



EAST RIVER ELECTRIC POWER COOPERATIVE, INC
MADISON, SOUTH DAKOTA

WILDFIRE MITIGATION PLAN

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1 Introduction/Executive Summary

At East River Electric Power Cooperative, Inc. ("East River"), wildfire mitigation plays an essential role in our operational practices. Over the years, East River has adopted wildfire mitigation programs to adjust to changes in the burning environment and has incorporated technological advances as well as improved operational practices to further mitigate the potential for ignitions and more effectively respond to apex wildfire risk conditions.

1.1 Purpose of the Plan

This plan describes East River's strategies, programs, and procedures to mitigate the threat of electrical equipment-ignited wildfires and addresses the unique features of its service territory, such as topography, weather, infrastructure, grid configuration, and areas most prone to wildfire risk. This includes the inspection and maintenance of its transmission assets, as well as the management of vegetation within rights-of-way containing those assets. This plan is developed in accordance with South Dakota Codified Laws, Chapter 49-49 (Wildfire Mitigation Plans), as enacted by South Dakota Senate Bill 36, which authorizes qualified electric utilities to establish and implement wildfire mitigation plans.

East River's board of directors reviews and approves the plan as needed, while senior management is responsible for its implementation. Primary accountability for plan implementation resides with the Chief Operations Officer.

1.2 Objectives of the Wildfire Mitigation Plan

The main objective of the Wildfire Mitigation Plan (WMP) seeks to implement an actionable plan to create increased reliability and safety while minimizing the likelihood that East River assets may be the origin or contributing factor in the ignition of a wildfire. The mitigation programs and strategies will comply with current and anticipated South Dakota state law, and the 2023 National Electric Safety Code (NESC) regulations and guidelines, as applicable. To help develop the WMP, East River compared emerging technologies that not only reduce the likelihood of a service interruption but also minimize the risk of ignition from the fault causing the outage.

The secondary objective is to measure, through the annual evaluation of certain performance metrics, the effectiveness of the specific wildfire mitigation strategies. Where a particular action, program component or protocol proves unnecessary or ineffective, East River will assess whether modification or replacement is suitable.

1.3 Utility Profile and History

East River Electric Power Cooperative, Inc., was founded in October of 1949 in Sioux Falls, South Dakota. In 1951, the headquarters was officially moved to Madison, South Dakota. Later that year, work began on the first 69 kV system in eastern South Dakota.

Today, East River provides services to twenty-four rural electric distribution cooperatives and one municipally-owned electric system. The members provide electrical service to over 225,000 meters. East River has a robust system that currently consists of 3,459 linear miles of overhead transmission line and 266 power supply substations. East River also provides communication and IT support to the members. East River's service territory consists of 54 counties in two states: eastern South Dakota and western Minnesota.

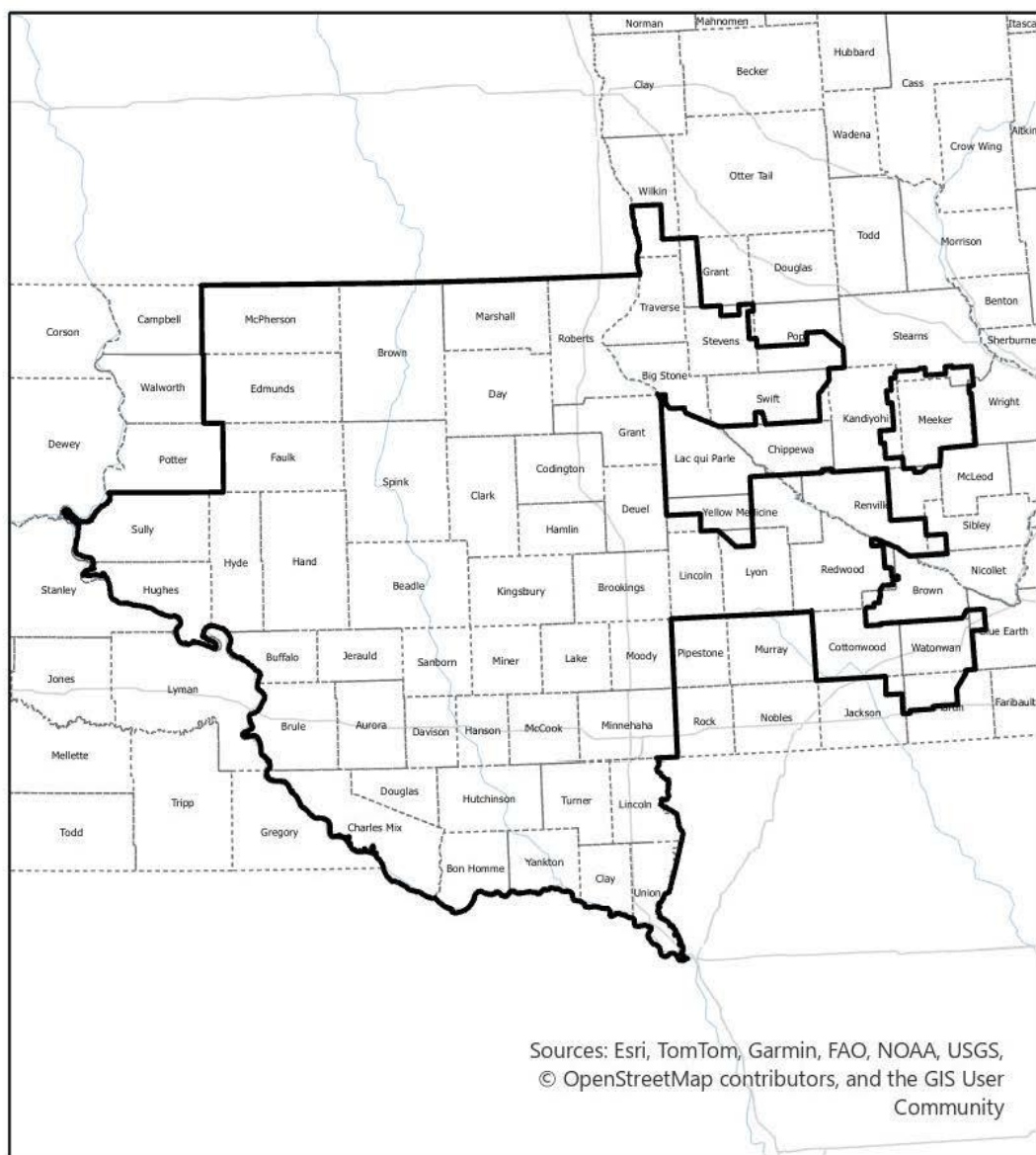
East River is governed by a 25-person board of directors with a representative from each of the 25-member distribution systems. Board members are democratically elected from among the local systems' consumers, with each local distribution system board or governing body electing a director from among the local board members to serve on the East River board.

East River's senior management includes a CEO/General Manager, General Counsel, Chief Operations Officer, Business Development Director, Chief Human Resources Officer, Chief Information Officer, Chief Financial Officer, and Chief Member and Public Relations Officer.

1.4 The Service Area

East River's headquarters is located at 211 South Harth Avenue in Madison, South Dakota. South Dakota service locations are also located in Aberdeen, Madison, Milbank, Miller, Mitchell, Sioux Falls, and Yankton. There is also a service center location in Marshall, Minnesota. As of May 2026, East River's service area size is approximately 41,457 square miles, as shown in figure 1.

Figure 1. Service Area



Service Area Map

-  Minnesota Counties
 SD Counties
 Service Territory (include Class D)



Operating out of offices located in the Lake County seat of Madison, SD, East River serves 25 member owners and has several transmission customers including municipalities, irrigation districts and rural water systems in the region. The areas served by our members are detailed in Table 1 and illustrated in Figure 2.

Table 1. Members and Service Territories

MEMBER	COUNTIES SERVED
Bon Homme Yankton Electric Association	Bon Homme and Yankton counties in South Dakota
Central Electric Cooperative Association	Aurora, Brule, Buffalo, Davison, Hanson, Jerauld, Miner, and Sanborn counties in South Dakota
Charles Mix Electric Association	Charles Mix County in South Dakota
City of Elk Point	Union County
Clay-Union Electric Cooperative	Clay, Union, Yankton, Lincoln, and Turner counties in South Dakota
Codington Clark Electric Cooperative	Codington, Clark, Beadle, Day, Deuel, Grant, Hamlin, Kingsbury, and Spink counties in South Dakota
Dakota Energy Cooperative	Beadle, Hand, Hyde, Spink, Buffalo, and Kingsbury counties in South Dakota
Douglas Electric Cooperative	Douglas County in South Dakota
FEM Electric Cooperative	Faulk, Edmunds, and McPherson counties in South Dakota
H-D Electric Cooperative	Deuel, Hamlin, Brookings, Clark, Codington, Grant, and Kingsbury counties in South Dakota. Yellow Medicine and Lincoln counties in Minnesota.
Kingsbury Electric Cooperative	Kingsbury County in South Dakota
Lake Region Electric Association	Otter Tail, Wilkin, Grant, Douglas, Clay, Becker, and Wadena counties in Minnesota
Lyon-Lincoln Electric Cooperative	Lyon, Lincoln, and Yellow Medicine counties in Minnesota
Meeker Energy	Meeker, Kandiyohi, McLeod, Renville, Stearns, and Wright counties in Minnesota
Northern Electric Cooperative	Brown and Spink counties in South Dakota
Oahe Electric Cooperative	Hughes and Sully counties in South Dakota
Redwood Electric Cooperative	Redwood, Brown, Murray, Lyon, and Cottonwood counties in Minnesota

Table 1. Members and Service Territories (continued)

MEMBER	COUNTIES SERVED
Renville-Sibley Cooperative Power Association	Renville, Sibley, Chippewa, Kandiyohi, Redwood, and Nicollet counties in Minnesota
Sioux Valley Energy	Brookings, Kingsbury, Lake, Minnehaha, and Moody counties in South Dakota. Pipestone and Rock counties in Minnesota.
Southeastern Electric Cooperative	Hutchinson, Lincoln, McCook, Turner, and Union counties in South Dakota
Traverse Electric Cooperative	Traverse, Big Stone, Grant, Stevens, and Wilkin counties in Minnesota. Richland County in North Dakota. Roberts and Marshall counties in South Dakota.
Union County Electric Cooperative	Union County in South Dakota
Whetstone Valley Electric Cooperative	Grant and Roberts counties in South Dakota

