WYOMING WILDFIRE MITIGATION PLAN

2024-2026

ROCKY MOUNTAIN POWER.

POWERING YOUR GREATNESS

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

INTRODUCTION

Wildfire threats have been growing in the United States and Rocky Mountain Power has developed a comprehensive plan describing its wildfire mitigation efforts. The 2024 Wildfire Mitigation Plan (WMP) guides the mitigation strategies that are, or will be, deployed in Wyoming. These efforts are designed to reduce the risk of utility-related wildfires, and proactively mitigate damage to Rocky Mountain Power facilities because of wildfire.

Wildfire has long been an issue of notable public concern. Electric utilities have always needed to be concerned with the potential of a fire starting because of sparks that could be emitted from an electrical facility, typically during a fault condition. The growth of wildfire size and intensity have magnified these concerns. Regardless of the causes, or political debates surrounding the issue, the reality is stark. Despite effective fire suppression agencies and increased suppression budgets, wildfires have grown in number, size, and intensity. Increased human development in the wildland-urban interface, the area where people (and their structures) are intermixed with, or located near, substantial wildland vegetation has increased the probability and the costs of wildfire damage in terms of both harm to people and property damage. A wildfire in an undeveloped area can have ecological consequences – some positive, some negative – but a wildfire in an undeveloped area will not typically have a direct effect on many people. A wildfire engulfing a developed area, on the other hand, can have significant consequences for people and property. For all these reasons, Rocky Mountain Power is committed to making long-term investments to reduce the risk of wildfire.

The measures in this WMP describe those investments to construct, maintain and operate electrical lines and equipment in a manner that will minimize the risk of wildfire. In evaluating which engineering, construction, and operational strategies to deploy, Rocky Mountain Power was guided by the following core principles:

- Systems that facilitate situational awareness and operational readiness are central to mitigating fire risk and its impacts.
- When a fault event does occur, the impact of the event can be minimized using equipment and personnel to shorten the duration to isolate the fault event.
- Frequency of ignition events related to electric facilities can be reduced by engineering more resilient systems that experience fewer fault events.

A successful plan must also consider the impact on Wyoming customers and Wyoming communities, and balance costs, benefits, operational impacts, and risk mitigation in the overall imperative to provide safe, reliable, and affordable electric service.

In 2023, Rocky Mountain Power invested approximately $1.6 million in capital and $1.6 million of expense in Wyoming to further many of the company's wildfire mitigation strategies, including:

- Implemented weather and fire risk modeling software and advanced data analytics tools.
- Installed 15 weather stations.
- Implemented modified operational settings and re-energization practices.

- Implemented risk-based work practices.

Rocky Mountain Power's 2024 WMP incorporates the company's 2023 experience. As a result, in 2024 the company is forecasting an additional investment in Wyoming through 2026 (across three years), of $47.8 million capital and $17 million expense. Section 13, Plan Summary, Costs, and Benefits includes a summary of all plan elements, forecasted costs, and anticipated benefits.

Many of Rocky Mountain Power's wildfire mitigation efforts are focused in the defined geographic areas of heightened wildfire risk. Rocky Mountain Power refers these areas as the Fire High Consequence Area (FHCA). The strategies embodied in this plan are evolving and are subject to change. As new analyses, technologies, practices, network changes, environmental influence or risks are identified, changes to address them may be incorporated into future iterations of the plan, as described in Section 12 Plan Monitoring and Implementation.

1 BASELINE RISK ANALYSIS

Rocky Mountain Power's baseline risk analysis framework consists of four main components as depicted in Figure 1 below. The framework is a cycle consisting of data collection and analysis, risk evaluation, risk treatment, and risk monitoring and evaluation.

Figure 1: Rocky Mountain Power's Baseline Risk Assessment Framework

1.1 DATA COLLECTION AND ANALYSIS

Data Collection and Analysis provides enhanced data collection and analytics for incident tracking, trend analysis and measurement of mitigation effectiveness. This capability is discussed below.

The following types of data are continuously collected, organized, and analyzed to support development of risk assessment tools and evaluation and inform Rocky Mountain Power's understanding of the wildfire risk. Additional details regarding the specific types of data collected can be found in Appendix A – Wildfire Risk Modeling Data Inputs.

RISK DRIVER ANALYSIS

Rocky Mountain Power analyzes the components of risk associated with utility facilities. In particular, an understanding of risk drivers informs specific mitigation tactics or strategies that can be used to reduce the total amount of risk associated with utility operations. For example, if a risk of utility-related-wildfire exists due to the potential for equipment failure, an increase in inspections or maintenance activities might help to mitigate the risk. If a risk exists due to potential contact between power lines and third-party objects, installing conductor more resilient to contact with objects might help to mitigate that particular type of risk.

Risk Evaluation includes the development of tools and models to supports location-specific risk identification to inform mitigation programs. These risk evaluation tools and models include the delineation of geographic areas of heightened risk of wildfire designated as the Fire High Consequence Area (FHCA), as described and shown in the Fire High Consequence Area (FHCA) Section 2.2, as well as the asset-specific risk modeling tool, FireSight, explained in Section 1.2.

Risk Treatment involves the development and implementation of mitigation programs informed by the data analysis and risk evaluation.

Risk Monitoring and Review supports quantitative evaluation of the effectiveness of mitigation strategies using a consistent framework and process.

The framework in Figure 1 is represented as a cycle to depict a process geared to make continuous improvement. For example, data collection and analysis support inputs to risk evaluation in a repeatable, transparent way to identify areas of risk. This, in turn, supports the development and updating of risk evaluation tools, such as mapping the FHCA, to inform risk mitigation programs such as vegetation management and asset inspections. Finally, risk is monitored, and programs are evaluated to enable continuous improvement.

In determining the potential risk drivers, Rocky Mountain Power employs a data driven approach that references certain categories of historical outage records as a proxy for risk events. Outage data is the best available data to correlate an identifiable event on the electrical network to the risk of a utility-related-wildfire. There is a logical physical relationship: if a fault creates a spark, there is a risk of fire. An unplanned outage – which is when a line is unintentionally de-energized – is most often rooted in a fault. Accordingly, outage records were organized into categories to understand the cause of each outage with the potential for an ignition as shown in Table 1 below. The outage categories in the table align with potential correlation to an ignition.[1]

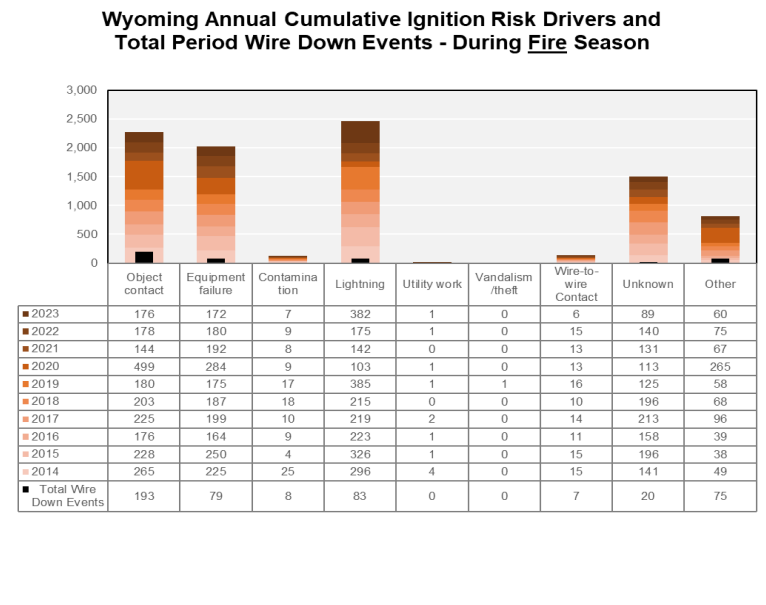
Table 1: Outage Causes with Possible Correlation to Ignition Potential

Risk Driver to cause Outages	Risk Driver Description
Animals	Animals make unwanted direct contact with energized assets.
Environment	Exposure to environmental factors, such as contamination
Equipment Damaged	Broken equipment from car hit-poles, vandalism, or other non-lightening weather- related factors.
Equipment Failure	Failure of energized equipment due to normal deterioration and wear, such as a cross arm that has become cracked or the incorrect operation of a recloser, circuit breaker, relay, or switch
Lightning	Outage event directly caused by lightning striking either (i) energized utility assets or (ii) nearby vegetation or equipment that, as a result, contacts energized utility assets
Other External Interference	External factors not relating to damaged equipment such as mylar balloons, hay or other interference resulting in a potential ignition source
Not Classifiable	Outage event with unknown cause or multiple potential probable causes identified
Operational	Unplanned outage resulting from operations

[1] These outage categories are not the same as the outage classifications traditionally used for reliability reporting. For example, certain outage categories, such as loss of upstream transmission supply, planned outage, or not an outage (misclassification), do not correlate to the potential for an ignition and were excluded from the data set used for risk driver analysis.

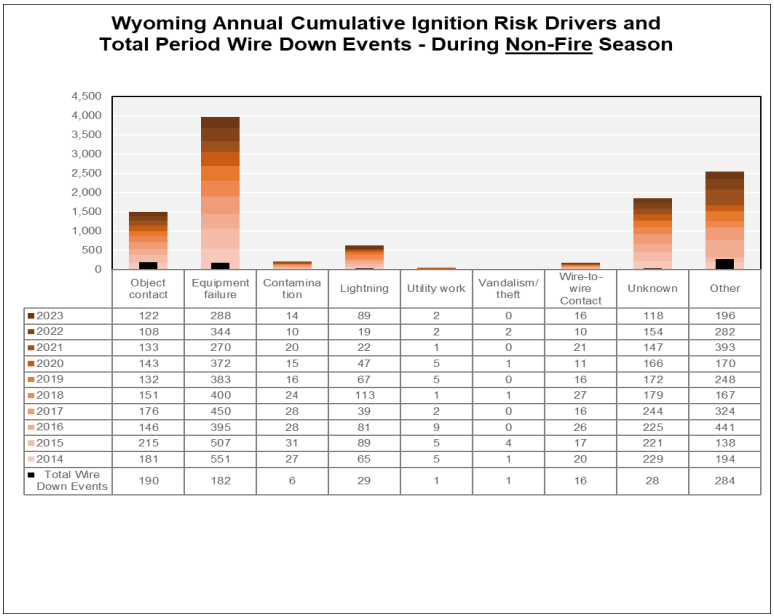
Risk Driver to cause Outages	Risk Driver Description
Tree-Within Right-of-Way (ROW)	Outage attributed to vegetation contact with vegetation located within the power line right-of-way
Tree-Outside Right-of-Way (ROW)	Outage attributed to vegetation contact with vegetation from outside the right-of-way

Rocky Mountain Power compiled an outage history from the past ten years grouped by these ten outage categories, both inside of fire season (June 1 through October 1) and outside of fire season. Because "wire down" events represent situations with heightened ground fuel ignition correlation, wire down event data is also assessed. This wire down data is overlaid in Figure 2 and Figure 3 and represents all wire down events in Wyoming from 2014-2023.



	Object contact	Equipment failure	Contamination	Lightning	Utility work	Vandalism /theft	Wire-to-wire Contact	Unknown	Other
2023	176	172	7	382	1	0	6	89	60
2022	178	180	9	175	1	0	15	140	75
2021	144	192	8	142	0	0	13	131	67
2020	499	284	9	103	1	0	13	113	265
2019	180	175	17	385	1	1	16	125	58
2018	203	187	18	215	0	0	10	196	68
2017	225	199	10	219	2	0	14	213	96
2016	176	164	9	223	1	0	11	158	39
2015	228	250	4	326	1	0	15	196	38
2014	265	225	25	296	4	0	15	141	49
Total Wire Down Events	193	79	8	83	0	0	7	20	75

Figure 2: Historic Ignition Risk Drivers During Fire Season



	Object contact	Equipment failure	Contamination	Lightning	Utility work	Vandalism/ theft	Wire-to-wire Contact	Unknown	Other
2023	122	288	14	89	2	0	16	118	196
2022	108	344	10	19	2	2	10	154	282
2021	133	270	20	22	1	0	21	147	393
2020	143	372	15	47	5	1	11	166	170
2019	132	383	16	67	5	0	16	172	248
2018	151	400	24	113	1	1	27	179	167
2017	176	450	28	39	2	0	16	244	324
2016	146	395	28	81	9	0	26	225	441
2015	215	507	31	89	5	4	17	221	138
2014	181	551	27	65	5	1	20	229	194
Total Wire Down Events	190	182	6	29	1	1	16	28	284

Figure 3: Historic Ignition Risk Drivers During Non-Fire Season

The analysis of risk drivers incorporates outage data collected through the company's normal outage response systems. As Rocky Mountain Power's risk modeling efforts evolve, there may be opportunities to gather more detailed data regarding outages, which may further refine the analysis of such data, to support the modeling and correlations between outages, risk events and ignition probabilities.

FIRE INCIDENT HISTORY

Rocky Mountain Power tracks fires potentially originating from Rocky Mountain Power equipment, as well as other fires that impact Rocky Mountain Power's facilities. An initial report of a fire can be obtained through a variety of sources. It is common for an initial report to come via a call to Rocky Mountain Power's system operations center from an emergency response agency or local government. Other times, Rocky Mountain Power field personnel may observe a fire or fire damage while performing work in the field.

After receiving an initial report of a fire incident, Rocky Mountain Power records the incident in a fire incident tracking database. Rocky Mountain Power gathers other information, as available, to record in the database. Fields maintained in this database include fire start date and time; location, with a latitude and longitude reference; land use in the area; fire size; suppression agency; facility identification; voltage; associated equipment; outage information; and the suspected initiating event. Data fields are organized to align with any regulatory reporting requirements. Information is often estimated, based on known available information. For example, a recorded fire start time may be the time when the fire is first observed or when a report of fire is first received; but the precise time that the fire ignited may not be known. Fields are sometimes populated as "unknown" when there is insufficient information. Fire incidents have been tracked since 2020, and the data is an input to the risk model.

ASSET INFORMATION

Information on transmission and distribution equipment, including type of equipment, location, installation date, and material are captured and used during analysis, when available.

1.2 RISK EVALUATION AND TOOLS

Rocky Mountain Power's baseline risk evaluation process employs the general concept that risk is the product of the likelihood of a specific risk event multiplied by the impact of the event, also referred to as risk consequence. The likelihood, or probability, of an event is an estimate of a particular event occurring within a given time frame. The impact of an event is an estimate of the effect to people and property when an event occurs. Impact can be evaluated using a variety of factors, including considerations centered on health and safety, the environment, customer satisfaction, system reliability, the company's image and reputation, and financial implications. Rocky Mountain Power uses modelling tools to evaluate both likelihood and impact.

FIRESIGHT

To perform risk evaluation, Rocky Mountain Power strives to combine utility and public data to analyze the components of risk associated with utility facilities in a consistent, repeatable way. Rocky Mountain Power procured and is currently implementing FireSight, a commercially available module in a broader software suite from Technosylva referred to as Wildfire Analyst (WFA-E). Technosylva has provided advanced wildfire products and services to utilities throughout the United States since 1997 and other modules in WFA-E are used by state agencies such as the California Department of Forestry and Fire Protection (Cal Fire). With in-house fire and data scientists, Technosylva partners with key providers in fire planning, advanced data modeling, and wildland fire research and development to enhance the models used in their software. Technosylva has also published studies in scientific journals and wildfire industry publications such as Current Opinion in Environmental Health and Science[2] and International Journal of Wildland Fire.[3]

FireSight specifically builds upon the quantitative risk model developed by Technosylva that associates wildfire hazards with the location of electric overhead assets. FireSight is used to forecast the consequence or impact of a wildfire from a given ignition point in Rocky Mountain Power's service territory based on the potential spread of a wildfire, should it occur. Rocky Mountain Power chose to implement FireSight based on Technosylva's experience with other utilities and their partnerships with experts in wildfire risk modeling and fire data science. The FireSight model, which is depicted in Figure 4 below, combines the utility asset information and data described in Section

[2] Cardil, Adrián, Santiago Monedero, Gavin Schag, Sergio de Miguel, Mario Tapia, Cathelijne R. Stoof, Carlos A. Silva, Midhun Mohan, Alba Cardil, and Joaquin Ramirez, "Fire behavior modeling for operational decision-making." Current Opinion in Environmental Health and Science, Volume 23. October 2023

[3] Cardil, Adrián, Santiago Monedero, Phillip SeLegue , Miguel Ángel Navarrete, Sergio de-Miguel, Scott Purdy, Geoff Marshall , Tim Chavez, Kristen Allison, Raúl Quilez, Macarena Ortega, Carlos A. Silva, and Joaquin Ramirez, "Performance of operational fire spread models in California," International Journal of Wildland Fire, July 7, 2023, Sourced November 2, 2023

1.2 with public data regarding community characteristics, terrain, vegetation, and weather information, to provide ignition risk scores at points along a circuit. Specific to this model, Technosylva sources information on climate, historic weather conditions, terrain, fuels, population, and the built environment (buildings and roads) from public sources. A
complete list of inputs, with source and frequency of update, is provided in Appendix A – Wildfire Risk Modeling Data Inputs.

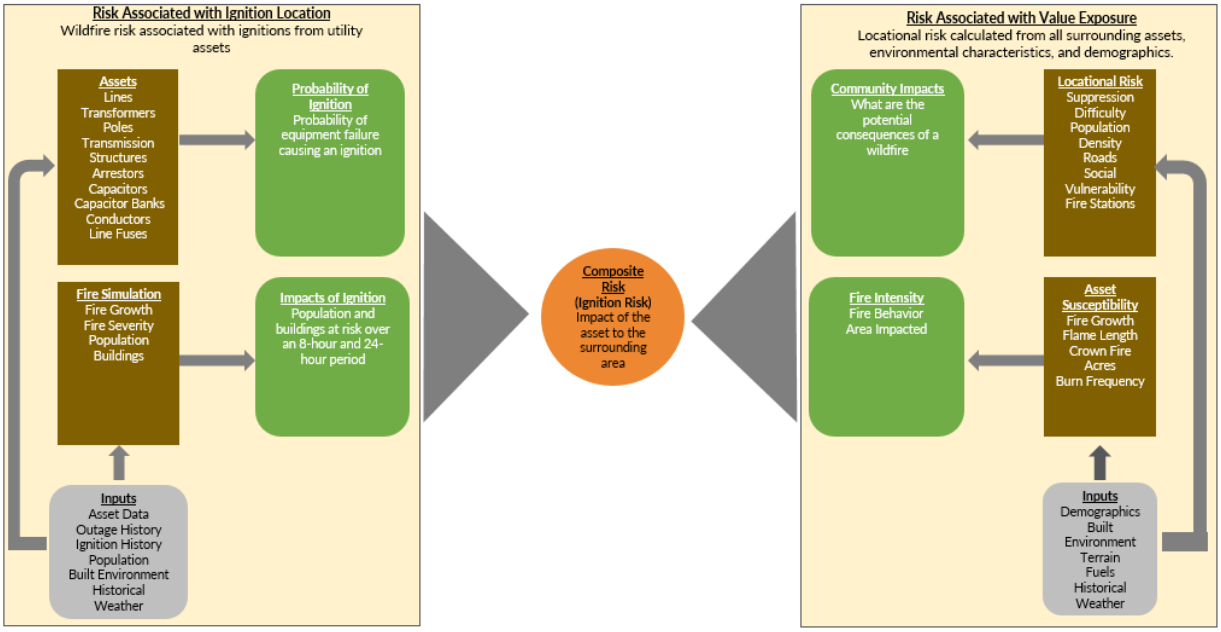


Figure 4: Overall FireSight Model for Risk Estimates

The FireSight model has two primary parts, **Risk Associated with Ignition Location (RAIL)** and **Risk Associated with Value Exposure (RAVE).** RAIL, depicted on the left side of Figure 4, represents the risk presented by the asset, based on its characteristics, including age and materials. RAIL assesses the risk by associating the ignition impact over an eight-hour and 24-hour period to a specific asset. The eight-hour period is the typical period used by utilities to model risk, but there is growing interest in 24-hour modeling risk to understand how that changes the risk profile.[4] Therefore, Rocky Mountain Power is modeling both to better understand if there are significant differences in the results that may impact mitigation efforts.
Factors considered in RAIL calculations include:

- Surface and canopy fuels outlook in 2030, including consideration of climate change impacts in the modeling.
- Topography.
- Wind speed and direction.
- Historical fire occurrence identifying time of data, typical weather conditions, and duration.

[4] California Office of Energy Infrastructure Safety. "Standardized Wildfire Risk Type Classifications and in Situ Wildfire Risk Assessment." Risk Modeling Working Group. October 11, 2023.

Outputs from RAIL include:

- Ignition risk from overhead transmission and distribution assets.
- Potential fire characteristics: Fire size, rate of spread, potential for crown fire and flame length.
- Population at risk.
- Number of buildings at risk.

Risk Associated with Value Exposure (RAVE), depicted on the right side of Figure 4, assesses the characteristics of the area that is under risk of ignition. Community demographics, geography, and the built environment influence how risky or resilient a community is to wildfire. RAVE is independent of the asset risk calculated in RAIL and considers the risk associated with additional factors:

- Population density.
- Socially vulnerable populations such as the elderly, people with a disability, or people at or below the poverty level.
- Infrastructure: Major and minor road density and building density.
- Suppression difficulty: Terrain, fuels, and fire station locations all impact how quickly firefighters can respond to a fire in the initial attack.
- Crown fire crowning acres: the amount the fire can spread through the trees.

RAVE Outputs:

- Community impacts: How vulnerable a community is to wildfire and the potential consequences.
- Fire intensity: How a fire is expected to behave and what area may be impacted from the point of ignition.

COMPOSITE RISK SCORE

The composite risk score is a combination of the RAIL and RAVE and reflects three components:

- **Where is the predicted impact.** This is the measure of the population and buildings if there is an ignition.
- **How destructive could the fire be.** This is the expected fire behavior over the forecast fire area.
- **How resilient is the community.** This is affected by the difficulty of suppression and population characteristics.

Rocky Mountain Power models and calculates separate composite risk scores for wind-driven and fuel/terrain-driven wildfires to account for the unique characteristics of its service territory that spans both steep forested areas as well as high desert areas. Below Table 2 shows the unique characteristics of each wildfire type modeled.

Table 2: Comparison of General Characteristics of Wind-Driven and Fuel/Terrain-Driven Wildfires

Category	Wind-Driven Wildfires	Fuel/Terrain-Driven Wildfires
Locational Risk	More likely in areas subject to PSPS (Public Safety Power Shutoff)	Confined to areas of complex fuels and terrain with difficult access
Frequency	Some years have none; others several	Annually during peak fire season
Event Duration	1-3 days per event	Can persist several weeks or months
Outage Risk	Wind-driven and somewhat predictable	Difficult to predict
Consequence	Immediately catastrophic	May be catastrophic over time

Calculating the risk separately and then combining them into a single composite risk, as shown in Figure 5 below, provides a robust risk calculation and identification of the risk driver at a location to apply the appropriate mitigation.

Figure 5: Composite Risk Consideration Wind-Driven and Fuel/Terrain-Driven Events

Figure 6 below shows the inputs and weights for the composite risk for wind-driven and fuel/terrain-driven wildfires. On the left side of the table are the RAIL inputs with the selected input for the type of wildfire, the percentile selected and the weights for each variable. On the right side of the table are the RAVE inputs with the weights for each variable, there are no percentiles for these inputs as they are relatively static values, i.e., the number of fire stations the number of disabled people in geographic area.

Fuel/Terrain

Risk Associated with Ignition Location (RAIL) Component: 60%				Risk Associated with Value Exposure (RAVE) Component: 40%		
RAIL Inputs	Percentile	Weight (%)		RAVE Inputs	Percentile	Weight (%)
Fire Behavior Index	95	20%	+	Terrain Difficulty Index	N/A	25%
Fire Size Potential	95	20%		Fire Station Density	N/A	10%
Flame Length	95	20%		Fuel Model Majority	N/A	5%

Wind

Risk Associated with Ignition Location (RAIL) Component: 80%				Risk Associated with Value Exposure (RAVE) Component: 20%		
RAIL Inputs	Percentile	Weight (%)		RAVE Inputs	Percentile	Weight (%)
Rate of Spread	95	30%	+	Terrain Difficulty Index	N/A	10%
Population Impacted	95	25%		Disability Population	N/A	5%
Buildings Destroyed	95	25%		Poverty Population	N/A	5%

Figure 6: Inputs and Weights for Composite Risk Calculation

The inputs and percentages above were selected based on inputs from internal subject matter experts and reviews of other utilities risk models. A sensitivity analysis was performed on the

selected inputs and weights to validate that the selected percentiles and weights identified circuits expected to be higher risk for fuels or terrain driven wildfires based on subject matter expertise.

Figure 7 below is an example of the difference in the Fuel/Terrain-Driven and Wind-Driven Composite Risk Score on a Rocky Mountain Power circuit. The terrain here is steeper and has more fuels, which is reflected in an average Fuel/Terrain Driven Composite Risk score of 0.75 compared to an average Wind-Driven Composite Risk score of 0.32.

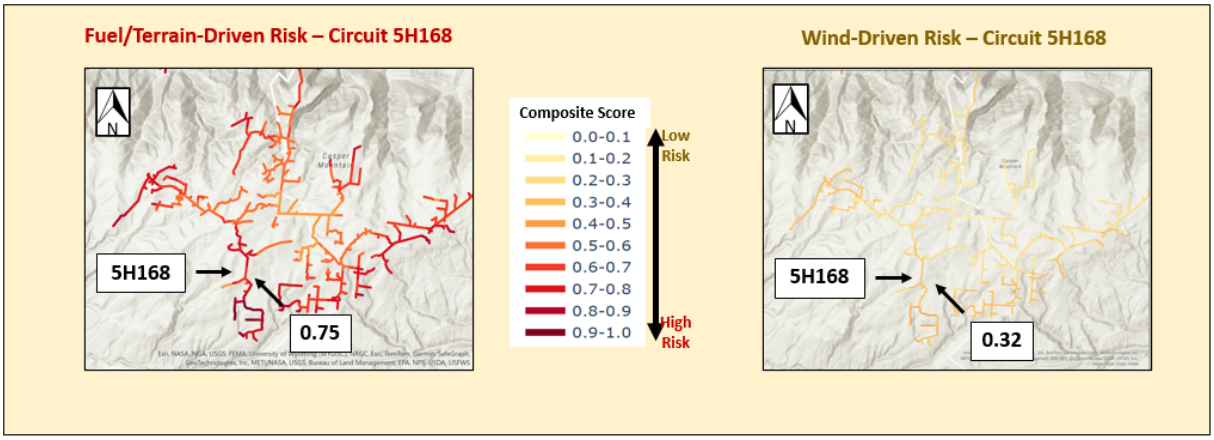


Figure 7: Illustrative Example of Fuel/Terrain-Driven Composite Risk Compared to the Wind-Driven Composite Risk Near Casper Mountain, WY

Figure 8 below is an example of the difference in the Fuel/Terrain-Driven and Wind-Driven Composite Risk Score on a Rocky Mountain Power circuit. Here the terrain is flatter, and the Wind-Driven Composite Risk is significantly higher than the Fuel/Terrain-Driven Composite Risk score.

