ROCKY MOUNTAIN POWER
A DIVISION OF PACIFICORP

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June 1, 2021

VIA ELECTRONIC FILING

Utah Public Service Commission
Heber M. Wells Building, 4th Floor
160 East 300 South
Salt Lake City, UT 84114

Attention: Gary Widerburg
Commission Administrator

RE: **Docket No. 21-035-35 – Rocky Mountain Power's 2021 Wildland Fire Cost and Compliance Report**

Pursuant to Utah Code § 54-24-201(4) and 54-24-202(2) and Administrative Code R746-315-3, PacifiCorp, d.b.a. Rocky Mountain Power, ("the Company") hereby submits its 2021 Wildland Fire Cost and Compliance Report.

The Company respectfully requests that all formal correspondence and requests for additional information regarding this filing be addressed to the following:

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Sincerely,

Joelle Steward
Vice President, Regulation

ROCKY MOUNTAIN POWER
A DIVISION OF PACIFICORP

Utah Wildland Fire Protection Plan

Cost and Compliance Report

June 1, 2021

Introduction

Consistent with UTAH CODE § 54-24-201(4), § 54-24-202(2), and R746-315-3, Rocky Mountain Power ("the Company") submits its first Annual Cost and Compliance Report ("Report"), which provides the following:

1. The actual capital investments and expenses incurred in calendar year 2020 to implement the Wildland Fire Protection Plan ("the Plan") approved in Docket No. 20-035-28, and an updated forecast of the capital investments and expenses for the current year 2021.

2. Details of the wildfire mitigation efforts undertaken in 2020 in compliance with the Plan as approved in Docket No. 20-035-28.

3. Changes incorporated into the Plan during the previous year and the reason for the changes in accordance with the Public Service Commission of Utah's October 13, 2020 order in Docket No. 20-035-28.

Overall, Rocky Mountain Power made progress to reduce wildfire risk, and the Company continues to evaluate and measure the effectiveness of its wildfire mitigation programs.

1. Capital and O&M Expenditures, Forecasts and Plan Updates

1.1 Capital Spend Summary

Table 1. Wildland Fire Protection Implementation Summary – Capital Actuals & Forecast

Capital Mitigation Programs ($ Millions)	2020			2021		
	Actuals	Plan	Variance	Forecast	Plan	Variance
System Hardening	$15.8	$29.6	($13.8)	$24.9	$44.7	($19.8)
Advanced Protection and Control	$4.1	$3.3	$0.8	$3.8	$3.0	$0.8
Operational Practices	$2.4	$2.9	($0.5)	$0.5	$1.0	($0.5)
Inspections and Corrections	$2.2	$1.0	$1.2	$3.8	$1.5	$2.3
Situational Awareness	$1.4	$0.4	$1.0	$0.8	$0.2	$0.6
Environmental	$0.0	$0.2	($0.2)	$0.0	$0.2	($0.2)
Totals	**$25.9**	**$37.4**	**($11.5)**	**$33.8**	**$50.6**	**($16.8)**

Capital spend in 2020 was $11.5 million less than originally planned. The 2020 variance was due to the actual spend in the System Hardening category ($15.8 million) being significantly lower than the forecasted $29.6 million. The largest contributing factors for underspend was associated with the line rebuild projects, which include lengthy permitting processes, limited access timeframes for construction, material delays caused by high-demand markets and limited supplies due in part to the COVID-19 related impacts.

The Inspections and Corrections costs were $1.2 million greater than what was initially estimated in the Plan. This variance was driven by the increased inspection program and identification of a greater number of corrections than initially forecasted.

Capital spend forecasted for 2021 is anticipated to be behind the original plan of $50.6 million for the year, which is also driven by delays in the line rebuild projects. The Company expects capital spend to increase in the years 2022-2026 as impacts and delays experienced from COVID-19 and related wildfire resources and material competition begins to subside and drives improved timelines for the installations progress to construction phase. Table 2 provides an updated forecast for capital spend for 2022-2026.