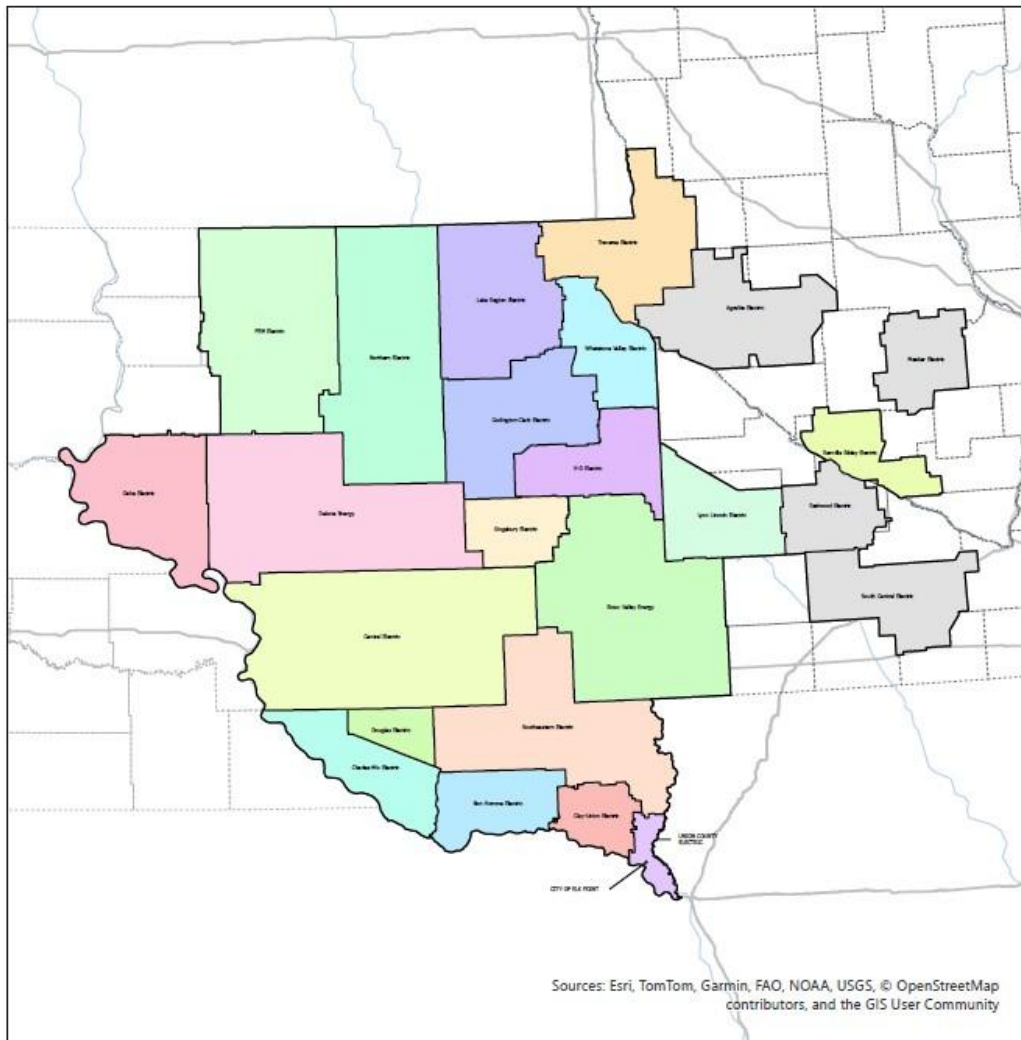
The East River service area has a humid continental climate, characterized by four distinct seasons with hot, moderately humid summers and cold, snowy winters. This region averages roughly 24-28 inches of annual rainfall with most of the precipitation occurring between April and September.

The summers are warm, dry, and sunny with occasional light rainfall. Fire season generally runs from mid-April to the end of October. With average daily high temperatures above 77°F, the hottest and driest month of the year is July with an average high temperature of 85°F. Over the course of the year, the temperature typically varies from -15°F to 94°F and is rarely below -15°F or above 98°F, though extremes can range from subzero to over 100°F. Drought and wildfire are not uncommon. Annual precipitation ranges from 24 to 28 inches of rainfall, with snowfall from 30 to 45 inches from October to April.

The service area is characterized by a tallgrass prairie transition zone referred to as the Northern Glaciated Plains populated with mixed grass prairies and riparian woodlands near river valleys. Significant portions of the area have been converted to agricultural lands while the native vegetation thrives in wet areas and along steep slopes and river corridors.

Topography is primarily gently rolling plains, fertile farmlands, and numerous glacial lakes situated entirely within the glaciated physiographic region known as the prairie plains. The landscape generally slopes from north to south, punctuated by the high plateau of the Coteau des Prairies, the James River and Big Sioux River basins. Elevations range from ~965 feet in the Big Stone Lake area to ~2000 feet on the western border. The highest point of the system is ~2,210 feet above sea level in Hyde County.

Figure 2. East River Member Service Area Map



East River Members Service Area Map

Co-op Members Name			
Agralite Electric	Codington-Clark Electric	Lyon Lincoln Electric	South Central Electric
Bon Homme Electric	Dakota Energy	Meeker Electric	Southeastern Electric
Central Electric	Douglas Electric	Northern Electric	Traverse Electric
Charles-Mix Electric	FEM Electric	Oahe Electric	Union County Electric
Clay-Union Electric	H-D Electric	Redwood Electric	Whetstone Valley Electric
	Kingsbury Electric	Renville Sibley Electric	• City of Elk Point
	Lake Region Electric	Sioux Valley Energy	

1.5 Utility Asset Overview

East River's main office is located in Madison, South Dakota, and we maintain eight regional service centers located in Aberdeen, Madison, Marshall, MN, Milbank, Miller, Mitchell, Sioux Falls

and Yankton. East River operates 482 miles of 115 kV, 2,977 miles of 69 kV and below, 22 supply substations, and 244 distribution substations as of May 2026. In addition, East River owns and operates 29 stand-alone communications towers from 60 feet to 488 feet in height.

Table 2 provides a high-level description of East River's transmission assets.

Table 2. Asset Overview

ASSET CLASSIFICATION	ASSET DESCRIPTION
Transmission Line Assets	Approximately 482 miles of line, transmission structures and line switches at 115 kilovolt (kV), and approximately 2,977 miles of line, transmission structures and line switches at 69 kilovolt (kV) and below.
Substation Assets	Major equipment such as power transformers, voltage regulators, capacitors, reactors, protective devices, relays, open-air structures, switchgear and control houses in 266 substation/switchyard facilities and communications equipment.
Communication Assets	Microwave communication equipment, battery banks and chargers, push-to-talk radio equipment, back-up propane generators and tanks.

2 Risk Analysis and Risk Drivers

East River assesses the key risk factors tied to its utility facilities. By identifying the primary drivers of risk, the company can develop targeted mitigation strategies to reduce overall operational risk exposure.

2.1 Fire Risk Drivers Related to Construction and Operations

East River staff evaluated fires caused by other utilities and applied our own field experience to determine the critical potential risk drivers. The categories listed below were identified as having the potential for causing power line sparks and ignitions:

- Operation of electric power system equipment (breakers, lines, switches, disconnects)
- Field work activities: metal grinding, welding, cutting, tree trimming/clearing, vehicle/ATV/UTV traffic, use of open fire tools
- Smoking and uncontrolled fires
- Equipment/facility failure
- Foreign utility contact
- Vehicle impact
- Standard expulsion fuses
- Age of assets
- Vandalism

2.2 Fire Risk Drivers Related to the Service Area

Eastern South Dakota features extensive grasslands and croplands with high fuel continuity in dry periods. Fires spread rapidly with prevailing winds, especially in mixed-grass prairie, tallgrass remnants, and harvested fields. Key drivers include drought, high winds, low humidity, lightning, equipment, and human activity. Climate variability increases episodic risk.

- Primary Fuels: Dakota mixed-grass prairie, tallgrass remnants, Conservation Reserve Program (CRP) lands, pastures, and croplands (small grains, corn stover, etc.). Grass fires can produce 1–10+ ft flames and rapid spread (miles per hour in high winds).
- Unfavorable / extreme weather conditions.
- Low to very low moisture content in grasses and dry organic material.
- Wind, temperature, and low humidity promote rapid fire spread and erratic behavior.

2.3 Key Risk Impacts

Ignitions caused by the aforementioned risk drivers have many possible outcomes. The list below outlines some of the worst-case scenarios and consequences:

- Personal injuries or fatalities to the public, employees and contractors
- Damage to public and/or private property
- Damage and loss of East River owned infrastructures and assets
- Impacts to reliability and operations

- Damage claims and litigation costs, as well as fines from governing bodies
- Damage to East River's reputation and loss of public confidence

2.4 Overview of Utility's Fire Prevention Strategies

This WMP integrates and interfaces with East River's existing operations plans, asset management, and engineering principles, which are themselves subject to change. Future versions of the WMP will reflect any changes to these strategies and will incorporate new best management practices as they are developed and adopted.

The main purpose of this plan is to reduce the risk of fire ignitions caused by the operation of equipment during elevated fire danger conditions. This is accomplished by defining the different Fire Danger Categories and implementing modified operating and work practices to reduce the probability of igniting a fire.

Table 3 summarizes East River's five mitigation components with associated programs and activities that support East River's ongoing commitment to wildfire prevention and mitigation.

Table 3. Mitigation Strategies/Activities

DESIGN AND CONSTRUCTION	
Substation:	
	Replacing electro-mechanical relays with intelligent microprocessor-based relays
	Covered jumpers and animal guards
	Replace expulsion fuses with Power Circuit Breakers
	Perimeter fencing for security and protection
Transmission Line:	
	Avian protection construction standards
	Increase overhead wire spacing to reduce wire-to-wire contact
	Alternatives to wood poles in select areas
INSPECTION AND MAINTENANCE	
Substation:	
	Infrared inspections of equipment
	Monthly inspections

Table 3. Mitigation Strategies/Activities (continued)

INSPECTION AND MAINTENANCE (continued)
Transmission Line:
Wood pole intrusive inspection and testing
System line patrols and detailed inspections
System vegetation management program
Increased removal rate of undesirable trees in easement areas
Enhanced line patrols during fire season as defined in Appendix D
Replace danger poles immediately
OPERATIONAL PRACTICES
Work procedures and wildfire hazard training for persons working in locations with elevated fire risk conditions
Contractor outreach/wildfire safety awareness
Member/staff fire safety training
Fire suppression equipment on worksite during fire season
SITUATIONAL AWARENESS
Weather monitoring in the service area
Utility-owned weather stations
Monitoring active fires in the service area
RESPONSE AND RECOVERY
Pre-emptive de-energization protocols
Member assistance programs for post-disaster recovery
Line patrols before re-energization
Emergency Restoration Plan

2.5 Wildfire History and Outlook

Fires do occur in eastern South Dakota but cause less widespread structural damage due to fragmented landscapes (farms, roads, plowed fields), better detection, and firefighting. They remain a spring concern, especially under drought and wind conditions.

