Midway City Council
19 September 2023
Regular Meeting

Rocky Mountain Power /
Conditional Use Permit

Midway

CITY COUNCIL MEETING STAFF REPORT

DATE OF MEETING:	September 19, 2023
NAME OF PROJECT:	Judge Transmission Line Rebuild
NAME OF APPLICANT:	Rocky Mountain Power
AGENDA ITEM:	Conditional Use Permit
LOCATION OF ITEM:	Midway substation near the Midway Cemetery to the Wasatch Mountain State Park crossing the Swiss Alpine Road area and the lower area of Lime Canyon
ZONING DESIGNATION:	R-1-22 and P-160

ITEM: 5

Rocky Mountain Power is requesting a Conditional Use Permit to rebuild the existing Judge transmission line and install a wildfire standard transmission line which is in alignment with Utah Code Ann 54-24-201. The proposal will include new poles to be above 55 feet with a pole for pole replacement within the existing alignment. The portion in Midway is approximately 2.5 miles in length and will follow the existing transmission line.

BACKGROUND:

This request for a Conditional Use Permit (CUP) by Rocky Mountain Power is to rebuild the existing 46kV transmission line with 138kV framing and steel structures. The length of the project is 9.24 miles with about 2.5 miles of the line within Midway City limits. Currently, all the poles are wood and each of the wood poles will be replaced, pole for pole, with steel poles except switch structures which will be fiberglass poles. While the diameter of the poles will remain the same, the height of the proposed poles will increase by an average of 10'. The applicant has stated that the purpose for the project is twofold, first, to reduce the probability of utility related wildfires and second, to mitigate damage to electric facilities because of wildfire.

The applicant is required to apply for a CUP for two reasons, the first is the height of the proposed poles will be taller than the existing poles. The second reason is because the material of the proposed poles will be different from the existing poles.

The proposed timeline for construction of the Judge transmission line rebuild will start during March of 2024 and be complete by October of 2024.

The City adopted a transmission line code on January 15, 2019 to regulate the processing and requirements regarding new transmission lines and the rebuilding of existing transmission lines. This code is Section 16.13.47 in the Midway City Municipal Code.

Section 16.13.47 Transmission Line Code Requirements and Comments

Section 16.13.47 (D)(1) prefers that transmission lines follow routes where transmission lines are currently located. The proposal does follow the current location of the existing Judge transmission line.

Section 16.13.47 (D)(2) prefers the shortest poles allowed by industry standards though all options should be considered for aesthetics and for harmonizing with the vision of Midway City as described in the General Plan. The proposed plan is to replace each existing pole with metal poles that will be the same diameter as the existing poles. The new structures will have longer insulators. Due to the longer insulators, as well as more stringent wildfire design standards, the steel structures will be about on average 10 feet taller. It is staff's understanding that the proposed poles are the shortest poles that are allowed by current industry standards.

Section 16.13.47 (D)(3) limits the types of poles that are allowed and focusses on the visual impact of the poles and lines. No galvanized poles, or poles with other reflective material can be used. Pole color and material shall be focused on minimizing the visual impact of the transmission line. The City may consider wood poles or metal poles. If metal poles are used, then the City can determine the color that will minimize the visual impact on the community. In this circumstance, wood poles are not an option because the line is in a Wildland Urban Interface area. Because of the wildfire potential, only metal and fiberglass poles are options. The existing wood poles will be replaced with corten

steel poles which will weather and blend well with surroundings as we have seen in other areas of Wasatch County where poles have been installed in recent years.

Section 16.13.47 (D)(4) allows the City to impose any reasonable restrictions on the conditional use.

Section 16.13.47 (E) allows the City to require the burial of transmission lines and distribution lines that share a transmission line pole. In this case, there are no distribution lines that will be impacted because of the proposal.

The City may, after consideration of cost, require the transmission lines to be buried. Burying the transmission lines will have a positive visual impact on the community by eliminating all current lines and future transmission lines along this specific route. Financially, the difference in cost of above ground lines and buried lines would need to be paid by the City or some other funding source by private individuals. The amount required would need to be paid within 30 days of when construction begins. The limited time allowed to pay for the difference in cost creates complications that need to be considered. The applicant has included pricing for the current proposal and estimate for an option to bury the transmission line. The cost to build overhead transmission lines (1.15 miles) is $937,726. The estimated cost to bury the lines is $11,182,799. The cost difference that would need to be paid by the City or some other funding source by private individuals would be $10,245,073. The City can require more estimates to be provided if more information is needed. Again, the difference would need to be paid within 30 days of when construction commences.