Table 2. Wildland Fire Protection Implementation Summary – Capital Plan for 2022-2026

Capital Mitigation Programs ($ Millions)	2022	2023	2024	2025	2026	Totals
System Hardening	$ 66.2	$ 43.9	$ 39.6	$ 20.1	$ 10.1	$ 179.9
Advanced Protection and Control	$ 1.1	$ 1.3	$ 0.3	$ 0.3	$ 0.3	$ 3.3
Inspections and Corrections	$ 1.5	$ 1.5	$ 1.5	$ 1.5	$ 1.5	$ 7.5
Situational Awareness	$ 0.2	$ -	$ 0.1	$ -	$ -	$ 0.3
Environmental	$ 0.2	$ 0.2	$ 0.2	$ 0.2	$ 0.2	$ 1.0
Totals	**$ 69.2**	**$ 46.9**	**$ 41.7**	**$ 22.1**	**$ 12.1**	**$ 192.0**
Original 2020 Plan Estimate	$ 50.1	$ 40.5	$ 27.7	$ 22.0	$ 12.1	$ 152.4
Variance	**$ 19.1**	**$ 6.4**	**$ 14.0**	**$ 0.1**	**$ -**	**$ 39.6**

The table reflects an increase in spending in 2022 – 2026 over the original forecast since several projects that were originally planned to be installed and placed in service in 2020 and 2021 have been shifted. The net impact of both Tables 1 and 2 is an overall $11.3 million increase to the plan that is a result of refined estimates from the originally planned projects, project scoping and engineering.

1.2 O&M Spend Summary

Table 3. Utah Wildland Fire Protection Implementation Summary – O&M Actuals & Forecast

Mitigation Program ($ Thousands)	2020			2021		
	Actuals	Plan	Variance	Forecast	Plan	Variance
Inspections and Corrections	$2,539	$3,200	$ (661)	$ 3,156	$3,050	$ 106
Situational Awareness	$ 191	$ 300	$ (109)	$ 227	$ 500	$ (273)
Environmental	$ 3	$ 100	$ (97)	$ 510	$ 400	$ 110
Advanced Protection and Control	$ -	$ -	$ -	$ 110	$ 100	$ 10
Total Distribution O&M	**$2,733**	**$3,600**	**$ (867)**	**$ 4,003**	**$4,050**	**$ (47)**
Inspections and Corrections	$ 737	$ 800	$ (63)	$ 1,005	$ 850	$ 155
System Hardening	$ 321	$ -	$ 321	$ 200	$ 100	$ 100
Environmental	$ -	$ -	$ -	$ -	$ 100	$ (100)
Total Transmission O&M	**$1,058**	**$ 800**	**$ 258**	**$ 1,205**	**$1,050**	**$ 155**
Total O&M	**$3,791**	**$4,400**	**$ (609)**	**$ 5,208**	**$5,100**	**$ 108**

Distribution inspections and corrections made up the largest variance in 2020 with a decrease of $661 thousand. This can be correlated to the types of conditions that are found which differ in whether the correction is funded under the capital or operations and maintenance expenses

("O&M") accounting treatments.et. (See discussion above regarding increased spending on corrections involving capital spend.) If the correction of a condition involves the replacement of an accounting asset (pole, crossarm, cutout, etc.) the correction is accounted for in the capital program; otherwise the correction is accounted for as O&M. Since the type of correction is unknown before the actual inspection takes place the planned costs can vary from the actual costs based on the type of correction required.