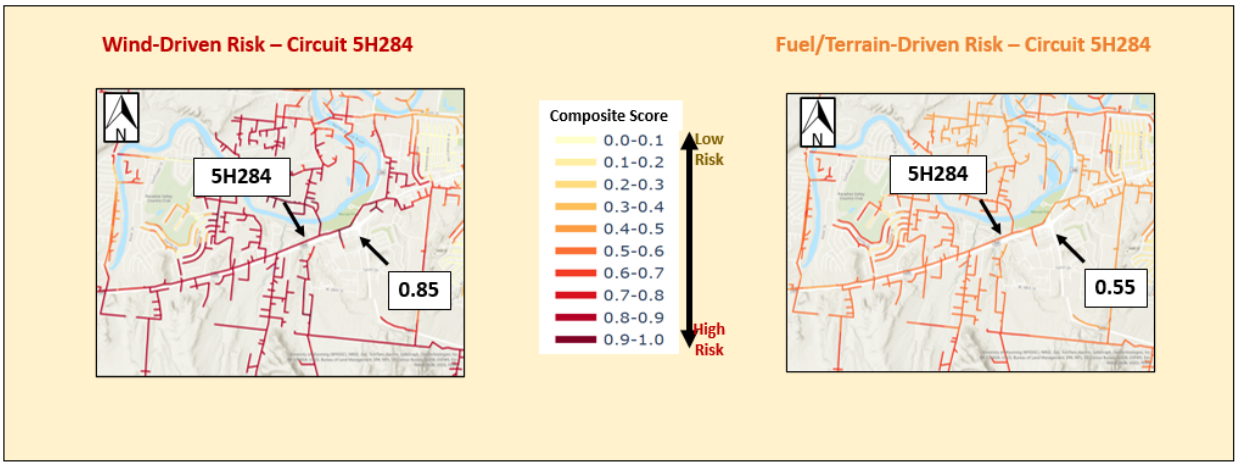


Figure 8: Illustrative Example of Fuel/Terrain-Driven Composite Risk Compared to the Wind-Driven Composite Risk in Casper, WY

As seen in Figure 7 and Figure 8 above, the composite risk scores can vary along a circuit due to changes in fuels, terrain, build environment, assets and community demographics that affect the risk score inputs. This variation is seen below in the change in composite risk score for a circuit segment as well as visually in the change in color along the circuits. The composite score is calculated for each circuit segment using an equation that calculates a wind-driven and terrain-driven risk as shown in Figure 9 below.

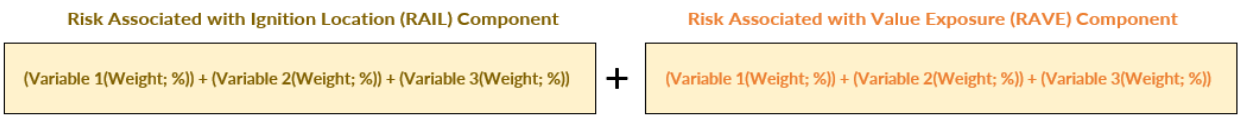


Figure 9: Calculation of Wind-Driven and Fuel/Terrain-Driven Composite Risk

The calculation for the combined risk score for each circuit segment is shown in Figure 10 below. Each composite score is on a scale of 0-1.

Figure 10: Combined Composite Risk Score Calculation

The FireSight tool, together with composite and combined composite risk score methodology described above, were leveraged to create two, parallel evaluations. First, assuming a fixed, equal probability, the wind-driven and fuel/terrain-driven composite risk scores were calculated and compiled to inform an evaluation of baseline wildfire risk, including whether to modify the geographic boundaries of the FHCA. As part of a parallel effort, the combined, composite risk scores were calculated using the historic risk driver analysis as an indicator of probability to inform a risk ranking of circuits and potential prioritization for grid hardening. These applications are described in more detail below.

FIRE HIGH CONSEQUENCE AREA (FHCA)

Rocky Mountain Power has identified areas of heighted risk of wildfire, with delineated geographic areas referred to as the Fire High Consequence Area or "FHCA." The FHCA sets geographic boundaries for wildfire mitigation programs including asset management and vegetation management discussed in Section 2.2 and Section 3.2 respectively.

Rocky Mountain Power leveraged FireSight to model risk scores for wind-driven and fuel/terrain-driven risk on each circuit assuming a probability factor of 1 as described in the Composite Risk Score section above to focus on the consequence of potential ignitions. Based on this approach and, specifically, the FireSight model risk scores in the 85th-100th percentile, Rocky Mountain Power identified geographic areas for inclusion within the FHCA, depicted in red in Figure 11 below.

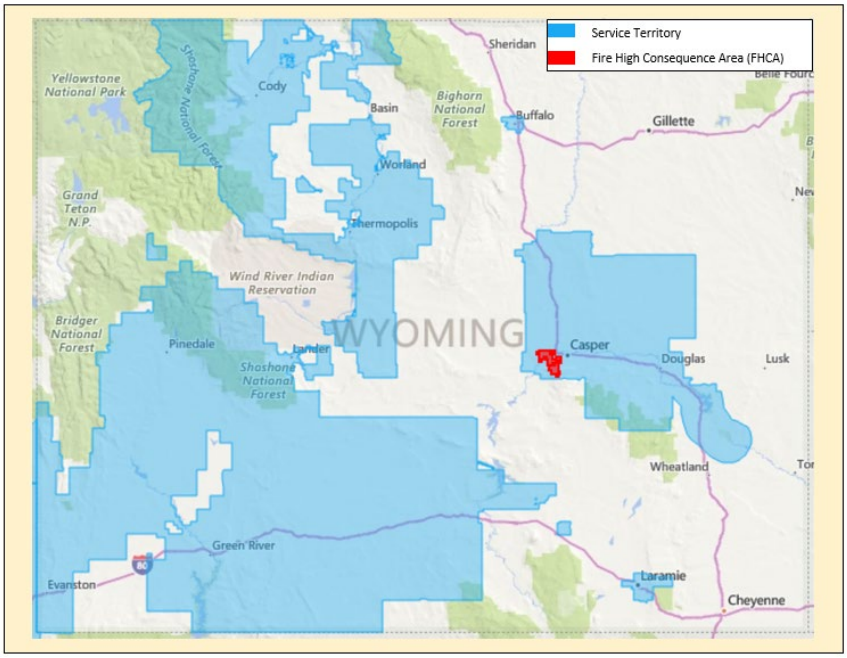


Figure 11: Baseline Risk map of Fire High Consequence Area (FHCA)

This analysis of the FHCA results in approximately 210 miles of overhead distribution and transmission lines within the FHCA. The breakdown of FHCA line miles is summarized in Table 3 below.

Table 3: FHCA Line Miles

Asset	Total	Historic FHCA		2024 FHCA Additions		Total New FHCA	
	Line Miles	Line Miles	% of Service Territory	Line Miles	% of Service Territory	Line Miles	% of Service Territory
Overhead Transmission	2,910	-	0.0%	26	0.3%	26	0.3%
46kV Transmission Lines	13	-	0.0%	-	0.0%	-	0.0%
57kV Transmission Lines	44	-	0.0%	-	0.0%	-	0.0%
69kV Transmission Lines	261	-	0.0%	10	0.1%	10	0.1%
115 kV Transmission Lines	214	-	0.0%	15	0.1%	15	0.1%
138 kV Transmission Lines	137	-	0.0%	-	0.0%	-	0.0%
230 kV Transmission Lines	1,725	-	0.0%	2	0.0%	2	0.0%
345 kV Transmission Lines	380	-	0.0%	-	0.0%	-	0.0%
500 kV Transmission Lines	138	-	0.0%	-	0.0%	-	0.0%
Overhead Distribution	7,228	-	0.0%	183	1.8%	183	1.8%
Total Overhead Transmission and Distribution	**10,139**	**-**	**0.0%**	**209**	**2.1%**	**209**	**2.1%**

AREAS OF INTEREST

Rocky Mountain Power continues to study other geographic areas for wildfire risk, even if FireSight model risk scores did not warrant inclusion of such areas in the FHCA at this time. The FireSight model risk scores reflect the reality that there is a spectrum of wildfire risk. Certain areas, such as wooded forests have more wildfire risk than other areas, such as irrigated agricultural areas. Along those same lines, certain areas have FireSight model risk scores which approach the scores resulting in FHCA treatment. Rocky Mountain Power will continue to evaluate those areas, for possible future expansion of the FHCA. Rocky Mountain Power has identified additional "Areas of Interest," which reflect geographic areas with above average FireSight model risk scores. The Areas of Interest are grouped in two parts: Area of Interest I refers to areas with risk scores closest to the risk scores used to demarcate the FHCA, while Area of Interest II refers to areas with risk scores lower than Area of Interest I. Expressed as percentiles, the FHCA reflects areas with FireSight model risk scores in the 85th-100th percentile; Area of Interest I reflects areas in the 65th-85th percentile; and Area of Interest II reflects areas in the 45th-65th percentile. The Areas of Interest, juxtaposed against the 2024 FHCA, are shown in Figure 12 below.

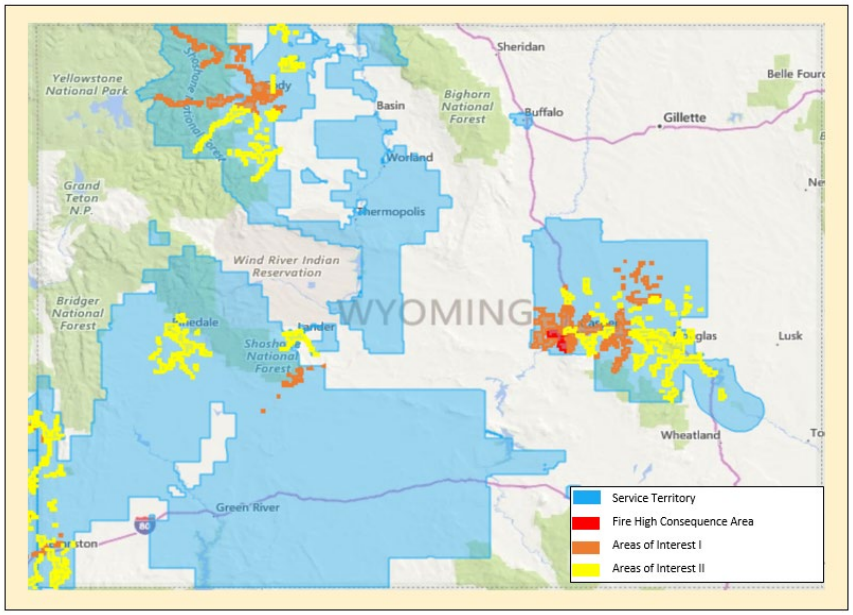


Figure 12: 2024 Fire High Consequence Area (FHCA) and Areas of Interest

Comparing the FHCA map with the Wyoming Wildfire Risk Assessment Portal[5] map of wildfire risk as depicted in Figure 13 below, there is general alignment with the general wildfire risk either in the FHCA and in the areas of interest.

[5] Wyoming State Forestry Division. Wyoming Wildfire Risk Assessment Portal. Sourced March 11, 2024.

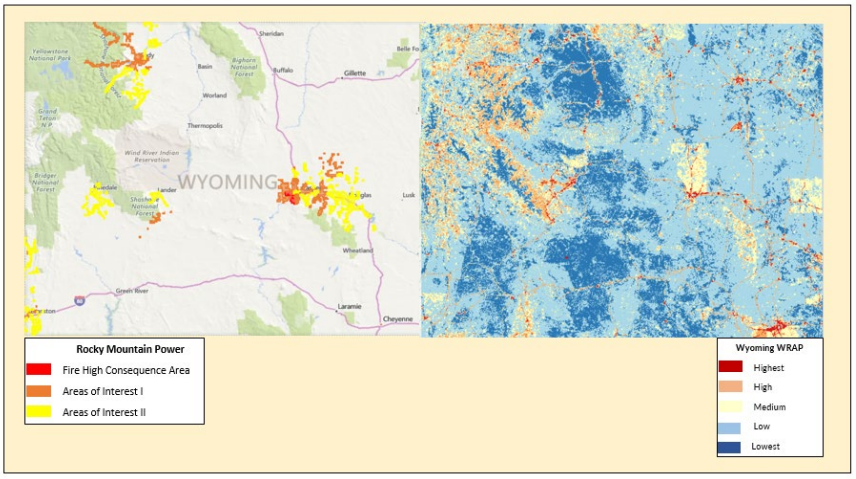


Figure 13: Comparison of Rocky Mountain Power Fire High Consequence Area (FHCA) and Areas Under Review (left) to Wyoming Wildfire Risk Assessment Portal Wildfire Risk (right)

Rocky Mountain Power plans to provide the updated FHCA boundary to the following utilities with service territory in close proximity to the FHCA boundary:

- High Plains Power
- Powder River Energy

Finally, Rocky Mountain Power also intends to continue evaluating the FHCA on an annual basis to incorporate new data, modeling techniques, and stakeholder input.

RISK TREATMENT - PROGRAM SELECTION AND PRIORITIZATION

For the FHCA, Rocky Mountain Power applies a high-level decision-making process that aligns with many other utilities to develop specific projects or programs, not including compliance driven system wide programs. The high-level process, represented by Figure 14, includes four key phases: (1) risk modeling and assessment, (2) program identification and planning, (3) project evaluation and selection, and (4) implementation and monitoring. While not specifically shown in the general framework, part of the process allows for a program or project to be moved back to a previous step if needed.

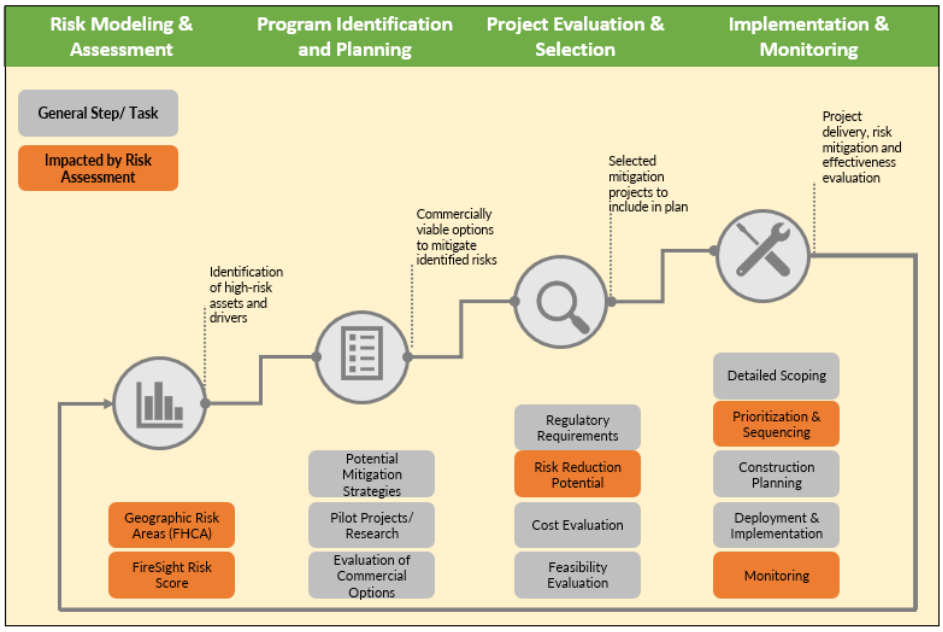


Figure 14: High Level Program and Project Selection Process

Table 4 generally maps Rocky Mountain Power's key risk drivers to the primary programs, demonstrating what elements impact a group or groups of risk drivers. It is important to note that elements may not eliminate a risk driver but are designed to mitigate the risk associated with that driver. For many risk drivers, risk is mitigated through a combination of programs and there is not always a 1:1 relationship between a risk driver category and a mitigation program. All elements and programs in the plan work together to collectively mitigate wildfire risk.

Table 4: Risk Driver Mapping to Potential Mitigation Program(s)

Key Risk Driver	Significant Contributor to Wire Down Events	Potential Mitigation Program Categories				
		Asset Inspections	Vegetation Management	System Hardening	Field Operations	System Operations
Object Contact	✓	✓	✓	✓	✓	✓
Other	✓	✓	✓	✓	✓	✓
Equipment Failure	✓	✓	✓	✓	✓	✓
Unknown	✓	✓	✓	✓	✓	✓
Wire-to-wire contact	✓	✓		✓	✓	✓
Contamination		✓		✓	✓	✓
Utility Work		✓		✓	✓	✓
Vandalism/ Theft		✓		✓	✓	
Lightning				✓		

As program scoping identifies potential mitigations, it is designed to make sure the ignition risk driver is addressed and considers other programs to avoid duplicate efforts.

2 INSPECTION AND CORRECTION

Inspection and correction programs are the cornerstone of a resilient system. These programs are tailored to identify conditions that could result in failure or potential fault scenarios. These scenarios can arise when the infrastructure may no longer be able to operate per code or engineered design, or may become susceptible to external factors, such as weather conditions.

Rocky Mountain Power performs inspections on a routine basis as dictated by company policies. When an inspection is performed on an asset, inspectors use a predetermined list of condition codes and priority levels (defined below) to describe any noteworthy observations or potential noncompliance discovered during the inspection. Once recorded, the condition codes are used to establish the scope of and timeline for corrective action to maintain conformance with National Electric Safety Code (NESC) requirements and company policies. This process is designed to correct conditions while reducing impact to normal operations.

Key terms associated with the inspection and correction programs are defined as follows:

- **Visual Assurance Inspection:** A brief visual inspection performed by viewing each facility from a vantage point allowing reasonable viewing access, which is intended to identify clearance violations, damage or defects to the transmission and distribution system, or other potential hazards or right-of-way-encroachments that may endanger the public or adversely affect the integrity of the electric system, including items that could potentially cause a spark.
- **Detailed Inspection:** A careful visual inspection accomplished by visiting each structure, as well as inspecting spans between structures. This inspection is intended to identify potential nonconformance with the NESC or company standards, infringement by other utilities or individuals, defects, potential safety hazards, and deterioration of the facilities that need to be corrected to maintain reliable and safe service.
- **Sound and Bore:** An inspection performed by sounding the pole to locate external and internal decay pockets. The pole is tapped with a metal hammer to identify potential soft spots or hollow-sounding areas. If decay is suspected, inspection holes are drilled to determine the extent of the internal decay.
- **Pole Test & Treat:** An inspection of wood poles to identify decay, wear, or damage. Inspections may include pole-sounding, inspection hole drilling and excavation to assess the pole condition at groundline to identify the need for any repair or replacement. When applicable, preservative treatment is also applied as part of this inspection.
- **Enhanced Inspection:** A supplemental inspection performed that exceeds the requirements of normal detailed or visual inspections; typically, a capture of infrared data.
- **Patrols:** Patrols are visual inspections performed in addition to scheduled inspection cycles during elevated fire risk conditions. Patrols can be performed prior or during significant weather events and are usually performed prior to re-energization of lines in FHCA during fire season. Patrolling can result in conditions being identified and corrected similar to scheduled inspections. More details on patrolling activities are described in Section 6.2.

- **Condition:** The state of an asset regarding appearance, quality, or working order that can sometimes be used to identify potential impact to normal system operation or clearance, which is typically identified by an inspection.
- **Energy Release Risk Condition:** A type of condition that, under certain circumstances, can correlate to increase the risk of a fault event and potential release of energy at the location of the condition.
- **Condition Codes:** Predetermined list of codes for use by inspectors to efficiently capture and communicate observations and inform the scope of and timeline for potential corrective action.
- **Correction:** Scope of work required to remove a condition within a specified timeframe.
- **Priority Level:** The level of risk assigned to the condition observed, as follows:
    - Imminent – imminent risk to safety or reliability
    - Priority A – risk of high potential impact to safety or reliability
    - Priority B – low or moderate risk to safety or reliability

2.1 STANDARD INSPECTION AND CORRECTION PROGRAMS

Rocky Mountain Power's asset inspection programs involve four primary types of inspections: (1) visual assurance inspection; (2) detailed inspection, (3) sound and bore, and (4) pole test & treat. Inspection cycles, which dictate the frequency of inspections, are set by Rocky Mountain Power's asset management department. In general, visual assurance inspections are conducted more frequently, to quickly identify any obvious damage or defects that could affect safety or reliability. Detailed inspections have a more comprehensive scope of work, so they are performed less frequently than visual assurance inspections. Pole test and treat (including sound and bore inspections) are more intrusive and targets finding internal decay. The frequency of these intrusive inspections is based on the age of wood poles, and such inspections are typically scheduled in conjunction with detailed inspections. Regardless of the inspection type, any identified conditions are entered into Rocky Mountain Power's facility point inspection system database for tracking purposes. For any condition identified, the inspector conducting the inspection will assign a condition code and the associated priority level. Corrections are then scheduled and completed within the correction timeframes established by internal company policies, as discussed below. While the same condition codes are used throughout Rocky Mountain Power's service territory, the timeframe for corrective action varies depending on location, wildfire risk area, and if the condition has the potential to release energy. In all cases, the timeline for correction considers the priority level of any identified condition.

2.2 FHCA INSPECTION AND CORRECTION PROGRAMS

The existing inspection and correction programs are effective at maintaining regulatory compliance and managing routine operational risk. They also mitigate wildfire risk by identifying and correcting conditions which, if uncorrected, could potentially ignite a fire. Recognizing the growing risk of wildfires, Rocky Mountain Power is continuing to supplement its existing programs to further mitigate the growing wildfire specific operational risks and create greater resiliency against wildfires. There are three primary elements that have been implemented: (1) creating a fire threat classification for specific condition codes which correlate to a heightened risk of fire ignition; (2)

performing inspections more often in the FHCA and (3) expediting the correction of any fire threat conditions identified within the FHCA.

FIRE THREAT CONDITIONS

Certain conditions are classified as energy release risk conditions. As the name suggests, this category includes conditions which, under certain circumstances, can increase the risk of a fault event and potential release of energy at the location of the condition. Certain condition codes are categorically designated as an energy release risk. If a condition is designated as an energy release risk and the condition is located within the FHCA, the condition is designated as a fire threat condition, which means that the condition is treated as a type which corresponds to a heightened risk of fire ignition; see Figure 15.

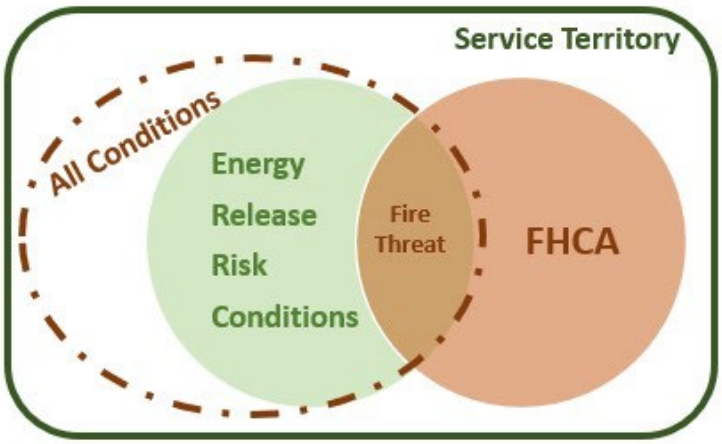


Figure 15: Fire Threat Condition Identification

Condition codes reflecting an appreciable risk of energy release are designated as energy release risk conditions. For example, a damaged or frayed primary conductor has a condition code CONDFRAY, which is designated as an energy release risk condition because the condition could eventually result in a release of energy under certain circumstances. CONDFRAY conditions identified within the FHCA are then designated as a fire threat condition because, due to escalation and environmental factors, the condition could eventually result in an ignition. In contrast, the observation of a missing or broken guy marker would result in the condition code GUYMARK, which is not designated as an energy release risk condition or a fire threat condition. Table 5 describes the general types of energy release risk conditions designated by Rocky Mountain Power that, if located within the FHCA, correlate to a heightened risk of fire ignition, and are then designated fire threats.

Table 5: Energy Release Risk Conditions

Condition Type	Description
Pole Replacement	A pole identified for replacement as a result of intrusive testing or visual inspection that does not meet strength requirements / safety factors
Frayed or Damaged Conductor	A conductor identified with damage/fraying on conductor strands because of visual or detailed inspection
Loose Connections / Bolts / Hardware	A connection, bolt, or hardware component identified that is loose or missing from equipment or framing on the pole during visual or detailed inspections
Loose / Broken Anchors and Guys	Loose or broken anchor and guying identified on the pole as a result visual or detailed inspections
Loose / Damaged Equipment	Loose or damaged equipment (capacitors, regulators, reclosers, etc.) identified on the pole during visual or detailed inspections
Primary And Secondary Conductor Clearances	Primary and secondary conductor clearances from the pole, buildings, or ground that do not meet minimum clearance requirements specified in the NESC identified during visual or detailed inspections
Vegetation Clearances	Vegetation clearances from the pole, primary/secondary conductor, and climbing space that do not meet minimum clearance requirements specified in the NESC identified during visual or detailed inspections
Loose / Broken Communication Lashing Wires	One or more lashing wires (Telco, CATV, Fiber) that are broken or loose identified during visual or detailed inspections
Broken / Missing Grounds	Broken or missing ground on a pole or equipment identified during visual or detailed inspections.
Infrared	Components or equipment that has a temperature rise that exceeds thresholds in company policy identified during enhanced inspection.
Unstable Soils	Soil or backfill on a pole that is unstable or insufficient identified during visual or detailed inspections.

INSPECTION FREQUENCY

Rocky Mountain Power conducts inspections on assets located within the FHCA more frequent than assets located outside of the FHCA. Consistent with industry best practices, inspections are the company's preferred mechanism to identify conditions. In FHCA, Rocky Mountain Power believes that having more frequent inspections is a good mitigation strategy because more regular inspections should identify a certain percentage of conditions at an earlier stage than otherwise. If conditions are identified at an earlier date, they will be corrected sooner. If a particular condition exists for a shorter amount of time, that condition is then less likely to cause a fault event or release energy, which could lead to a wildfire ignition. Inspection frequencies for Wyoming asset types are summarized in Table 6.

Table 6: Planned Inspection Frequency

Inspection Type*	Standard Inspection Frequency (Years)	FHCA Inspection Frequency (Years)
Overhead Distribution (Less than 46 kV)		
Visual	2	1
Detailed	10	5
Pole Sound and Bore	10	10
Pole Test and Treat**	-	10
Overhead Local Transmission (Greater than 46 kV and less than 200 kV)		
Visual	2	1
Detailed	10	5
Pole Sound and Bore	10	10
Pole Test and Treat	10	10
Overhead Main Grid (Greater than 200 kV)		
Visual	1	1
Detailed	2	2
Pole Sound and Bore	10	10
Pole Test and Treat	10	10

* *Inspections with same inspection frequency are performed at the same time.*

** *Treatment may not be applied if the pole is scheduled for replacement through the line rebuild program.*

EXPEDITED CORRECTION TIME PERIODS

Rocky Mountain Power further mitigates wildfire risk in the areas of greatest risk by reducing the time for correction of fire threat conditions, which by definition are located in FHCA. As expressed above, certain types of conditions have been identified as having characteristics associated with a heightened risk of wildfire potential. Identified violations, recorded as fire threat conditions, are on an accelerated correction schedule within the FHCA, as they are considered a heightened risk to safety. The accelerated timeframe reduces the correction timeframe by half for A conditions from the 120 days to 60 days. Additionally, the conditions classified as an imminent energy release risk within the FHCA are corrected immediately. Correction timeframes for fire threat conditions are summarized in Table 7.

Table 7: Planned Correction Timeframes for Fire Threat Conditions in the Fire High Consequence Area (FHCA)

Condition Priority	Correction Timeframes
A - Imminent Energy Release Risk in FHCA	Immediate
A – Energy Release Risk in FHCA	60 Days
B – Energy Release Risk in FHCA	12 Months

2.3 ENHANCED INSPECTIONS

Rocky Mountain Power's enhanced inspection programs use alternate technologies such as infrared or drone imagery to supplement visual inspections, identify hot spots, equipment degradation, and potentially substandard connections.

The infrared inspection program can be performed on transmission lines that are interconnected with the FHCA. The identified lines are grouped by peak loading intervals for the inspections to be performed. The infrared data is used to identify thermal rises in equipment which could be a potential issue not visible through other inspection programs. Drone inspections are performed using an Unmanned Aerial Vehicle (UAV), referred to as a drone. A drone can provide enhanced imagery, alternate perspectives, and the ability to package new technology (LiDAR, IR, detailed imagery) to view assets and assess conditions.

3 VEGETATION MANAGEMENT

Rocky Mountain Power's vegetation management program is designed to reduce the potential of vegetation contact with power lines, which reduces the potential of an ignition originating from electrical facilities. While it is impossible to eliminate all vegetation contact, at least without radically altering the landscape near power lines, a primary objective of the vegetation management program is to minimize contact by addressing both grow-in and fall-in risks. Rocky Mountain Power manages a comprehensive vegetation management program throughout Rocky Mountain Power's territory. All the work performed in the core program provides wildfire mitigation, because the core program is designed to minimize the risk of vegetation contact. In addition, Rocky Mountain Power supplements the core program with heightened activities both inside and outside of the FHCA, further reducing the potential of vegetation contact in those areas.