Wildfires are less frequent and smaller than in the Black Hills or western prairies. Lightning-ignited fires are rarer in the east compared to the west.

Prescribed burns are common for grassland management.

State resources include the South Dakota Grassland Fire Danger Map for daily risk assessment.

Eastern South Dakota sometimes experiences smoke from distant fires (including western South Dakota, Black Hills, or out-of-state events), affecting air quality more in recent years.

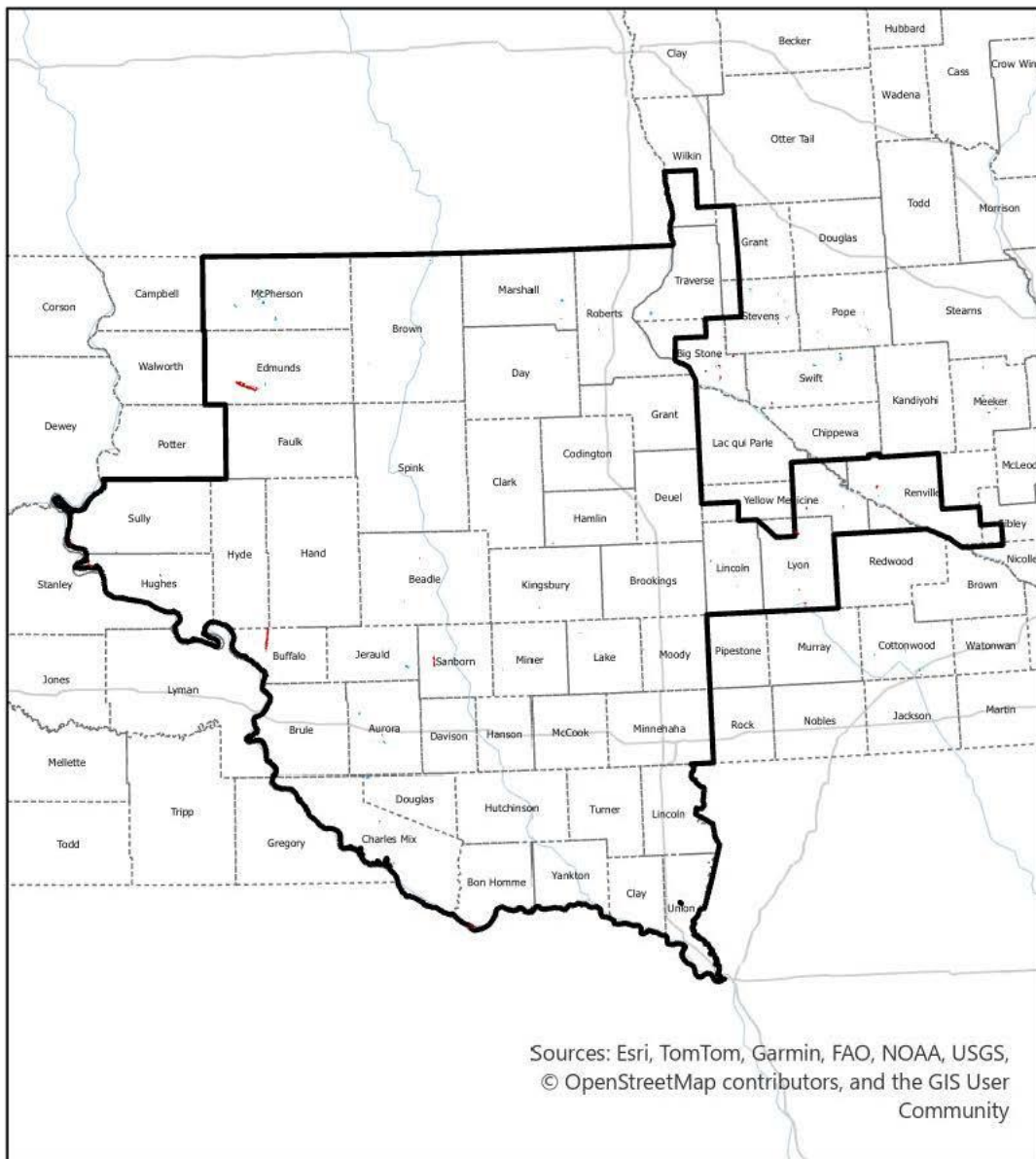
In 1947, one of the largest recorded prairie fire events burned ~250,000 acres combined across Hand, Hughes, Hyde, and Potter counties. It was ignited by a discarded cigarette.

Key factors influencing fires in eastern South Dakota include:

- Vegetation: Dry grasses; fires spread fast but are mostly surface level.
- Season: Peak in early spring.
- Climate/Weather: Drought, low humidity, and high winds drive risk. Climate patterns influence frequency.
- Human Impact: Agriculture has reduced fuel continuity; prescribed fire is used proactively.

The historic wildfire perimeters of fires greater than 100 acres in the East River service territory between the years 2000-2025 are shown in Figure 3.

Figure 3. Historic Wildfire Perimeters 2000-2025



Historic Wildfire Perimeter Map



2.6 Wildland Urban Interface

The U.S. Forest Service (USFS) defines the wildland urban interface (WUI) as a place where humans and their development meet or intermix with wildland fuel and is composed of both interface and intermix communities. The distinction between the two is based on the characteristics and distribution of houses and wildland vegetation across the landscape. East River's system is illustrated on the WUI map as shown in Figure 4.

Interface WUI

Interface is defined as those areas where human development meets areas that are covered with more than 50% wildlands. To be considered an "interface" land area, development or structures must be bordered by wildlands on at least one side.

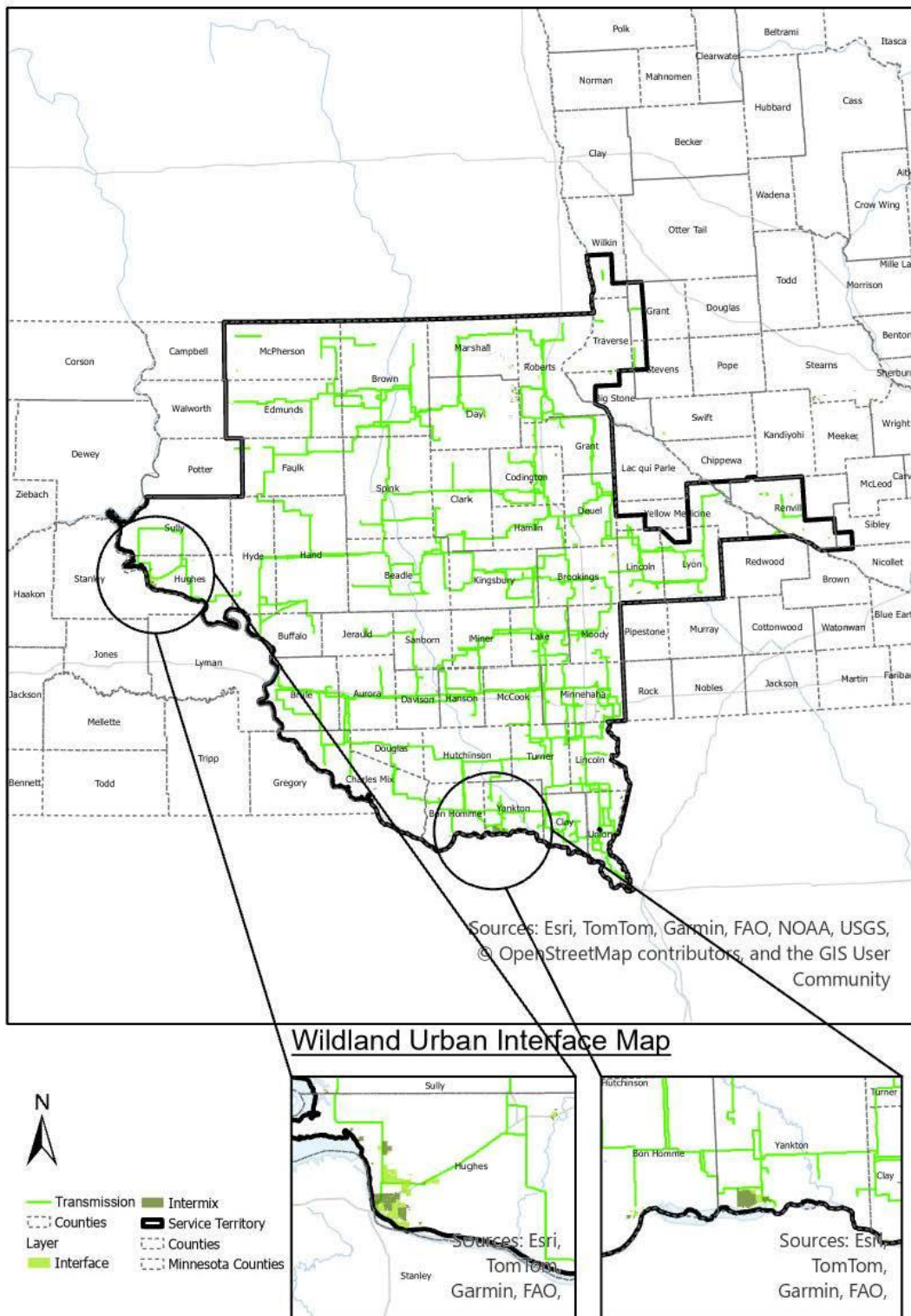
Intermix WUI

Intermix refers to areas where housing and wildland vegetation intermingle. To be considered intermix, a development or structure must be surrounded on two (2) or more sides by wildlands. Intermix is often found between the Interface and the wildlands.

Wildlands

For the purposes of this map, "wildlands" are defined as any area without any structures or human development that also have more than 50% burnable vegetated cover including grasslands and sagebrush-steppe. However, most wildlands could eventually become intermix, interface, or even urban areas. For example, a new single-family home in the woods could make wildlands into intermix, while a new housing development, strip mall, or other series of structures could turn a section of wildlands into interface.

Figure 4. Wildland Urban Interface



2.7 Fire Threat Assessment Mapping

The Wildfire Hazard Potential (WHP) map used in this plan is a raster geospatial dataset produced by the U.S. Forest Service, Fire Modeling Institute (FMI). It is intended to inform evaluations of wildfire risk or prioritization of fuels management needs across large landscapes. The specific objective of the WHP map is to depict the relative potential for wildfire that would be difficult for suppression resources to contain. East River's system is illustrated on the WHP map as shown in Figure 5.