Table 4. Utah Wildland Fire Protection Implementation Summary – O&M Plan for 2022-2026

Mitigation Program ($ Thousands)	2022	2023	2024	2025	2026	Total
Inspections and Corrections	$3,050	$3,050	$3,100	$3,050	$3,050	$15,300
Situational Awareness	$ 500	$ 400	$ 500	$ 500	$ 400	$ 2,300
Environmental	$ 400	$ 400	$ 400	$ 400	$ 400	$ 2,000
Advanced Protection and Control	$ 100	$ 100	$ 100	$ 100	$ 100	$ 500
Total Distribution O&M	**$4,050**	**$3,950**	**$4,100**	**$4,050**	**$3,950**	**$20,100**
Inspections and Corrections	$ 850	$ 850	$ 900	$ 850	$ 850	$ 4,300
Environmental	$ 100	$ 100	$ 100	$ 100	$ 100	$ 500
Total Transmission O&M	**$ 950**	**$ 950**	**$1,000**	**$ 950**	**$ 950**	**$ 4,800**
Total O&M	**$5,000**	**$4,900**	**$5,100**	**$5,000**	**$4,900**	**$24,900**

On a longer-term perspective, the Company is not currently projecting significant changes to O&M spending forecast in the Plan.

2. Compliance with the Plan

2.1 System Hardening

The Plan identified five primary categories for system hardening activities. The line rebuild projects are particularly central to Rocky Mountain Power's mitigation efforts, as reflected in the cost of those projects.

Fire High Consequence Area (FHCA) Line Rebuild Program

The increased risk of wildland fires in western states prompted Rocky Mountain Power to focus standards development on tools and materials better suited for mitigating wildfire risk. In 2020, the Company developed standards for covered conductor, which is being used to replace portions of the distribution network inside of the FHCA.

For decades, the dominant distribution overhead conductor used by U.S. utilities, including Rocky Mountain Power, has been bare wire. Covered conductors are useful in preventing arcing on a distribution line that can be caused by trees, animals, balloons, or any other kind of foreign objects that can contact powerlines. This results in both a prevention of ignition sources for fires and an improved reliability of the distribution line.

In 2020, Rocky Mountain Power completed a re-build project of an 8-mile section of the 138kV transmission line from Snyderville Junction to Silver Creek. An additional eight transmission line rebuild projects are currently underway. Various projects are at different stages in permitting,

design or construction, with 2021, 2022 and 2023 installation dates currently projected. In addition, rebuild projects for 12 distribution line circuits are also currently underway.

Due to the complexity of most of the line rebuild projects, the environmental permitting process, limited construction season and current demand of materials, most line rebuilds will span two or more years. 2020 served as a major planning and project origination year that will bring greater results in 2021 and beyond.

Pole Replacement Program

In 2020, 69 distribution poles in the FHCA over 45 years of age were selected to be replaced. These poles were designed and submitted for construction during the last quarter of 2020. Construction itself will take place in 2021. These pole replacements are separate from and in addition to the pole replacements that take place in conjunction with other wildfire mitigation initiatives. Specifically, poles may be replaced as part of the distribution line rebuilds discussed above; in addition, pole replacement can occur as the result of conditions found during inspections.

Fire Mesh Wrap Installation

During 2020, Rocky Mountain Power created a new policy to provide crews guidance on the installation of fire mesh wrap. This wrap can be installed on wood poles (either transmission or distribution) to protect the poles from fire damage in the event of a wildfire. The Company installed wrap on 104 wood poles on the Snyderville – Silver Creek 138kV rebuild. All condition pole replacements inside of the FHCA are reviewed to determine whether installation of fire mesh wrap is warranted in conjunction with the replacement. Fire wrap may also be installed in certain conditions when an advancing fire is threatening facilities and crews can safely complete installations. In 2020, the Company installed fire wrap on nine wood poles on the Hale – Wallsburg 138kV transmission line during the Range Fire in Provo Canyon under such conditions.

Relays for Advanced System Protection Program

Rocky Mountain Power replaced 11 substation electromechanical relay packages on transmission lines inside of the FHCA with new microprocessor relay packages prior to the 2020 wildfire season. These relays result in faster clearing times in the case of a fault, which decreases the amount of released energy. They also provide fault location to dispatch, which speeds up the ability to complete a patrol and decreases restoration time. All electromechanical relay packages on transmission lines inside of the FHCA will be replaced with new microprocessor relays by the end of the 2026 plan.