3.1 REGULAR VEGETATION MANAGEMENT PROGRAM

Tall growing vegetation is pruned to maintain a safe distance between vegetation and power lines. Dead, dying, diseased, or otherwise impacted trees or vegetation, which are at an elevated risk of falling into a power line, are removed. Like other utilities, Rocky Mountain Power contracts with vegetation management service providers to perform the pruning and tree removal work for both transmission and distribution lines.

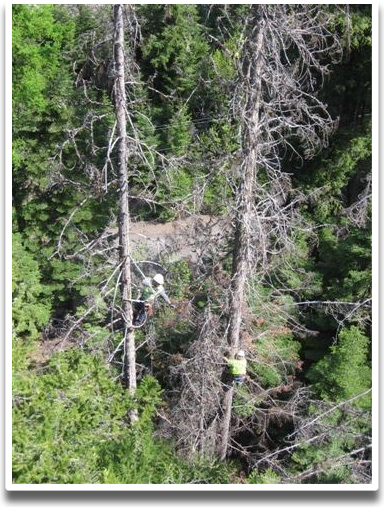


Figure 16: Hazard Tree Removal

DISTRIBUTION

Vegetation near distribution facilities is pruned to maintain a clearance between conductors and vegetation. Vegetation work is performed on a four-year cycle. When cycle work is planned, the circuit is inspected to identify vegetation that needs to be pruned because it may grow too close to power lines before the next scheduled cycle work. When vegetation is identified for pruning, it is pruned to achieve minimum post-work clearance distances, designed to maintain a sufficient clearance until the next scheduled cycle work. Tree growth rates influence the minimum post-work clearance distance. For example, faster growing trees need a greater minimum post-work clearance

to maintain required clearance throughout the cycle. Rocky Mountain Power also integrates spatial concepts to distinguish between side clearances, under clearances, and overhang clearances. The distances for the minimum post-work clearances used for normal cycle maintenance are listed in Table 8.

Table 8: Normal Distribution Minimum Post-Work Vegetation Clearance Distances

	Slow Growing (<1 ft/yr.)	Moderate Growing (1-3 ft/yr.)	Fast Growing (> 3 ft./yr.)
Side Clearance	8 ft.	10 ft.	14 ft.
Under Clearance	10 ft.	14 ft.	16 ft.
Overhang Clearance	12 ft.	14 ft.	14 ft.

Figure 17: High-Risk Tree Removal

Rocky Mountain Power also removes high-risk trees as part of distribution cycle work, to minimize fall-in risk. High-risk trees are dead, dying, diseased, deformed, or unstable trees which have a high probability of falling and contacting a substation, distribution conductor, transmission conductor, structure, guys, or other electric facility. High-risk trees pose a safety and reliability risk and are, therefore, removed. High-risk trees are identified for removal in any vegetation inspection. To identify high-risk trees, the inspector applies the best management practices set forth in ANSI A300 (Part 9).

Distribution cycle work also includes work designed to reduce future work volumes. Volunteer saplings, or small trees that were not intentionally planted, are typically removed if they could eventually grow into a power line. From a long-term perspective, reducing unplanned vegetation growth helps mitigate wildfire risk by eliminating a potential vegetation contact long before it could ever occur.

TRANSMISSION

Vegetation management on transmission lines is also focuses on removing tall and fast-growing trees where easement rights exist. Where rights do not exist vegetation is pruned, maintaining clearances between vegetation and electrical facilities, which vary according to the voltage of the transmission line. At all times, Rocky Mountain Power must maintain the required minimum clearances set forth in FAC-003-04,[6] are referred to as the "Minimum Vegetation Clearance Distance" (MVCD). To determine whether work is needed, an action threshold distance is applied, meaning that work is required if vegetation has grown within the action threshold distance. When work is completed,

[6] See Table 2 of FAC-003-04 at https://www.nerc.com/pa/Stand/Reliability%20Standards/FAC-003-4.pdf

vegetation is removed or pruned to a minimum post-work clearance distance. The applicable distances for various voltages of transmission lines are shown in Table 9.

Table 9: Transmission Minimum Vegetation Clearance (in Feet) by Line Voltage

Minimum Clearance Type	500 kV	345 kV	230 kV	161 kV	138 kV	115 kV	69 kV	45 kV
Minimum Vegetation Clearance Distance (MVCD)	8.5	5.3	5.0	3.4	2.9	2.4	1.4	N/A
Action Thresholds	18.5	15.5	15.0	13.5	13.0	12.5	10.5	5
Minimum Clearances Following Work	50	40	30	30	30	30	25	20

In some circumstances, when local conditions and property rights allow, Rocky Mountain Power may use "Integrated Vegetation Management" (IVM) practices to prevent vegetation growth from violating clearances by proactively managing the species of trees and other vegetation growing in the right-of-way. Under such an approach, Rocky Mountain Power may remove tree species that could potentially threaten clearance requirements, while encouraging low-growing cover vegetation, which would never bring about clearance issues.

Main grid transmission lines are inspected annually. Other transmission lines ("local" transmission) are inspected as needed. Vegetation work is scheduled dependent on several local factors, consistent with industry standards and best management practices. When transmission lines are overbuilt, meaning they are located on the same poles as distribution lines, vegetation management work is completed on the normal distribution cycle schedule.

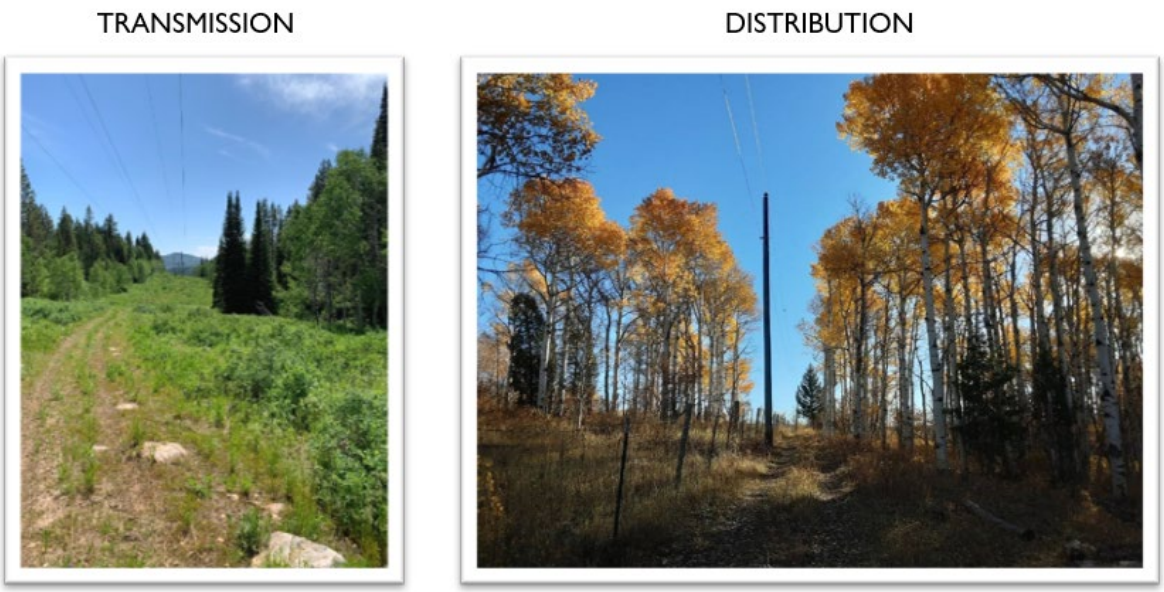


Figure 18: Example Right of Way Clearances for Transmission (left) and Distribution (right)

POST-WORK AUDITS

After Cycle Maintenance work is completed, Rocky Mountain Power conducts post-audits (quality control reviews) to compare completed work against required specifications. Post-audits are conducted after the vegetation management work is completed at a location, typically as soon as reasonably practicable to arrange for prompt corrective work if any exceptions are identified. Rocky Mountain Power targets to perform a full post-work audit on distribution cycle and correction work associated with the distribution annual vegetation inspection program.

3.2 FHCA VEGETATION MANAGEMENT

In addition to the regular vegetation maintenance program discussed above, Rocky Mountain Power's vegetation management specifically targets risk reduction in the FHCA with three distinct strategies. First, annual vegetation inspections are conducted by Vegetation Management on all lines in the FHCA, with correction work also completed based on inspection results. Second, increased minimum clearance distances are used for distribution cycle work completed in the FHCA. Third, annual pole clearing is conducted within the FHCA on subject equipment poles which are defined as poles having switches, clamps, fuses, or other devices that could create a spark.

OFF-CYCLE FHCA VEGETATION INSPECTION

As discussed above, normal vegetation management work on the distribution system is performed on a three-year cycle. In areas of elevated fire risk, however, Rocky Mountain Power may schedule an off-cycle vegetation inspection. In the FHCA, an off-cycle vegetation inspection is typically scheduled on an annual basis (meaning every year except those years where the circuit is already scheduled for regular maintenance). In Wyoming, outside the FHCA, an off-cycle vegetation inspection may be scheduled as needed, typically in conjunction with other wildfire mitigation

activities (as discussed in Section 3.2). An off-cycle inspection is typically scheduled with the goal to complete the inspection prior to the height of fire season. An off-cycle inspection is geared to identify any high-risk trees which may have emerged since the last inspection. An inspector conducting an annual inspection will also identify vegetation likely to exceed minimum clearance requirements prior to the next scheduled inspection. After an annual inspection is completed, vegetation management work is promptly completed as reasonably practicable, including removal of any high-risk trees.

EXTENDED CLEARANCES

Rocky Mountain Power uses increased minimum post-work clearance specification distances for any distribution cycle work in the FHCA. In simple terms, more clearance equates to less chance of a tree and powerline contact. The planned minimum post-work clearance distances for the FHCA are listed in Table 10

Table 10: Distribution Minimum Post-Work Vegetation Clearance Distances in the FHCA

	Slow Growing (<1 ft./yr.)	Medium Growing (1 to 3 ft./yr.)	Fast Growing (>3ft./yr.)
Side Clearance	12 ft.	12 ft.	14 ft.
Under Clearance	12 ft.	14 ft.	16 ft.
Overhang Clearance	12 ft.	14 ft.	14 ft.

POLE CLEARING

Rocky Mountain Power vegetation management performs pole clearing on subject equipment poles located in the FHCA. Pole clearing involves removing all vegetation within a ten-foot radius cylinder (up to eight feet vertically) of clear space around a subject pole and applying herbicides and/or soil sterilant to prevent any vegetation regrowth (unless prohibited by law or the property owner), as illustrated in Figure 19.

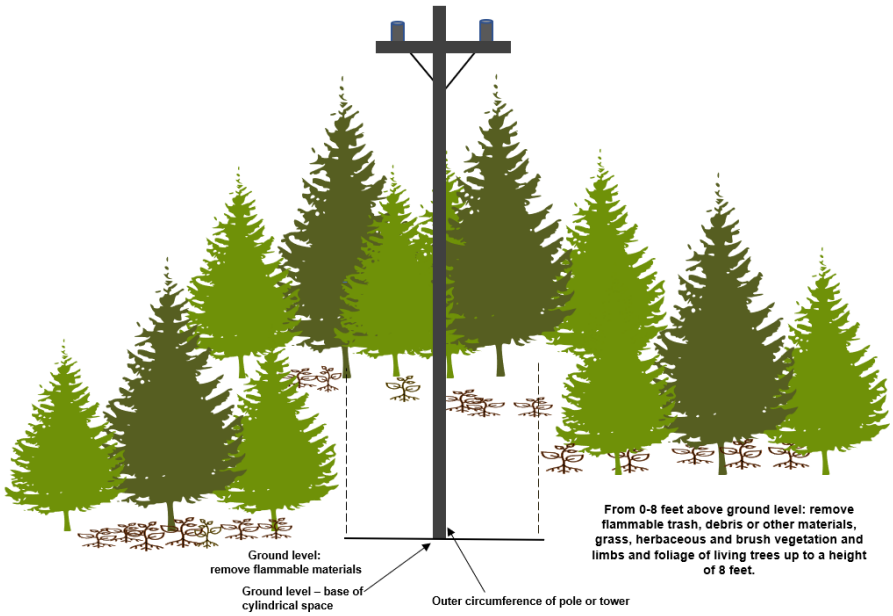


Figure 19: Pole Clearing Strategy

This strategy is distinct from the clearance and removal activities discussed above because it is not designed to prevent contact between vegetation and a power line. Instead, pole clearing is designed to remove fuels at the base of equipment poles, to reduce the risk of fire ignition if sparks are emitted from electrical equipment. Pole clearing will be performed on wildland vegetation in the FHCA around poles that have fuses, air switches, clamps, or other devices that could create sparks.

Figure 20: Pole Clearing at Pole Base

4 SYSTEM HARDENING

Rocky Mountain Power's electrical infrastructure is engineered, designed, and operated in a manner consistent with utility best practices, enabling the delivery of safe, reliable power to all customers. When installing new assets as a part of corrective maintenance or growth projects, Rocky Mountain Power incorporates the latest technology and engineered solutions that have been assessed and proven to be effective. When conditions warrant, Rocky Mountain Power engages in strategic system hardening, like replacing or modifying existing assets and/ or utilizing a new design or technology to make the asset more resilient. With the growing risk of wildfires, the company supplements existing asset replacement projects with system hardening programs designed to mitigate operational risks associated with wildfire. The areas assessed for system hardening are particularly beneficial within the FHCA as defined by the risk modeling described in Section 1 and system hardening initiatives will be evaluated based on the updated map for 2025.

System hardening programs are designed in reference to the equipment on the electrical network that could be involved in the ignition of a wildfire or be subject to an existing wildfire event. In general, system hardening programs reduce the occurrence of events involving the emission of sparks (or other forms of heat) from electrical facilities or reduce the impact of an existing wildfire on utility infrastructure. System hardening programs represent the greatest long-term mitigation tool available for use by electric utilities. The phasing and prioritization of such programs, as described in Section 4, will utilize risk modeling and assessments for program identification which will be evaluated for implementation as a strategic hardening initiative.

No single system hardening program mitigates all wildfire risk related to all types of equipment. Individual programs address several factors, different circumstances, and different geographic areas. Each program described below, shares the common objective of reducing overall wildfire risk associated with the design and type of equipment used to construct electrical facilities. In prioritizing particular design or equipment elements, these programs also consider environmental factors impacting the magnitude of a wildfire. Extreme weather conditions such as dry and windy conditions, present an increased risk of wildfire ignitions and spread. Consequently, system hardening programs may specifically attempt to reduce the potential of an ignition event when it is dry and windy, by utilizing equipment that is less likely to release energy if failure or contact with foreign objects occur.

System hardening cannot prevent all ignitions, no matter how much is invested in the electrical network. Equipment does not always work perfectly and, even when manufactured and maintained properly, can fail; in addition, there are external forces and factors impacting equipment, including from third parties and natural conditions. Therefore, Rocky Mountain Power cannot guarantee that a spark or heat coming from equipment owned and operated by the company will never ignite a wildfire. Instead, the system hardening efforts seek to reduce the potential of an ignition associated with any electrical equipment by making investments with targeted system hardening programs.

4.1 LINE REBUILD PROGRAM

Circuits within the FHCA constructed with bare overhead wire have been evaluated for potential system hardening work. As a part of this program, certain overhead lines may either be moved, removed, retrofitted with more resilient materials such as covered conductor or non-wooden poles, or converted to underground. After completion of system hardening, such lines will be more tolerant to incidental contact, thereby reducing the risk of wildfire.

COVERED CONDUCTOR

Historically, most distribution power lines in the United States – and in Rocky Mountain Power's service territory – were installed with bare overhead conductor. As the name "bare" suggests, the wire surface is uninsulated and exposed to the elements. For purposes of wildfire mitigation, covered conductor which can also be called tree wire or aerial spacer cable, has been installed to provide an insulating layer around the conductor.

The dominant characteristic of covered conductor is manufactured with multiple high-impact resistant extruded layers forming an insulation around stranded hard drawn conductor. The inherent design provides insulation for the energized metal conductor. To be clear, covered conductor is not insulated enough for people to directly handle an energized distribution voltage power line (as discussed below). The insulating layers reduce the risk of wildfire by minimizing the potential of vegetation or ground contact with the conductor.

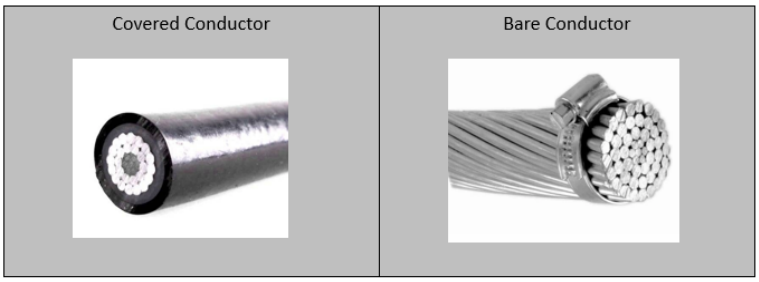


Figure 21: Covered Conductor Compared (left) to Bare Conductor (right) Images from VW Wire and Cable Product List

Variations in covered conductor products have been used in the industry for decades. Due to many operating constraints, however, use of covered conductor tended to be limited to locations with extremely dense vegetation where traditional vegetation management was not feasible or efficient. Recent technological developments have improved covered conductor products, reducing the operating constraints historically associated with the design. These advances have improved the durability of the product and reduced the impact of conductor thermal constraints. There are still logistical challenges with covered conductor. The wire is heavier, especially during heavy snow/ice loading, meaning that more and/or stronger poles may be required to support covered conductor.

The wildfire mitigation benefits of covered conductor are significant. As discussed in the risk assessment in Section 1, a disruption on the electrical network, a fault, can result in emission of a spark or heat that could be a potential source of ignition. Covered conductor reduces the potential of many kinds of faults. For example, contact from an object is a major category of real-world faults which can cause a spark. Whether it is a tree branch falling into a line and pushing two phases together or a Mylar balloon carried by the wind drifting into a line, contact with energized bare conductor can cause the emission of sparks. If those same objects contact covered conductor, the

wire is insulated enough that there are no sparks. Likewise, many equipment failures are a wildfire risk because the equipment failure then allows a bare conductor to contact a grounded object. Consequently, covered conductor reduces the risk of ignition associated with most types of equipment failure. For example, if a cross arm breaks, the wire held up by the cross arm often falls to the ground (or low and out of position, so that the wire might be contacting vegetation on the ground or the pole itself). In those circumstances, a bare conductor can emit sparks (or heat) that can cause an ignition. The use of covered conductor, in those exact same circumstances, would greatly reduce the risk of ignition, because the insulation around the wire is sufficient to prevent any sparks and limit energy flow, even when there is contact with an object.

Covered conductor is especially well-suited to reduce the occurrence of faults linked with the worst wildfire events. Dry and windy conditions increase the wildfire risks. Wind is the primary driving force behind wildfire spread. At the same time, wind has distinct and negative impacts on a power line. The wind blows objects into lines; a strong wind can cause equipment failure; and even parallel lines slapping in the wind can cause sparks. Covered conductor specifically reduces the potential of an ignition event, because covered conductor is especially effective at limiting the kinds of faults that occur when it is windy. Taken together, these substantial benefits warrant the use of covered conductor in areas with a high wildfire risk.

UNDERGROUND

Rocky Mountain Power also continues to evaluate the potential to convert overhead lines to underground lines for the rebuild projects. The potential wildfire mitigation benefits are undeniable. While an underground design does not eliminate every ignition potential (i.e., because of above-ground junctions), it is the most effective design to reduce the risk of a utility-related ignition. Currently, the cost and operational constraints of underground construction often make it difficult to apply on a widespread basis. Nonetheless, some electric utilities are planning to employ an underground strategy more broadly.

Currently, Rocky Mountain Power is continuing to evaluate the use of underground design as part of the rebuild program on a project-by-project basis; and it uses under-grounding where practical. Through the design process, every rebuild project is assessed to determine whether sections of the rebuild should be completed with underground construction. Some communities and landowners may prefer, for aesthetic reasons, to pursue a higher cost underground alternative. Consistent with electric service regulations and company design standards, Rocky Mountain Power will collaborate with communities or individual landowners who are willing to pay the incremental cost and obtain the necessary legal entitlements for underground construction.

NON-WOODEN POLES

Traditionally, overhead poles are replaced or reinforced within the service territory consistent with the NESC, company policies, and prudent utility practices. When a pole is identified for replacement, typically through routine inspections and testing, major weather events, or joint use accommodation projects, a new pole consistent with engineering specifications suitable for the intended use and design is installed in its place. Engineering specifications typically reflect the use of wooden poles which is consistent with prudent utility practices as they are considered safe and structurally sufficient to support overhead electrical facilities during standard operating conditions. However, the use of alternate non-wooden construction, such as steel or fiberglass, provides additional structural resilience in high-risk locations during wildfire events and, therefore, aid in restoration efforts. For example, as a part of covered conductor installation, the strength of existing poles are evaluated. In many cases, the strength of existing poles may not be sufficient to accommodate the additional weight of covered conductor. In these instances, the existing wooden pole is upgraded to support the increased strength requirements and replaced with a non-wooden solution for added resilience.

Figure 22: Distribution Fiberglass Poles

4.2 ADVANCED SYSTEM PROTECTION AND CONTROL

Rocky Mountain Power is continuing to replace and upgrade electro-mechanical relays with microprocessor relays throughout the service territory for operational improvements system wide. Microprocessor relays provide multiple wildfire mitigation benefits. They can exercise programmed functions much faster than an electro-mechanical relay and, most importantly, the faster relay limits the length and magnitude of fault events. After a fault occurs, energy is released, posing a risk of ignition, until the fault is cleared. Reducing the duration of a fault event reduces the risk that the fault might result in a fire.

Additionally, microprocessor relays also allow for greater customization to address environmental conditions through a variety of settings and are better able to incorporate complex logic to execute specific operations. These functional features allow for the company to use more refined settings for application during periods of greater wildfire risk, to be discussed in Section 6. As part of replacing an electro-mechanical relay, the associated circuit breaker or other line equipment may also be replaced, as appropriate to facilitate the functionality of a microprocessor relay. Finally, as part of this upgrade SCADA is extended to the relay allowing remote monitoring and control of the device. This may include upgrade of existing communication assets or installation of new assets.

4.3 EXPULSION FUSE REPLACEMENT

Overhead expulsion fuses serve as one of the primary system protection devices on the overhead system. A typical expulsion fuse has a small metal element within the fuse body that is designed to melt when excessive current passes through the fuse body, interrupting the flow of electricity to the downstream distribution system. Under certain conditions, the melting action and interruption technique will expel an arc out of the bottom of the fuse tab. To reduce the potential for ignition because of fuse operation, Rocky Mountain Power uses alternate equipment that does not expel an arc.

4.4 FAULT INDICATORS

As described above, Rocky Mountain Power is continuing to replace and upgrade electro-mechanical relays with microprocessor relays throughout the FHCA and enable the use of more refined settings for application during periods of greater wildfire risk, discussed in detail in Section 6. As Rocky Mountain Power continues to understand risk and implement mitigation programs such as EFR settings, the company may install additional communicating fault indicators as needed to continue balancing the impact to customers and wildfire mitigation.

5 SITUATIONAL AWARENESS

As described in Section 1, Rocky Mountain Power uses the Fire High Consequence Area (FHCA) as the company's baseline risk map, layered with a risk driver analysis to inform longer term strategic investment and modifications to asset inspections and vegetation maintenance practices. However, as climate and weather patterns change, extreme weather events are predicted to become more frequent, and the potential exists for seasonal, dynamic, and/or isolated risk events to occur that compound or deviate from this baseline risk. Therefore, having an additional sophisticated, dynamic risk model grounded in situational awareness is pertinent to ensure electric utilities know when, where, how, and why to take additional action to mitigate the risk of wildfire in the shorter term.

Rocky Mountain Power's approach to situational awareness includes the acquisition of data to forecast, model, and assess the risk of potential or active events to inform operational strategies, response to local conditions, and decision making. These key components, as described below and illustrated in Figure 23, rely on a core team of utility meteorologists to guide, execute, and continuously evolve.

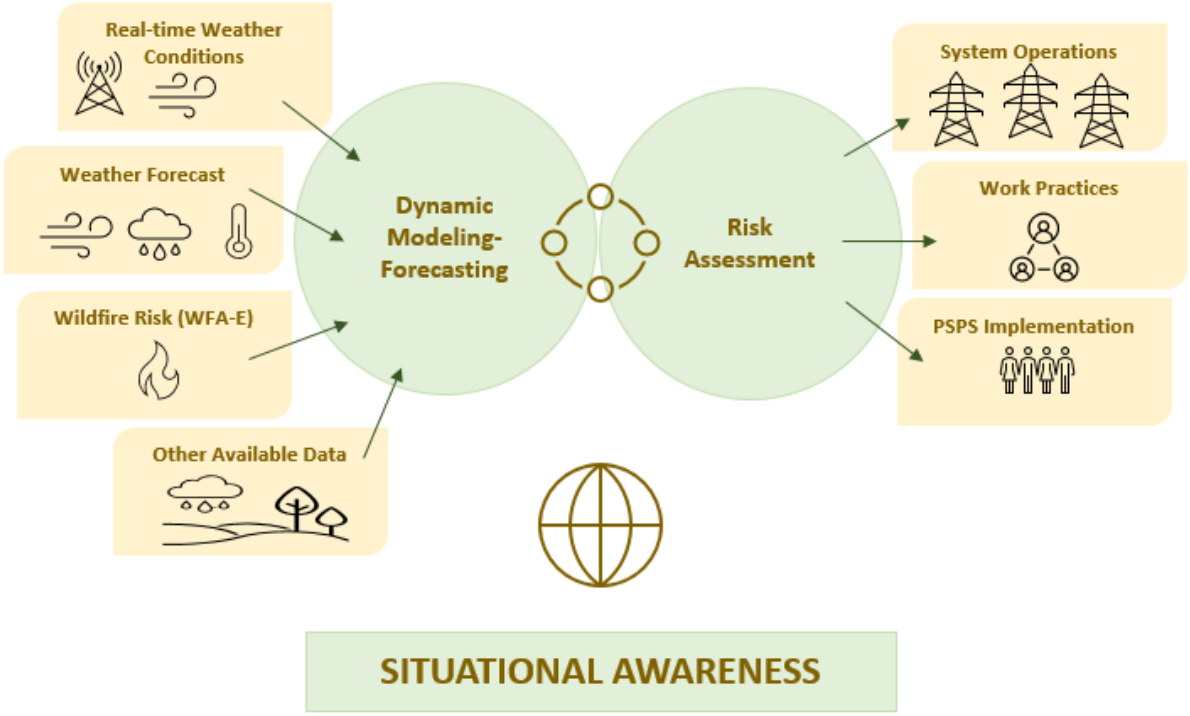


Figure 23: Overview of Situational Awareness

5.1 METEOROLOGY

As described above, the ability to gather, interpret, and translate data into an assessment of utility specific risk and informed decision making is a key component of Rocky Mountain Power's situational awareness capability. To support this effort, Rocky Mountain Power developed a meteorology department that consists of four full-time meteorologists, one data scientist, and one manager. The

team's experience includes decades of fire weather forecasting for various government agencies such as the National Weather Service (NWS) and Geographic Area Coordination Center (GACC).

The objectives of this department are to supplement the company's longer term risk analysis capabilities by:

- Implementing a real-time risk assessment and forecasting tool,
- Identifying and closing any forecasting data gaps,
- Managing day-to-day threats and risks, and
- Providing information to operations to inform and recommend changes to operational protocols during periods of elevated risk, as depicted below.