ANALYSIS:

The comments italicized represent Planning Staff's comments pertaining to compliance or lack of compliance with the findings that the Planning Commission must make in considering this request. Section 16.26.120 requires specifically the Planning Commission to find that:

1. The proposed use is conditionally permitted within the Land Use Title, and would not impair the integrity and character of the intended purpose of the subject zoning district and complies with all of the applicable provisions of this Code; *planning staff believes that the proposal will have an impact on the properties along the route. There will be a visual impact that will be greater with the new proposal than the existing lines. There will also be a positive impact in the fact that the area is a Wildland Urban Interface and has a greater risk of wildfire. This is a major safety issue that must be considered. Minimizing the risk of wildfire and reducing the potential loss of life and property is of highest priority. The proposal will help lower the risk of wildfire from utilities and will mitigate the damage to utility structures if there is a wildfire. This will help protect the entire community, especially those living closest to the transmission lines.*

2. The proposed use is consistent with the General Plan; *the proposed use will create a greater visual presence for the transmission line because of the increased height. The General Plan describes the surrounding zones as an area of relatively large lots in an agricultural setting. The proposed lines will not be in harmony with this description though lines do currently exist along this route and have for several decades. The General Plan is also a zoning tool that has been created for the health, safety, and welfare of the community. The proposed plan will help fulfill those goals.*

3. The approval of the conditional use or special exception permit for the proposed use is in compliance with the requirements of state, federal and Midway City or other local regulations; *the proposal is required to comply with all federal, state and local requirements and staff has not identified any noncompliant issues at this point.*

4. There will be no potential, significant negative effects upon the environmental quality and natural resources that could not be properly mitigated and monitored; *the City may require and environmental impact study for the proposed conditional use per Section 16.13.47 (C)(4). This is a report the City may require if deemed necessary.*

5. The design, location, size, and operating characteristics of the proposed use are compatible with the existing and future land uses in the general area in which the proposed use is to be located and will not create significant noise, traffic, or other conditions or situations that may be objectionable or detrimental to other permitted uses in the vicinity or adverse to the public interest, health, safety, convenience, or welfare to the City; *the proposed use will supply power to Heber Valley which is important to all residents. The proposal will also provide redundancy to the power supply so if a fire or some other natural disaster disrupts one of the sources of power to the valley there will be another route for power supply. Regarding health, there are studies that argue that transmission lines have a negative impact on the health of those that live nearby and there are studies that argue that there is no negative health impact on surrounding neighbors. The City may want to consult experts regarding this issue.*

6. The subject site is physically suitable for the type and density/intensity of the proposed use; *the proposed location has had transmission lines for decades. It is debatable if increasing the transmission lines pole height will create an intensity that is unsuitable for the subject site. The amount of voltage in the lines will not increase from the current 46kV transmission line even though construction standards will be for 138kV. The City may require additional studies, including an environmental impact study, to help answer this question.*

7. There are adequate provisions for public access, including internal and surrounding traffic flow, water, sanitation, and public utilities, and services to insure that the proposed use would not be detrimental to public health and safety; *Public health and safety based on voltage will not change because of the proposal based on the fact that the amount of voltage in the lines will not increase from the current 46kV transmission line even though construction standards will be for 138kV. There will also be a positive public health and safety benefit in the fact that the area is a Wildland Urban Interface and has a greater risk of wildfire. This is a major safety issue that must be considered. Minimizing the risk of wildfire and reducing the potential loss of life and property is of highest priority. The proposal will help lower the risk of wildfire from utilities and will mitigate the damage to utility structures if there is a wildfire. This will help protect the entire community, especially those living closest to the transmission lines.*

PLANNING COMMISSION RECOMMENDATION:

Motion: Commissioner Simons: I make a motion that we recommend approval of a Conditional Use Permit to rebuild the existing Judge transmission line and install a wildfire standard transmission line which is in alignment with Utah Code Ann 54-24-201. The proposal will include new poles to be above 55 feet with a pole for pole replacement within the existing alignment. The portion in Midway is approximately 2.5 miles in length and will follow the existing transmission line. We approve the staff findings in the staff report.