The WHP-2023 dataset was built upon:

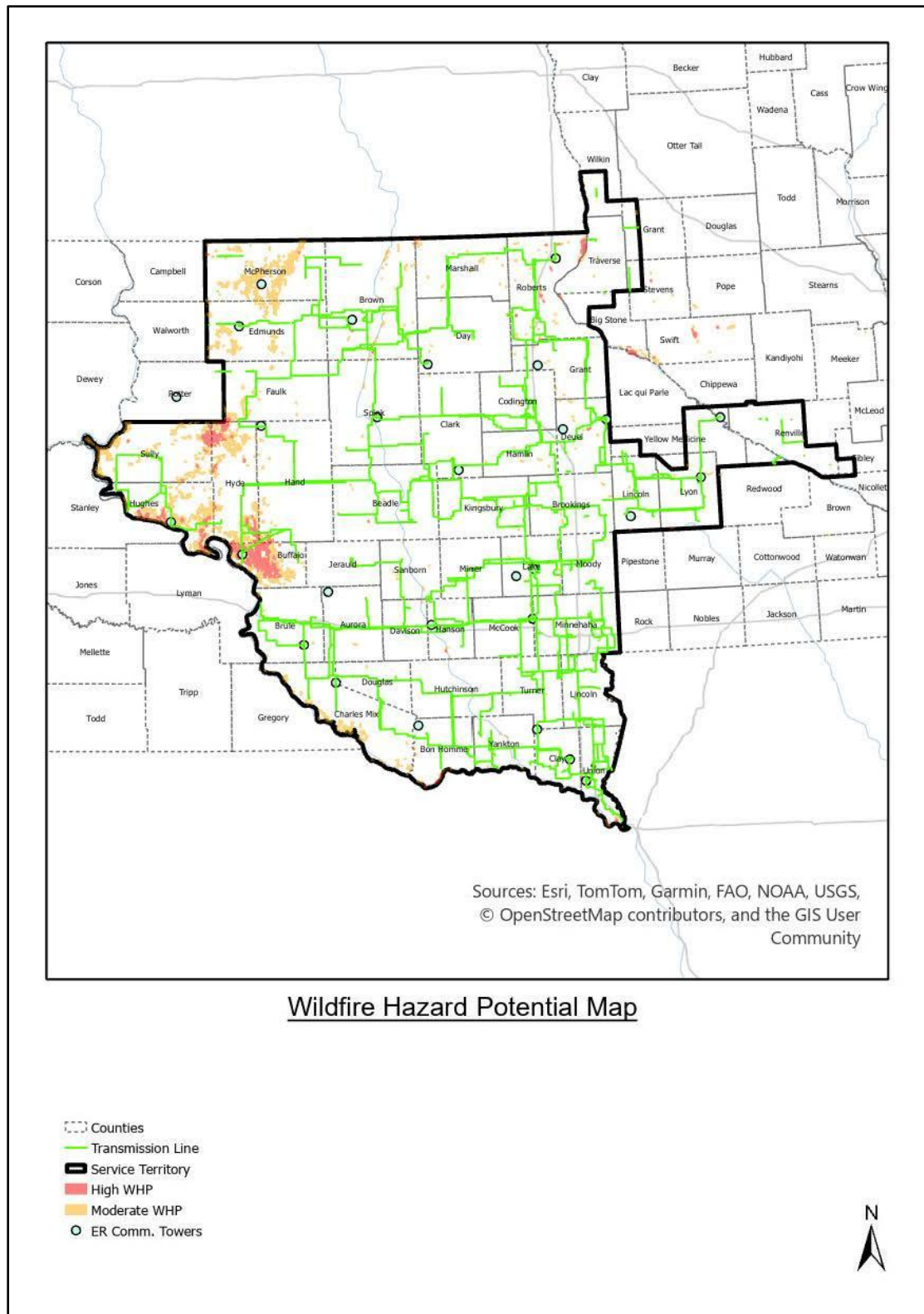
- Spatial vegetation and wildland fuels data from *LANDFIRE 2020* (version 1.4.0). The *LANDFIRE* Fire Behavior Fuel Models layer is a primary input to the FSim Burn Probability (BP) and Fire Intensity Level (FIL) datasets and forms the foundation for WHP.
- Spatial datasets of wildfire likelihood and intensity were generated for the conterminous U.S. with the *Large Fire Simulator* (FSim). FSim simulates the growth and behavior of hundreds of thousands of fire events for risk analysis across large land areas using geospatial data on historical fire occurrence, weather, terrain, and fuel conditions. Effects of large-fire suppression on fire duration and size are also simulated. This research aims to develop a practical method of quantifying geospatial wildfire impacts, including annual probabilities of burning and fire line intensity distributions at any point on the landscape.
- Point locations of past fire occurrence from 1992 through 2020.

Areas mapped with higher WHP values represent fuels with a higher probability of experiencing torching, crowning, and other extreme fire behavior under conducive weather conditions. An essential aspect of the WHP method is the use of "resistance to control weights" at the end of the mapping process. This serves to reduce the WHP index in areas with light fuels, such as grass and shrubs. A smoothing process was applied to the raw data and the Very Low and Low tiers removed from the map. The High and Very High tiers were also combined to form the High-risk tier. This helps to inform where forest fuel reduction treatments and mitigations might be most needed.

On its own, WHP is not an explicit map of wildfire threat or risk, but when paired with spatial data depicting highly valued resources and assets such as communities, structures, or powerlines, it can approximate relative wildfire risk to those resources and assets. WHP is not a forecast or wildfire outlook for any particular season as it does not include any information on current or forecasted weather or fuel moisture conditions.

The WHP map is used to prioritize vegetation management activities, determining the location for focused operational protocols, and future sectionalizing studies and associated remedial actions.

Figure 5. Service Facility WHP Overview



2.7.1 Assets Within Wildfire Threat Index Tiers

Table 4 provides a high-level overview of East River's various assets relative to the Wildfire Hazard Potential tiers shown in the WHP map in Figure 5.

Table 4. Overview of Assets within WHP Tiers

Assets	Total	Low		Moderate		High	
	Line-miles	Line-miles	%	Line-miles	%	Line-miles	%
69 kV and below OH Transmission	2977	2878	96.67%	59	1.9%	16	.54%
115 kV OH Transmission	482	479	99.44%	3	.62%	0	0%
Totals							
Total OH Transmission	3459	3357	97.06%	62	1.79%	16	.46%
Total Substations	266	262	98.5%	4	1.5%	0	0%
Total Communications Towers	29	28	96.6%	0	0%	1	3.4%

3 Operational Practices

This chapter describes the operational practices, preventive strategies, and programs implemented, or planned for implementation, to reduce the risk of wildfire ignition associated with the utility's electric facilities. These measures focus on minimizing ignition potential under elevated fire risk conditions while maintaining system safety and reliability. The chapter outlines key operational controls and adaptive practices intended to reduce ignition risk and improve situational awareness.

Table 5. Activities That Address Wildfire Risk Factors

RISK FACTOR	MITIGATION ACTIVITY
Fuel Source	• Substation ○ Vegetation control in and around substations • Transmission Lines ○ Comprehensive vegetation management program ○ Vegetation line inspections ○ Easement trimming and clearing specifications
Extreme Weather	• National Weather Service monitoring
Contact with Foreign Objects	• Substation ○ Wildlife guards and coverup ○ Insulated equipment • Transmission Lines ○ Avian protection construction standards ○ Hazard tree removal
Equipment Failure	• Substation ○ Routine maintenance ○ Design and construction standards to reduce ignition sources ○ Infrared inspections of substation equipment ○ Current limiting fuses • Transmission Lines ○ Detailed inspections and annual patrols ○ Wood pole testing and treatment program ○ Repair/replace inoperable load break devices
Field Work	• East River worker/contractor education on fire ignition sources • Tailgate meetings before fieldwork • NWS fire restriction level monitoring • Modified work practices linked to restriction levels

3.1 De-energization – Public Safety Power Shutoff

A Public Safety Power Shutoff (PSPS) preemptively de-energizes power lines while in a Very High or Extreme Fire Danger category as defined by the NWS with on-the-ground observations from qualified personnel. When considering de-energization, East River examines whether crews can reasonably and safely access the affected line section for patrol, isolation, repair, and eventual re-energization, including road access, terrain, weather, fire conditions, landowner access, and first-responder restrictions.

East River also considers the external risks and potential consequences of de-energization while striving to meet its main priority of protecting the communities and members we serve. They include:

- Potential loss of water supply to fight wildfires due to loss of production wells and pumping facilities.
- Negative impacts to emergency response and public safety due to disruptions to the internet and mobile phone service during periods of extended power outages.
- Loss of key community infrastructure and operational efficiency during power outages.
- Medical emergencies for members of the community requiring powered medical equipment or refrigerated medication. Additionally, the lack of air conditioning can negatively impact medically vulnerable populations.
- Negative impacts on medical facilities.
- Traffic congestion resulting from the public evacuation of de-energized areas can lengthen response times for emergency responders.
- Negative economic impacts from local businesses forced to close during an outage.
- The inability to open garage doors or motorized gates during a wildfire event can lead to injuries and fatalities.

The risks and potential consequences of initiating a PSPS are significant and extremely complex. Based on the above considerations, East River reserves the option of implementing a PSPS when conditions dictate. While East River believes the risks of implementing a PSPS far outweigh the chances of its electric overhead transmission system igniting a catastrophic wildfire, the PSPS provides a last resort tool and another mitigation option in a potential crisis.

On a case-by-case basis, East River has historically and will continue to consider de-energizing a portion of its system in response to a known public safety issue or response to a request from an outside emergency management/response agency. Any de-energizing of the lines is performed in coordination with key local partner agencies; however, the final determination is made by East River.

3.2 System Operations Practices

Electric power system operations practices will be implemented for substations and lines located within the impacted areas and will also include lines and source breakers for line originating outside the impacted area.

Normal

- No restrictions, normal operating practices.

Restricted

- Breaker operations shall be patrolled as soon as possible.
- Line energization after a breaker lockout is allowed after crews have been dispatched for patrolling.
- The operation of energized disconnects and switches without load break devices shall be limited and consideration given to on-site supervision.

Emergency

- Breaker operations will be patrolled immediately.
- Line energization and sectionalizing after a breaker lockout is only allowed after the line section has been patrolled.
- Non-emergency switching shall be kept to a minimum.
- The operation of all energized disconnects and switches shall be supervised on site.