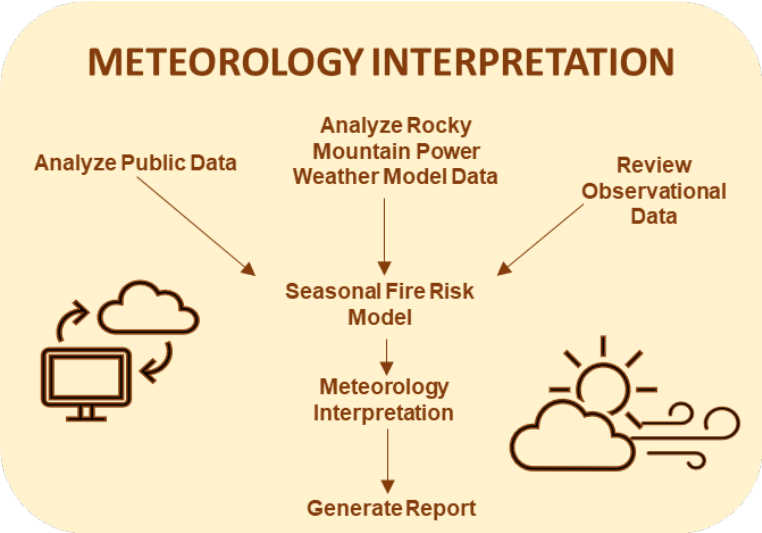


Figure 24: Meteorology Daily Process

Rocky Mountain Power's meteorology department also coordinates with government agencies that provide weather warnings. For instance, during high-risk weather events, the company's meteorologists participate as a represented partner in daily coordination calls hosted by the National Weather Service (NWS) and/or the Geographic Area Coordination Center (GACC). In these calls, they ingest information and updates, and may provide additional pertinent information to the GACC. Additionally, the NWS may host briefings during high-risk weather events that are geared toward an emergency management audience. The company's meteorology department also participates in these calls to ensure that forecasting discrepancies are understood and that there is alignment and/or clarity regarding external messages from a utility or the NWS.

5.2 NUMERICAL WEATHER PREDICTION

The creation of an impacts-based forecasting system consisting of an operational Weather Research and Forecasting (WRF) model and a complimentary 30-year WRF reanalysis across the company's entire service territory forms the foundation of Rocky Mountain Power's meteorology program. Using the WRF reanalysis and other training data, the company plans to continue building and training machine learning models to improve its operational thresholds and convert its weather forecasts into predictions of system impacts. To assess confidence in the calculated values, forecasts

are actively monitored to assess trends and potential convergences or divergences between forecasts and actuals during period(s) of elevated risk. As the time of observation nears the forecast period, confidence in the forecasted values increases.

OPERATIONAL WRF MODEL

Rocky Mountain Power's meteorology department uses a twice daily, two-kilometer-resolution, hourly WRF model. It produces a comprehensive forecast of atmospheric, fire weather, and National Fire Danger Rating System (NFDRS) parameters out to a timescale of 96 hours (four days). The model's high resolution gives a much more complete picture of finer scale atmospheric features than what is available with most public four-day ahead timescale models. In addition, the WRF data is overlayed on overhead distribution circuits and transmission lines, along with other relevant utility asset data, for further analysis.

30-YEAR WRF REANALYSIS

Rocky Mountain Power's meteorology department developed a 30-year, two-kilometer resolution, hourly WRF reanalysis. The 30-year WRF reanalysis uses the same configuration and contains the same weather, fire weather, and NFDRS parameters as the company's operational WRF to minimize any potential forecast biases between the two datasets. This reanalysis data was correlated with historic outage data and wildfire events using statistical and machine learning techniques to improve the company's weather-related outage and wildfire risk thresholds. Output from Rocky Mountain Power's operational WRF model is then ingested by the company's machine-learning models and GIS tools to convert the daily forecast into potential circuit-level system impacts and to map the intersection of fire weather and outage related risks across its service territory. The 30-year WRF reanalysis also provides a daily circuit-level look at the severity of fire weather conditions relative to the past 30 years and, based on that historic data, an assessment of whether the forecast weather event would historically have resulted in an outage on that circuit.

CONTINUAL IMPROVEMENT

The Rocky Mountain Power WRF domain covers the entirety of PacifiCorp's six-state service territory. From 2021 to 2022, Rocky Mountain Power invested in the procurement of two High Performance Computing Clusters (HPCCs) to provide the computational resources needed to run an operational WRF model that large. Currently, the two systems provide a high resolution, four-day forecast of the WRF domain twice daily through a single, deterministic model.

This single, deterministic WRF model has allowed Rocky Mountain Power to take meaningful action in advance of severe weather to reduce restoration times and increase reliability. However, it does not account for multiple weather scenarios, which makes it more difficult to forecast the types of low probability, high-impact weather events that are becoming both more common and more impactful. To address this issue, Rocky Mountain Power plans to implement a multi-member WRF ensemble forecasting system. This new forecasting system will enable analysis of multiple weather scenarios simultaneously, thereby improving the accuracy of the company's forecasts and its ability to respond to severe weather in advance. Additionally, the company also plans to increase the

computational capacity of its forecast system by purchasing 3 new HPCCs. These new supercomputers will add the computing power needed to implement the new forecasting system and, at the same time, allow for full system redundancy, which can be critical during severe weather events.

5.3 ONGOING DATA ACQUISITION AND INPUTS

Ongoing data acquisition and inputs, from both internal and external sources, is another key component of Rocky Mountain Power's situational awareness model.

WEATHER STATION NETWORK

Public weather data has been available for many years for reference. However, relying only on publicly available data can have limitations. When using publicly available weather data the utility does not have visibility into the maintenance and calibration records or standards used to maintain the weather station collecting the data. Additionally, the frequency of data collection may not match the requisite intervals for performing real time risk assessments and dynamic modeling. Finally, publicly available data may have geographic coverage gaps within the utility's service territory.

When weather stations are owned by the utility, the calibration date and usability of the data is known, the data reporting intervals can be adjusted to report more frequently, and the data can be used to inform real time operations. Additionally, weather stations can be installed and adjusted to pinpoint specific locations needed to inform utility risk assessment. For all these reasons Rocky Mountain Power is continuing to invest in a utility-owned and operated weather station network within the company's service territory. Currently, Rocky Mountain Power has a network of 40 weather stations in Wyoming installed directly on utility infrastructure. Additionally, the company also has portable weather stations that it can deploy as needed, for example, during extreme weather events.

As shown in Figure 25 below, data gaps are a key consideration in siting weather stations. These can include a lack of data granularity, as well as the absence of any data altogether. Additionally, as part of its weather station siting methodology, the company accounts for geographic gaps in publicly available weather data from within its service territory, to include factors like data resolution, and consistency.

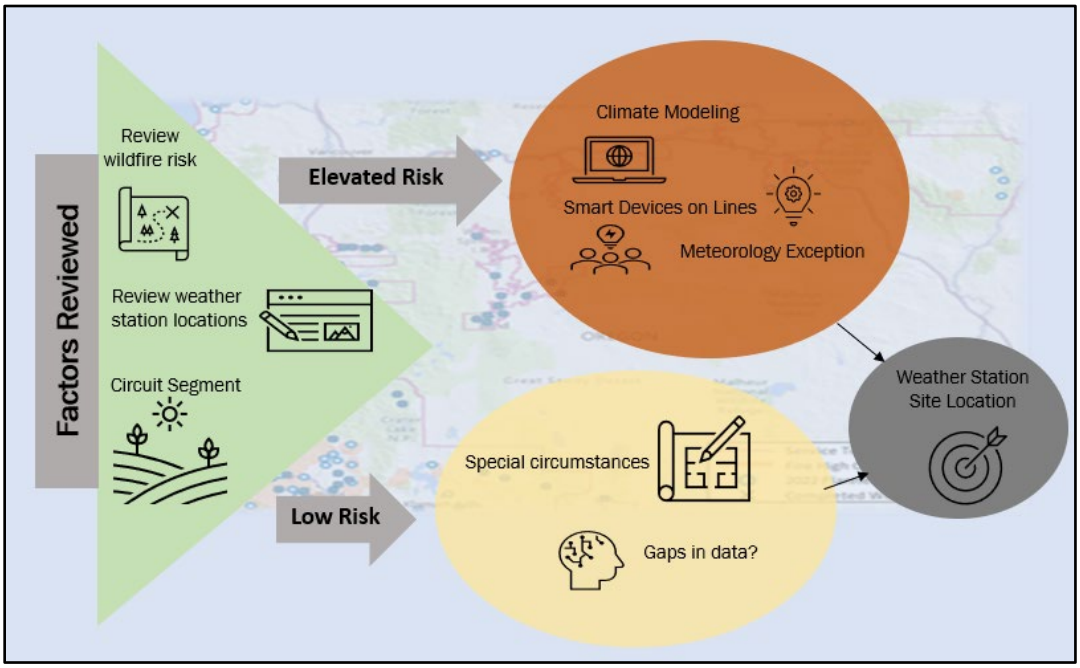


Figure 25: General Weather Station Siting Methodology

Weather station data is used to create a model of routine weather patterns in specific areas. This weather data is then leveraged alongside the operational WRF, its companion 30-year weather data reanalysis, and Technosylva's Wildfire Analyst-Enterprise (WFA-E) software to model potential impacts to infrastructure associated with forecasted weather events and inform operational protocols and decision making, such as when and where to stage resources and how to prioritize restoration times. This improved modeling allows for better anticipation of impactful weather events and is a key component of situational awareness. Below Table 11 depicts the plan and annual phasing of Rocky Mountain Power's weather station installation work.

Table 11: Weather Station Build Out Plan

	2023 Actuals	2024 Plan	2025 Plan	2026 Plan	Total
New Weather Stations	15	15	8	5	43
Total WY Fleet	40	55	63	68	68

In 2024, Rocky Mountain Power plans to install 15 additional weather stations, evaluate additional locations for installation in 2025, and depending on data gaps and risk, grow the weather station fleet to approximately 65 stations by 2026. To ensure the weather stations are operating appropriately, they are calibrated on an annual basis. Rocky Mountain Power's meteorology department will continue to evaluate the benefits of installing additional weather stations.

PUBLICLY AVAILABLE SITUATIONAL AWARENESS DATA

Rocky Mountain Power's weather stations and WRF model generate a considerable amount of data each day. The company makes this data available to its employees, customers, and public safety partners through a Situational Awareness website, pacificorpweather.com, alongside weather station observations and forecast data from other trusted government sources, including the

National Weather Service. Combining weather station observations with forecast data allows Rocky Mountain Power to compare real-time weather observations with forecast data. Further, the wind climatology of each weather station is considered, with real-time and forecast wind conditions color-coded based on station-specific statistics like 95th and 99th percentile values. All the above data are automatically updated on the website as new data is available and can be viewed in maps, tables, and meteograms. Below Figure 26 includes sample material from the company's public situational awareness website.

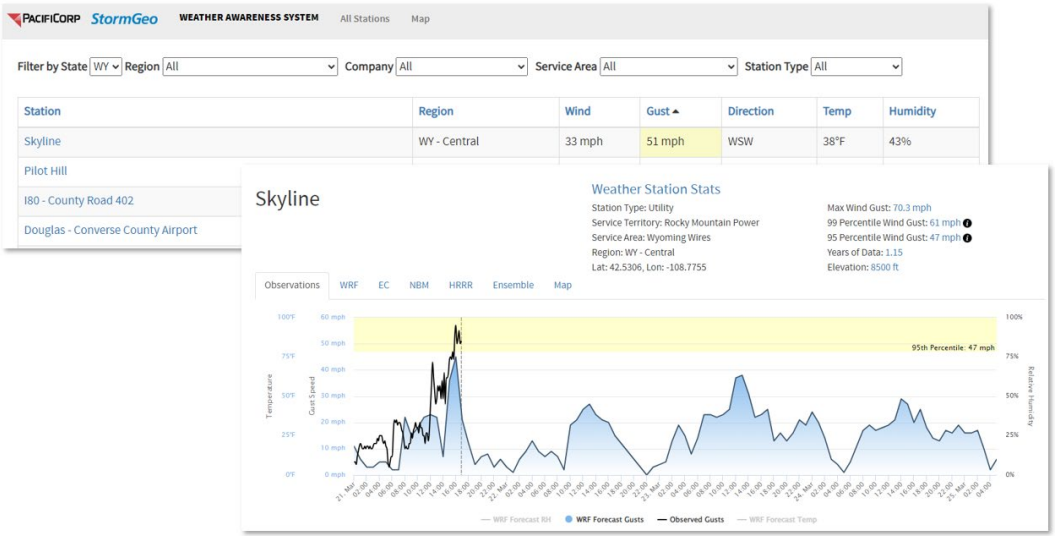


Figure 26: Sample of Publicly Available Situational Awareness Information from a Weather Station in Central Wyoming

This data is also ingested into an internal dashboard used for situational awareness during periods of elevated risk, like during a PSPS. The dashboard is also customizable based on the scale of the event and includes station alert speeds and/or other decision points.

In 2024, Rocky Mountain Power plans to incorporate additional information into the internal dashboard to support its situational awareness and implement improved website functionality.

5.4 WILDFIRE RISK MODELS AND TOOLS

Rocky Mountain Power leverages a variety of models and tools to assess dynamic wildfire risk, which are described in the subsections below.

FIRECAST AND FIRESIM

As discussed in Section 1.2, in reference to the FireSight tool, Rocky Mountain Power procured and implemented Wildfire Analyst Enterprise (WFA-E), the broad suite of wildfire risk modeling tools from Technosylva. WFA-E includes two *seasonal* wildfire models, FireCast and FireSim, and is used by the company to forecast the risk of wildfire and the potential behavior of a wildfire, should it occur. As described in Appendix A – Wildfire Risk Modeling Data Inputs, the inputs for the various WFA-E models are similar. They are, however, used for different purposes. FireCast performs simulations daily to assess wildfire risk more broadly, while FireSim is used to simulate growth and spread of specific and unique fire events.

FireCast: FireCast performs millions of wildfire simulations daily across the company's service territory to provide a 96-hour look ahead that identifies the risk of wildfire (both of ignition and impact) in particular locations. This output is then joined with overhead distribution and transmission asset location data to provide location-specific wildfire risk and consequence forecasts. It is important to note that the asset location data does not assess the probability of a utility asset causing an ignition but, instead, is used to inform operational decision-making, as discussed in Sections 5.5 and 8.

FireCast outputs include the following information:

- An assessment of the potential for a wildfire, given fuel, weather, and other conditions.
- A simulation of how a wildfire would behave in the event of an ignition. This would include, for example: the forecasted rate of spread, size, and flame length.
- Data on the population threatened and potential impact to assets (e.g., identification of buildings that would be threatened in the event of a wildfire).

Figure 27 is an example of FireCast output from July 2023. It shows the potential acreage burned should an ignition occur near a circuit. The areas around the circuits highlighted in yellow are forecast to be within 100 acres of wildfire spread. The line graphs to the right depict variables like wind speed and fuel moisture for the forecast period. This information is then used to inform operational practices like whether to de-energize proactively or, if time allows, take measures to protect utility assets and communities that could be in the path of a wildfire. This example does not make any assumptions about the effectiveness of the initial or extended attack that may impact the forecast of acres burned.

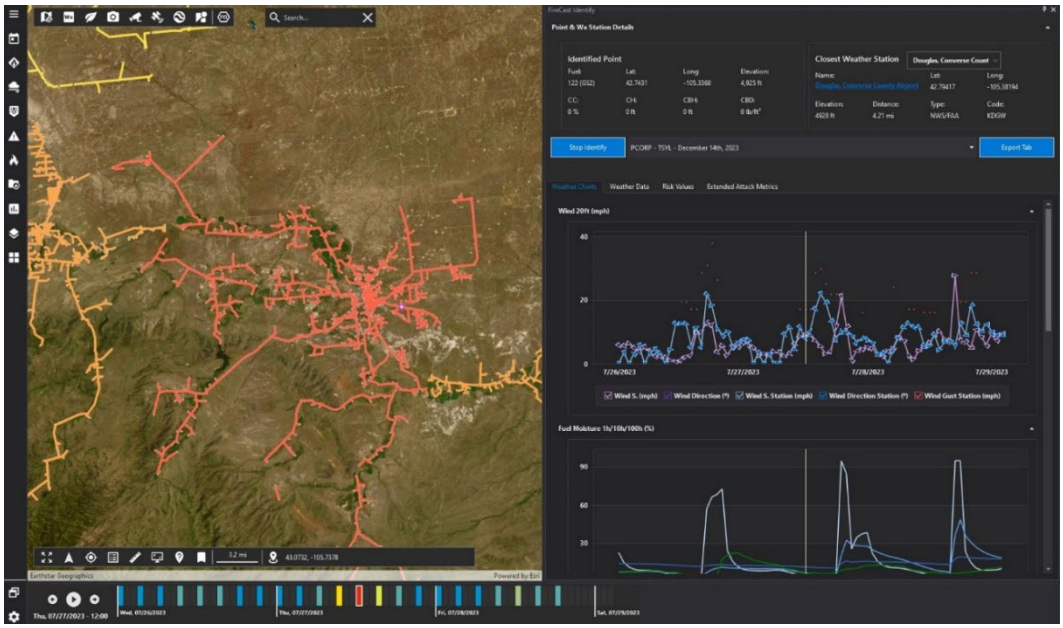


Figure 27: Example of FireCast Output from Converse County, July 2023

FireSim: FireSim runs simulations that forecast potential fire behavior and spread from a 1 to 96-hour period and assess the potential impact on populations, buildings, utility assets, and other resources in the field. FireSim's model assumes no suppression efforts to slow the fire's spread and considers the following elements:

- **Initial Attack Assessment**. Assessment of how difficult initial attack could be for first responders and the probability of stopping the fire within the first operating period. An operational period is "The period of time scheduled for execution of a given set of tactical actions"[7] and varies from incident to incident.
- **Population at Risk**. Projection of the number of people in the path of the fire and the timing of when the fire is likely to arrive.
- **Assets at Risk**. Physical assets like utility equipment, residential and commercial structures, barns, outbuildings, other structures, and the timing of when the fire is likely to arrive.
- **Places at Risk**. These are locations identified on the maps that may not be physical assets but have other significance. These could include parks, reservoirs, cultural sites, campgrounds, or other locations.
- **Weather and fuels conditions**: Wind speed, direction, fuel moisture content.

Figure 28 below includes an example of FireSim outputs and reports from a simulated event in Converse County, July 2023.

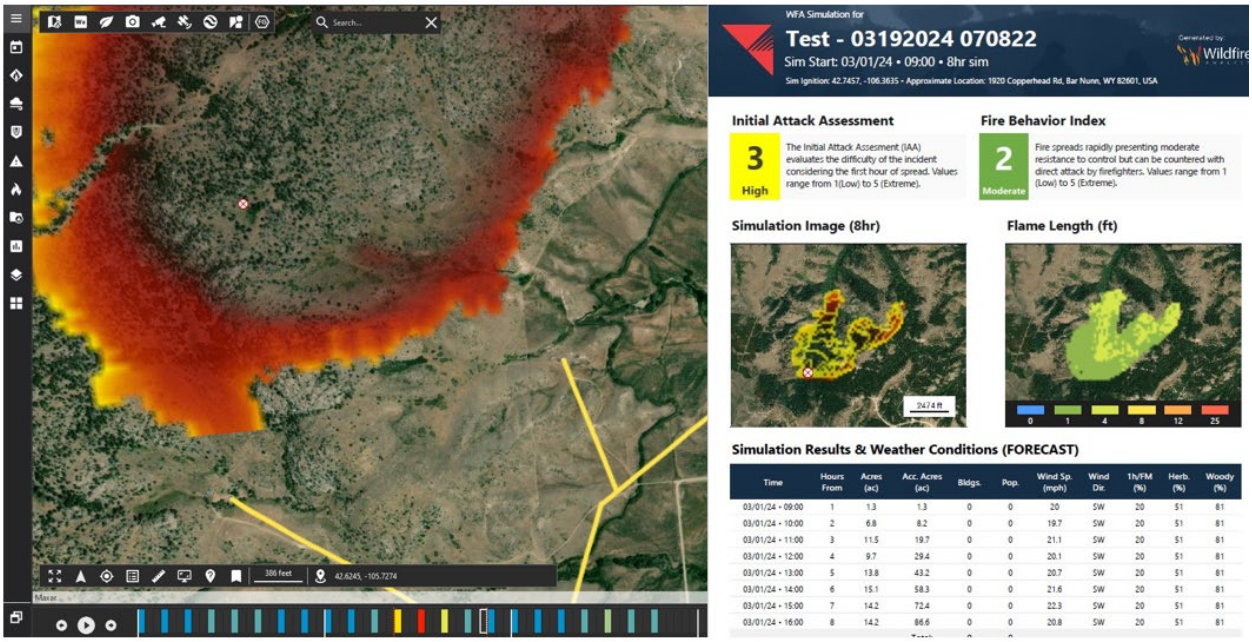


Figure 28: Example FireSim Output (left) and Report (right) from Converse County, July 2023

The shaded area in the graphic on the left shows the forecasted spread of the simulated fire over a period of 12 hours. In the companion FireSim report to the right, the rating of the Initial Attack

[7] Federal Emergency Management Agency. FEMA Operational Planning Manual FEMA P-1017. June 2014. Sourced November 6, 2023.

Assessment and Fire Behavior Index are highly influenced by fuel models and forecasted weather conditions. The image on the left shows the forecasted direction of the fire and the image on the right shows the forecasted flame length. Below the images is a table showing a time-based impact analysis of forecasted acres burned, population and buildings at risk and weather and fuel conditions. In sum, FireSim modeling is used to assess potential fire growth, spread, and damage to inform response efforts and decision-making by Rocky Mountain Power operations.

FIRE POTENTIAL INDEX

Prior to the start of the 2023 fire season, Technosylva developed a complementary metric called the Fire Potential Index (FPI) for Rocky Mountain Power. The FPI is a supplementary metric that quantifies the potential for large or consequential wildfires based on weather, fuels, and terrain. In combination with the Modified Hot-Dry-Windy Index (MHDWI), the FPI is used to guide operational decision-making as it relates to wildfire risk and spread.

The following three inputs contribute to the final FPI score:

- **A Fuel Model Complex** that assesses the type of fuels and the time elapsed since the last fire to quantify how the fuels may affect fire behavior, type, and suppression difficulty. The model considers fire history, fuel growth, and fuel dryness over time in response to weather conditions to support accurate wildfire modeling.
- **Weather Conditions** that consist of a combination of wind gusts, temperatures, and fuel conditions. For wind driven risk events in particular, Rocky Mountain Power has identified some geographically driven patterns that correlate to higher risk.
- **Terrain Difficulty Index** which represents the level of geographical complexity to access an area. For instance, regarding fuels and terrain driven risk events, large areas of contiguous complex fuel and terrain in areas of limited or difficult access present the greatest risk when fuels are dry, and weather is hot and dry.

The scores from these inputs are then correlated to a level of fire risk in Figure 29 below which shows the FPI scoring scale and percentiles. An FPI value or FPI percentile can then be used to determine the FPI risk level. For instance, FPI values >37.5 or percentiles >99% indicate that fire risk is extremely high. In contrast, an FPI value <5 or percentile <60 indicate that fire risk is low.

FPI Category	FPI Values		FPI Percentiles
Very Low	<5		<60
Low	5-10		60-80
Moderate	10-13.5	OR	80-85
High	13.5-23		85-95
Very High	23-37.5		95-99
Extreme	> 37.5		>99

Figure 29: Fire Potential Index Scale

MODIFIED HOT-DRY-WINDY INDEX

In 2023, Rocky Mountain Power analyzed over 2,000 wildfires between 1991-2021 across the western United States that were known to be or widely suspected of being caused by power lines.[8] Based on its analysis of the ignitions, which included fire size and consequence, the company identified a correlation between utility ignition and a measure of fire weather based on temperature, relative humidity, wind, and fuels conditions. As a result, Rocky Mountain Power created an index called Modified Hot-Dry-Windy Index (MHDWI). The MHDW Index combines the Energy Release Component (ERC) from fuels with weather data from the surface and low levels of the atmosphere from the Hot-Dry-Windy Index (HDWI)[9] to help determine what days are more likely to have conditions that could result in consequential wildfires. Based on this analysis, levels of risk (non-fire season, low, elevated, significant, and extreme) were assigned to certain combinations of environmental conditions that can be used to inform decision-making. Figure 30 visually depicts the historic analysis, correlation of utility ignitions to the MHDW Index and wind gust percentiles and assigned levels of risk expressed using a five color-code scheme where a higher percentile of wind gusts and MHDW Index correlated to a higher level of risk. In terms of the historic analysis, circles in blue reflect fire events where no structure damage or injuries occurred. The circles in red reflect events where one or more structure was damaged, or one or more injury occurred. As depicted in Figure 30, the events in red, where structure damage or injuries occurred, correspond to significant or extreme risk levels.

[8] States included in the analysis were Utah, Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Washington, and Wyoming.

[9] United States Forest Service" "A Brief Introduction to the Hot-Dry-Windy Index."

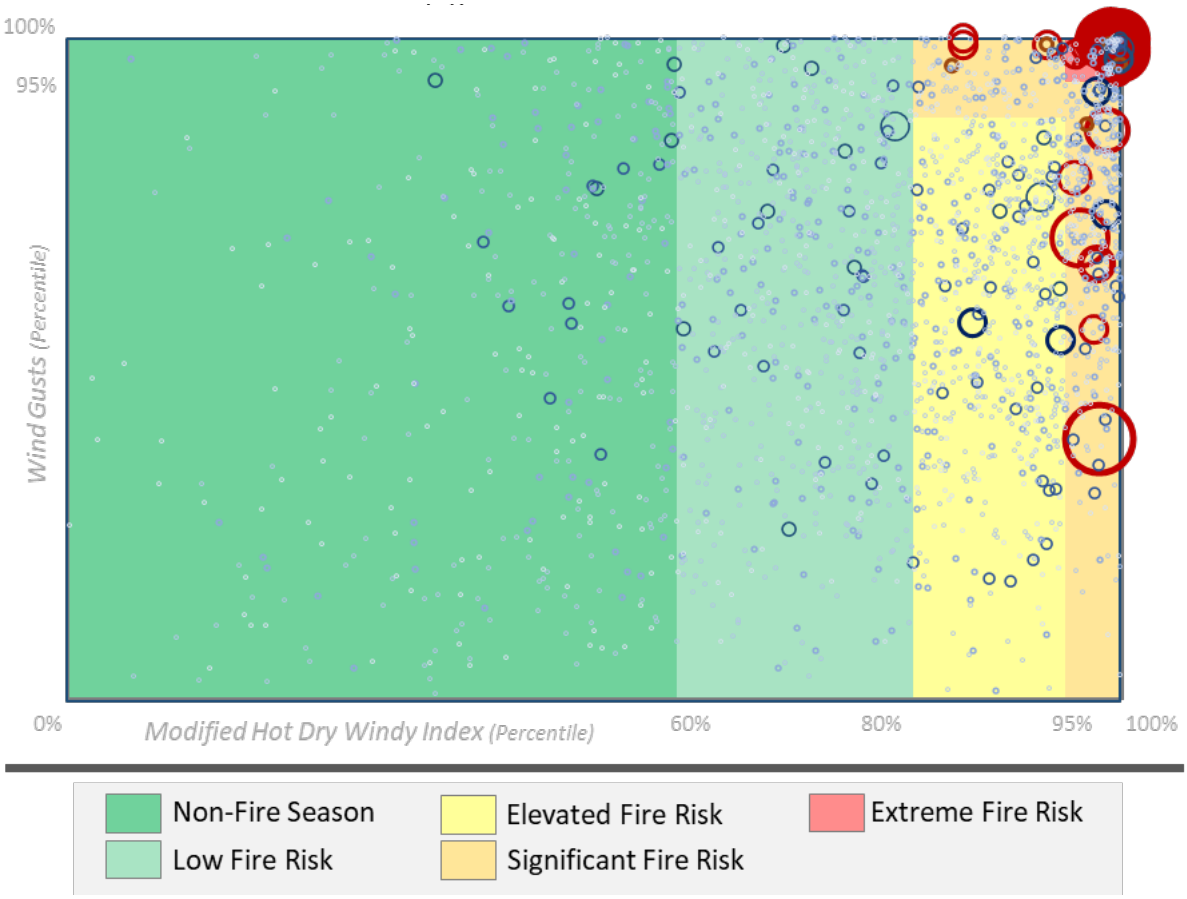


Figure 30: Correlation of Utility Ignitions to MHDWI and Wind Gust Percentiles to Determine Risk Levels

5.5 APPLICATION AND USE

Rocky Mountain Power's meteorology team leverages the various analysis, model outputs, and indices described above to produce a district-based, weather-related system impact forecast.

ASSESSING DISTRICT FIRE RISK

Meteorology combines the Fire Potential Index (FPI), the MHDW Index, and (where applicable) an analysis of the state of grass curing to produce a daily district-based, weather-related system impacts forecast that guides operational decision-making. Additionally, when moving into elevated, significant, or extreme wildfire risk, meteorology also performs an additional review of fuels and fire weather forecasts and observations by using some or all the metrics and methods identified in Table 12 below.