Seconded: Commissioner Ream
Chairman Nicholas: Any discussion on the motion?
Chairman Nicholas: All in favor.
Ayes: Commissioners: Ream, Osborne, Wardle, Lineback, Garland and Simons
Nays:
Motion: Passed

POSSIBLE FINDINGS:

- The proposal is an administrative review and approval
- The proposed use is a conditional use and the city may impose reasonable conditions to mitigate identified issues
- The proposal includes taller poles that will be visible to the residents of Midway, visitors of Midway, and the surrounding residents of Wasatch County
- The purpose of the proposal is to reduce the probability of utility related wildfires and to mitigate damage to electric facilities because of wildfire

ALTERNATIVE ACTIONS:

1. Approval (conditional). This action can be taken if the City Council the application complies with the requirements of the code and any conditions will mitigate identified issues.

    a. Accept staff report
    b. List accepted findings
    c. Place condition(s)

2. Continuance. This action can be taken if the City Council finds that there are unresolved issues.

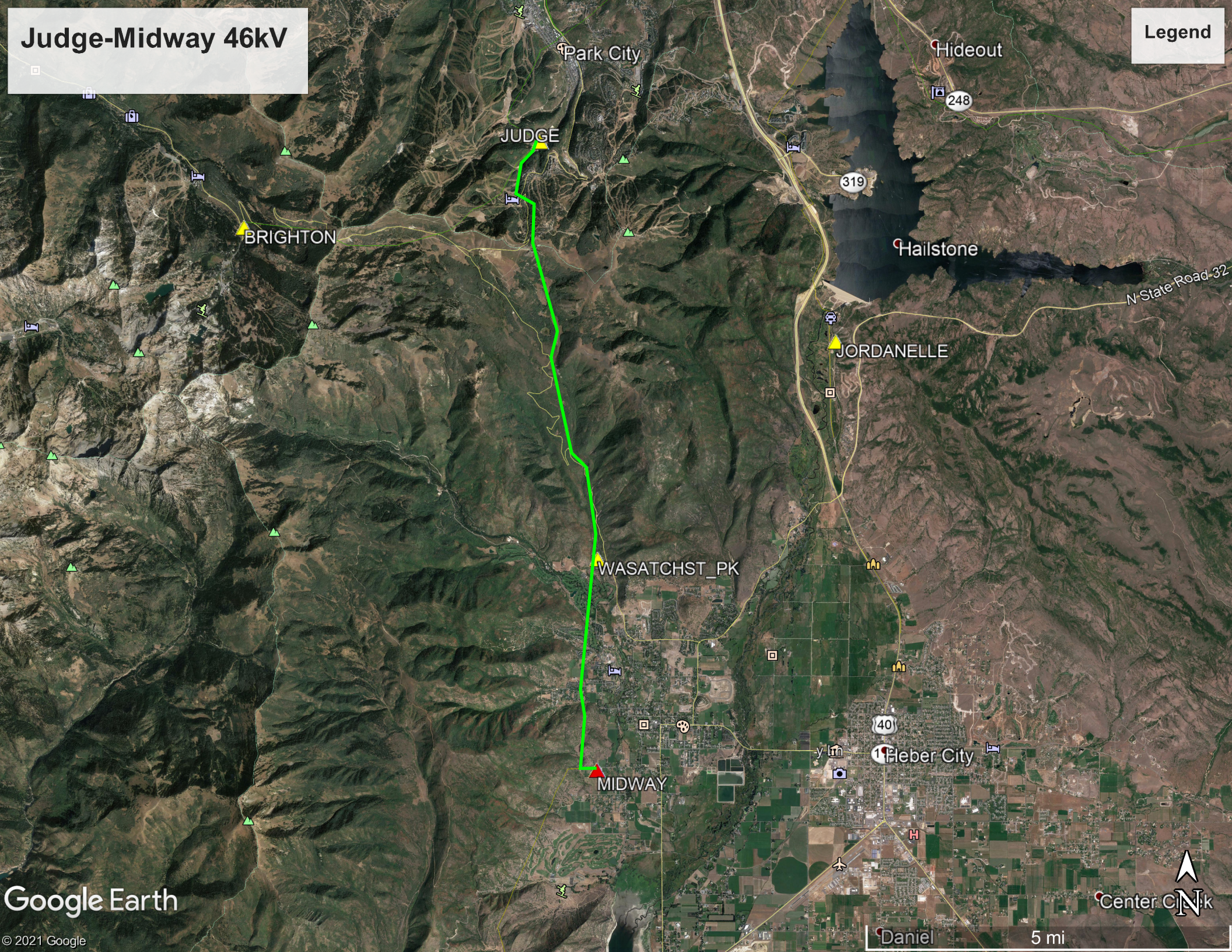
    a. Accept staff report
    b. List accepted findings
    c. Reasons for continuance
        i. Unresolved issues that must be addressed
    d. Date when the item will be heard again