3.3 Situational Awareness

Situational assessment is the process by which current operating conditions are determined. Situational awareness is the understanding of the working environment, which creates a foundation for successful decision making and the ability to predict how it might change due to various factors.

System Operators rely on various resources to monitor evolving fire weather and climatological conditions that may lead to fire events. Sources for weather information include, but are not limited to, the following:

- **NWS South Dakota Grassland Fire Danger Map:** For immediate and short-term situational awareness, mapping tools from the NWS help determine daily and short-term forecasted risk, with daily and day-ahead fire weather status maps produced as needed to assess service area wildfire conditions.
(<https://www.weather.gov/unr/rfd>) & (<https://www.weather.gov/fsd/rfd>)
- **MyRadar:** MyRadar provides real-time weather radar, wind direction and magnitude, fire risk and current fires. (<https://myradar.com/>)
- **East River Weather Stations:** East River has installed its own weather stations at four substations throughout the service area. These stations are monitored remotely and provide temperature, wind speed, wind direction, and relative humidity.

4 Fire Mitigation Construction

East River has a board-approved engineering design standard for transmission lines and substations. East River utilizes these engineering design standards for the design and construction of its electrical facilities and other associated facilities. These design standards shall be utilized for new construction, repairs, and rebuilds as practical. The design standards meet or exceed National Electric Safety Code and Rural Utilities Service (RUS) codes and standards.

4.1 Electrical Facilities Design Standards

East River will utilize its approved design standards for design and construction of its electrical facilities. These design standards shall be utilized for new construction, repairs, and rebuilds as practical. There may be specific conditions, situations, or locations where it may not be possible or practical to follow these design standards and a different site-specific design is required. These design standards may be modified and revised by East River as required.

4.2 Emerging Technologies

East River has initiated various pilot projects to explore new technologies and best management practices. These pilot projects will serve to evaluate the effectiveness of emerging technologies while controlling unwarranted expenditures on unproven methods. East River may elect to integrate these technologies or practices into its ongoing maintenance programs based on the outcomes. These technologies include, but are not limited to, thermal imaging cameras, drone inspections, fault circuit indicators, and East River owned weather stations.

4.3 Avian Protection Program

Since 2010, East River has employed design and construction standards to protect raptors, migratory birds, and other wildlife. These standards are included in the board-approved engineering design standards. The measures contained in East River's Avian Protection Plan have been shown to reduce the collision and electrocution risks and the number of birds injured. Consequently, avian protection strategies also reduce the potential for fire ignitions while helping to prevent power outages. Avian interactions are considered in the design and installation of new facilities, as well as the operation and maintenance of existing structures. Construction standards include, but are not limited to:

- Minimum 14' cross arms on all new or replacement structures
- All new or rebuilt lines will include 115 kV insulators
- Bird flight diverters
- Perch deterrents
- All new and rebuilt substations will have animal guard installed on jumpers, insulators, and bushings
- Caps on surge arresters, energized bushings, and terminators

The construction specifications listed above are used where a need has been identified, and not necessarily at every structure. These safety measures have reduced the potential for fire ignitions while also recognizing the Migratory Bird Treaty Act (MBTA), Bald and Golden Eagle Protection Act (BGEPA), and the Endangered Species Act (ESA).

4.4 System Protection Upgrade

A power circuit breaker is an automatic, high-voltage electric circuit protective device. Like a circuit breaker in a household electric panel, this class of equipment is designed to interrupt electric power when a disruption occurs, such as a short circuit, then close back in a programmed number of times to detect if the problem still exists. If the fault is temporary, the unit automatically resets restoring power. If the fault is permanent, it will remain open interrupting power flow.

Power circuit breakers are controlled by a series of protective relays that monitor parameters such as voltage, current, and frequency to identify irregularities in the system and interrupt power as a protective action. East River has been systematically replacing aging electro-mechanical relays with intelligent microprocessor-based relays that allow for more complex and accurate system protection programming.

4.5 System Monitoring - SCADA

East River's power circuit breakers are connected to the supervisory control and data acquisition (SCADA) system to monitor circuit conditions, providing early notification and faster response to system abnormalities. Connecting power circuit breakers to the operations center via SCADA also allows the operators to operate the device without rolling trucks, thus improving response time and safety. The East River transmission system is completely operated via the SCADA network.

5 Infrastructure Inspections and Maintenance

East River maintains a formal Maintenance Plan for transmission and substation equipment, which plays an essential role in the prevention of wildfires. East River currently patrols and inspects its system regularly with a variety of methods. Table 6 summarizes the inspection schedule for all assets, while the following sections outline inspection practices for the utility.

Table 6. Inspection Program Summary

ASSET CLASSIFICATION	INSPECTION TYPE	FREQUENCY
Transmission	Aerial Patrol and Inspection	Twice Annually
	Ground Patrol and Inspection	Annually
	Wood Pole Test and Treatment	Every 25/15 years
Substation	Routine Inspection	Monthly (not to exceed two months)
	Infrared Inspection	Delivery Point subs Annually Distribution subs Biennial
	HV Protective Relay Inspection	NERC mandated intervals

5.1 Aerial Patrol and Inspections

A simple visual inspection from a contracted fixed wing aircraft of utility lines and structures is designed to identify obvious problems and hazards. East River is notified immediately if a dangerous condition is found and comprehensive inspection reports are provided following each system inspection flight. The following is a short list of examples of items inspected during the patrol:

- Vegetation encroaching on the line
- Construction activities near the line
- Failed or damaged equipment

5.2 Ground Patrol and Inspection of Transmission Lines

A ground patrol is completed on an annual basis to inspect each pole, pole top assembly, and the lines to identify any deficiencies that need to be addressed. The following is a short list of examples of items inspected during the patrol:

- Pole decay
- Damaged hardware or conductor
- Vegetation encroaching on the line
- Loose hardware or guy wires
- New construction or activity near the lines
- Encroachments

5.3 Wood Pole Testing and Treatment

To maintain East River's wood poles, a formal Wood Pole Assessment Plan was initiated with the goal to inspect line sections initially 25 years after construction, and then on a rotating 15-year interval thereafter. Wood pole inspections are carried out on a planned basis to determine whether they have degraded below NESC design strength requirements with safety factors.

A third-party contractor inspects and tests all poles as recommended in RUS Bulletin 1730B-121. Circuits are identified, mapped, and scheduled for inspection and testing using latest industry standards and practices. Poles suspected of deficiencies are subjected to intrusive inspection to determine and identify problems such as rot, decay, or insect damage. Based on the results of the intrusive test, wood treatments are then administered.

5.4 Substation Inspections

The Maintenance Plan provides for regular inspections of East River substations on a monthly interval not to exceed two months. Qualified personnel will use prudent care while performing inspections following all required safety rules to protect themselves, other workers, the general public, and the system's reliability.

The routine substation inspection involves a thorough look at the system to confirm that there are no structural or mechanical deficiencies or hazards. Individual pieces of equipment and/or structures receive careful visual examination and routine diagnostic tests as appropriate.

Infrared scanning of substations inspects for deficiencies that could lead to failures, equipment damage, or fires. The sites are inspected at intervals described in the Maintenance Plan.

5.5 Prioritization of Repairs

East River considers and prioritizes maintenance work by assessing the most urgent needs. The inspector will document the system's condition, recording defects, deterioration, violations, safety concerns, or any other factors requiring attention on the inspection records. The inspection shall

focus on any hazards that could affect the system's integrity or the safety of workers and the public.

Inspection data (overhead & substation) will be prioritized and issued as follows:

Immediate hazard: Conditions that may affect the integrity of the system or present a hazard to workers or the general public. These deficiencies will be responded to **immediately**, and appropriate action taken until the hazardous condition is remedied.

Moderate hazard: Conditions that require maintenance that can be scheduled to maintain the integrity of the system. These deficiencies will be prioritized by urgency and will be scheduled to have appropriate repairs made to correct the condition(s) within two years where practicable.

Non-emergency repair condition: Conditions that do not present a situation that could jeopardize the safety of the system, workers and the general public. These deficiencies will be submitted by the inspector with the time interval recommended. The appropriate Superintendent and Foreman will schedule the repairs when outage schedules, ground conditions, and equipment and manpower requirements can be met.

6 Vegetation Management (VM)

The objective of quality vegetation management (VM) is to provide safe, reliable electric service through an efficient cost-effective program. East River's vegetation management includes vegetation removal, cutting, trimming, pruning, and herbicide application around transmission power lines.

6.1 Vegetation to Conductor Clearance

East River strives to maintain conductor clearances from vegetation to provide safety for the public and utility workers, reasonable service continuity and fire prevention. As an operator of electric supply facilities, East River crews will keep appropriate VM records to ensure that timely trimming is accomplished to maintain the designated clearances. These records will be made available for RUS operations and maintenance inspections upon request.

East River has an operational and management responsibility to maintain the easements under or around its power lines. To lessen the liability of fire and safety hazard due to live, dead or leaning trees and vegetation, East River crews work on an ongoing effort to clear any such hazard by trimming or removing any tree or brush that are directly under the power line and considered a problem. Trees or vegetation that is outside of the power line but is encroaching inside the easement area shall be trimmed or removed as needed.

Patrols are scheduled to ensure all lines are inspected for vegetation hazards three times per year, once by ground inspection and twice by aerial inspection, to identify areas of vegetation encroachment and prioritize the identified areas by need.

During tree work, crews remove all overhanging limbs and aim to achieve a minimum of 10 feet of clearance from energized conductors to vegetation where practical and allowed by landowners. When the 10 feet cannot be met, crews will create as much clearance as possible and the location will be monitored. Illustrations of desired clearances can be located in Appendix C.

The following are optimal clearance dimensions or trimming operations:

- **Roadside Transmission with distribution under build:** 10 feet from the conductor.
- **Transmission Easement (defined width):** A line from the ground to sky to a width defined in the easement from the line route centerline.
- **Trees Under Conductors:** Trees that are under conductors should have crowns reduced to a height 10 feet below the primary conductors or be removed.
- **Overhanging Branches:** Removed to the sky on all transmission lines.
- **Pole Base:** A 3-foot radius area around the base of all poles is cleared of vegetation that would prevent the pole from being safely accessed and climbed.

6.2 Vegetation Trimming Standards

East River's personnel and contractors follow American National Standards Institute (ANSI) A300 concepts and utility directional pruning, which supports proper pruning/tree health while achieving and maximizing the pruning cycle. The VM guidance was developed with RUS, ANSI, and NESC¹ requirements.