Table 12: Additional Considerations for District Fire Risk

Additional Considerations	District Fire Risk
Current or Recent Wildfire Activity	Current or recent wildfire activity is an indication that the weather and fuels conditions will contribute to fire occurrence and spread.
Geographic Area Coordination Center (GACC) Products	Seven-Day Significant Wildfire Potential, Fuels & Fire Behavior Advisories, and other outlooks or discussion products.
National Weather Service Watches or Warnings	Fire Weather Watches, Red Flag Warnings, High Wind Warnings, and other products issued by the National Weather Service
Evaporative Demand Drought Index (EDDI)	EDDI identifies anomalous atmospheric evaporative demand and provides an early warning of increased wildfire risk.
Fire High Consequence Areas (FHCA) (Y/N)	Fire High Consequence Areas are pre-identified areas of elevated risk based on historical fires, climatology, geography, and populations
Fire Potential Index (FPI)	FPI quantifies the potential for large or consequential wildfires based on weather, fuels, and terrain.
Fuels Conditions (Grasses, Live Fuels, & Dead Fuels)	Observations of the local fuel conditions including 1, 10, 100, and 1000-hour dead fuel moisture, herbaceous and woody live fuel moisture, tree mortality, Energy Release Component, etc.
High Resolution Fire Weather Forecasts (WRF)	Rocky Mountain Power's two-kilometer WRF model produces a twice daily territory-wide forecast of fire weather and National Fire Danger Rating System (NFDRS) outputs across a 96-hour time horizon.
Severe Fire Danger Index	Publicly available index that uses two United States National Fire Danger Rating System indices that are related to fire intensity and spread potential.
Vapor Pressure Deficit (VPD) one month running average	Vapor Pressure Deficit is a measure of the atmospheric demand (thirst) for water. Values above the 94th percentile have been associated with large wildfires.
Wildfire Consequence Modeling (WFA-E)	Millions of wildfire simulations are performed daily to map out potential wildfire risk and consequence across the service territory.

If the forecast indicates that a significant fire weather event is possible within the forecast period, the meteorology team may leverage more resources to analyze concerns such as timing, strength, areas potentially impacted, and forecast confidence. These resources include tools like wildfire consequence modeling and high-resolution models to identify localized areas of greatest risk. Additionally, the meteorology team may collaborate with the local National Weather Service office and/or the regional Geographic Area Coordination Center (GACC) office if there is significant or extreme wildfire risk.

Significant fire potential forecasts issued by the GACC are also used as supplemental criteria to the MHDW Index, an output of PacifiCorp's WRF model. In addition to the GACC forecast, the meteorology team closely monitors fuel and Energy Release Component (ERC) charts that are published by regional GACC coordination centers. Wildfire and traffic cameras are also used to assess fuel conditions. Additionally, the on-duty meteorologist also reviews the most recent publicly

available weather forecast model trends and National Weather Service products (forecast discussions, watches, warnings, advisories, etc.) to complete a more comprehensive analysis.

The risk level for each district is then determined by the on-duty meteorologist's evaluation of all the information gathered relative to the criteria listed in Table 12 above. In addition to the system impact forecast matrix shown below, a written weather summary is prepared in which the on-duty meteorologist provides key forecast takeaways and additional detail regarding the strength and timing of any weather threats.

This analysis is then combined with the team's district-based fire risk forecast to produce a complementary system impacts forecast that is used to support decision-making related to implementation of the operational, short term risk mitigation programs and measures that will be discussed in Section 6, Section 7, and Section 8. An example of a district-based fire risk forecast is shown in Figure 31 below.

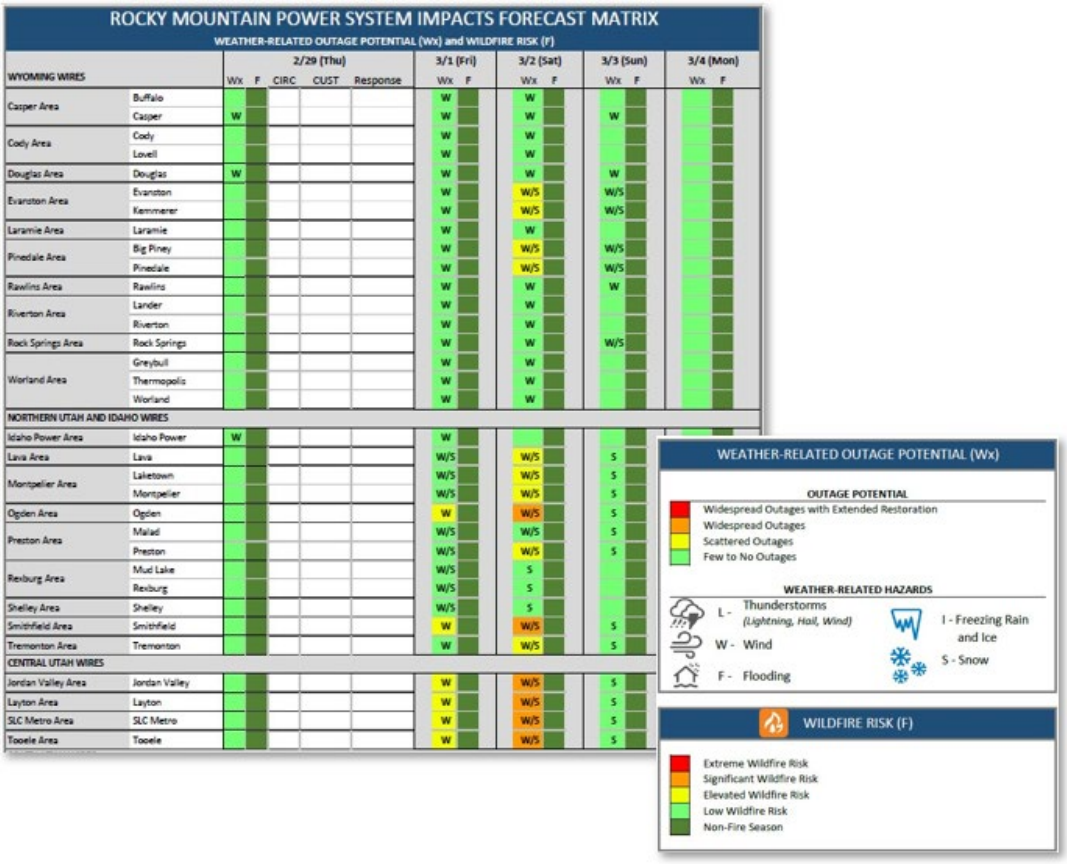


Figure 31: Example System Impacts Forecast

In sum, Rocky Mountain Power's meteorology team leverages a considerable number of resources to produce its forecast reports. These include internal and external data sources and metrics, like the company's Weather Research Forecast (WRF) model, Modified Hot-Dry-Windy Index (MHDWI), Fire Potential Index (FPI), Geographic Area Coordination Center (GACC) forecast reports, and publicly available weather trends.

The company recognizes that under certain conditions, wildfires can occur anywhere there is sufficient wildland vegetation that is dry and flammable, even in historically low-risk areas; therefore, the system impacts forecast covers the company's entire service territory. Typically, the forecast reports are produced on business days; however, during periods of extreme weather or wildfire risk, a forecast is generated every day, including weekends and holidays.

6 SYSTEM OPERATIONS

Adjustments to power system operations can help mitigate wildfire risk. System operations adjustments may include the modification of relay settings for protective devices on distribution lines or changes to line re-energization testing protocols. Adjustments beneficial to wildfire mitigation are not universally applied to power system operations, because there are certain disadvantages in their use, primarily an increase in outage frequency and duration experienced by customers. In other words, a balance is required to provide customers with reliable power while still mitigating wildfire risk. To help balance these concerns, Rocky Mountain Power is deploying technologies such as fault indicators and assessing outages to inform short term mitigation projects which are also discussed in the subsections below.

6.1 ELEVATED FIRE RISK SETTINGS

Line protective devices, such as line reclosers, are currently deployed on various transmission and distribution lines throughout Rocky Mountain Power's service territory. When line trips open due to fault activity, reclosers can be programmed to momentarily open, allow the fault to dissipate, then reclose to assess whether the fault is temporary. The reclosing function gives the ability to restore service on a line that has tripped while maintaining the option to open again if the fault persists. If the fault is permanent, the recloser will operate and stay open (known as the "lock out" state) until the line has been deemed ready for re-energization.

Figure 32 below generally depicts one potential configuration of a distribution circuit with multiple line reclosers installed.

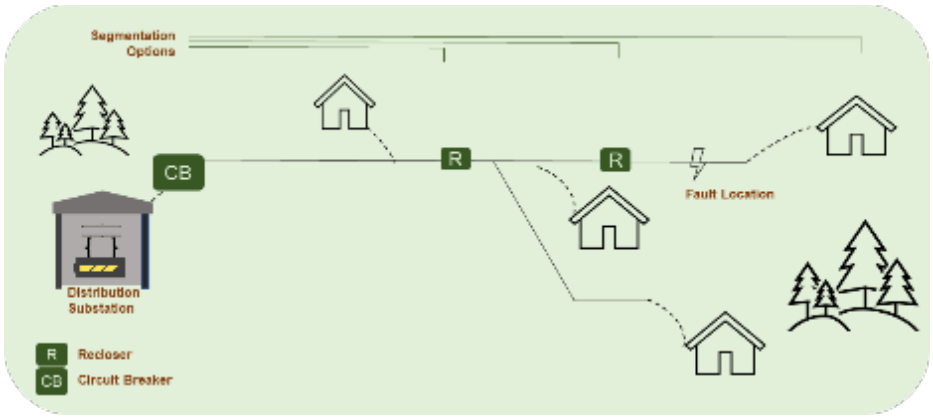


Figure 32: Example of Distribution Circuit with Multiple Reclosers

In general, recloser operation is beneficial because it reduces the number of sustained outages and improves customer reliability. The reclosing function implicates some degree of ignition risk because additional energy can be released if a fault persists. When a fault is detected on the line, a recloser will trip and reclose to re-energize the line based on predetermined settings. If the fault is temporary in nature and is no longer present upon the reclose operation, the line will re-energize resulting in limited impact to customers. If the fault persists, however, reclosing can, depending on the circumstances, potentially result in arcing or an emission of sparks. Accordingly, a strategic balance between customer reliability and wildfire mitigation goals is required.

Rocky Mountain Power is implementing additional strategies on the distribution network, including the use of modified and more sensitive protection and control schemes, referred to as Elevated Fire Risk (EFR) settings. Such applications on the distribution network, can have a greater impact on customer reliability and Rocky Mountain Power is exploring different strategic combinations to find the right balance.

The daily risk assessment process and situational awareness reports described in Section 5.5 are used to support a risk-based approach for the deployment of EFR settings. For example, when meteorological conditions of increased wildfire risk occur, an alternative operating mode may sometimes be used to clear detected faults faster, reduce the number of reclose attempts, increase the open interval time between trip and reclose operations, or set the recloser to lock out upon a single trip event. Rocky Mountain Power plans to continue evaluating situational awareness, customer outages and other information to further optimize the settings and implement EFR settings as needed.

6.2 ADDITIONAL PATROLS

When district fire risk indicates elevated fire risks, a pro-active, targeted patrol may be performed. These patrols target obvious defective equipment and conditions that could lead to increased ignition risk. Targeted patrols allow for expedited correction of any serious conditions. They also provide valuable reports of the situation "on the ground" by subject-matter-expert, field personnel. Additionally, vegetation management may patrol lines, targeting conditions subject to severe weather conditions, especially hazard trees. As conditions are found, they are promptly pruned or removed.

Overall, these additional, responsive patrols aim to provide Rocky Mountain Power, with additional situational awareness of on the ground conditions before a weather event and expedited corrections of targeted equipment conditions and hazardous vegetation. These targeted patrols do not replace standard programs (described on Sections 2 and 3 above); instead, they supplement them.

6.3 RE-ENERGIZATION PRACTICES

In addition to enabling EFR settings as described above, Rocky Mountain Power may also modify re-energization practices, which can include patrols and line testing. Line testing involves closing an open circuit at a protective device to again allow the flow of electricity past the device. If a fault condition persists, the protective device will open again, and additional work will be necessary to clear the fault condition. If the line holds, however, the line is re-energized and can be returned to a normal operating state. Line testing can be an effective tool to maintain customer reliability, like the use of reclosing, as described in the previous section. At the same time, line testing can potentially result in arcing or an emission of sparks if a fault has not yet cleared when the line is evaluated. To mitigate this risk (depending on local circumstances), an enhanced patrol that includes a patrol and step restoration of the entire circuit prior to line testing, may be required under certain conditions. This often results in an increase to restoration time and costs.

6.4 FAULT INDICATORS TO MITIGATE IMPACTS

The time it takes to patrol a line and the impact to customers can be significantly reduced when a fault location can be determined. Therefore, as described in Section 4.4 and depicted in Figure 33, the utility is installing fault indicators across its service territory on circuits where EFR settings are more likely to be implemented, such as the FHCA and surrounding areas. When an outage occurs, regional operators and field personnel use these tools to narrow down potential fault locations, optimize the deployment of resources, and expedite restoration.

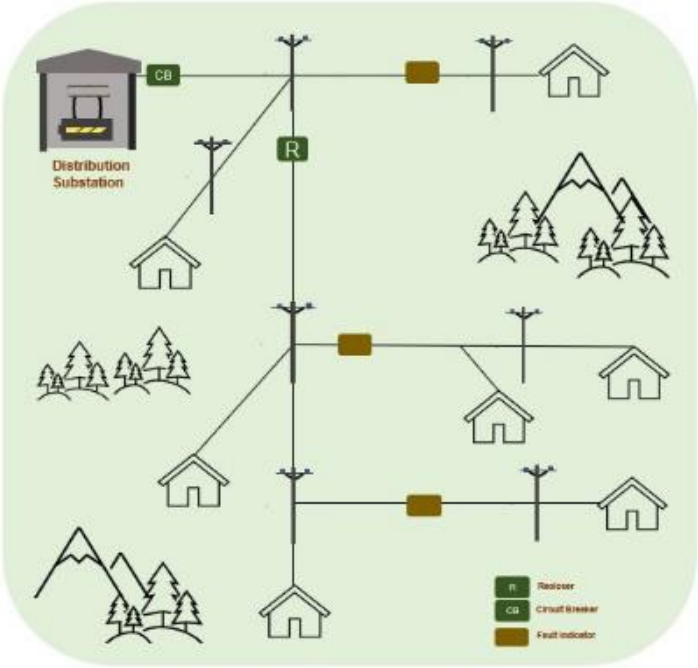


Figure 33: General Fault Indicator Configuration

EFR settings will continue to be implemented to reduce the wildfire risk associated with prolonged fault events while being strategic in the EFR implementation to balance the reliability impacts to customers. Rocky Mountain Power will also continue to assess the need for and install additional fault indictors as described in Section 4.4.

6.5 2023 EXPERIENCE

In 2023, Rocky Mountain Power implemented its EFR program across the company's service territory based on dynamic risk assessment forecasts and tracked outages with EFR settings enabled. EFR settings, as discussed above, leverage a faster isolation scheme to reduce the amount of energy that may be released during an event, which can lead to more frequent outages. Each outage that correlates to a device having EFR settings enabled is considered an event where risk was mitigated through the refined settings as the settings limit the amount of energy that may be released. The correlation between EFR settings being enabled and an outage being recorded does not mean the settings caused an outage. Outages can be caused by a variety of factors, not limited to, planned

work and/or environmental factors. Figure 34 below depicts the number of outages with and without EFR enabled each month in 2023 compared to a five-year average.

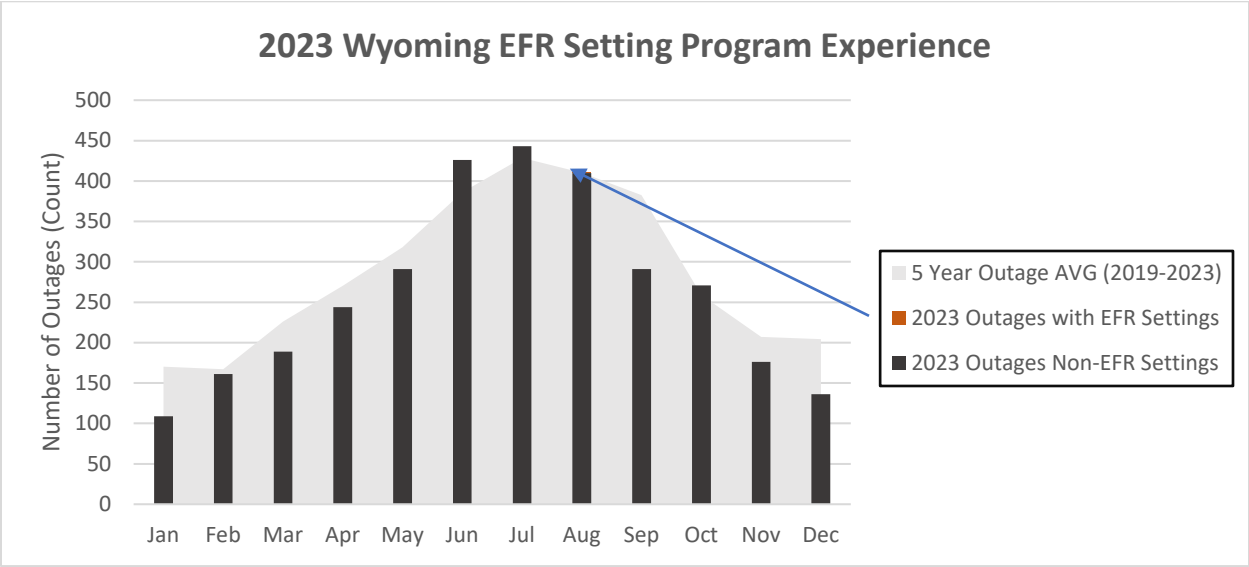


Figure 34: 2023 EFR Setting Impact

As shown above, Rocky Mountain Power experienced approximately 1 EFR outages in August 2023 during periods of elevated fire risk. This represents approximately 0.03% of the total outages experienced in 2023 and 0.2% of outages experienced in August 2023.

Additionally in 2023, Rocky Mountain Power implemented alternate re-energization practices that required incremental or augmented patrols after system faults, which can lead to increased restoration times. While these strategies mitigate wildfire risk, Rocky Mountain Power recognizes the disruption on customers and communities when there are additional and longer duration outages.

7 FIELD OPERATIONS AND WORK PRACTICES

Rocky Mountain Power modifies field operations and work practices to further mitigate wildfire risk. Additionally, investments are made in tools and equipment to mitigate wildfire risk.

7.1 MODIFIED PRACTICES AND WORK RESTRICTIONS

As a part of the situational awareness reports and briefings prepared by the meteorology department, the operations department within Rocky Mountain Power considers the local weather and geographic conditions that may create an elevated risk of wildfire. The intent of this practice is to reduce the potential of direct or indirect causes of ignition during planned work activities, fault response, and outage restoration.

Personnel working in the field mitigate wildfire risk through a variety of tactics. Routine work, such as condition correction and outage response, poses some degree of ignition risk, and, in certain circumstances, crews modify their work practices and equipment to decrease this risk. In the extremely unlikely event that a fire ignition occurs while field crews or other Rocky Mountain Power personnel are working in the field (collectively "field personnel"), such field personnel are equipped with basic tools to extinguish small fires.

Figure 35: Line Workers Performing Work

Some wildfire risk can be mitigated by managing the way that field work is scheduled and performed. To effectively manage work during fire season, area managers regularly review local fire conditions and the weather forecasts provided to them as part of the situational awareness program, as discussed in Section 5 of this document.

During fire season, operations managers are encouraged to defer any nonessential work at locations with dense and dry wildland vegetation, especially during periods of heightened fire weather conditions. If essential work needs to be performed in the FHCA and other areas with appreciable wildfire risk, certain restrictions may apply, including:

Hot Work Restrictions. Evaluating whether field personnel should perform work during a planned interruption, rather than while a line is energized.

Time of Day Restrictions. Considering using alternate work hours to accommodate evening and night work when there may be less risk of ignition.

Wind Restrictions. Deferring work, if feasible, when there are windy conditions at a particular work site.

Driving Restrictions. Keeping vehicles on designated roads whenever operationally feasible.

Worksite Preparation. Removing wildland vegetation that poses an ignition risk from a worksite if the work to be performed involves the potential emission of sparks from electrical equipment, and only where it is allowed in accordance with land management/agency permit requirements. In addition to clearing work, water truck resources, discussed below, are strategically assigned to accompany field personnel working in wildland areas during fire season, especially in the FHCA. Depending on local conditions, dry vegetation in the immediate vicinity may be sprayed with water before conducting work as a preventative measure.

As noted above, whether to implement these restrictions is evaluated based on the daily reports and briefings provided by meteorology. As Rocky Mountain Power is continuously improving and evolving its plan and programs, the process below is subject to change and is managed by internal company policies and procedures.

In general, whenever wildfire risk potential is minimal, work may be conducted using normal operating practices. However, when meteorology forecasts wildfire risk conditions that are elevated, significant, or extreme, local operations may modify operating practices. For example, the personal protective equipment and basic firefighting tools described above are required for any field work conducted during periods of elevated fire risk. Local area management will also evaluate, after considering multiple factors regarding the local circumstances of a particular circuit, whether any hot work modifications should be made. If wildfire risk is significant or extreme, local area management will also consider whether any additional work is appropriate. Section 5 of this document provides an in-depth discussion of how meteorology forecasts impact field operations and work practices.

ADDITIONAL LABOR RESOURCES

To implement some of the wildfire mitigation programs described above and at greater length in Section 6 of this document, incremental labor resources and field personnel time is often required to: (1) support system operations in assessing localized risk and administering EFR settings and (2) respond to outages during fire season with additional patrols and coordination.
Under normal operating procedures, system operators and field personnel work together daily to manage the electrical network and there are many situations where system operators depend on field personnel to gather information and assess local conditions. As discussed in Section 6, there are system operations procedures during wildfire season for implementing EFR settings and limiting line-testing. Consequently, system operators need field personnel to gather information and assess local conditions during fire season more often than what is required under normal operating procedures. The requests from system operators may be varied, ranging from a simple phone call

to confirm that it is raining in a particular area, to a much more time-intensive request, such as a full line patrol on a circuit.

Depending on current conditions at the work site and the duration of the restoration work, field personnel may also spend incremental time when responding to an outage during fire season. As discussed in Section 6.3, Re-Energization Practices, a heightened risk exists with traditional restoration practices. To mitigate this risk, field operations may perform line patrol on certain de-energized sections of circuits, most notably during fire season and particularly in the FHCA. Depending on the circumstances, this extra patrol might be done just before or just after re-energizing the line. Typically, this type of line patrol does not involve a close inspection of a particular facility; instead, it is a quick visual assessment specifically targeted to identify damaged equipment or obvious foreign objects that may have fallen into the line during restoration work.

ACTIVE WILDFIRE RESPONSE

Rocky Mountain Power monitors and may support the response of active wildfires in or near assets and service territory. While Rocky Mountain Power employees may carry small fire suppression equipment, they are not professionally trained fire fighters; therefore, when they encounter a fire of any appreciable magnitude, Rocky Mountain Power employees will call 9-1-1. For known active wildfires, Rocky Mountain Power will monitor the situation and may contact the appropriate incident management team to support efforts needed which can include de-energization of lines.

7.2 FIELD OPERATIONS CIRCUIT HARDENING

As a result of modified work practices, additional patrols performed, and experiences from times of elevated risk, circuits may be identified on a case-by-case basis for system hardening upgrades. System hardening initiatives include but are not limited to the hardening programs identified in Section 4 such as relay or recloser upgrades, replacement of wooden poles, installation of fault indicators, or replacement of fuses.

7.3 EQUIPMENT AND TOOL PURCHASES

In addition to changes in work practices, Rocky Mountain Power invests in tools and equipment to mitigate wildfire risk. These investments include (1) mobile communication devices, (2) vehicles, (3) personal suppression equipment, and (4) water trailers.

MOBILE COMMUNICATION DEVICES

Rocky Mountain Power operates and serves customers in very rural locations, some of which have limited to no cellular connectivity back to the local district office and/or the control center. During large disasters, like wildfire events, Rocky Mountain Power field personnel need to be able to communicate quickly and effectively to maintain safe operation of its system and support emergency response and restoration activities. Therefore, in 2022 Rocky Mountain Power procured a compact rapid deployable cell tower, this device is also known as Cell-On-Wheels (COW). This equipment,

as shown on the right, generates an area of FirstNet cellular and Wi-Fi coverage, to improve communications when cell coverage is unavailable. These devices will be strategically staged at service centers for use during a major event, such as a wildfire emergency, to improve communication capabilities into the control center, base camp, and/or management. This equipment will also enable communication when there is a loss of it due to infrastructure failure for SCADA access, WAN, and portable radios.

Figure 36: Rapidly Deployable Cell on Wheels (COW)

In addition to the COW device, Rocky Mountain Power is currently considering other, emergency communication alternatives, such as Starlink devices, to help mitigate wildfire risk in locations where there is no cellular coverage. The Starlink device would provide a Wi-Fi hot spot connection to allow communication with the local district office and the control center. Overall, the communication equipment will improve emergency restoration activities and mitigate impacts to customers.

VEHICLES

Vehicles can be a source of ignition. As discussed above, operations personnel are instructed to stay on designated roads during fire season, as feasible, and to avoid vegetation which could contact the undercarriage of parked vehicle. To further mitigate any wildfire risk associated with the use of vehicles, Rocky Mountain Power plans to convert, over time, the vehicle exhaust configuration of work trucks. Some vehicles in districts with the greatest amount of FHCA will be strategically converted. Long term, when new vehicles are purchased, Rocky Mountain Power plans to purchase/lease trucks with a vehicle exhaust configuration which minimizes ignition risk.

BASIC PERSONAL SUPPRESSION EQUIPMENT

Personal safety is Rocky Mountain Power's priority, and the company's field personnel are encouraged to evacuate and call 911 if necessary. Field personnel working in the FHCA maintain the capability to extinguish a small fire that ignited while they are working in the field. Field personnel should attempt suppression only if the fire is small enough so that one person can effectively fight the fire while maintaining their personal safety. All field personnel working in the FHCA during fire season will have basic suppression equipment available onsite, because field utility trucks typically carry the following equipment: (1) fire extinguisher; (2) shovel; (3) Pulaski; (4) water container; and (5) dust mask. The water container should hold at least five gallons and may be a pressurized container or a backpack with a manual pump (or other).

WATER TRAILER RESOURCES

Rocky Mountain Power has water trailers that field operations use to mitigate against wildfire risk. For clarity, these resources are not dispatched to reported fires (i.e., like a fire truck). Instead, Rocky Mountain Power resources are strategically assigned to accompany field personnel if conditions warrant. For example, if it is necessary to perform work in the FHCA during a period in which there is a Red Flag Warning, Rocky Mountain Power field operations may schedule a water trailer to join field personnel working in the field. As discussed above, the water trailer can be used to help prep the site for work. By watering down dry vegetation in the work area, any chance of an ignition can be minimized. In the extremely unlikely event there was an ignition, the water trailer could be used to assist in the suppression of a small fire.

8 PUBLIC SAFETY POWER SHUTOFF (PSPS) PROGRAM

Rocky Mountain Power may de-energize power lines as a temporary, preventative measure during periods of the greatest wildfire risk. This practice is referred to as "proactive de-energization" or is more commonly known as a "Public Safety Power Shutoff" or "PSPS." The decision to implement a PSPS is based on extreme weather and area conditions, including high wind speeds, low humidity, and critically dry fuels. The Company may also de-energize power lines in response to an active wildfire that is within a defined distance of the lines (described in Section 8.5 below). A PSPS event is implemented as a last resort and is intended to supplement – not replace – existing wildfire mitigation strategies. The general process is depicted below in Figure 37.