The Company also replaced 19 DPU (distribution line relays) and three TPU (distribution transformer relays) in substations inside the FHCA to replace devices with identified performance issues. All distribution relaying devices with known performance issues inside of the FHCA will be replaced by the end of the 2026 plan.

Non-Expulsion Fuse Installation Program

Rocky Mountain Power replaced 417 protection overcurrent devices, expulsion fuses, inside of the FHCA with new non-expulsion fuses. Rocky Mountain Power plans to replace all expulsion fuses installed in the FHCA by the end of the 2026 plan. Because most fuse replacements are included as part of the distribution line rebuild projects, much of this work will be completed on the timeframe of the underlying re-build project. (Note that pole-clearing, discussed in the vegetation management section, will continue equipment poles with expulsion fuses while such fuses remain in service.)

2.2 Operational Practices

Wildfire Training Facility

Rocky Mountain Power constructed a comprehensive wildfire transmission and distribution training center in 2020. The training center provides spaces to perform training and equipment testing analysis, including an enclosed pole yard where crews can train on network operations of new materials and impacts on electrical facilities. Especially with the new technologies being deployed as part of Rocky Mountain Power's wildfire mitigation efforts, this training center will play a key role in ensuring personnel are properly trained for project installations, maintenance, and restoration efforts.

Public Safety Power Shutoff (PSPS)

In 2020, Rocky Mountain Power did not de-energize any power lines as part of any Public Safety Power Shutoff ("PSPS"). During the 2020 wildfire season, Rocky Mountain Power Emergency Operations Center was activated for two separate PSPS watch events. During the watch events, field employees were dispatched to take real-time wind measurements, actively patrol lines, and monitor local conditions, which field personnel communicated back to Emergency Operation Center ("EOC") personnel. Conditions were not elevated as to warrant a PSPS in either case.

The watch events were useful real-world experiences that has helped the Company prepare for the 2021 wildfire season. In each watch event in 2020, the Company notified affected customers 48 hours in advance, informing them of potential de-energization. Targeted media notices and follow-up releases were sent out, and customers were notified via outbound calls, texts and/or emails based on their preference. Related posts were also made on Rocky Mountain Power's social media channels. Notification information included updates on weather forecast conditions, criteria being monitored as part of the PSPS evaluation, actions taking place by operations personnel on the ground and restoration information. Rocky Mountain Power will employ the lessons learned in 2020 to effectively use this tool of last resort.

Mobile Generators

Three 500 kW generators were acquired to use in case of public safety power shutoff during the wildfire season. These units will be ready to be deployed to restore service to certain commercial, industrial, or residential areas where it is needed if PSPS is implemented. This will help mitigate impacts to customers if a PSPS event leaves customers without power for an extended period.

Emergency Management and Response

In 2020, Rocky Mountain Power continued to develop relationships with Cedar City Fire Department, North Fork Fire District, Summit, Wasatch, Utah, and Iron Counties Emergency Managers. Those relationships were key in discussions involving the stand-up of the Rocky Mountain Power Emergency Operations Center and efforts in the field to monitor facilities during periods of elevated wildfire risk, particularly in those areas where a PSPS watch event occurred.

2.3 Inspection and Correction Program

Distribution and Transmission Facility Point Inspection and Correction

In 2020, Rocky Mountain Power inspected all 12,933 poles inside of the Fire High Consequence Area (FHCA). Inspections were performed in accordance with PacifiCorp's general inspection policies and procedures. In addition, these facilities were inspected by four infrastructure specialists that were hired and trained specifically for the purpose of conducting inspections with a particular focus on potential wildfire risk.

