can provide valuable real-time fire conditions information in both Nevada and Utah.

B. Risk Assessment of Service Territory

> **Section (2) (a) Requirement:** A description of areas within the service territory of the electric cooperative that may be subject to a heightened risk of wildland fire.

WREC's Utah service area is limited to the area in and surrounding the town of Wendover. Wildfire risk and threat were assessed using the Utah Department of Natural Resources Wildfire Risk Assessment Portal.

Wildfire Threat: Wildfire Threat is a number that is closely related to the likelihood of an acre burning and is displayed in the Utah WRA by the Fire Threat Index (FTI). The Fire Threat Index is derived from historical fire occurrence, landscape characteristics including surface fuels and canopy fuels, percentile weather derived from historical weather observations and terrain conditions. These inputs are combined using analysis techniques based on established fire science to develop resultant fire behavior.

FTI combines the probability of an acre igniting (Fire Occurrence Density), the expected final fire size based on rate of spread in four weather percentile categories and the effectiveness of fire suppression resources. There are nine output categories with general descriptions from Lowest to Highest Wildfire Threat.

The Utah service area contains the following FTI categories, with the majority falling into the Urban, Agriculture, Barren or Water category which indicates zero wildfire threat.

- 1-Very Very Low
- 2-Very Low
- 3-Low

Wildfire Risk: Wildfire Risk (WR) represents the possibility of loss or harm occurring from a wildfire. WR combines the likelihood of a fire occurring (threat), with those areas of most concern that are adversely impacted by fire (fire effects), to drive a single overall measure called the Wildfire Risk Index (WRI). It identifies areas with the greatest potential impacts from a wildfire considering the likelihood of an area burning and the impacts to values and assets aggregated together. There are nine output categories with general descriptions from Lowest to Highest Wildfire Risk.

The Utah service area contains the following WRI categories, with the majority falling into the Urban, Agriculture, Barren or Water category with zero wildfire risk.

- 1-Very Very Low
- 2-Very Low

[1] utahfireinfo.gov
[2] https://m.wfas.net

- 3-Low
- 4-Low-Moderate
- 5-Moderate
- 6-Moderate High
- 7-High

Although the WRI mapping indicates there are pockets of "Moderate High" to "High" risk, these same areas are categorized as "Very Low" to "Low" on the WFI. Vegetation density and ground level vegetation/fuel consist of mostly low-load, dry climate grass and shrubs and do not represent a significant threat of wildland fire. Trees are generally street adjacent and widely spaced.

Recommendation:
Although the vegetation profile of WREC's service area in Utah presents low risk, the utility should identify circuits located in higher fire risk areas throughout all service areas utilizing fire risk mapping. Historic fire perimeter mapping, consultation with UDNR, and reference to local Community Wildfire Protection Plans[3] can provide valuable information.

Although the Utah Public Service Commission (UPSC) and the Nevada Public Utility Commission (NPUC) have not yet developed High Fire Threat District maps, the UDNR[4] has a web portal for assessing fire risk throughout the state. The Nevada Division of Forestry[5] has a similar map portal available to help identify high risk areas. Fire threat maps of Nevada and Utah with a WREC service area overlay, including T&D assets, would provide valuable data for planning of mitigation programs. Identified higher risk areas can be given priority in vegetation management (VM) program planning and asset inspection scheduling.

C. Asset Inspection Plan

Section (2) (b) Requirement: A description of the procedures, standards and time frames that the electric cooperative will use to inspect and operate its infrastructure.

Current Practice:

OH Insp. Schedule: Overhead detailed line inspections are carried out on a documented 5-7 year cycle. Visual inspections are conducted annually and when responding to an outage or trouble shooting.

Substation Insp. Schedule: Routine visual substation inspections are conducted monthly or when dictated by outage troubleshooting. Currently, detailed substation inspections are conducted quarterly, which include infrared inspections. Oil testing is conducted annually.

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[3] https://ffsl.utah.gov/wp-content/uploads/2017CompletedCWPPs.pdf
[4] https://wildfirerisk.utah.gov/Map/Pro/#whats-your-risk
[5] https://www.nevadafireinfo.org/fire-safety

Underground Insp. Schedule: The utility conducts inspection of underground facilities on a 5-7 year cycle using infrared.

Pole: Pole testing is carried out by an outside contractor. The utility is current with its pole testing as all poles were tested between 1995 and 2010. The current testing cycle of 10 years exceeds the RUS inspection standard and best management practices (BMPs).