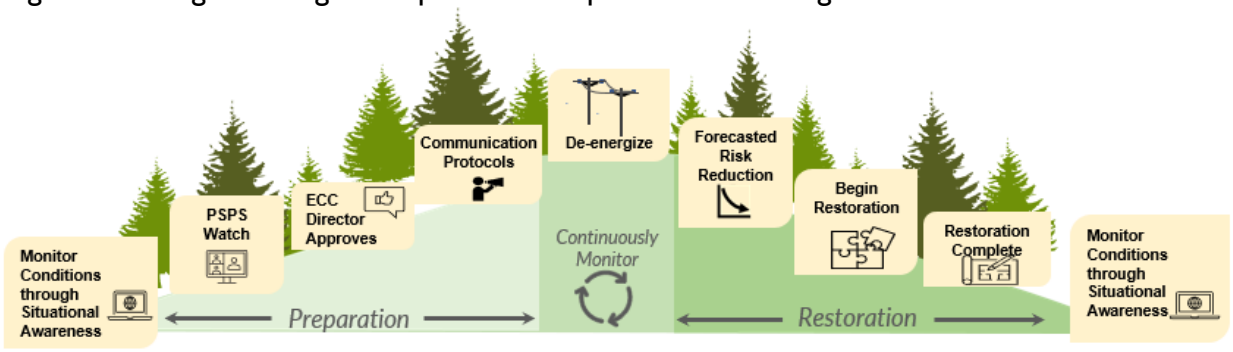


Figure 37: PSPS Overview

The following subsections describe Rocky Mountain Power's PSPS program in greater detail. Many of the program elements revolve around the successful execution of a PSPS event, while other elements bolster decision-making, mitigate the potential impact of a PSPS event, or help to avoid use of the tool altogether.

8.1 INITIATION

As discussed in Section 5, situational awareness reports are generated daily during business days by the meteorology department to aid in decision making during periods of elevated risk. During periods of extreme risk like during PSPS assessment and activation, these reports are generated daily, including weekends. They identify where fuels (dead and live vegetation) are critically dry, where and when critical fire weather conditions are expected (gusty winds and low humidity), and where and when the weather is forecast to negatively impact system performance and reliability. It is the intersection of these triggers that result in the potential for a PSPS event, as shown below in Figure 38.

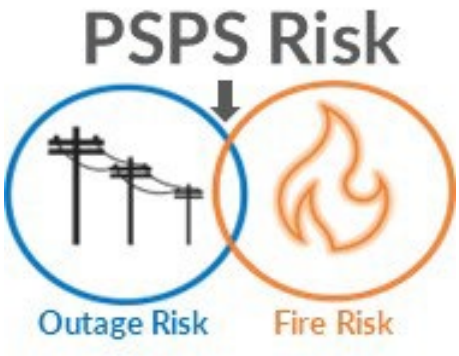


Figure 38: PSPS Assessment Methodology

8.2 ASSESSING THE POTENTIAL FOR A PSPS

As discussed in Section 5, meteorology generates a daily weather briefing that includes a system impact forecast matrix for Rocky Mountain Power's entire service territory. This matrix includes a district-level forecast of weather-related outage potential and fire risk as described in detail in Section 5 of this document. When the district fire risk is significant or extreme, meteorology will use a combination of its Weather Research Forecast (WRF) and outage models, Technosylva's Wildfire Analyst Enterprise (WFA-E) software, and subject matter expertise (as described in Section 5.4) to identify circuits of concern. Emergency management will also schedule a coordination meeting to discuss circuits of concern and to determine the appropriate operational response, up to and including PSPS. A PSPS is typically discussed and/or considered when the forecast matrix indicates a combination of wind-related outage potential and extreme wildfire risk in the same district.

8.3 DE-ENERGIZATION WATCH PROTOCOL

Rocky Mountain Power actively monitors real-time weather conditions. When real-time observations and weather forecasts indicate extreme risk, a de-energization watch protocol is initiated that includes:

- Activation of an Emergency Coordination Center (ECC).
- Communication with local public safety partners.
- Implementation of additional monitoring activities.

The ECC is staffed by a specialty group of company representatives who assemble during the de-energization warning through completion of the event to provide critical support to operational resources. The ECC makes decisions to maintain the safety and reliability of the transmission and distribution system and helps facilitate cross-organization coordination. The ECC is led by an ECC Executive and has the support of a safety officer, a joint information team, emergency management, meteorology, and operational stakeholders representing field operations, system operations, vegetation management, engineering, and other specialties.

Upon activation of the ECC, Rocky Mountain Power emergency management gathers input from public safety partners to properly characterize and consider impacts to local communities. The ECC

also sends advance notifications to the operators of pre-identified critical facilities, partner utilities, and adjacent local public safety partners. The company's customer service team then coordinates through the ECC to confirm customer lists for the subject area to develop a communication plan for customers that may be impacted.

Local assessments of lines may occur during a PSPS watch by way of various methods depending on the accessibility of locations, the reliability of the line, area conditions and other factors. The ECC reviews various factors and may deploy crews to perform these assessments in the field or remotely monitor from the coordination center.

PSPS is a temporary mitigation measure. Consistent with existing regulations and the general mandate to operate the electrical system safely, the ECC has discretion to determine when (or if) a PSPS is appropriate. Given the potential impacts to customers and communities, the ECC Executive will consider all available information, including real-time feedback and other considerations from other ECC participants, public safety partners, and field observers, to determine whether a PSPS should be executed. Additionally, the ECC Executive may decide to further refine the PSPS areas identified.

8.4 DE-ENERGIZATION PROTOCOL

When a PSPS event is initiated, an action plan is prepared to include affected location details, event timing and projected event duration. Once approved by the ECC Executive, an internal notification is sent to initiate appropriate communications to customers, critical facilities, public safety partners, regulatory organizations, large industrial customers, and required field and system operations team members. Preparations also begin for the opening of community resource centers (CRCs) and, if needed, additional field resources may be deployed or staged accordingly. Conditions are continually monitored; when they no longer meet the requirement for a PSPS, the lines are patrolled and assessed for damage to begin the process of re-energization.

8.5 ACTIVE WILDFIRE DE-ENERGIZATION

Wildfires can spread rapidly and behave unpredictably. Rocky Mountain Power will sometimes de-energize power lines when there is an active wildfire threatening the lines, as described in Appendix B – Encroachment policy. For example, fire suppression authorities may request de-energization of lines to protect firefighters working in the area; most often, Rocky Mountain Power always accommodates those requests. Additionally, Rocky Mountain Power may initiate a de-energization after receiving information about an advancing wildfire, to reduce the risk of energized electrical equipment contributing to fire spread or endangering fire suppression personnel. Consistent with an established procedure for this scenario, Rocky Mountain Power will de-energize power lines when a wildfire is within defined distance of the lines, with a sufficient buffer to guard against the potential spread. To help evaluate a fire's location and probable spread, Rocky Mountain Power uses the fire modelling software and other situational awareness tools described in Section 5.

8.6 COMMUNICATION PROTOCOL

Rocky Mountain Power recognizes that adequate and clear communication is a key component to the successful implementation of a PSPS event, and the company will always strive to provide as much notice as practical to impacted parties. Nonetheless, PSPS decisions are made based on weather forecasts, and weather can change quickly or dramatically with little forewarning. This requires some degree of balancing in communication protocols and, accordingly, advanced notice may not always be possible.

PUBLIC SAFETY PARTNERS AND CRITICAL FACILITIES

Public safety partners, like emergency dispatch centers, state, regional and local emergency management, fire agencies, and law enforcement agencies, are an essential component to any communication plan during an event. They provide essential insight into the geographic and cultural demographics of affected areas to advise on protocols that address limited broadband access, languages, medical needs, and vision or hearing impairment. Rocky Mountain Power's initial communication with local public safety agencies starts as early as possible when weather forecasts indicate a PSPS event is possible. Proactive communication to public safety partners allows them to prepare for anticipated operational impacts internally and mitigate any community-wide impacts that may occur because of de-energization. Collaboration with these agencies also supports impact reduction of de-energization and communication of information regarding the impacted areas and expected event duration.

Upon activation of the ECC, emergency management resources coordinate, as appropriate, with local, county, tribal, and state emergency management to provide information through the assigned representative of the agency. Additionally, the ECC Executive will also contact the Wyoming Public Safety Commission. However, it is important to note that public safety partners will only be contacted if it is appropriate for the situation and location. ECC-assigned staff provide event details including estimated timing and event duration, potential customer impacts, and GIS shapefiles that include PSPS boundaries for areas subject to de-energization. Throughout a PSPS event, Rocky Mountain Power's emergency management group maintains regular communication with its public safety partners and other entities as applicable. The company will also support efforts to send out emergency alerts and status updates, as appropriate, until restoration efforts begin.

Critical facilities and infrastructure[10], are particularly vulnerable to the impact of PSPS events. Rocky Mountain Power emergency management maintains a list of critical facilities within its service territory. Upon activation of an ECC, they work to establish and maintain direct contact with these facilities' emergency points of contact to provide projected PSPS timing, estimated duration, regular status updates, and restoration notifications. Additionally, Rocky Mountain Power will provide, where possible, GIS shapefiles to communications facility operators in potentially impacted areas.

[10] Critical facilities and infrastructure are entities that are essential to the public safety and/ or that require additional assistance and advance planning to ensure resiliency during de-energization events. These include, but are not limited to, medical, public, and private utility, drinking water or wastewater processing, transportation, chemical processing, food/ agriculture, and/ or communications facilities.

During a PSPS event, Rocky Mountain Power recognizes the importance of providing additional geographic details of the affected area and provides them to public safety partners through a secure web-based public safety partner portal. The public safety partner portal is a secure, map-centric application that hosts information regarding critical facilities and infrastructure like GIS files for location, primary/secondary contact information, and known backup generation capabilities.

CUSTOMERS

The Rocky Mountain Power PSPS webpage[11] provides timely and detailed information regarding potential and actual PSPS events for a specific location. The website has the bandwidth to manage site traffic under extreme demand because it has implemented bandwidth capacity to a level that will allow for increased customer access while maintaining site integrity. The PSPS webpage provides webpage visitors with an interactive map where they can input an address to see if a residence or business could be affected by a PSPS. When a potential PSPS is announced, the map is updated to show the geographic boundaries of potentially impacted areas. The boundaries will be colored yellow, or "Watch" prior to de-energization, then red or "Event" once de-energization occurs. The website is easily accessible by mobile device, and a Rocky Mountain Power 'app' is available that enables customer access to real-time outage updates and information via their mobile device.

Customers with specific language needs can also contact the company's customer care number and request to speak with an agent that speaks their preferred language. Rocky Mountain Power employs Spanish-speaking customer care professionals and contracts with a 24/7 service that provides interpretation in real-time over the phone in multiple languages and dialects. Customer care agents have received training on wildfire safety and preparedness, and PSPS-related information to facilitate conversations between the customer(s) and interpretive service to ensure they receive the wildfire safety and preparedness, or PSPS-related information they are looking for. Additional information on the company's customer wildfire safety and preparedness engagement strategy can be found in Section 10 of this document.

Rocky Mountain Power's communications plan also includes procedures that ensure appropriate notifications are given to medically vulnerable customers. The utility leverages insight from its partners and customer records to pre-identify these customers. Upon activation of the ECC, customer care agents will attempt, time and circumstances allowing, to make personal outbound calls to known medically vulnerable customers.

The communication plan allows for informational updates to customers using multiple methods of communication. Direct customer notifications are made by way of outbound calls, text messaging, and email notifications. Customers will receive an outbound call, when possible, within:

- 48 hours of a potential PSPS event,

[11] See https://www.rockymountainpower.net/outages-safety/wildfire-safety/public-safety-power-shutoff.html

- 24 hours prior to de-energization,
- 1 to 4 hours prior to de-energization,
- At the commencement of the event,
- At the beginning of the re-energization process, and
- Upon the event conclusion.

Additional methods of notification include the use of social media sites like Facebook and X (formerly Twitter). Upon activation of the ECC, and following appropriate customer notifications, the public information officer will distribute press releases to news outlets that serve the affected areas. Regular updates across all available channels are distributed as they are available, and the public information officer will manage press inquiries as appropriate.

In making the customer notifications described above, Rocky Mountain Power provides a statement with:

- The impending PSPS execution, with information about the estimated date, time, and duration of the event.
- A 24-hour means of contact for customer inquiries, and links to pertinent PSPS websites.
- Event status updates, and re-energization expectation notices.

NOTIFICATION TIMING

When a potential PSPS event is forecasted, customers and local government representatives will be provided with advanced notice. If feasible, notifications of a potential de-energization event will begin at 72 hours in advance for public safety partners and 48 hours in advance for customers. If this is not possible due to rapidly changing weather conditions or other emerging circumstances, the notification process will begin as soon as possible. Additional notice will be provided as appropriate, as conditions are monitored and depending on the circumstances. There is some degree of balancing required. Customers generally want ample advance notice of any actual de-energization. At the same time, recognizing that weather forecasts are inherently speculative, it is possible to overburden them with notices of potential PSPS events that never materialize, especially given that the company's fundamental business objective is to keep the grid energized except under the most extreme conditions. Table 13 illustrates Rocky Mountain Power's planned PSPS notification timeline for notifications sent to customers. Notifications to public safety partners and critical facilities will take place as appropriate throughout the event. Timelines may be reduced if rapidly changing conditions do not allow for advance notification. In these cases, the company will make all notifications as promptly as possible.

Table 13: PSPS Notification Timeline for Customers

PSPS Notification Timeline with Summary	
48-72 Hours Prior	De-energization Warning to Public Safety Partners & Operators of Critical Facilities
24-48 Hours Prior	De-energization Warning
1-4 Hours Prior	De-energization Imminent / Begins
Re-energization Begins	Re-energization Begins
Re-energization Completed	Re-energization Completed
Cancellation of Event	De-energization Event Canceled (if needed)
Status Updates	Every 24 hours during event (if needed)

8.7 COMMUNITY RESOURCE CENTERS

Rocky Mountain Power is aware of the potential impacts of PSPS events to all customers, businesses, and communities, and plans to provide support to impacted communities through activation of Community Resource Centers (CRCs) as appropriate. By taking advantage of established relationships with community and public safety partners, a CRC may be activated in an impacted area to give community members and businesses access to items that may be affected by interruption of electrical service. The services, which can vary between CRCs, may include:

- Potable water
- Shelter from hazardous environment
- Air conditioning
- Seating and tables
- Restroom facilities
- Refrigeration for medicine and/or baby needs
- Interior and area lighting
- On-site security
- Communications including internet, Wi-Fi, cellular access, and satellite phone.
- Television and radio
- On-site medical support (where available)
- Charging stations for cellular devices, radios, and computers

CRCs adhere to all existing local, county, state or federal public health orders and will have personal protective equipment on site and available to customers if needed. Local emergency management and community-based organizations will be notified of CRC activation(s) as appropriate and with advanced notice, generally three days prior to the event, when possible.

CRC activation timing, protocols, and locations are discussed with area emergency management and community-based organizations during emergency management workshops and tabletop exercises.

Depending on the needs of its public safety partners, CRC locations may be pre-identified. However, this is not always the case. For instance, in 2023 Rocky Mountain Power, together with its partners, determined that the need for and location of a CRC should be dependent on a PSPS area and community needs. As a result, it was decided that a CRC, if needed, should be activated in close coordination with public safety partners during a PSPS event. Rocky Mountain Power intends to continue collaborating with public safety partners to evaluate its approach to CRC activation and adapt its practices accordingly.

Figure 39: Example of a Temporary CRC

8.8 RE-ENERGIZATION

As described above, local conditions are continually monitored during a PSPS event. Based on forecasted risk reduction, Rocky Mountain Power may begin staging resources to expedite restoration. Then, when local conditions subside consistent with the forecasted reduction in risk, restoration activities officially begin. The general steps of restoration are depicted below.

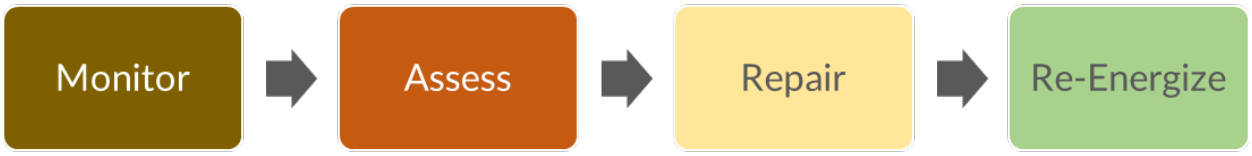


Figure 40: General Re-Energization Process

Once the local and forecasted conditions are favorable to re-energize and no new risk(s) have been identified, field personnel begin assessing the de-energized circuits through ground or air patrols. Power lines that have been de-energized during a PSPS event have been exposed to strong winds and the potential for damage. In addition, even after the wind has dropped to levels low enough to support a decision to re-energize, fire weather conditions typically remain elevated. Therefore, before re-energizing a line post-event assessments are completed to determine whether any damage has occurred to the line and/ or substation that needs to be corrected prior to re-energization (e.g., line down, broken crossarms, tree through line and/ or tree branches or other items blown into the line). Field personnel report any damage identified to Rocky Mountain Power's facilities to the ECC where it is tracked. If issues are discovered, the necessary repairs are made within an appropriate corrective time-period.

While all lines and facilities (e.g., substations) are de-energized as part of a PSPS event are assessed, a step restoration process is leveraged where possible so that power to customers may be restored as the assessments progress, instead of waiting for the assessment of the entire impacted area to complete. While not to scale or representative of an actual event, this concept is visually depicted in Figure 41 below.

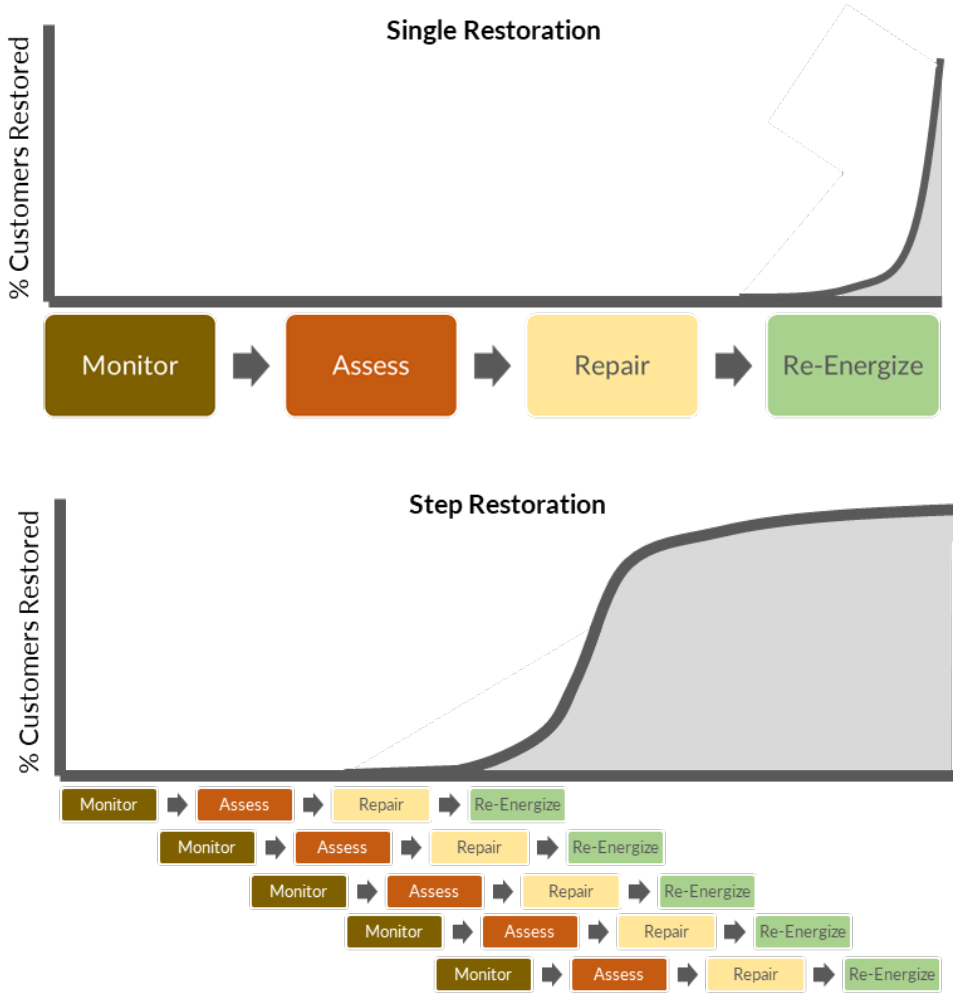


Figure 41: Visual Depiction of Step Restoration

Wherever possible, Rocky Mountain Power also works with emergency and public safety partners to identify critical customers for prioritization. After the line patrol and facility inspection is completed, the impacted circuits or portions of circuits are re-energized, and the date and time of re-energization is logged. Once service is restored to all customers impacted by the PSPS event, the event concludes.

8.9 EXPERIENCE

Rocky Mountain Power plans to continuously improve all aspects of its emergency management practices. From its experience to date, it has identified four key opportunities for improvement to its Public Safety Power Shutoff Program moving forward. These include:

- **Broaden public outreach and engagement.** Rocky Mountain Power plans to expand its communication and overall preparedness as appropriate to ensure adequate public outreach and engagement regarding PSPS and wildfire safety. As noted above, more detailed information on the Rocky Mountain Power's customer wildfire safety and preparedness engagement strategy can be found in this document.

- **Strategize community resource center locations.** Pacific Power, Rocky Mountain Power's peer business unit, has set up multiple CRCs throughout its multi-state service territory in response to outages. In some cases, it has found that there is little customer interest. From this experience, Rocky Mountain Power has learned the importance of emphasizing CRC planning during workshops and tabletop exercises. Additionally, it will work with local public safety partners during events to better identify the needs of communities impacted.
- **Streamline GIS and information sources.** Due to the dynamic nature of a PSPS event, there may be a need to manually update multiple sources of information and GIS layers among various internal platforms. Rocky Mountain Power has a process in place to streamline and align GIS layers and information sources so it can communicate information quickly. For instance, Rocky Mountain Power has developed a secure, web-based public safety partner portal where critical information can be shared with its partners during a PSPS event. The public safety partner portal is described at greater length in Section 9.
- **Internal communication and coordination.** Most documents, communication protocols, and processes have worked well. Nevertheless, there is still an opportunity to build out new tracking tools, documents, and training within the existing response structure. To that end, a novel tracking tool has been developed and Rocky Mountain Power has begun to look at building out additional situational awareness tools.

Table 14: Summary of PSPS Experiences

Description of Experience	Recommended Action	Status
Multiple points of contact among partners resulted in missed opportunities for communication with partners.	Update documentation and incident action plan to include a single point of contact for partners.	**Implemented**. Rocky Mountain Power emergency management has established service territories for its emergency managers to create a single point of contact for partners.
Critical facility (customer) identification (GIS information).	Complete implementation of the Public Safety Partner Portal. Identify steps for producing shapefiles with critical customer information and identify who should receive them.	**Implemented**. The Public Safety Partner Portal was launched in the first quarter of 2024.
Inconsistent documentation created potential for confusion internally and external partners.	Improve documentation consistency. Task Information Management Specialist (IM) or Joint Information System (JIS) with ensuring that all sources of information match. Include details on who is responsible for what information.	**Implemented**. Joint information system training has been given to corporate communications, Regional Business Managers (RBMs), customer service, and regulatory on the documentation process to include roles and responsibilities.
Feedback from partners.	Provide more outreach and training on PSPS to partners.	Expanded PSPS outreach and workshops statewide.

9 PUBLIC SAFETY PARTNER COORDINATION STRATEGY

Rocky Mountain Power takes a multi-step approach to coordination with its public safety partners on wildfire mitigation and PSPS preparedness, as shown in Figure 42 below.

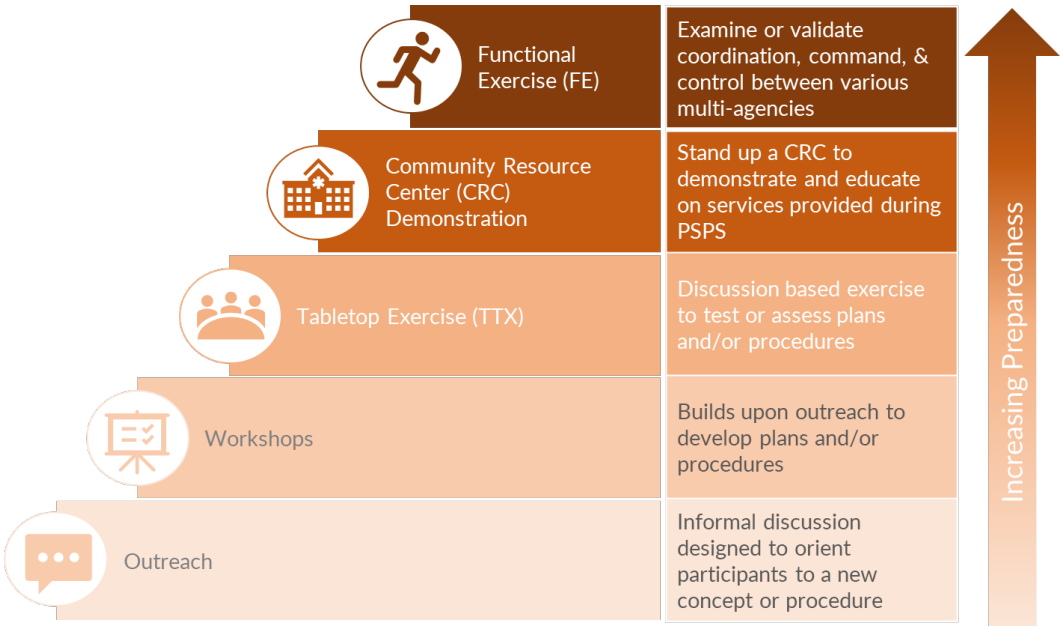


Figure 42: PSPS Preparedness Strategy

As a part of this strategy, each element builds upon the previous step to increase overall preparedness. They include outreach, workshops, Tabletop Exercises (TTXs), Community Resource Center (CRC) demonstrations, and functional exercises (FEs) as described in more detail in the following subsections.

9.1 GENERAL OUTREACH

Rocky Mountain Power participates in multiple public safety partner meetings and workshops throughout the calendar year across its service territory. Meetings include monthly, quarterly, and annual County and State Emergency Management partner meetings, in addition to pre- and post-fire season collaboration meetings with local, state, and federal fire suppression agencies. These informal discussions are designed to orient participants to a new concept or procedure and continue fostering key working relationships. Additionally, Rocky Mountain Power provides an annual customer webinar, described at greater length in Section 10.6, that provides additional information about PSPS practices that is displayed prominently on the wildfire safety and preparedness webpage.

9.2 WORKSHOPS

Workshops are more local, targeted discussions that build upon general outreach to further compare and refine plans, streamline processes, and confirm capabilities (such as customer outreach, critical facilities, and CRC locations and operations) with local public safety partners. In 2023, the company did not conduct workshops as part of its outreach outside the FHCA. In 2024 and beyond, it anticipates targeting workshop locations outside of the FHCA and leveraging them to bring other communities and public safety partners up to speed.

9.3 TABLETOP EXERCISES

Rocky Mountain Power facilitates annual discussion-based and functional tabletop exercises to develop awareness of PSPS planning and procedures. These exercises aim to facilitate public and private sector coordination, validate communications protocols, and verify capability to support communities during extreme risk events through mitigation actions such as the deployment of community resource centers. Additionally, the exercises include the collective identification of critical infrastructure at the county level to better inform restoration planning and notifications. Rocky Mountain Power collects after-action reports from exercises and real-world events involving wildfire safety and Public Safety Power Shutoff. The after-action reports request feedback on areas for improvement, potential corrective actions and suggestions for plan or procedure development. The company considers suggestions for inclusion in a comprehensive plan that is subsequently shared with the appropriate public safety partners.

9.4 COMMUNITY RESOURCE CENTER DEMONSTRATIONS

Rocky Mountain Power may provide a public demonstration of a Community Resource Center (CRC) prior to the start of wildfire season. This public event provides an opportunity for members of the public, as well as public safety partners, to learn about the type of services offered at a CRC during a PSPS event.