3. Denial. This action can be taken if the City Council finds that the request does not meet the intent of the ordinance.

    a. Accept staff report
    b. List accepted findings
    c. Reasons for denial

RECOMMENDED CONDITIONS:

- None


Judge-Midway 46kV
Legend
Park City
Hideout
248
JUDGE
319
BRIGHTON
Hailstone
N State Road 32
JORDANELLE
WASATCHST_PK
40
Heber City
MIDWAY
Center Creek
Daniel
5 mi
N
Google Earth
© 2021 Google

Wildfire Mitigation Plan
Judge to Midway 46KV Transmission Rebuild

PACIFICORP
Rocky Mountain Power | Pacific Power

Program Overview:

The State of Utah has long recognized and emphasized the risk of wildfire for many years. Due to the potential for fires caused by sparks emitted from electric utilities, the Utah Legislation passed House Bill 66, *Wildfire Fire Planning and Cost Recovery Amendments (2020)*. The new bill requires electric utilities to prepare and submit a wildland fire protection plan in accordance with Utah Code Ann 54-24-201.

In response, Rocky Mountain Power has developed a comprehensive plan for wildfire mitigation efforts in all its service territories. The plan is designed to reduce the probability of utility related wildfires and to mitigate damage to electric facilities because of wildfire. Specific facilities have been identified to be located in Fire High Consequence Area (FHCA); and therefore, the improvements proposed were developed to reduce the risk and lessen the impact of wildland fires.

Project Scope:

Judge to Midway transmission line has been identified to be located in Fire High Consequence Area (FHCA). As part of wildfire mitigation, this project will rebuild the Judge-Midway 46kV line with 138kV framing and steel structures. All wood structures will be replaced with steel except switch structures. Switch structures will use fiberglass poles. Existing access roads will be used where available. However, construction of new access roads may be required.

Design Criteria:

- 10’ average height increase from existing poles
- Estimated Length: 9.24 Miles
- Operation Voltage: 46kV
- Construction Voltage: 138kV
- Company avian protection standards applied to all structures
- Self-weathering steel poles will be used for all structures except switch structures
- Existing transmission overhead conductor and shield wire will remain.

Schedule Milestones:

Start CUP Application	06/03/2022
Final Design	03/15/2023
Order Long Lead Items	03/20/2023
Issue for Construction Drawings	12/20/2024
Acquire CUP	01/03/2024
Construction Start	03/11/2024
Construction Finish	09/20/2024
In Service Date	10/30/2024

ROCKY MOUNTAIN POWER
A DIVISION OF PACIFICORP

1569 W. North Temple
Salt Lake City, UT 84116

May 16, 2023

Midway Planning & Zoning

Attn: Michael Henke

75 North 100 West

Midway , UT 84049

The accompanying conditional use permit application is to rebuild part of a 9.24 mile existing Rocky Mountain Power 46kV transmission line, with approximately 3.5 miles within the boundary of Midway. The transmission line being rebuilt begins at the Midway substation near the Midway Cemetery and runs towards Wasatch Mountain State Park crossing the Swiss Alpine Road area, lower lime Canyon, and the two golf courses.

All of the existing wood poles on this project will be replaced with steel structures, except switch structures which will be replaced with fiberglass. Approximately 57 poles will be replaced (Str. 0A to Str. 55) and the line will be rebuilt to the most up-to-date national electric safety code and avian standards. There are no distribution wires being directly impacted by this project.

Protecting the communities we serve while providing safe, reliable, and affordable power is one of Rocky Mountain Power's top priorities. This project will improve Rocky Mountain Power's electrical system, improve safety, and reduce wildfire risk in the area. This is one of several projects in area that Rocky Mountain Power is working on and will be implementing over the next several years within the fire high consequence area boundaries. Along with these efforts, we have increased inspections and vegetation management near our facilities to mitigate wildfire risk.

We look forward to working with Midway on this project to better serve you and the surrounding communities in Wasatch County.