Table 5. Utah Wildland Fire Protection Implementation Summary – Conditions found in 2020

Area	Fire Risk	Condition	Correction Timeframe	Outstanding Conditions	Corrected Conditions
FHCA	Yes	A – Imminent*	immediately	0	178
FHCA	Yes	A	60 days average	17	391
FHCA	Yes	B	12 months	59	330
FHCA	No	A	120 days average	9	997
FHCA	No	B	-	88	392
2020 FHCA				**173**	**2,288**

Currently, there are 173 total outstanding conditions identified in 2020, including 17 A and 59 B conditions categorized as fire risk. The 17 Priority A, Fire Risk outstanding conditions were identified near the last quarter of 2020. These locations were very difficult to access, if not, inaccessible for line operations to correct conditions during the winter season. These conditions are scheduled to be corrected when locations can be safely accessed by line operations.

Rocky Mountain Power also integrated a new strategy in its inspection program. During the month of July 2020, a helicopter infrared scan was conducted on all transmission lines that have poles within the FHCA. Thirty-six transmission localities containing over 1,300 miles of line were scanned for components experiencing thermal breakdown. No conditions requiring immediate replacement were found as part of the infrared scan.

Vegetation Inspection and Management

Rocky Mountain Power implemented the new elements of its vegetation management program described in Section 4.2 of the Plan. In doing so, the Company performed annual vegetation inspections on all lines inside of the FHCA. While the actual overhead distribution mileage inside of the FHCA is 489, Rocky Mountain Power completes an inspection on the entire circuit, and the total mileage of subject circuits is 1,211. The Company also completed inspections on 210 miles of transmission lines in the FHCA. Vegetation contractors completed work identified through the inspections consistent with the Vegetation Management Standard Operating Procedures including the extended clearances as described in Table 13 of the Plan. As a result, a significant amount of clearance work was performed: with 4,192 trees pruned along the distribution circuits, and 554 trees pruned along transmission lines.

Most significantly, 679 trees were removed along the distribution circuits and another 292 trees removed along the transmission lines. These trees were all determined to be high risk trees and in need of removal. High risk trees can fall-in and contact a conductor, taking the conductor down. Trees were removed, either as inventory reduction or because of identification as high risk.

Another key element for the vegetation management program is the Company's new pole clearing program. In 2020, Rocky Mountain Power cleared the bases of all 4,712 distribution equipment poles inside of the FHCA. Pole clearing consists of clearing all vegetation in a 10-foot radius cylinder of clear spare around the pole.

2.4 Situational Awareness Program

Weather Stations

In 2020, Rocky Mountain Power entered into an agreement with a third-party vendor that provides customized weather forecasts, which the Company uses to improve situational awareness and make informed decisions. These forecasts are used to determine when to dispatch field crews to perform on-the-ground monitoring of conditions during periods of elevated wildfire weather conditions. The vendor's forecasts are based on information from both company-owned weather stations and weather stations with publicly available information.

In addition to the 11 weather stations installed in 2019, there were 10 new stations installed in 2020 bringing the total to 21 weather stations in Rocky Mountain Power's Utah service territory. These stations have been sited to provide weather data for forecasting weather conditions in

selected areas of the FHCA. Additional weather stations are planned to be purchased and installed; however, the locations are yet to be determined. As the weather station system is built out it is continually reviewed for effectiveness in areas of concern and will continue to be added to when information is determined to be needed on new areas.

Cameras

To expand situational awareness, Rocky Mountain Power invested in high definition video cameras. Working with AlertWildfire and the Utah Fire and State Lands (FFSL), communication towers were reviewed to select 14 tower locations that would provide the greatest viewsheds into the Utah FHCA to not only get a real time view of transmission and distribution lines but also help facilitate a rapid suppression response to any fire ignitions by firefighting resources. These cameras include 360° rotation, pan/tilt and zoom capabilities. In 2020, the Company finalized 14 camera locations and entered into an agreement with AlertWildfire, to have cameras at these locations operational by the start of the 2021 wildfire season. Through web access on www.AlertWildfire.org/utah, the live camera views are available to the public at all times. As part of ongoing collaboration with fire suppression agencies, Rocky Mountain Power is sharing login capability with the Utah Division of Forestry, FFSL, Utah Emergency Management groups and other fire-fighting resources throughout the state of Utah.