9.5 FUNCTIONAL EXERCISES

Functional Exercises (FE) are the last step in PSPS preparedness. Rocky Mountain Power coordinates these exercises to examine or validate coordination, command, and control between various agencies. Unlike TTXs or workshops, which are discussion based, these exercises are larger scale, last much longer (e.g., multiple days), require significantly more planning and coordination, and include deployment of resources to practice protocols and processes. A functional exercise requires that part of the plan is executed. Examples relevant to a PSPS FE might include performing customer calls or updating websites. To be successful, functional exercises require that foundational planning like workshops and TTXs be complete, and formal plans to be in place. Currently, Rocky Mountain Power is not planning to conduct a functional exercise in Wyoming in 2024. Rocky Mountain Power does expect to leverage its experience conducting functional exercises in other states with more mature PSPS programs and incorporate functional exercises in Wyoming in the future as needed.

9.6 2023 ACTIVITIES

In 2023, Rocky Mountain Power conducted outreach and exercises statewide. It held three regional TTXs to improve efficiency and enhance broader coordination and collaboration with public safety partners. Even though the events targeted certain counties, Rocky Mountain Power encouraged expanding participation by inviting officials from adjacent counties. Table 15 below provides a more detailed overview of these activities.

Table 15: 2023 Completed Workshops and Exercises

Activity	General Location[12]	Target Counties[13]	Complete Date
Tabletop Exercise	Southwest	Uinta, Lincoln, Sublette, Sweetwater	July 2023
Tabletop Exercise	Northwest	Park, Fremont, Washakie	August 2023
Tabletop Exercise	Southeast	Natrona, Converse, Albany, Carbon	August 2023

In addition to executing planned activities, Rocky Mountain Power may also participate in various other workshops, conferences, and discussions to ensure coordination and preparedness with public safety partners, state agencies, and other utilities.

9.7 2024 EMERGENCY PREPAREDNESS AND EXERCISE PLAN

In 2024 and beyond, the company plans to continue building upon previous years' experience to engage and coordinate with public safety partners. Based on the company's experience to date, planning, in collaboration with public safety partners, is most effective when completed closer to the start of fire season. Therefore, Rocky Mountain Power intends to solicit input from public safety partners later in the year to firm up the details and schedule of its activities for the current year. Table 16 below provides an overview of planned emergency management activities for 2024.

Table 16: 2024 Workshop and Exercise Plan

Planned Date	Topic	Status	Region/County(s)
May 2024	Wildfire/Hazards Workshop	Planned	Northwest (Park/Big Horn)
May 2024	Wildfire/Hazards Workshop	Planned	Central (Fremont/Hot Springs/Washakie)
May 2024	Wildfire/Hazards Workshop	Planned	Southwest (Uinta/Sublette/Lincoln/Sweetwater)
May 2024	Wildfire/Hazards Workshop	Planned	Southcentral (Carbon/Albany)
May 2024	Wildfire/Hazards Workshop	Planned	Central (Natrona/Converse/Platte)

The company may also participate in workshops, conferences, and discussions, or it may host other activities to ensure coordination and preparedness with public safety partners, state agencies, and other utilities. In sum, the annual activity plan is subject to change depending on public safety partner input and availability.

[12] Rocky Mountain Power identifies general locations and then works with public safety partners to select the most appropriate location and dates for activities.

[13] Target counties are informed of the coordination plan and strategy; however, Rocky Mountain Power does not limit participation in the event.

9.8 PUBLIC SAFETY PARTNER PORTAL

During a PSPS event, Rocky Mountain Power recognizes the importance of providing additional geographical details of the affected area. Therefore, in addition to the coordination strategy described above, Rocky Mountain Power plans to launch a secure, web-based portal to share information about critical facilities and infrastructure with Public Safety Partners during a PSPS event. It is a secure, map-centric application that hosts GIS files and information regarding critical facilities and infrastructure like primary/secondary contact information and known backup generation capabilities. In addition to enhancing coordination with local public safety partners, the portal also improves Rocky Mountain Power's capabilities to evaluate, communicate with, and prioritize restoration of critical facilities and infrastructure.

10 WILDFIRE SAFETY & PREPAREDNESS ENGAGEMENT STRATEGY

Rocky Mountain Power employs a multifaceted approach to support community engagement and outreach with the goal of providing clear, actionable, and timely information to customers, community stakeholders and regulators. Over the past several years, the company has engaged customers and the general public throughout its three-state service area on wildfire safety and preparedness through a variety of tactics including webinars, in-person forums and booth events, targeted paid advertising campaigns, informational videos featuring company subject matter experts, press engagement, distributed print materials, infographics, social media updates, and direct communication through: bill messages, emails and website content, among other communication channels. The wildfire safety and preparedness community engagement plan will continue to evolve year-over-year as customer and stakeholder feedback and regulatory guidance is incorporated. Rocky Mountain Power maintains an awareness and engagement strategy that is flexible and allows for dynamic tactics, informed by customer survey data, community stakeholder input and community needs. Overall, Rocky Mountain Power's plan includes information that can be heard, watched, and read in a variety of ways with the goal of accessibility and understandability.

10.1 AWARENESS AND ENGAGEMENT CAMPAIGN

For the past several years, the company has deployed some form of paid media campaign to raise awareness and action on wildfire safety and preparedness. The 2023 wildfire safety and awareness paid advertising campaign, which launched March 20, 2023, and concluded October 1, 2023, included radio spots, digital over-the-top (OTT) pre-roll video ads (Hulu, Pluto TV, Roku, etc.), digital audio ads (Spotify, Pandora, etc.), display ads (search and web banners), and social media static and video ads (Facebook, Instagram, and YouTube) – each delivered in English and Spanish.
Metropolitan Statistical Areas in Wyoming targeted through the paid campaign were included. The campaign focused on four main topics: personal preparedness and safety, PSPS, leadership and vision, and investments the company is making to reduce wildfire risk, specifically grid hardening. A breakdown of media type, target area, and language for the Wyoming campaign are shown in Table 17 below.

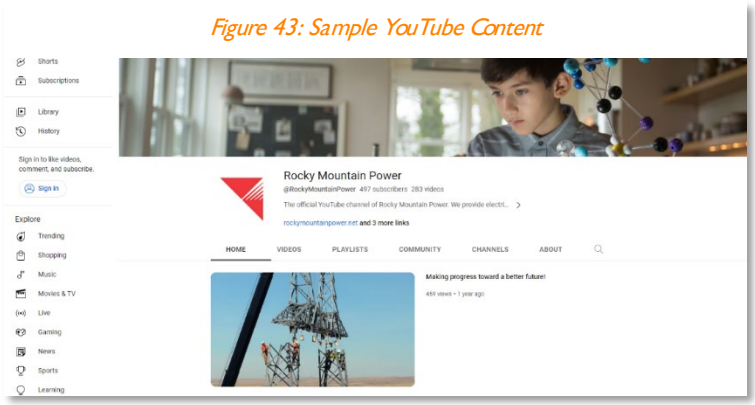
Table 17: 2024 Media Campaign Summary

Media Type	Target Area	Language
Social Media	Casper	English

The call-to-action in each campaign vertical compelled the audience to visit Rocky Mountain Power's wildfire safety and preparedness online resources. In 2023, the company's social media campaign in Wyoming received 795,924 impressions and 7,236 clicks to company-hosted wildfire safety and preparedness informational webpages.

Engaging with local and regional news media outlets is another key component of the awareness and engagement campaign. Each year prior to fire season, Rocky Mountain Power distributes updated wildfire safety information and information on the company's WMP to press outlets across its

Figure 43: Sample YouTube Content



service area as an additional low-cost outreach method. In addition to paid and earned (news media engagement) awareness and engagement strategies, Rocky Mountain Power also communicates to customers about wildfire safety and preparedness through channels it owns or manages, as shown in Figure 43. Bill messages, website and social media updates, emails, texts, automated phone calls are also an additional low cost means to reach customers.

10.2 SUPPORT COLLATERAL

Rocky Mountain Power has developed several print and digital wildfire safety and preparedness collateral pieces including factsheets, flyers, brochures, infographics, and safety checklists. These items are accessible through the company wildfire safety webpages and are utilized at public meetings and community events to describe PSPS (its necessity, considerations and what to expect throughout the event, etc.), and to provide general information on emergency kits/plans and preparation checklists, among other topics.

Figure 44: Sample Support Collateral

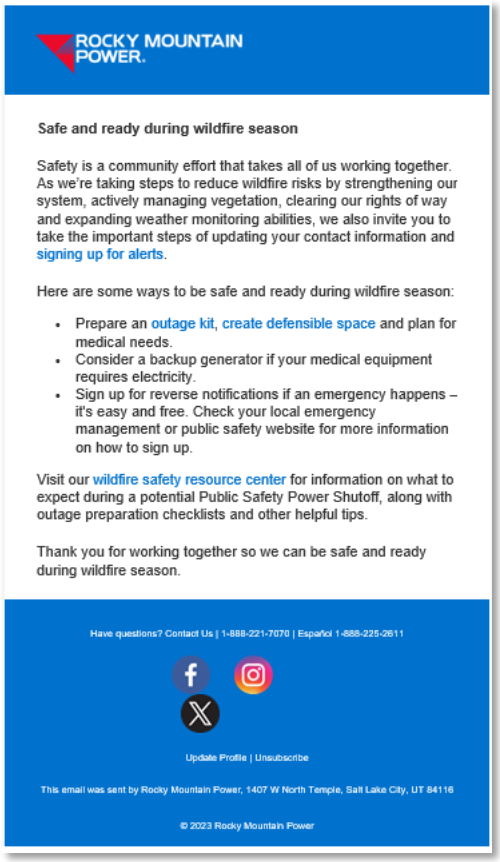
The Rocky Mountain Power Communications team reviews these materials annually and updates them as needed to ensure the information is relevant, accessible, and actionable. Spanish PSPS page[14] for Rocky Mountain Power are also made available.

Additionally, the company engages customers as needed via direct communications like email. For instance, beginning in 2023, during periods of elevated risk, modified operational settings (described in greater detail in Section 6, System Operations) may be implemented in some areas. Customers that are impacted by implementation of these settings are sent a notification via email or paper letter, depending on their communication preferences, when this occurs. Additionally, customers are also sent wildfire safety and preparedness email at regular intervals and as needed. An example of support collateral for customer notification via email is included in Figure 44.

[14] Spanish PSPS page for RMP: https://www.rockymountainpower.net/es/seguridad/seguridad-contra-incendios-forestales.html

10.3 CUSTOMER SERVICE TRAINING

Customer care agents have received training on wildfire safety and preparedness and PSPS-related information to ensure that customers who call in looking for information about wildfire safety and preparedness or PSPS get information they are looking for. Additionally, customers with specific language needs can also contact the company's customer care number and request to speak with an agent that speaks their preferred language. Rocky Mountain Power employs Spanish-speaking customer care professionals and contracts with a 24/7 service that provides interpretation in real-time over the phone in multiple languages and dialects.



ROCKY MOUNTAIN POWER.

Safe and ready during wildfire season

Safety is a community effort that takes all of us working together. As we're taking steps to reduce wildfire risks by strengthening our system, actively managing vegetation, clearing our rights of way and expanding weather monitoring abilities, we also invite you to take the important steps of updating your contact information and signing up for alerts.

Here are some ways to be safe and ready during wildfire season:

- Prepare an outage kit, create defensible space and plan for medical needs.
- Consider a backup generator if your medical equipment requires electricity.
- Sign up for reverse notifications if an emergency happens – it's easy and free. Check your local emergency management or public safety website for more information on how to sign up.

Visit our wildfire safety resource center for information on what to expect during a potential Public Safety Power Shutoff, along with outage preparation checklists and other helpful tips.

Thank you for working together so we can be safe and ready during wildfire season.

Have questions? Contact Us | 1-888-221-7070 | Español 1-888-225-2611

Update Profile | Unsubscribe

This email was sent by Rocky Mountain Power, 1407 W North Temple, Salt Lake City, UT 84116

© 2023 Rocky Mountain Power

Figure 45: Sample Email Communication

10.4 WILDFIRE SAFETY, PREPAREDNESS, AND PSPS WEBPAGES

The Rocky Mountain Power website provides robust and comprehensive information on company wildfire mitigation programs, general wildfire safety, PSPS information, and more. In 2022, the company launched updated wildfire safety webpages to improve customer experience and allow for improved accessibility to wildfire-related information. The page refreshes include a new infographic depicted in Figure 46 that demonstrates the work in progress to improve the safety and reliability of the grid.

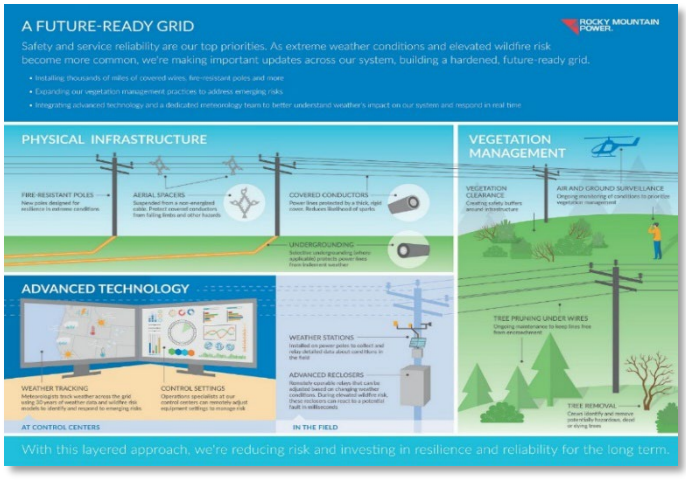


Figure 46: Wildfire Mitigation Program Infographic

Additionally, the page was updated with embedded videos highlighting the work Rocky Mountain Power will complete to

improve the system, increase situational awareness, and prepare for events that may result in outage activity.

The wildfire safety webpages were also updated in early 2022 to include a Spanish translation via Google Translate (Figure 47). This includes a frequently asked questions section, links to public safety power shutoff maps and information, and resources including public safety power shutoff and wildfire preparedness brochures.

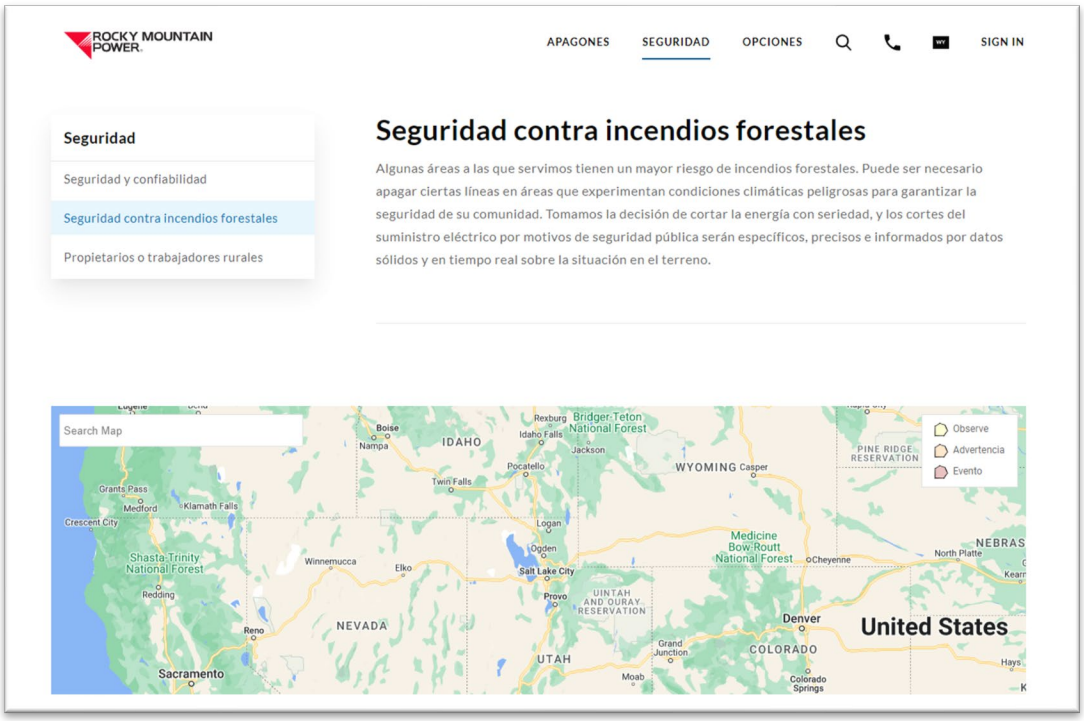


Figure 47: Sample Webpage Content - Spanish

Various resources and tools for community preparedness can be found on the Rocky Mountain Power wildfire mitigation webpage.[15] Prompts for customers to update contact information are displayed prominently on the page. Guides and checklists for creating an emergency plan/outage kit are easily accessible. The wildfire safety webpages also include links to the WMP, as well as links to webinars and videos describing key components of the plan. Overall, site visitors have a variety of ways to consume and engage with wildfire safety and preparedness information, as shown below in Figure 48.

15 https://www.rockymountainpower.net/outages-safety/wildfire-safety.html

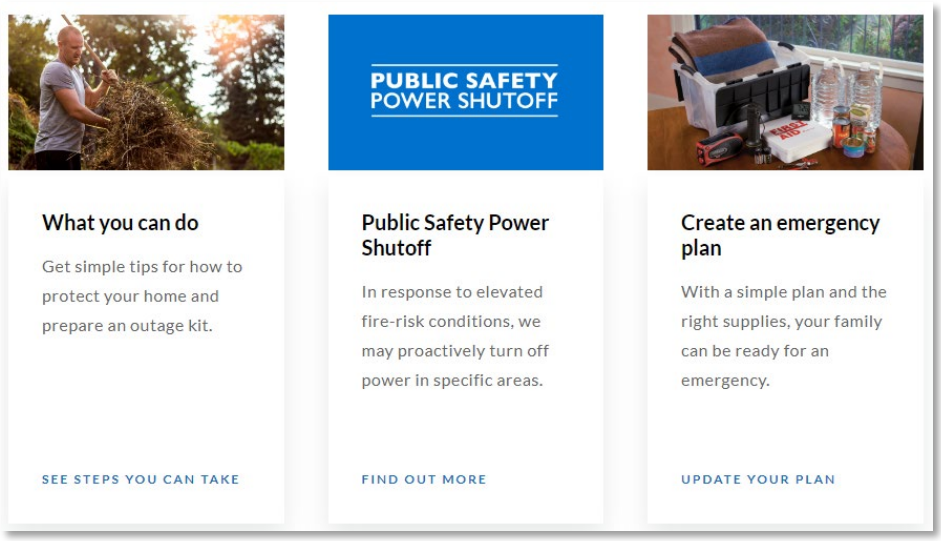


Figure 48: Wildfire Safety Webpage Content

Additionally, the Rocky Mountain Power Public Safety Power Shutoff webpage provides educational material on PSPS. It describes why a PSPS would happen, includes details of conditions monitored prior to executing a PSPS, and on how customers can prepare. Information on how customers will be notified, what to expect during an event, and about the service restoration process if a PSPS is deemed necessary are detailed on the webpage. There is also an interactive map of PSPS areas (shown in Figure 49) that provides a visualization of whether the company is considering a PSPS, and which areas might be affected if one is necessary.

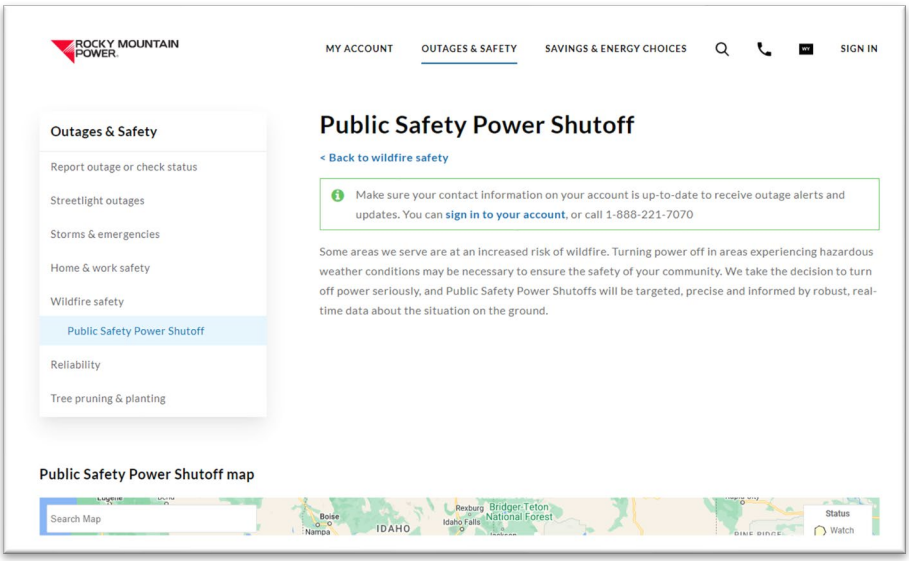


Figure 49: Public Safety Power Shutoff Webpage

To ensure that the website information is provided in identified prevalent languages, the PSPS webpage has a message in nine languages – Chinese traditional, Chinese simplified, Tagalog, Vietnamese, Mixteco, Zapoteco, Hmong, German and Spanish - that states "A customer care agent can speak with you about wildfire safety and preparedness. Please call **888-221-7070**." The

company will continue to work with Public Safety Partners and Community-Based Organizations (CBOs) to determine if additional languages should be included.

Additionally, the webpages have the capacity to manage site traffic under extreme demand because the company has implemented the bandwidth to allow for increased customer access without compromising site integrity.

10.5 2023 WILDFIRE COMMUNICATIONS AND OUTREACH PLAN

The company's overall approach to wildfire communications and its outreach plan remains the same year over year, as shown in Figure 50. For example, the company always runs a paid advertising, customer email, and initiative-taking news media engagement campaign.

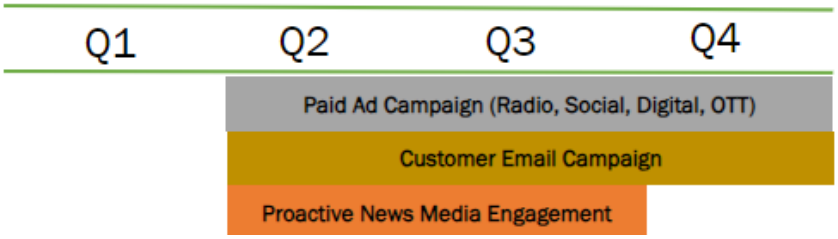


Figure 50: Wildfire Communications and Outreach Plan Timeline

10.6 WEBINARS

Rocky Mountain Power is planning to host an annual webinar ahead of the 2025 fire season that provides an overview of the company's wildfire mitigation program and strategies. Among other items, key mitigation topics addressed in the webinar include situational awareness capabilities, system hardening investments, the PSPS process, and general emergency preparedness. The webinar brings to focus how the company engages with local communities and public safety partners on wildfire safety. It also serves as a forum for customers, community stakeholders, and the public-at-large to ask questions during the live stream.

10.7 CAMPAIGN AND ENGAGEMENT EVALUATION

Rocky Mountain Power is looking to expand the company's customer survey program to Wyoming. The overall objective of this research would be to measure the public's awareness of messaging related to wildfire preparedness and safety to inform development of the next year's engagement campaign. Because wildfire can occur anywhere, the survey's reach would not be limited to customers who reside within the FHCA. Instead, all areas of the company's Wyoming service territory would be evaluated.

10.8 BACKUP ELECTRIC POWER REBATE PROGRAM

Currently, the company does not offer a backup power rebate program to its Wyoming customers. However, it is actively exploring whether to implement a backup power rebate program.

11 INDUSTRY COLLABORATION

Industry collaboration is another component of Rocky Mountain Power's WMP. Through active participation in workshops, international and national forums, consortiums, and advisory boards, Rocky Mountain Power maintains an understanding of existing best practices and collaborates with industry experts regarding emerging technologies and research.

For example, Rocky Mountain Power is an active member of the International Wildfire Risk Mitigation Consortium (IWRMC),[16] an industry-sponsored collaborative designed to facilitate the sharing of wildfire risk mitigation insights and discovery of innovative and unique utility wildfire practices from across the globe. This consortium, with working groups focused in the areas of asset management, operations and protocols, risk management, and vegetation management, facilitates a system of working and networking channels between members of the global utility community to support the ongoing monthly sharing of data, information, technology, and practices.

Rocky Mountain Power is participating in the three-year Electric Power Research Institute (EPRI) Climate Resilience and Adaptation Initiative (Read) to develop, in collaboration with industry stakeholders and other utilities, a common framework or guideline to assess climate risk, address resiliency and evaluate investments. This common framework includes aligning on a consistent approach to understand climate-related data, application, and climate trends, apply a common set of climate data to perform asset and system vulnerability assessments, and to evaluate investments and grid hardening technologies across power systems.

Through these various engagement channels, Rocky Mountain Power aims to maintain industry networks, understand the evolution of technologies, discover broader applications for such advancements, freely share data to enable scientists and academics, collaborate with developers to push the boundaries of existing capabilities, and expand its research network through support of advisory boards or grant funding. Participation in these industry networks is continuing to increase Rocky Mountain Power's confidence in its WMP strategies and program elements.

[16] See https://www.umsgroup.com/what-we-do/learning-consortia/iwrmc/.

12 PLAN MONITORING AND IMPLEMENTATION

In 2021 Rocky Mountain Power developed a new department, commonly referred to as wildfire safety. The new department consists of multiple groups, including the program delivery team, responsible for overall plan development, implementation, and monitoring.

While the broader wildfire safety organization is tasked with supporting all types of wildfire mitigation initiatives and strategies across the company's entire service territory, the key function of wildfire safety program delivery team is to develop, implement, monitor, and improve the company's WMP in Wyoming. It is the responsibility of wildfire safety program delivery to coordinate with other internal departments such as asset management, vegetation management, field operations, and emergency management to ensure all aspects of the plan are delivered. Additionally, wildfire safety program delivery regularly evaluates its plan and provides updates as needed and consistent with statutory and regulatory requirements.

The wildfire safety and asset management team, specifically the wildfire safety program delivery group, is responsible for developing the wildfire mitigation plan, incorporating enhancements to existing initiatives, and scoping new initiatives. Developing the plan requires internal collaboration across many different departments to establish the lessons learned applied with existing initiatives; for example, the streamlining of system hardening projects as described in Section 4. The group is also responsible for making sure the elements of the plan meet the regulatory requirements. To further evolve the company's wildfire mitigation capabilities, new initiatives are analyzed, scoped, and pursued; for example, the enhanced technologies used to evaluate risk as described in Section 1 and the increase in computational requirements mentioned in Section 5.
In addition to evaluating the plan elements, Rocky Mountain Power is also monitoring potential cost sharing and partnership opportunities to secure federal and state grant funding and offset the potential impacts to customers. Many of the company's wildfire mitigation programs, such as grid hardening, which includes investment in transformational technology, align with the goals and objectives of potential grant funding.

Implementation of the plan requires processes in place to ensure each initiative is progressing toward the established plan. Initiative owners are responsible for developing individual project plans to ensure the plan objectives are met. Wildfire safety program delivery ensures that the project plans are aligned with the WMP's objectives, and that key performance metrics are in place to monitor progress.

Once the plan is filed it is the wildfire safety team's responsibility to ensure the mitigations are being performed as described in the plan. Monitoring includes verification that initiative owners have plans to deliver projects on time and regular status checks to ensure work is progressing as planned. The regular status checks ensure that risks and issues are being appropriately monitored and prompt action is taken to resolve issues and remove barriers to successful project execution.