Respectfully,

Travis Jones

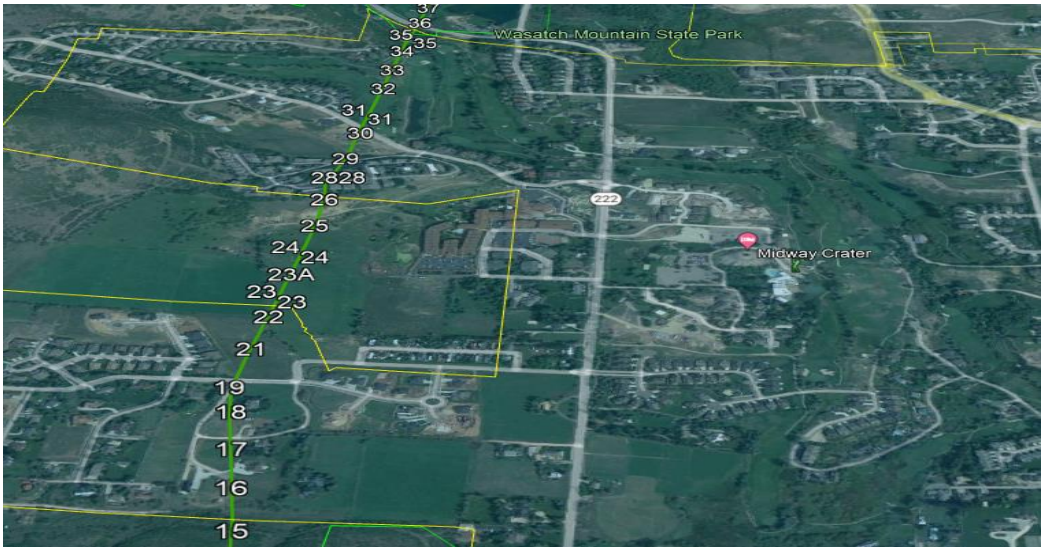
Regional Business Manager

Rocky Mountain Power

Wildfire Mitigation Plan

Judge to Midway 46KV Transmission Rebuild

Rocky Mountain Power | Pacific Power



Estimate Scope:

Install 1.15 miles of underground transmission on the Judge-Midway Transmission line. This preliminary Underground estimate is from Structure 15 to structure 35 which covers midway city limits.

Key Assumptions:

- Built to 138KV standards
- Existing alignment is used and no additional property or ROW costs are included
- No horizontal boring included
- Pricing is derived from underground bids received by Rocky Mountain Power on similar projects in past 2 years.

Pricing:

- General Conditions: $ 526,246
- Engineering & Design: $ 135,146
- Aboveground transition Material (Dead end Steel Structures): $ 393,675
- Construction Services & Materials: $ 10,127,733
- Total Underground Cost: $11,182,799

Overhead Transmission Construction Cost:

- Cost to build Overhead transmission lines (1.15mile span): $ 937,726

Cost Difference:

- Cost Difference b/w Unground and Overhead: $ 10,245,073

Rocky Mountain Power Wildfire Mitigation Plan- Judge Midway Rebuild

March 23, 2023





ROCKY MOUNTAIN POWER
A DIVISION OF PACIFICORP

Wildfire Trends*

- Fire season across the Western United States increased by nearly six weeks over a 20 year span (1992 – 2012).
- Mega Fires (more than 100,000 acres) increased threefold in the last 10 years.
- Utah is one of the most wildfire prone states in the United States and has experienced an upward trend of wildfire size over the past 50 years.
- Areas of greatest potential loss from wildfire are located in the Wildland Urban Interface (WUI) that continues to expand with Utah's growing population.
- Trends in acres burned by wildfire are projected to increase in Utah as temperatures warm and incidence of drought increases.