Work performed to the above guidelines provides reasonable service continuity, public safety, and guards against wildfire damage caused by supply conductors. Consideration is given to the impact of pruning on system reliability, individual tree condition, and tree aesthetics. All work is conducted in a safe manner in accordance with the work rules set forth in OSHA 1910.269, East River's guidance, and generally accepted industry practice.

6.3 VM Trimming and Inspection Schedule

East River personnel and contractors perform annual, ground-based, or aerial inspections of tree conductor clearances and hazard tree identification for East River easements. East River contracts tree trimming crews for year-round vegetation management work. East River line crews also address vegetation concerns in response to service calls or field observations. Proactive maintenance during routine operations and prompt action during emergency events maintain system reliability, a safe work environment, and reduces fire danger. Any VM issues that cannot be immediately handled by the line crews are referred to the VM contractor for priority trimming. Scheduled patrols ensure all lines are inspected for vegetation hazards and systematically trimmed. On-going, year-round field patrols identify targeted areas for vegetation pruning or removal and ensure compliance with state and federal regulatory requirements. Table 7 outlines the VM inspection and maintenance schedule for East River.

Table 7. Vegetation Management Maintenance Schedules

ASSET CLASSIFICATION	OPERATION TYPE	FREQUENCY
Transmission ROW	Inspection	Three times per year
	Maintenance	As Identified

6.4 Hazard Trees

A hazard tree is defined as any tree or portion of a tree that is dead, rotten, decayed or diseased and which may fall into or onto the overhead lines or trees leaning toward transmission and

¹ Rules 012,013 and 218

distribution facilities. These trees are sometimes located beyond the easement or ROW. Where practical and possible, any tree that is located outside of the ROW and is deemed a hazard tree will be removed or topped to make safe for conductors.

A hazard tree will have one or more of the following characteristics:

- Dead or dying: All dead or dying trees along or outside the East River right-of-way may be removed depending on the height of tree and the direction of the lean.
- Leaning trees: Trees that have such a lean toward the right-of-way that they cannot be trimmed without removing the tops and slanting the tree back. Removal depends on height and species of the tree and direction of the lean.

6.5 Controlling Incompatible Vegetation

In addition to the annual patrols by East River field staff observing and reporting on incompatible uses and encroachments, East River makes efforts to educate public and private landowners about incompatible vegetation that can pose risks if planted under or near conductors.

7 Emergency Response

7.1 Preparedness and Response Planning

East River will utilize its Emergency Response Plan (ERP), along with defined operational practices, to minimize power disruptions to its members during any significant event. The cooperative will also hold scheduled tabletop exercises as a training tool for staff to prepare for these types of events.

7.2 Emergency Management Communication and Coordination

In response to active emergencies, East River coordinates and collaborates with the appropriate County Emergency Manager (EM) and any relevant state agencies as a peer partner. During such emergencies, East River will provide a utility contact to the county and/or city EM to ensure effective communication and coordination.

East River's primary coordination point will be the affected County EM, or in the absence of an EM, the Sheriff's Office will be contacted. East River's Safety Coordinator will contact the local EM and establish themselves as the duty officer for coordination. The Chief Member and Public Relations Officer or Communications & Marketing Manager will act as the communications officer during an emergency.

7.3 Jurisdictional Structure

East River has considered the jurisdictional structure of the service area when developing or implementing its strategic plan, including those related to wildfires. Figure 6 illustrates the general land ownership, while the various stakeholders with land management responsibilities within the service area are listed below.

East River has assets in the following areas:

- South Dakota – 44 counties
- Minnesota – 10 counties
- Municipalities – 12

State Lands:

- SD Game Fish and Parks
- SD State Parks
- SD School and Public
- MN Department of Natural Resources

Federal Lands:

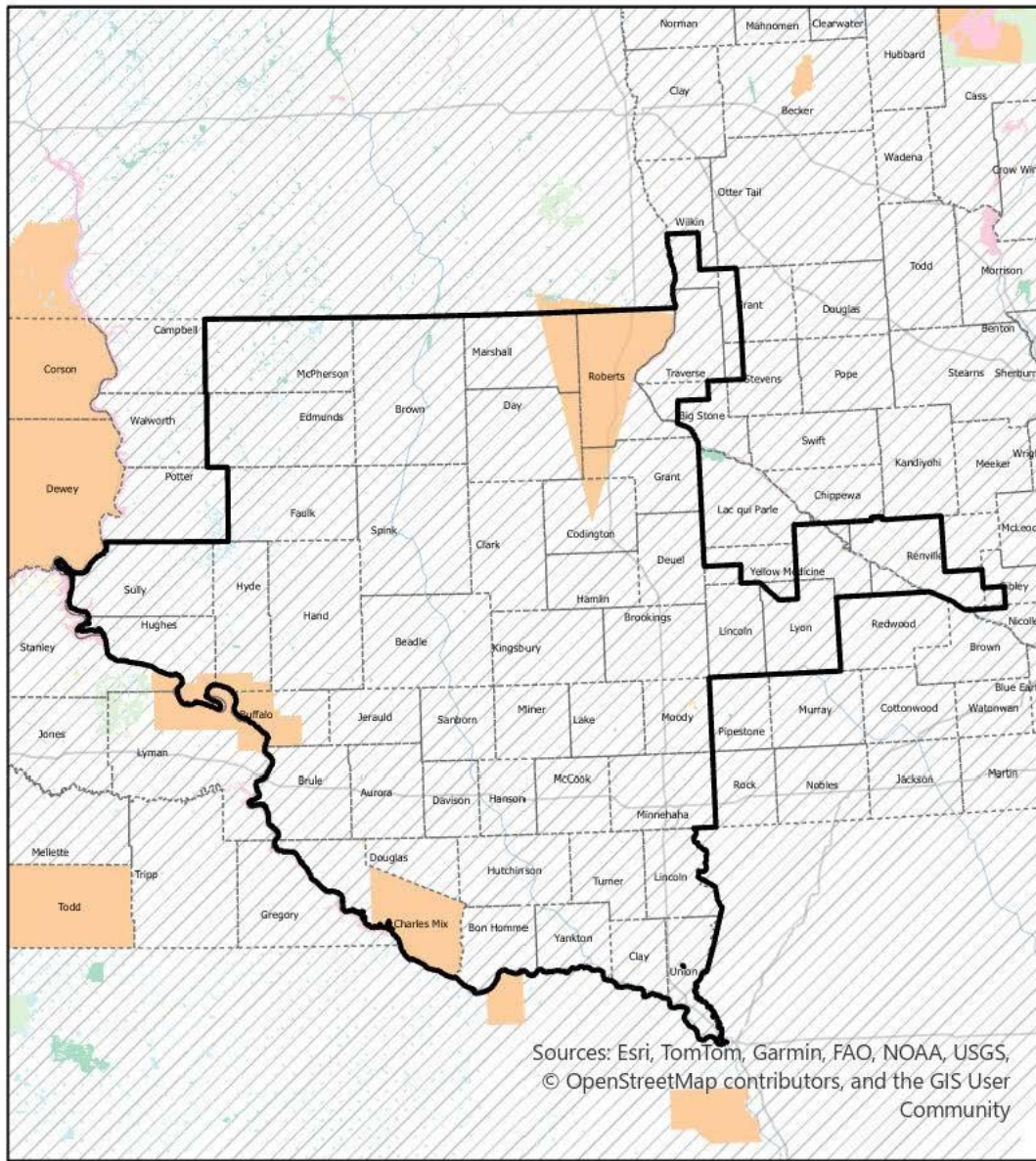
- US Department of Interior

Tribal Lands:

- SD
 - Lake Traverse
 - Crow Creek
 - Flandreau Santee Sioux

- Yankton Sioux
- MN
 - Lower Sioux
 - Upper Sioux

Figure 6. General Land Ownership



General Land Ownership Map

- | | | |
|---------------------------|-----------------------|----------------------|
| Counties | Local | US Fish and Wildlife |
| Bureau of Indian Affairs | National Park Service | US Forest Service |
| Bureau of Land Management | Other Federal | Service Territory |
| Bureau of Reclamation | Private or Unknown | |
| Department of Defense | State | |



7.4 Public Agency and Customer Communications for Outages

During power disruptions or crisis situations, East River will follow the “Media and Communications Procedure” defined in the cooperative’s ERP for when and how communications with the general public are administered.

7.5 Community Outreach

East River recognizes the importance of public awareness related to wildfire risks, preparedness, and mitigation planning. This effort leverages relationships with key stakeholders such as East River’s members, OEM’s, public safety partners, regulatory agencies, media and local organizations to activate a comprehensive community outreach strategy. Critical messaging is disseminated across multiple channels including traditional media relations efforts, social media, website content, and member communications. These communication channels are leveraged to support public awareness campaigns and communicate outage and restoration information.

7.6 Restoration of Service

In the event of a circuit becoming de-energized, East River crews will patrol the affected portions of the system before the system can be re-energized in accordance with the Wildfire Operations Plan located in Appendix D. Suspect equipment or distribution transmission lines that cannot immediately be patrolled will remain de-energized until East River crews can do so. Poles and structures damaged in a wildfire must be assessed and rebuilt as needed prior to re-energization. Periodic member updates of restoration status prior to full restoration will be made.

7.6.1 Service Restoration Process

After a widespread outage, East River work crews take the following steps before restoring electrical service after a de-energization event. These measures are intended to protect the workers, members, the public, and the system’s reliability.

- **Patrol:** Crews patrol every de-energized line to ensure no hazards have affected the system during the outage. If an outage is due to wildfire or other natural disasters, as soon as it is deemed safe by the appropriate officials, crews inspect lines and equipment for damage, foreign contacts and estimate equipment needed for repair and restoration. Lines located in remote and rugged terrain with limited access may require additional time for inspection. East River personnel assist in clearing downed trees and limbs as needed.
- **Isolate:** Isolate the damaged or hazardous areas and restore power to areas not affected.
- **Repair:** After the initial assessment, East River staff meet to plan the work needed to restore the system. Restoration efforts commence as soon as the affected areas become safe. Repair plans prioritize substations and transmission facilities serving the most critical infrastructure needs. Additional crew and equipment are dispatched as necessary.

- **Restore:** Periodic member and media updates of restoration status before full restoration are posted on social media platforms and East River's website. After repairs are made, power is restored to members as quickly as possible. Members, local news, and other agencies receive notification of restored electric service.

8 Performance Metrics and Monitoring

East River staff will have designated responsibilities to implement the plan and to monitor effectiveness over time and adjust as necessary. A group of defined metrics will be monitored annually through field inspections and quality control to use as a basis for the annual evaluation.