13 PLAN SUMMARY, COSTS, AND BENEFITS

13.1 2023 PROGRAM ACHIEVEMENTS AND 2024 OBJECTIVES

Rocky Mountain Power WMP is designed to provide timely and cost-effective wildfire mitigation benefits through a range of programs. While described in more detail through the plan itself, Table 18 below summarizes the program elements, 2023 achievements, and 2024 program objectives.[17]

Table 18: Summary of 2023 Program Results and 2024 Objectives

Program Category	General Program Description	2023 Achievements ✓	2024 Program Objectives
Risk Modeling & Drivers 	Maintain baseline risk maps and framework to identify areas that are subject to a heightened risk of wildfire and inform longer term, multi-year investment and programs	✓ Refreshed FHCA Map ✓ Updated Fire Sight composite risk ✓ Improved advanced data analytics tools	➢ Continued FireSight model updates. ➢ Update composite risk. ➢ Continued development for advanced data analytics
Inspection & Correction 	Continue FHCA inspection programs (5-yr detail, annual visual assurance), accelerated correction timeframes for fire threat conditions (6 months or less), and implementation of IR inspections on transmission	✓ Completed inspections and corrections on 43 distribution circuit segments and 3 transmission circuit segments.	➢ Initiation of FHCA Inspection Programs ➢ Continue expanded IR inspection program beyond the FHCA to include approximately 1,000 additional line miles in 2024.
Vegetation Management 	Transition to a 3-yr trim cycle system wide, increase post trim clearances in the FHCA, implement annual pole clearing of subject poles in the FHCA, and perform annual inspections in the FHCA	✓ Completed additional vegetation management practices on 46 circuits which resulted in the following work: ✓ 314 additional trees pruned. ✓ 98 additional trees removed. ✓ 24 additional brushes removed.	➢ FHCA Vegetation Management programs including expanded post work clearances.
System Hardening 	Long term investment to mitigate wildfire risk including line rebuilds, system protection and control equipment upgrades, and replacement of OH fuses and adjacent equipment	✓ Performed system hardening on 7 circuits. ✓ 30 Poles replaced.	➢ Planning and Design of Line Rebuild. ➢ Plan and Design of Substation Relay Upgrades ➢ Install CFCI Devices
Situational Awareness 	Install and operate a company owned weather station network, implement a risk forecasting and impact-based fire weather model, and inform key decision making and protocols	✓ 15 weather stations installed. ✓ Developed Hot-Dry-Windy Index ✓ Completed 30-yr WRF reanalysis and implemented WFA-E software to model potential impacts based on weather events.	➢ Install additional weather stations. ➢ Improve weather forecasting.

[17] 2023 achievements in this table are estimates or end of year forecasts based on document preparation ahead of the filing.

Program Category	General Program Description	2023 Achievements ✓	2024 Program Objectives
System Operations 	Risk-based implementation of EFR settings and re-energization practices in a manner that balances risk mitigation with potential impacts to customers.	✓ Risk-based implementation of EFR settings and re-energization practices.	➢ Continued risk-based implementation of EFR settings and re-energization practices.
Field Operations & Work Practices 	Acquire and maintain key equipment (water trucks, COWs, & personal suppression equipment) and implement risk-based work practices and resource adjustments	✓ Risk based work practices. ✓ Acquired equipment needed for wildfire activities (5 UTV's & 1 Fire Truck) ✓ Purchase 1 COW	➢ Purchase 2 Starlink devices. ➢ Continued implementation of risk-based work practices ➢ Assess additional equipment needs
PSPS Program 	Maintain the ability to actively monitor conditions, assess risk, and implement a PSPS as a measure of last resort in a manner that limits the impacts to customers and communities consistent with regulatory requirements	✓ Maintain readiness to implement PSPS.	➢ Maintain readiness to implement PSPS. ➢ Expand general preparedness beyond the FHCA
Public Safety Partner Coordination 	Develop and implement a public safety partner engagement strategy to enhance coordination and ensure preparedness	✓ Completed 3 tabletop exercises. ✓ Plans to launch PSPS portal	➢ Conduct 5 regional tabletop exercises.
Wildfire Safety & Preparedness Engagement Strategy 	Manage a multi-pronged approach to engage and inform the public and customers regarding wildfire safety & preparedness	✓ 795K+ Impressions ✓ Over 7,200 clicks ✓ Webpage updates for Spanish translations	➢ Continue multi-pronged outreach campaign. ➢ Continue to refine information for ease of use and access. ➢ Identify community engagement opportunities with external stakeholders.
Industry Collaboration 	Participate in consortiums, forums, and advisory boards to collaborate with industry experts, maintain expertise in leading edge technologies and operational practices, and continue to improve and advance the WMP and its programs	✓ Participated in multi-state industry collaboration.	➢ Continue multi-state industry collaboration.
Plan Monitoring & Implementation	Leverage a centralized, dedicated team to develop, monitor, implement, and continuously improve the WMP	✓ Investigated grant funding opportunities. ✓ Better QA/QC for program tracking	➢ Continue negotiation of invited grant funding opportunity ➢ Continue review of QA/QC processes for program tracking

The table above summarizes the main program objectives discussed throughout the plan. Within system hardening and situational awareness there are planned targets of these objectives which have

the potential to span multiple years. The projects listed below go through a planning, design, and/or engineering process to be achieved. The targets below are the planned quantity of when the initiative will be installed.

Table 19: Summary Program Planned Targets

Initiatives	2024	2025	2026
Line Rebuild Miles		15	25
Substation Relay Upgrades		5	
Recloser Upgrades	2	5	5
CFCI Installations	225	150	
Weather Station Installations	15	10	5

13.2 COSTS

Delivering Rocky Mountain Power's multi-year WMP, as summarized above, requires an increase in investment across multiple years. Rocky Mountain Power is currently forecasted an additional investment of $47.83 million capital and $17.01 million expenses. Some programs, as understood today, require finite investment with a planned end date. Other programs, such as enhanced inspections or vegetation management, are expected to be on-going and annual in nature. Furthermore, not all programs require spend of each type in each year.

The following tables describe Rocky Mountain Power's three-year estimate of these incremental costs broken down by expenditure type. Additionally, the capital costs included reflect spend occurring in a given year, which may differ from values included in GRC filings or cost recovery mechanism applications which include costs based on when assets are placed in service. Furthermore, the costs reflect Rocky Mountain Power allocated share of associated programs and projects and, finally, while the tables only include a three-year forecast, these programs and increased expenditure are expected to continue beyond 2026.

Table 20: Planned Incremental Capital Investment by Program Category ($millions)

Program Category	Total 2024	Total 2025	Total 2026	3 Year Total
*Risk Modeling and Drivers	$0.92	$0.96	$1.00	$2.88
System Hardening	$-	$11.75	$17.50	$29.25
*Situational Awareness	$1.30	$2.09	$0.28	$3.67
**Operations & Work Practices (Asset Corrections i.e., pole replacements)	$0.03	$3.00	$3.00	$6.03
WMP Engagement Strategy & Plan Development	$0.15	$-	$-	$0.15
*System Allocated Transmission	$1.54	$2.10	$2.21	$5.85
Grand Total	**$3.94**	**$19.90**	**$23.99**	**$47.83**

Table 21: Planned Incremental Expense by Program Category ($millions)

Program Category	Total 2024	Total 2025	Total 2026	3 Year Total
*Risk Modeling and Drivers	$1.52	$1.57	$1.65	$4.74
Inspection & Corrections	$0.82	$0.86	$0.86	$2.54
Situational Awareness	$1.06	$1.17	$1.17	$3.40
Vegetation Management	$0.50	$0.52	$0.55	$1.57
Operations & Work Practices	$0.27	$0.27	$0.27	$0.81
PSP Coordination	$0.27	$0.27	$0.26	$0.80
**PSPS Program	$1.05	$1.05	$1.05	$3.15
Grand Total	**$5.49**	**$5.71**	**$5.81**	**$17.01**

** Spend within these categories represent Wyoming's portion of allocated spend.*

*** Designate reactive spend and not planned spend. Should circumstances indicate a need for these programs, as described in this WMP, they will be implemented with costs around this projection.*

Rocky Mountain Power anticipates continuously improving its WMP in a way that aligns with community and Commission expectations. Key takeaways from collaborations with other utilities, Public Safety Partners, the Commission, communities, and customers will be evaluated for incorporation into future WMPs and may require corresponding changes or updates to these forecasts.

Through partnerships, there are opportunities to secure general and state grant funding which have the potential to progress wildfire mitigation objectives and offset potential impacts to the customer. Beginning in 2022, Rocky Mountain Power began applying for, and actively pursuing grant funding opportunity where in 2023, Rocky Mountain Power was invited to negotiations by the Grid Resilience and Innovation Partnerships (GRIP) grant program. Should the GRIP grant be awarded as proposed, it would support funding of several programs in this plan.

13.3 CO-BENEFITS OF PLAN

Rocky Mountain Power's WMP encompasses various strategies, programs, and investments designed to reduce the risk of wildfire, in a manner consistent with emerging industry best practices. The elements of this plan provide clear benefits in the areas of wildfire mitigation, whether through enhanced inspections and corrections, additional vegetation management activities, or system hardening and the implementation of covered conductor. Additionally, maturation in the areas of risk mapping and situational awareness facilitate the prioritization and balancing of efforts to ensure the plan is delivered as efficiently as practical.

In identifying plan elements, Rocky Mountain Power considered both the costs and the benefits of any approach. Its strategies were guided by the principle that the frequency of ignition events related to electric facilities can be reduced by engineering more resilient systems that experience fewer fault events.

While the mitigation strategies in this plan are designed to reduce the risk of wildfire, many also offer co-benefits to the utility operation and its customers. The joint Investor-Owned Utilities

(IOUs) have worked on a common structure for assessing benefits, yet the way the benefits are assessed can vary from utility to utility. While there are nuances, Table 22 identifies which program categories could provide perceived co-benefits.

Table 22: Co-benefit Objectives

Projects	Utility Definition	Distribution System Planning	Safety	Reliability	Resiliency
Vegetation Management	Incremental wildfire mitigation programs within the FHCA such as annual cycle work.		√	√	
Asset Inspections and Corrections	Incremental wildfire mitigation programs within the FHCA such as increased inspection frequency and accelerated corrections		√	√	
Grid Hardening	Incremental WMP programs such as recloser / relay installations, and line rebuilds (covered conductor, undergrounding, etc.)	√	√	√	√
Situational Awareness	Incremental WMP programs such as weather station installations.	√	√	√	√
Research and Development					
Advanced Forecasting (Weather)			√	√	√

More frequent asset inspections can result in the identification and accelerated correction of additional conditions, which reduces wildfire risk. This same program can also improve public safety, worker safety, and reliability. Similarly, system hardening provides one of the most beneficial ways to reduce wildfire risk, by increasing the level of localized weather conditions that can be tolerated without impact on the utility operations. For example, installing covered conductor will increase the grid's resiliency against wind-driven contacts. The mechanical properties of a covered conductor design physically prevent the initiation of a flash-over due to contact, mitigating wildfire risk. For this same reason, covered conductor also reduces the potential for outages, thereby providing significant reliability benefits.

Furthermore, Rocky Mountain Power's situational awareness capabilities provide multiple wildfire mitigation benefits by informing operational and field protocols and playing a key role in the facilitation of PSPS protocols and decision-making. Along the same lines, situational awareness, paired with operational readiness, provides co-benefits throughout the year by supporting Rocky Mountain Power's response to many types of emergency related events, such as winter storms. While the program is designed to mitigate wildfire risk, Rocky Mountain Power anticipates leveraging this new capability to support other types of emergency response and overall system resilience.

Finally, Rocky Mountain Power's WMP includes the use of emerging technologies, such as the implementation of advanced protection and control schemes. While key to reducing the potential for utility related spark events following a fault event, this equipment provides additional co-benefits

in the areas of distribution system planning readiness. These projects lay the initial foundation for greater incorporation of other tactics, such as distribution automation or distributed generation.

APPENDIX A – WILDFIRE RISK MODELING DATA INPUTS

The following describes the general model inputs, data sources, update frequency, and update plans for data included in the company's planning and dynamic, seasonal risk model described in Sections 1.2 and 5.4. Many of the data sources below are provided and managed by Technosylva, who owns and maintains WFA-E which has the FireSight, FireRisk, and FireSim models.

Dataset	Spatial Resolution (Meters)	Start of Dataset	Dataset Update Frequency	Source
Landscape Characteristics				
Terrain	10		Yearly	United States Geological Survey (USGS)
Surface Fuels	30/10	2020	Pre-Fire Season, Monthly Update in Fire Season, End of Fire Season	Technosylva
Wildland Urban Interface (WUI) and Non-Forest Fuels Land Use	30/10	2020	Twice A Year	Technosylva
Canopy Fuels (CBD, CH, CC, CBH)	30/10	2020	Pre-Fire Season, Monthly Update in Fire Season, End of Fire Season	Technosylva
Roads Network	30		Yearly	USGS
Hydrography	30		Yearly	USGS
Croplands	30	1997	Yearly	USDA
Weather And Atmospheric Data				
Wind Speed	2000	1990	Hourly / 96 Hour Forecast	Atmospheric Data Solutions (ADS)
Wind Direction	2000	1990	Hourly /96 Hour Forecast	ADS
Wind Gust	2000	1990	Hourly / 96 Hour Forecast	ADS
Air Temperature	2000	1990	Hourly / 96 Hour Forecast	ADS
Surface Pressure	2000	1990	Hourly / 96 Hour Forecast	ADS
Relative Humidity	2000	1990	Hourly / 96 Hour Forecast	Technosylva
Precipitation	2000	1990	Hourly / 96 Hour Forecast	ADS
Radiation	2000	1990	Hourly / 96 Hour Forecast	ADS
Water Vapor Mixing Ratio 2 meter	2000	1990	Hourly / 96 Hour Forecast	ADS
Snow Accumulated – Observed	1000	2008	Daily	National Oceanic and Atmospheric Administration (NOAA)

Dataset	Spatial Resolution (Meters)	Start of Dataset	Dataset Update Frequency	Source
Precipitation Accumulated - Observed	4000	2008	Daily	NOAA
Burn Scars	10	2000	5 Days	National Aeronautics and Space Administration (NASA)/ European Space Agency (ESA)
Weather Observations Data	Points	1990	10 Min	Synoptic
Fuel Moisture				
Herbaceous Live Fuel Moisture	250	2000	Daily / 5-Day Forecast	Technosylva
Woody Live Fuel Moisture	250	2000	Daily / 5-Day Forecast	Technosylva / ADS
1-Hour Dead Fuel Moisture	2000	1990	Hourly / 124 Hour Forecast	Technosylva / ADS
10-Hour Dead Fuel Moisture	2000	1990	Hourly / 124 Hour Forecast	Technosylva / ADS
100-Hour Dead Fuel Moisture	2000	1990	Hourly / 124 Hour Forecast	Technosylva / ADS
Values at Risk				
Buildings	Polygon Footprints	2020-21	Yearly	Microsoft/Technosylva
Damage Inspection (DINS)	Points	2014-21	Yearly	Cal Fire
Population	90	2019	Yearly	LANDSCAN, Oak Ridge National Laboratory (ONRL)
Roads	Vector Lines	2021	Yearly	Caltrans
Social Vulnerability	Plexels	2021	Yearly	Esri GeoEnrichment Service
Fire Stations	Points	2021	Yearly	Esri, USGS
Building Loss Factor	Building Footprints	2022	Yearly	Technosylva
Critical Facilities	Points	2021	Yearly	Fire Resource Assessment Program (FRAP), Cal Fire
Potential Ignition Locations				
Distribution & Transmission Lines	Linear Segments	2022	Updated Quarterly	PacifiCorp
Poles & Equipment	Points	2022	Updated Quarterly	PacifiCorp
Outage History	Points	1989	Annual	PacifiCorp
Ignition History	Points	2020	Annual	PacifiCorp

Dataset	Spatial Resolution (Meters)	Start of Dataset	Dataset Update Frequency	Source
Fire Activity				
Hotspots MODIS	1000	2000	Twice A Day	NASA
Hotspots VIIRS	375	2014	Twice A Day	NASA
Hotspots GOES 16/17	3000	2019	10 Minute	NASA
Fireguard	Polygons	2020	15 Minute	National Guard
Fire Season Perimeters	Polygons	2021	Daily	National Incident Feature Service (NIFS)
Historic Fire Perimeters	Polygons	1900	Yearly	Cal Fire
Alert Wildfire Cameras	Live Feeds	Real Time	1 Minute	Alert Wildfire Consortium
Lighting Strikes	1000	Real Time	1 Minute	Earth Networks / Others

APPENDIX B – ENCROACHMENT POLICY

Wildfire Encroachment
System Operations Procedure SOP-203

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Owner (Position):	VP, System Operations
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Summary of Policy:	Wildfire Encroachment Action Description
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0	06/2023	Preliminary Draft
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2	01/23/2024	New Format

Wildfire Encroachment
System Operations Procedure SOP-203

Table of Contents

Wildfire Encroachment
System Operations Procedure SOP-203

PURPOSE

This document defines PacifiCorp's escalation and response protocols when a wildfire is approaching PacifiCorp's Transmission and/or Distribution facilities. As set forth in Section 2, this procedure requires de-energization of power lines when a wildfire is within defined distances to PacifiCorp assets.

IMMEDIATE ACTION: DUE TO FIRE LOCATION RELATIVE TO ASSETS

In the event of a wildfire encroachment, any subject power lines will be de-energized. A wildfire encroachment shall have occurred if there is credible information that a wildfire has breached the minimum distance described in the table below. Real-time weather information (wind speeds) at the fire location will be obtained using PacificPowerWeather.com or RockyMountainPowerWeather.com.

Voltage	System	Design	Weather*	Minimum Distance (miles) for given Wind Gusts (mph)**		
				< 15 mph Gusts	**15 to 30** mph Gusts	**> 30** mph Gusts
Bulk Electric Transmission ***- or -*** Sub-transmission	Radial	Wood	Elevated fire weather (yellow or greater)	1/2	1	2
			Non-elevated fire weather (green)	1/4	1/2	1
		Steel	Non-elevated fire weather (green or greater)	1/4	1/2	1
	Loop	All	All	2	2	2
Distribution	All	All	Elevated fire weather (yellow or greater)	1/2	1	2
			Non-elevated fire weather (green)	1/4	1/2	1

Note: Distances and wind speed combinations provide a 2-hour buffer for de-energizing before the fire reaches assets
***** As defined on the daily weather risk matrix
****** Utilize PacificPowerWeather.com and RockyMountainPower.com to determine real-time wind gusts

The system operator is authorized to take action and ***shall de-energize*** any power line within the wildfire encroachment area. If there has been sufficient time to complete a Wildfire Threat Tracking Form, etc., the T&D Operations Director (or an authorized delegate) may issue other specific instructions related to a de-energization, such as the specific time or sequence of de-energization. In the absence of a contrary instruction from management, however, a system operator is authorized to de-energize under this section and shall complete the de-energization required in the event of a wildfire encroachment.

Depending on the specific circumstances of an event, the T&D Operations Director (or an authorized delegate) may seek approval from executive management to keep a line in service despite a wildfire encroachment. The approval of the chief executive officer (CEO) of

PacifiCorp, or an authorized delegate, is required to keep a power line energized if a wildfire encroachment has occurred.

IMMEDIATE ACTION: DE-ENERGIZATION REQUESTS

In the event local fire personnel or incident command request the de-energization of assets, the system operator will clarify the timeframe requested (i.e. immediate, 15 minutes, 1 hour, etc.). If fire suppression authorities request an immediate de-energization, the line should be de-energized immediately. In such case, the de-energization will be promptly reported to the Reliability Coordinator (RC), along with additional system analysis and resolution of post contingency issues. If time allows, the system operator will notify the RC of the impending action, complete a RTCA analysis and plan post contingency actions.

MANAGEMENT AND MONITORING

For multiple safety reasons, a power line should generally be de-energized if there is an active wildfire in the right-of-way. A wildfire can spread and move quickly. These procedures are designed to provide a safety buffer and to facilitate de-energization before a wildfire grows into the actual right-of-way. A wildfire encroachment occurs when a wildfire moves into a defined buffer space and threatens PacifiCorp-owned assets. Some of the parameters that affect the decision-making and response actions to a potential encroachment scenario include:

- Voltage classification(s)
- Asset type and construction material
- Stability of the system
- System configuration (loop or radial)
- Current fire suppression efforts
- Fire spread and weather forecast models
- Timeframe for potential asset impacts

These procedures provide specific buffer distances for different scenarios. If an active wildfire is encroaching a buffer distance, the line will be de-energized. While it can be difficult to obtain accurate real-time information about an active wildfire, PacifiCorp will act on the best available information.

INITIAL REPORTING

During normal business hours, PacifiCorp Emergency Management, in consultation with PacifiCorp Meteorology, is primarily responsible for monitoring any wildfires. Emergency Management may learn of new wildfires, and monitor known wildfires, through reporting from external sources and through monitoring of internal tools (i.e., wildfire cameras, satellite wildfire hot spot warning, or other application alerts).
Outside of normal business hours, System Operations is primarily responsible for monitoring wildfire activity and shall immediately notify the on-duty Emergency Manager by telephone upon receiving notice of any new wildfire within 10 miles of any PacifiCorp assets.

- **More than 10 miles**. Wildfires more than 10 miles from the nearest PacifiCorp assets are monitored for potential growth and potential impact by Emergency Management.

- **Within 10 miles**. The on-duty Emergency Manager shall notify by email the T&D Operations Director or an authorized delegate (who may escalate such information through normal channels) of any new wildfire within 10 miles of PacifiCorp assets.

    - **Preliminary Spread Assessment**. Upon receiving notice of a new wildfire, the on-duty Emergency Manager will promptly obtain a preliminary spread assessment from the on-duty meteorologist regarding the probability of the fire damaging PacifiCorp assets and shall supplement the original email notification to the T&D Operations Director or an authorized delegate with the preliminary spread assessment, as soon as it is available. If the preliminary spread assessment indicates that the fire will likely reach PacifiCorp assets at any time prior to the end of the next business day, the on-duty Emergency Manager will immediately telephone the T&D Operations Director or an authorized delegate to confirm receipt of the preliminary spread assessment. Otherwise, the on-duty Emergency Manager may telephone the T&D Operations Director or an authorized delegate to confirm receipt at the beginning of the next business day.

WILDFIRE THREAT TRACKING

If a preliminary spread assessment concludes that a wildfire will likely grow into PacifiCorp assets within 48 hours, the on-duty Emergency Manager, in consultation with the on-duty meteorologist, shall promptly complete a Wildfire Threat Tracking Form. If a preliminary spread assessment concludes that wildfire contact with PacifiCorp assets is not likely to occur within 48 hours, the on-duty Emergency Manager shall continue to monitor the new wildfire and request a new preliminary assessment if there are any material changes in the fire. The Wildfire Threat Tracking Form includes the following information:

- Name of the Emergency Manager submitting the report and the time of the report
- Fire location, including a description of the source of such information;
- Fire size, including a description of the source of such information;
- Proximity to nearest PacifiCorp asset(s), with mapping as appropriate;
- Fire growth assessment by PacifiCorp Meteorology, including:
    - Estimated fire growth rate and pattern;
    - Forecasted weather conditions which may impact fire spread;
    - Physical terrain between the fire and the assets; and
    - Estimated duration regarding when fire may reach company assets; and
- Other information regarding the fire and the company's potential response, including:
    - Physical status of company field personnel;
    - Monitoring capabilities of field personnel; and any communications with fire incident command.

The on-duty Emergency Manager will promptly transmit the completed Wildfire Threat Tracking Form to the T&D Operations Director or an authorized delegate. After confirming

receipt by telephone, the on-duty Emergency Manager will continue to monitor the wildfire. In conjunction with ongoing monitoring, the on-duty Emergency Manager shall:

- Open communications regarding fire status with local officials;
- Coordinate with the on-scene field personnel;
- Confer with the on-duty Meteorologist to evaluate fire conditions and update fire spread assessments;
- Update the Wildfire Threat Tracking Form as needed; and
- Manage an ongoing exchange of information exchange between System Operations, Emergency Management, and Meteorology until there is no threat to PacifiCorp assets.

CUSTOMER AND STAKEHOLDER NOTIFICATIONS

In all cases, system operations, under the direction of the network operators, will provide notice to on-call region or grid system operations management and the on-call emergency management manager, who will begin coordination with Meteorology, Executive Management, Corporate Communication, Customer service, Regional Business Managers, and Field Operations.

System Operations

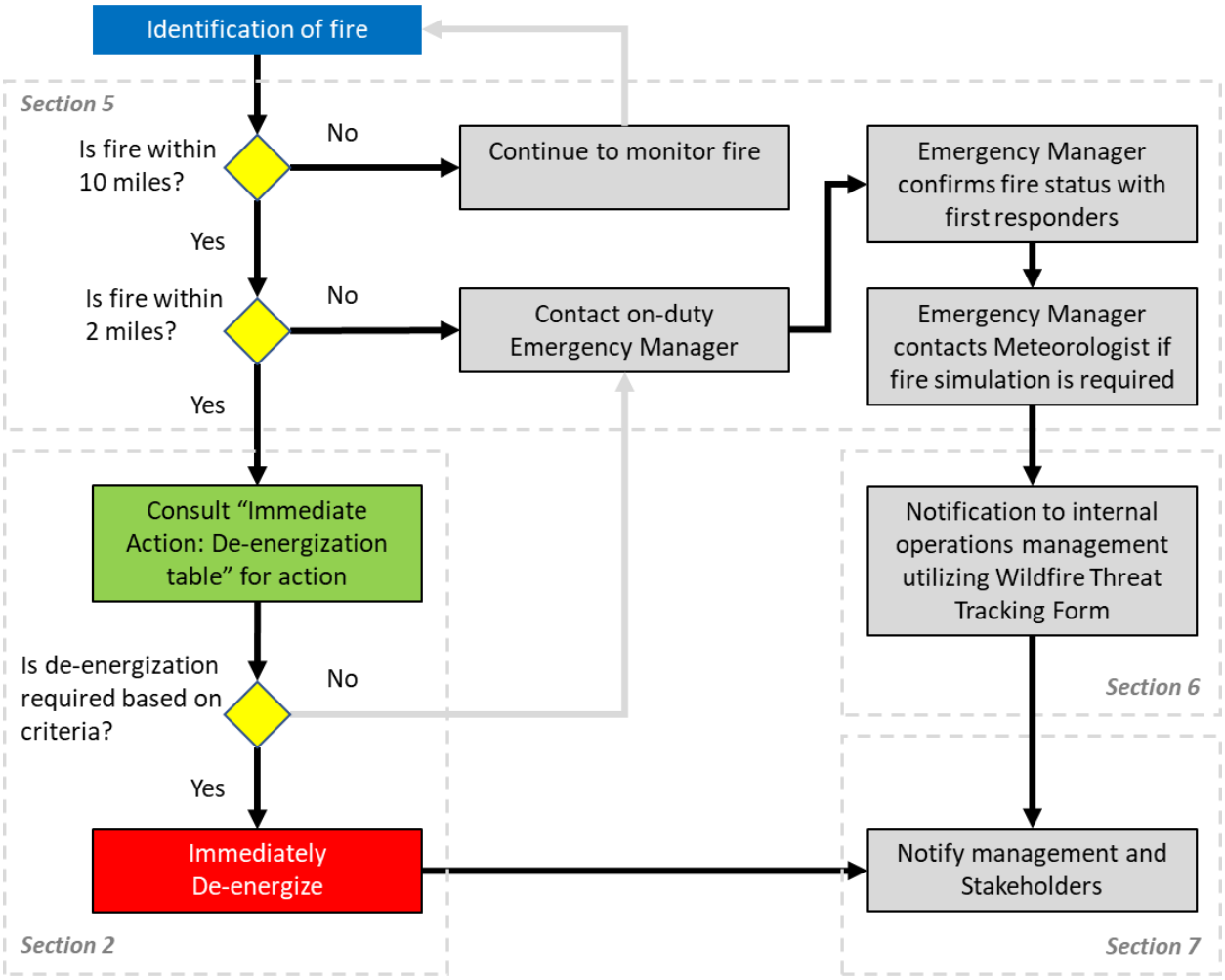
Department	Contact	Number
Emergency Management	24/7 Hotline – Pacific Power	503-331-4498
	24/7 Hotline – Rocky Mountain Power	801-220-2057

Emergency Management Contacts

Department	Contact	Number
Executive Management	Vice President, System Operations	
	Vice President, T&D Operations	
	Senior Vice President, Power Delivery	
T&D Field Operations	Area Director	Based on location
Corporate Communications	24/7 Hotline – Pacific Power	503-813-6018
	24/7 Hotline – Rocky Mountain Power	801-220-5018
Customer Service	Manager, Customer Service Mission Control	503-813-5087
Regional Business Manager(s)	Area Regional Business Manager	Based on location

If time allows before de-energization, the customer and stakeholder notification process will be executed by the appropriate departments. If time does not allow, a post event customer notification strategy will be developed. Stakeholders include other utilities, the reliability coordinator, the state commission, and other government authorities.

APPENDIX 1 : FLOWCHART FOR FIRE ENCROACHMENT ASSESSMENTS



Note on revisions made on 1/9/2025:

- "Rocky Mountain Power" amended to "PacifiCorp" as the source for *Potential Ignition Datasets* as described in Appendix A.