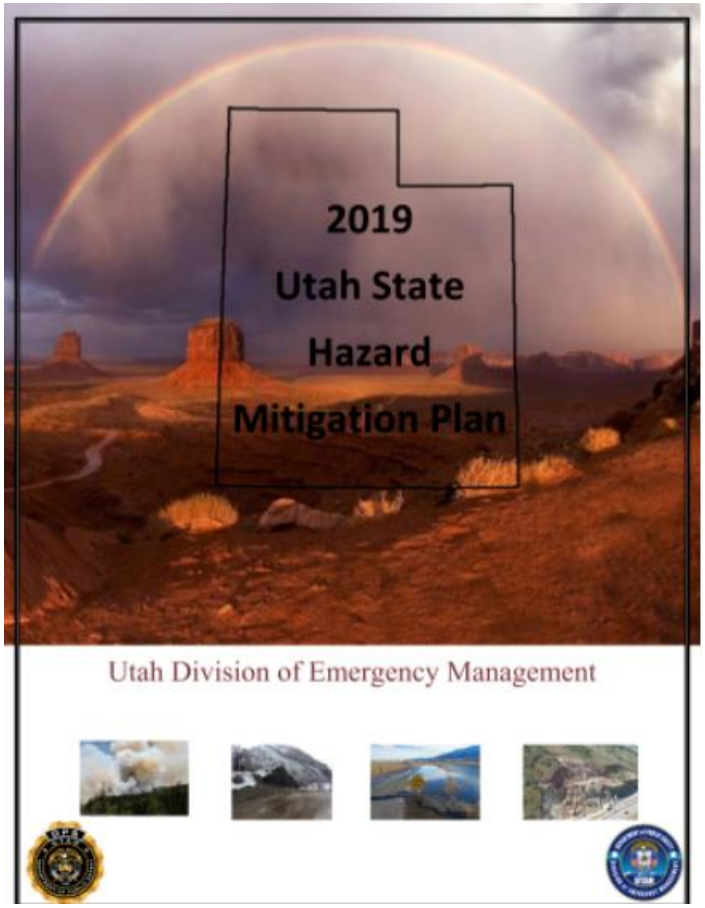
*Trends from 2019 Utah Hazard Mitigation Plan – Utah Division of Emergency Management
https://dem.Utah.gov/hazards-and-mitigation

Utah Hazard Mitigation Plan – Wildfire

- Wildfires in Utah have become a significant problem impacting state and local economies, infrastructure, the environment and private land owners.

- Utah Wildland Fire Policy has shifted from fire suppression to risk reduction.

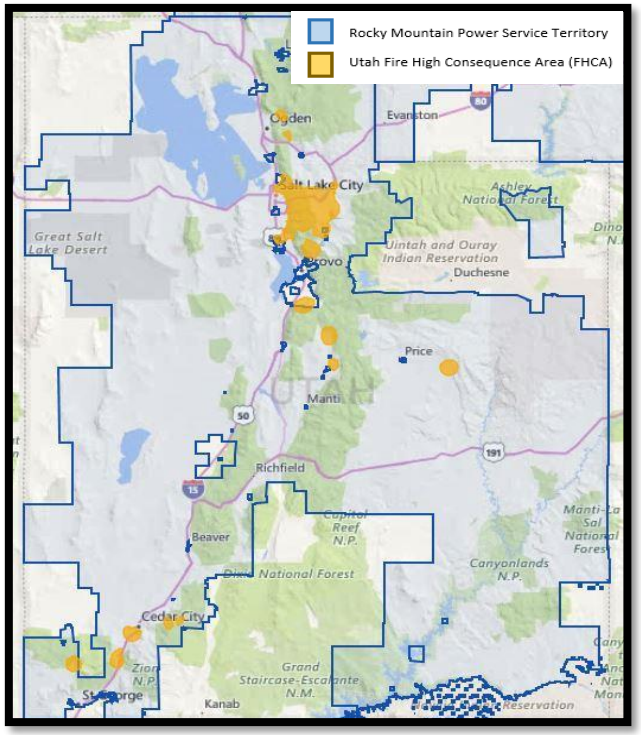
- The policy focuses on prevention, preparedness and mitigation.