Recommendation:

There are no mandated inspection cycle minimums for Utah utilities per the UPSC. WREC's inspection program exceeds the recommended cycle for patrol inspections, detailed inspections and pole testing. WREC inspection cycles meet industry standards and BMPs.

BKI recommends that all inspection practices, including intervals, methods and definitions be formalized in an official adopted policy document which can be referenced by all staff for continuity and consistency of operations.

D. Vegetation Management Program

> **Section (2) (c) Requirement:** A description of the procedures and standards that the electric cooperative will use to perform vegetation management.

Current Practice:

All VM work is contracted to two companies and is conducted before and after peak fire season. The VM contractors used by WREC are familiar with the WREC electric grid and local vegetation species growth rates. All trees within the ROW are trimmed annually to RUS specifications.

One VM crew does mowing around poles where feasible and to 8 feet on either side of the conductors in the right-of-way (ROW). This is for the protection of WREC assets from range fires as much as a prevention of utility sourced ignitions of vegetation.

Current VM policy is to clear assets on a 5 to 7-year rotation or sooner if overgrowth occurs. High risk areas are identified and given priority for clearing as needed. The utility is working towards a more methodical and consistent circuit by circuit-based system of inspection and clearance work.

WREC has begun seeding and planting in the ROW with beneficial species such as Crested Wheat intended to displace and reduce the growth of Cheatgrass, which is an invasive grass that becomes dry fuel by mid-June.

100% of the contracted VM work is audited by WREC staff, which exceeds the industry norm of 10%.

Recommendation:
For the purposes of a WFPP development, the VM program policies should be formalized and documented with specific schedules for inspections and clearance work in line with industry BMPs.

The standard or code to which the utility performs its clearance work should be identified in the program. Inspection areas should be identified, mapped and scheduled with tracking mechanism to ensure 100% coverage.

It is recommended that standards to which the tree and vegetation work is performed is identified in the formal plan.

E. Proposed Modifications or Upgrades

> **Section (2) (d) Requirement:** A description of proposed upgrades or modifications to facilities and preventative programs that the electric cooperative will implement to reduce the risk of its electric facilities initiating a wildland fire.

Current Practice:
WREC is looking into the use of non-expulsion fuses in high fire-threat locations as a pilot program. Poles that are inaccessible for mowing would benefit from the use of this technology.

Aging infrastructure and traditional framing specifications are being addressed in current and planned construction projects. Long spans are being shortened to improve fire resistance and overall grid hardening.

All overhead conductor is bare wire. WREC will continue to install covered jumpers all on new installations and retrofits.

There are no tree attachments system wide.

WREC has an Avian Protection Program (AVP) in place that has reduced outages and wildlife mortality. Perch resistant construction, raven nest removal, insulated jumpers and bushing covers are some of the hardening efforts included in the AVP.

Recommendation:
Continue to perform a risk assessment of all assets to identify the areas of susceptibility to wildfire ignition. When these risk drivers are determined, develop short and long-range plans for system hardening projects and operational policy improvements geared toward ignition hazard reduction. All deficiencies should be prioritized and scheduled accordingly with cost/benefit justifications in mind.

F. De-energizing Power Lines

Section (2) (e) Requirement: A description of procedures for de-energizing power lines and disabling reclosers to mitigate potential wildland fires, taking into consideration:

- (2)(e)(i): The ability of the electric cooperative to reasonably access the proposed power line to be re-energized;
- (2)(e)(ii): The balance of the risk of wildland fire with the need for continued supply of electricity to a community; and
- (2)(e)(iii): Any potential impact to public safety, first responders, and health and communication infrastructure.

Current Practice:

Due to the characteristics of the vegetation and the topography of the Utah service area, WREC does not believe the benefits of initiating a Public Safety Power Shutoff (PSPS) outweigh the public safety impacts including loss of water infrastructure, disruption in communications, and loss of community infrastructure.

WREC will consider de-energizing portions of the system in response to a known public safety issue or in response to a request from an outside emergency management/response agency. All de-energizing and re-energizing is performed in coordination with key local partner agencies keeping the best interests of all parties in mind.

Recommendation:

Monitor the evolution of PSPS implementation by other Utah and Nevada electric utilities to continue to refine the evaluation of this important topic.