2.5 Environmental Program

Avian Protection Plan and Wildlife Protection Plan

Rocky Mountain Power continued implementation of its pre-existing Utah Avian Protection Plan (APP) in 2020, retrofitting 2,866 poles in Utah to address avian electrocution risks. This work has the added benefits of reducing wildfire risk associated with bird or animal contacts. In addition, as part of the APP and in accordance with Company state and federal wildlife permits, the Company managed hazard nests to reduce potential fire risks. Specifically, Rocky Mountain Power surveyed targeted locations with historic avian mortalities or nests. If needed, facilities were retrofitted to meet current standards for wildfire and avian protection. This effort included surveys at 33 poles and retrofitting at 14 poles in the Cedar City district in 2020. Locations in the Park City district have also been identified for a 2021 survey.

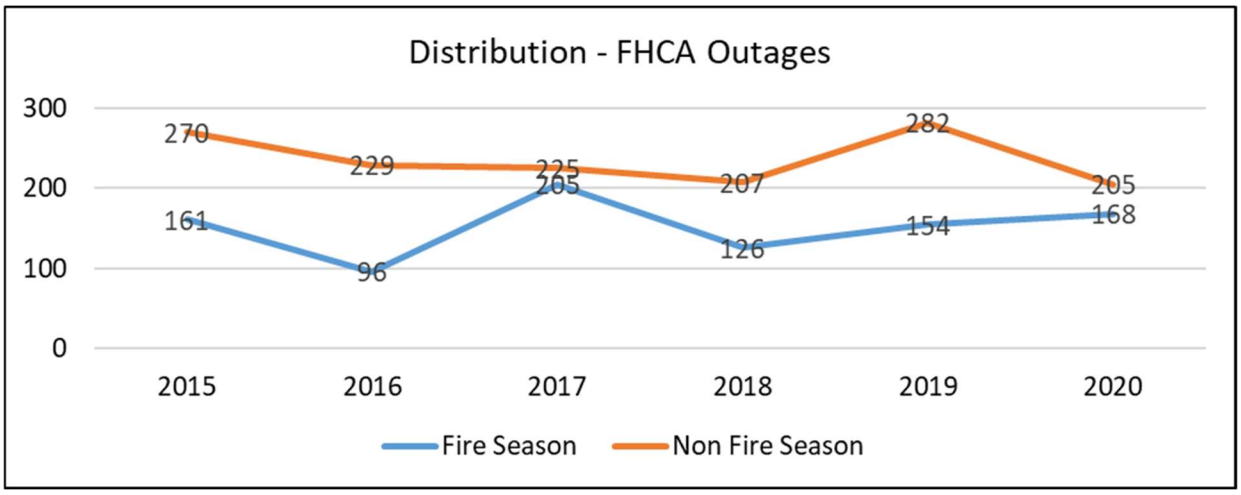
As part of new wildfire mitigation programs launched in conjunction with the Wildland Fire Protection Plan, Rocky Mountain Power began development of its Wildlife Protection Plan (WPP) for Utah in 2020. The WPP is intended to identify and mitigate areas where animal contacts with lines could pose wildfire risks. Planned line rebuilds and enhancements for wildfire protection within the FHCA will address the risk of wildfire associated with avian or animal contacts in these areas. Therefore, efforts are being focused on areas where habitat and animal contacts may pose wildfire risks. Historical data was gathered for wildlife-caused outages and compared with wildfire risk areas in GIS. Based on this analysis, locations were prioritized, and a circuit identified for surveys and retrofitting in 2021.