The performance metrics listed in Table 8 will be reviewed annually by select East River staff to determine the effectiveness of the plan and to identify coverage gaps or efficiencies that can be gained through modifications.

8.1 Plan Accountability

Staff responsibility for plan implementation and general communications is described below:

- The board of directors makes policy decisions relative to the utility - they will be responsible for approving and adopting the Wildfire Mitigation Plan.
- The Chief Operations Officer directs management staff responsible for the design, operation and maintenance of the system and has the accountability of the Wildfire Mitigation Plan.
- The Transmission System Manager supervises the system maintenance personnel (Transmission, Substation, and Telecommunications Superintendents).
- The Transmission, Substation, Telecommunications, System Operations, and Engineering Superintendents are responsible for the overall execution of the WMP. Staff will be directed as to their roles and responsibilities in support of the plan.
- The Chief Member and Public Relations Officer is responsible for communicating with public safety, media outlets, and public agencies.
- The Safety Coordinator is responsible for communicating with local Office of Emergency Management and health agencies during emergency or planned maintenance outages.
- The System Operations Superintendent determines when and how to notify outside agencies in cases of wildfire emergency events.
- East River's management staff will be responsible for monitoring and auditing the targets specified in the WMP to confirm that the objectives of the WMP are met, as well as the implementation of the plan in general.

8.2 Monitoring and Auditing of the WMP

The WMP will be reviewed annually by select members of management for the purpose of updating the plan as needed to reflect knowledge gained in the preceding year and modified accordingly. A more formal review will be done every five years in coordination.

8.2.1 Identifying Deficiencies in the WMP

The Chief Operations Officer will be responsible for ensuring that this WMP meets all public agency guidelines to mitigate the risk of its assets becoming the source or contributing factor of a wildfire. Staff responsible for assigned mitigation areas have the role of vetting current procedures and recommending changes or enhancements to build upon the strategies in the WMP. Either due to unforeseen circumstances, regulatory changes, emerging technologies, or other rationales,

deficiencies within the WMP will be sought out and reported to the board of directors in the form of an updated WMP at least once every 2 years.

The Transmission System Manager and the System Operations Superintendent will be responsible for spearheading discussions on addressing any plan deficiencies and collaborating on solutions when updating the WMP. At any point in time when deficiencies are identified, the supervisors or their delegates are responsible for making the appropriate policy adjustments. East River staff and qualified stakeholders are encouraged to bring any potential deficiencies to the attention of the Chief Operations Officer. The Chief Operations Officer, along with the appropriate staff, will evaluate each reported deficiency and, if determined to be valid, shall record the deficiency for further action.

8.3 Performance Metrics

East River has developed performance metrics intended to gauge the effectiveness of its various programs and strategies for mitigating power-related ignitions (Table 8). The tracking of these metrics will help identify circuits most susceptible to unexpected outages, time-of-year risks, and the adequacy of the VM and asset inspection schedules. The metrics are also intended to assess the performance of different aspects of the plan.

Because this WMP is in the initial stage of implementation, relatively limited data is on hand. However, as results of the mitigation programs become evident and additional data is collected, East River will identify areas of its operations that will require a different approach, as well as develop additional methods to eliminate East River asset-sourced ignitions.

Table 8. Performance Metrics

METRIC	RATIONAL	MEASURE OF EFFECTIVENESS
Field work-related ignitions	Demonstrates management of controllable ignition events	Reduction or no material increase
Utility caused ignitions	Demonstrates the effectiveness of the plan	Reduction or no material increase
Power lines down during fire season	Assess system hardening efforts in critical areas	Reduction in the general trend of events
Vegetation-caused outage during fire season	Assess VM program work schedules/QC process	Reduction or no material increase
Vegetation-caused ignition	Assess VM program work schedules/QC process	Reduction or no material increase

8.4 System Inspection Quality Control Process

The Transmission System Manager manages the transmission line, substation, and telecommunication assets and develops comprehensive inspection and maintenance programs. These programs ensure the safe operation of the transmission line, substation, and telecommunication facilities.

Key imperatives are to:

- Reduce the risk of power-related wildfire.
- Meet federal and state regulatory requirements.
- Achieve reliability performance within mandated limits and to optimize capital and O&M investments.

Designated superintendents regularly monitor inspection and corrective maintenance records and diagnostic test results to adjust maintenance plans and develop new programs. East River makes all reasonable efforts to follow best industry practices in developing its maintenance programs.

East River's Transmission System Department is responsible for performing the inspections and corrective maintenance. The priority for corrective maintenance is to remove safety hazards immediately and repair deficiencies according to the type of defect and severity of the risk level associated with the asset location. Work orders are monitored throughout the year to ensure timely completion via regular internal reports.

8.5 Vegetation Management Quality Control Process

East River utilizes both internal and external tree crews to perform the vegetation management (VM) and clearing work for the utility. Quality control (QC) of VM activities is achieved through a structured review process integrated into routine maintenance operations. When the VM work has been completed it is reviewed in the field by the East River staff and line crews during daily line patrols, inspections, and other system maintenance activities. These reviews assess compliance with established clearance specifications, trimming standards, and applicable utility procedures.

Annual reviews are conducted by supervisory field personnel and designated operations staff utilizing the metrics defined in Table 8. They are responsible for documenting findings, identifying any deficiencies, and directing corrective actions as needed. Results are used to evaluate overall program effectiveness, verify the adequacy of trimming cycles, and inform adjustments to work practices, schedules, or resource allocation. VM quality control records, including inspection notes and corrective action documentation, are retained in accordance with utility records-retention policies and are available for internal review and audit purposes. This ongoing quality control process supports continuous improvement and ensures vegetation clearance work consistently meets safety, reliability, and wildfire mitigation objectives.

8.6 Implementation and Improvement Costs.

East River will incur additional costs associated with implementing this WMP on an annual basis. The annual realized costs will be assembled as part of the annual report and will be utilized for future budget planning purposes. Costs associated with the plan may include, but are not limited to: (1) capital investments for system hardening, protection equipment, and facility upgrades; (2) operations and maintenance expenses related to enhanced inspections and patrols, vegetation management, and miscellaneous operational practices; and (3) program administration, training, and monitoring. Estimated costs will be refined through the cooperative’s annual budgeting process and aligned with East River’s business planning. As of adoption of this initial plan, East River has not identified separately quantifiable incremental costs beyond existing budgeted inspection, maintenance, vegetation management, and system improvement programs; any incremental costs will be tracked and reported through the annual report and budget process.

8.7 Approval Process

The Wildfire Mitigation Plan will be published on East River’s website as required upon approval by the board of directors. In accordance with South Dakota Senate Bill 36, codified at South Dakota Codified Laws Chapter 49-49 (Wildfire Mitigation Plans), East River shall submit an annual report to its board of directors summarizing compliance with its approved Wildfire Mitigation Plan for the prior calendar year. Any annual report prepared under this chapter will also be made publicly available on the website. The Wildfire Mitigation Plan will be reviewed and updated as required by law and submitted to the board of directors for consideration and approval.

8.7.1 Board Presentation

East River’s WMP was developed by utility staff with input from relevant operational departments and reviewed by management prior to submission. The plan is presented to the board of directors for review and approval, following which it is adopted by formal board action. Upon adoption, the WMP is implemented by utility staff and made publicly available in accordance with applicable requirements.

Table 9. Version History

Date	Version	Author	Revision Description
05/2026	V0	East River	Original document adopted in 2026
7/2/2026	V1	East River	Plan Approved by the East River Board of Directors

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Appendix A: Plan and Mapping Disclaimers

WILDFIRE MITIGATION PLAN DISCLAIMER

The information provided in this report was developed by East River Electric Power Cooperative, Inc. ("East River"), staff and is intended for East River's internal planning purposes only. East River does not warrant the accuracy, reliability, or timeliness of any information in this report, and assumes no liability for any errors, omissions, or inaccuracies in the information provided. East River shall not be held liable for losses caused by using this information. Portions of the data may not reflect current conditions. Any person or entity who relies on any information obtained from this report does so at their own risk. This report is presented solely for internal use AS-IS by East River staff. East River makes no representations or guarantees expressed or implied regarding the accuracy or completeness of the report.

WMP MAPPING DISCLAIMER

Maps in this report were created from multiple datasets from various public and private sector sources and may include utility Geographic Information System (GIS) data. The geographic information contained in the map(s) is not to be used as a "legal description" or for any purpose other than general planning and reference. Every effort has been made to ensure the accuracy of the map(s), but errors in source documents do occur and inherent mapping ambiguities are not shown.