G. Restoration of Service

Section (2) (f) Requirement: A description of the procedures the electric cooperative intends to use to restore its electrical system in the event of a wildland fire.

Current Practice:

WREC will patrol the affected lines, clear, repair, test, restore, and monitor.

The following operational protocols have been implemented to reduce fire hazard when energizing lines due to a temporary or permanent fault:

- When a circuit device opens due to a fault, the line or protection zone must be given a visual inspection before trying to energize.
- If the open device is a fuse, sectionalizer or switch, the line must be visually inspected before energizing.
- If the device open is a recloser, the line must be visually inspected and the recloser closed in on the non-reclose or hot line tag setting.

- All vehicles and equipment responding to an outage will pack water for fighting fire.

Recommendation:
Outline the utilities protocols for re-energizing after a wildfire in a formal policy document or incorporate the policy into a comprehensive WFPP.

H. Consultation with local Fire Prevention Plans

Section (2) (g) Requirement: A description of the potential consultation, if applicable, with state or local wildland fire protection plans, including;

- (3)(b)(ii)(A): Division of Forestry, Fire and State Lands created in 65A-1-4; and
- (3)(b)(ii)(B): Any other appropriate federal , state or local entity that chooses to provide input; and
- (3)(b)(ii)(C): Other interested persons who choose to provide input.

Current Practice:
WREC has a history of involvement with fire prevention and suppression agencies throughout the service area. The utility has provided funding for and has had membership in local Volunteer Fire Departments, participated in the passage of the Rangeland Fire Protection Association (RFPA) legislation and have been involved with the Local Emergency Planning Committee. WREC coordinates with the Bureau of Land Management (BLM) and United States Forest Service (USFS) seasonal fire teams during emergency events and provides a liaison to assist with coordination of resources.

Recommendation:
Before finalizing the WFPP, coordinate with state and local wildland fire protection plans and consider input from the entities referenced in the code cited above.

I. Communication and Public Outreach

Current Practice:
The WREC website does not currently provide information on wildfire season preparedness and mitigation to its members. There are links to information on electrical fire prevention in the home as well as agricultural controlled burns, but does not provide information on wildfire mitigation topics for homeowners. Although this is not required, it is considered a BMP to provide this information to the public.

Recommendation:
In order to increase public awareness of fire safety and prevention, it is recommended that WREC provide fire safety information to its ratepayers in some form regarding:

- Defensible Space guidelines for homeowners
- Fire season preparedness
- Emergency planning

- Weather conditions/Red Flag Warnings
- Evacuation planning/Family Emergency Plan

J. Emergency Response Planning

Current Practice:

The utility has taken proactive steps to plan for and respond to wildland fire, including the purchase of two fire trucks. When the conditions warrant, field trucks are stocked with water pumps and fire trucks are dispatched to outages if calls show signs of fire risk. VM crews carry water backpack pumps for fire suppression, and have a 250-gallon pressure tank on site. Conditions are monitored and operations are shut down if conditions are too dry.

Crew vehicles are equipped with radios that can access emergency channels. All crew members carry cell phones as well.

Recommendation:

In addition to the measures described above, there are various emergency contingency plans utilities can prepare in addition to WFPPs. The list below contains examples of some of these plans.

- **Crisis Communication Plan:** Assists the utility to collect, coordinate and share consistent and timely information with all engaged stakeholders before, during and after an incident. Defines the utility's protocols for alerting the public of emergencies of all kinds, as well as outages.
- **Emergency Response Plan:** Details how the utility responds to emergencies using a standard response process with identified roles. Provides the ability to collect, analyze and consolidate information through a standard process. Also establishes the official incident status, incident objectives and current resource requirements on a regular basis.
- **Emergency Restoration Plan**: Outlines the process of Inspecting, Repairing and reenergizing the system after an emergency outage. Plan may include policies regarding customer assistance after an emergency.

Prepare and document WREC policies for response to various types of emergencies. Having a plan for all foreseeable emergency situations that identify the responsibilities of critical staff during a crisis will serve to reduce outage times and will reduce public concern with effective and accurate massaging. Continue to coordinate with the County, UDNR and other land management agencies to plan for and respond to wildfire events.

Summary

The remainder of H.B. 66 not directly cited above pertains to the submission and review process. It also addresses the requirements for consideration of input from state and federal agencies and other interested persons.

A WFPP is required to be reasonable and in the interest of the electric cooperative members, and appropriately balance the costs of implementing the plan with the risk of a potential wildland fire.