FOUNDATION OF PLAN

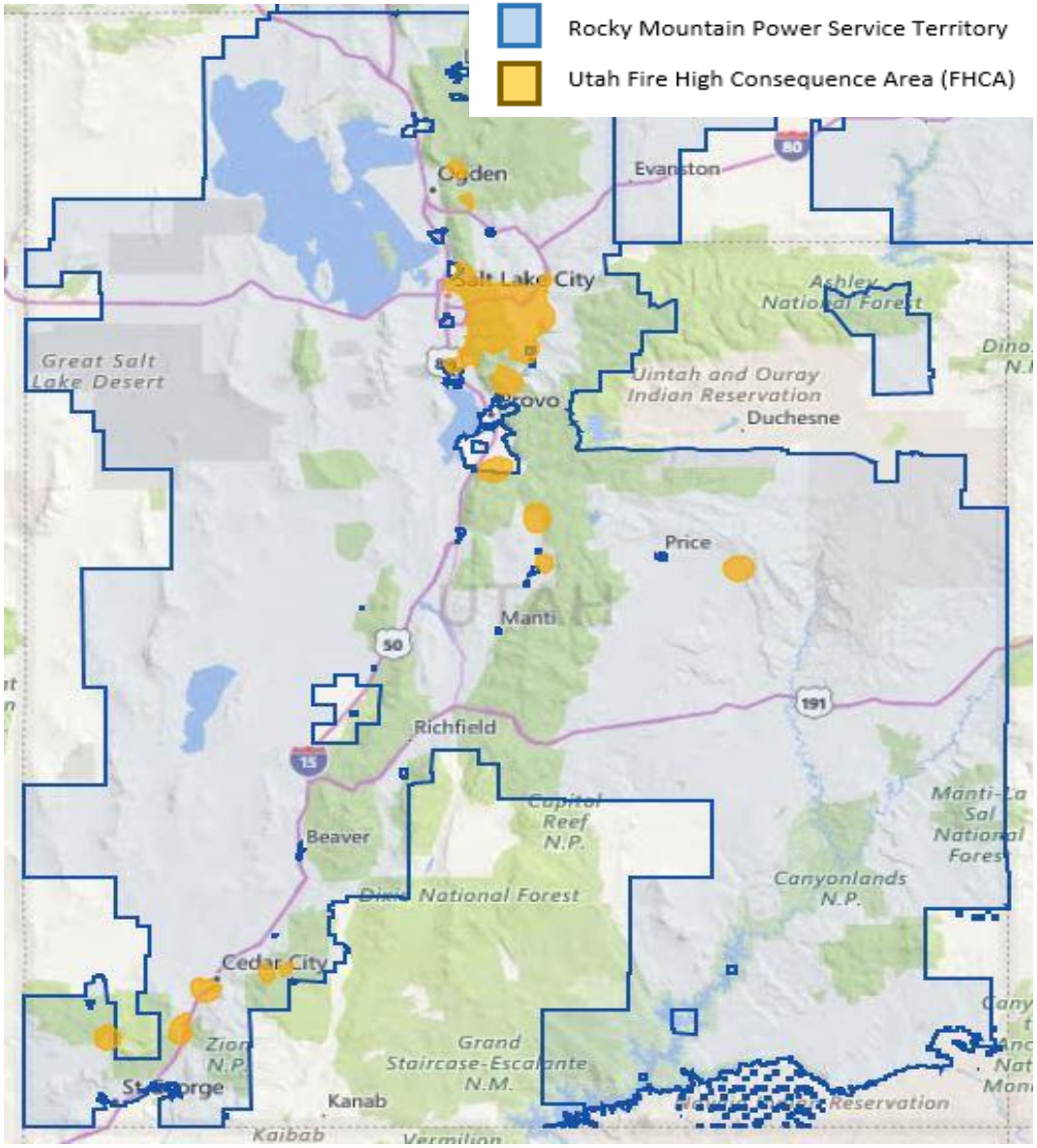
Utilizing fire threat modeling concepts, areas were identified in Utah where there is an elevated risk of utility-associated wildfires to ***occur*** and ***spread rapidly***, and where communities face an elevated risk of damage or harm from wildfires

Fire High Consequence Areas (FHCAs) are used to prioritize wildfire mitigation initiatives, such as, increased inspections, system hardening and modified operating practices



	Overhead Total Line Miles	Distribution Line Miles (Overhead only)	Transmission Line Miles (46kV and Above)	Substations
FHCA (Utah)	699 (4%)	489 (4%)	210 (3%)	26 (5%)
RMP Utah Total	18,100	10,959	7,141	503

Fire High Consequence Area Assessment



Assessment Factors:

- Fuel Presence (dry brush)
- Historic Weather Data
- Topography
- Fire Suppression Response
- Fire History
- Spatial Isolation / Fire Breaks

Impact to People and Property:

- Communities at Risk
- Presence of Critical Facilities
- Asset Risk/Vulnerability
- Egress Points

- 699 Miles of Rocky Mountain Power lines run through Fire High Consequence Areas

What is Rocky Mountain Power Doing to Mitigate Wildfire Risks?