Habitat Enhancement and Fuels Reduction Partnership Projects

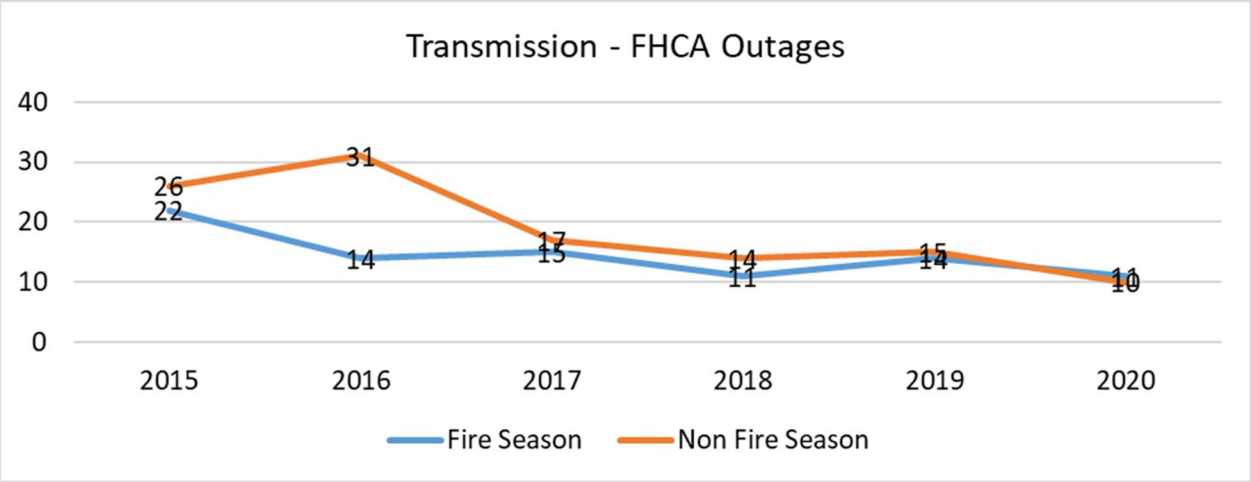
During 2020, Rocky Mountain Power had discussions with the Shared Stewardship (SS) and Watershed Restoration Initiative (WRI) regarding potential partnership opportunities. Rocky Mountain Power participated in a Shared Stewardship stakeholder meeting in June 2020 and reviewed WRI proposed projects during the fall of 2020. The Company also had discussions with the U.S. Forest Service (USFS) Dixie Field Office regarding proposed WRI partnership projects to reduce pinyon and juniper encroachment near Enterprise and Pinto that are in proximity to several transmission lines. In-kind vegetation work completed by Rocky Mountain Power is currently planned for 2021 completion with an estimated cost of $1.5 million.

2.6 Performance Metrics and Monitoring

A key metric for evaluating the effectiveness of mitigation strategies, especially as projects are completed every year, will be the outages during fire season inside of the FHCA. The below graphs provide a baseline of the last six years of outages inside the FHCA both in and out of fire season.



While inspections and fusing projects have been completed inside FHCA regions, many of the line rebuilds are still underway and the benefits will not yet be realized. While outages in these regions have declined from 2019 to 2020, outages during fire season still show a slight increase from 2019 levels. These outages are greatly attributed to the catastrophic windstorm that Utah experienced in September. Of the 168 outages which occurred during the 2020 fire season, 66 (39%) were attributed to damages associated with this storm.



Like distribution, many of the transmission rebuild projects are currently in design, permitting and or construction. As such, benefits have not yet been realized in these results. Improvements on the transmission system from previous years has continued the overall downward trend of transmission outages. The transmission system experienced a decline in events when compared to 2019, both in the total number of outages and outages during fire season.

3. Changes to the Plan

There were no material changes to the original plan that have been determined to be required as projects have been started and completed.

CERTIFICATE OF SERVICE

Docket No. 21-035-35

I hereby certify that on June 1, 2021, a true and correct copy of the foregoing was served by electronic mail to the following:

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