Conclusion

The utility has an active relationship with local fire-fighting agencies which provide annual wildland fire training for field workers.

WREC has identified areas needing improvement, such as aging infrastructure and construction standards.

Although the Utah service area does not have an exceedingly high fire risk, portions of the Nevada service territory are prone to wildfire. It is recommended that WREC draft a formal facility inspection policy that will reduce liability in the event that WREC assets are a contributing factor in the ignition of a wildfire.

WREC should identify the standards that the cooperative will use to perform vegetation management.

The following should be formally documented in order to prepare for the development of a comprehensive WFPP to satisfy the requirements of H.B. 66:

- Risk assessment identifying areas of heightened wildfire risk
- Inspection and maintenance procedures, standards and time frames
- Operations policies
- Vegetation management procedures, standards and timeframes
- Short and long-range plans outlining proposed modifications or upgrades to facilities
- Preventative programs to reduce the risk of facilities initiating a wildland fire
- Public Safety Power Shutoff / de-energization policy
- Restoration of power procedures
- Description of potential consultation with state or local wildland fire protection plans

APPENDIX A Code Citations

REGULATED UTILITIES

The Utah Public Service Commission has jurisdiction over investor owned and cooperative owned public utilities. Utah Code 54 ◆ 2 defines a public utility to include "every railroad corporation, gas corporation, **electrical corporation**, **distribution electrical cooperative**, wholesale electrical cooperative, telephone corporation, telegraph corporation, water corporation, sewerage corporation, heat corporation, and independent energy producer not described . . . where the service is performed for, or the commodity delivered to, the public generally. "The term corporation "does not include towns, cities, counties, conservancy districts, improvement districts, or other governmental units created or organized under any general or special law of this state". The Commission is also responsible for the safety regulation of intrastate natural gas pipelines. This includes pipelines owned by regulated utilities, municipal gas systems, small gas operators (master meter systems), and liquid propane gas systems. In general, the following ARE regulated by the Public Service Commission:

54-4-14. Safety regulation.

The commission shall have power, by general or special orders, rules or regulations, or otherwise, to **require every public utility** to construct, maintain and operate its line, plant, system, equipment, apparatus, tracks and premises in such manner as to promote and safeguard the health and safety of its employees, passengers, customers and the public, and to this end to prescribe, among other things, the installation, use, maintenance and operation of appropriate safety or other devices or appliances including interlocking and other protective devices at grade crossings or junctions, and block or other system of signaling, and to establish uniform or other standards of construction and equipment, and to require the performance of any other acts which the health or safety of its employees, passengers, customers or the public may demand, provided, however, that the department of transportation shall have jurisdiction over those safety functions transferred to it by the Department of Transportation Act.

Amended by Chapter 9, 1975 Special Session 1
Amended by Chapter 9, 1975 Special Session 1

54-8c-1 Definitions.

As used in this chapter: (1) "Authorized person" means an employee or agent: (a) of a public utility that: (i) generates, transmits, or delivers electricity; or (ii) provides and whose work relates to communication services; (b) of an industrial plant whose work relates to the electrical system of the industrial plant; (c) of a cable television or communication services company, or of a contractor of cable television or communication services company, if specifically and expressly authorized by the owner of the poles to make cable television or communication services attachments; or (d) of a state, county, or municipal agency which has or whose work relates to: (i) **overhead electrical lines**; (ii) **overhead lighting systems**; (iii) **authorized overhead circuit construction**; (iv) conductors on poles; or

(v) structures of any type. (2) "Business day" means any day other than Saturday, Sunday, or a legal holiday. (3) "High voltage" means voltage in excess of 600 volts measured between: (a) conductors; or (b) a conductor and the ground. (4) "Overhead line" means all bare or insulated electrical conductors installed above the ground. (5) "Public utility" means any entity that generates, transmits, or distributes electrical energy, including any: (a) public utility as defined in Title 54, Chapter 2, General Provisions; (b) municipality as defined in Title 10, Utah Municipal Code; (c) agricultural cooperative association as defined in Title 3, Uniform Agricultural Cooperative Association Act; (d) improvement district as defined in Section 17B-1-102; or (e) entity created pursuant to Title 11, Chapter 13, Interlocal Cooperation Act. (6) "Responsible party" means any person who contracts to perform, is responsible for the performance of, or has control over, any function or activity at any location. Amended by Chapter 329, 2007 General Session