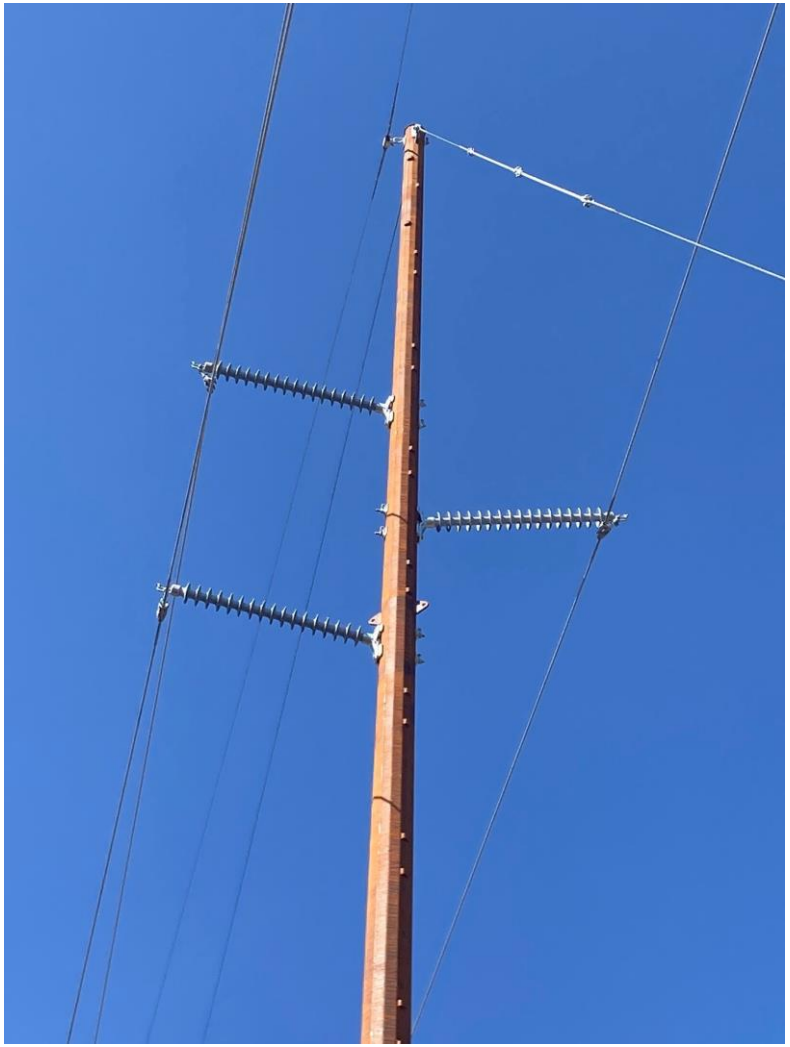
- As wildfires become more frequent and intense throughout the West, protecting the communities we serve while providing safe, reliable power, is our highest priority.
- Maintaining the safety of our system has always been at the center of our wildfire preparedness plans. As wildfires become a growing threat, we are seeking out new ways we can be even more vigilant, helping to create new best practices.
- Operational practices include enhanced vegetation management, enhanced inspections, training of field personnel and use of enhanced protection and control settings.
- System modifications include installing insulated conductors, construction standard changes, installing non-spark equipment (fuses, avian deterrents, lightning arrestors).
- Public Safety Power Shutoffs (PSPS) in some areas

RMP WF MITIGATION: Judge to Midway Transmission Rebuild

- The green line below shows the existing 46kV transmission line from the Judge substation in Park City to the Midway substation in Midway.
- The new line will follow this same alignment pole for pole.
- The new line will be operated at the same voltage as existing – 46kV.

Corten Self Weathering Transmission Structures

- The rebuild of the new transmission lines will be pole for pole in the existing alignment.
- The existing wood structures will be replaced with corten steel structures which will weather and blend well with surroundings.
- The new structures will have longer insulators. Due to the longer insulators as well as more stringent wildfire design standards the steel structures will be about on average 10 feet taller.
- The project will start in March of 2024 and be complete by October 2024.



Other Resources

Customers can learn more at:

https://www.rockymountainpower.net/wildfiresafety

Your safety is our top concern. With special equipment and trained crews, our goal is to keep your power on and to help firefighting crews protect your community. There are safety precautions that you too can take to help reduce the risk of wildfire damage.

First Responder Safety at:

https://www.rockymountainpower.net/ed/hws/frs0.html

Police, firefighters and EMTs are usually the first to respond on the scene of an emergency and can face great risk of electrical hazards. We want to make sure first responders know how to recognize and manage these conditions to avoid life threatening situations for themselves and the people they serve.

Track outages at: **https://www.rockymountainpower.net/ed/po.html**