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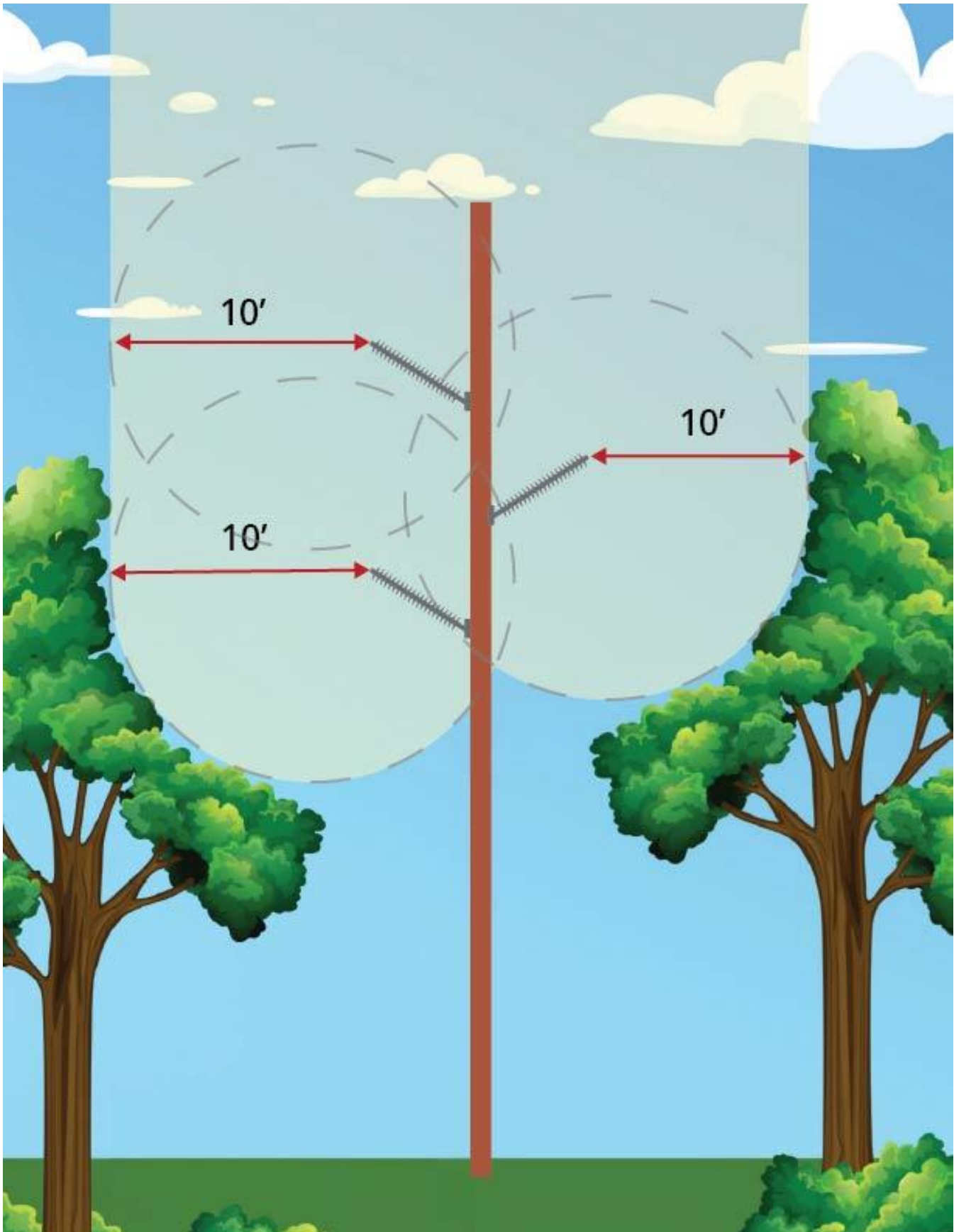
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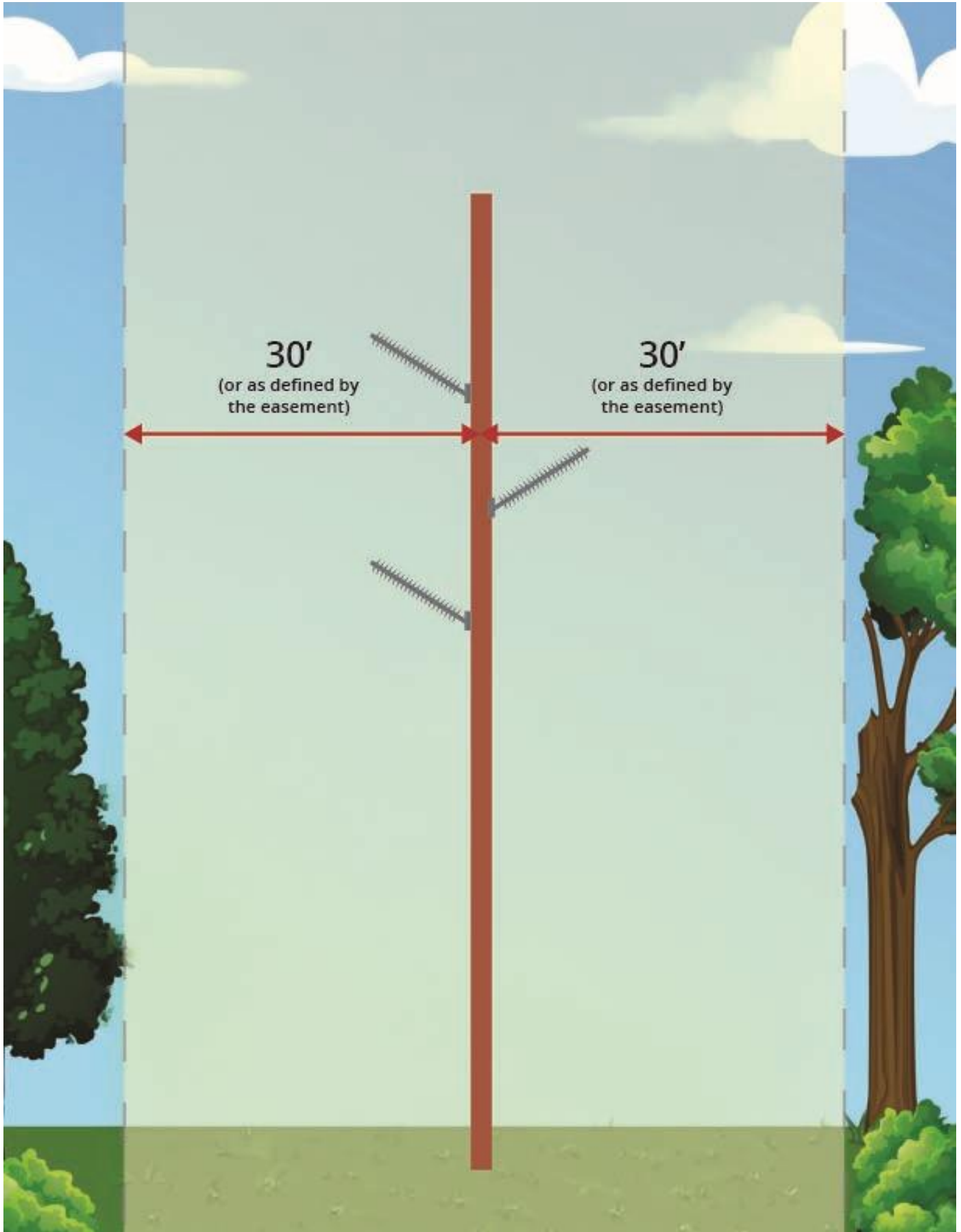
Appendix B: SB-36 Cross Reference Table

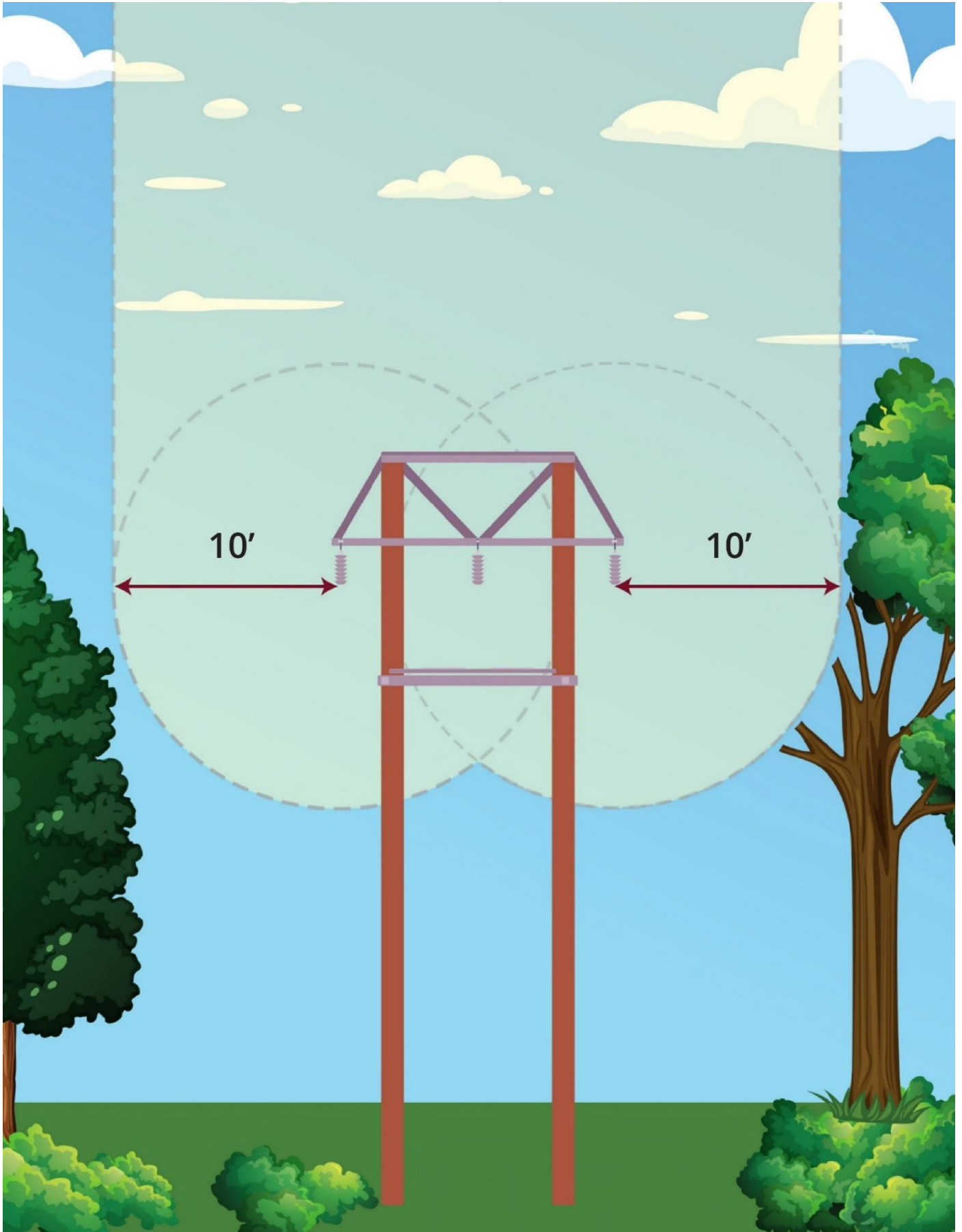
Section	Guidelines Regarding Wildfire Mitigation Plans	Plan Section Number
SB-36, §2	A qualified utility that is not an electric cooperative or municipal utility may submit a wildfire mitigation plan to the commission for filing and publishing.	
SB-36, §2	An electric cooperative or municipal utility may submit a wildfire mitigation plan to its approval authority for review and approval, and upon approval must publish the plan on its website.	8.7
SB-36, §4	A wildfire mitigation plan under this section must include:	
SB-36, §4(1)	A description of areas within the service territory or facility locations of the qualified utility which may be subject to a heightened risk of wildfire.	2.6, 2.6.1
SB-36, §4(2)	A description of the procedures or strategies, standards, and time frames that the qualified utility will use to inspect and operate its infrastructure.	5
SB-36, §4(3)	A description of the procedures or strategies and standards that the qualified utility will use to perform vegetation management.	6
SB-36, §4(4)	A description of the procedures or strategies for modifications or upgrades to electric facilities and preventative programs to reduce the risk of its electric facilities initiating a wildfire.	1.6, 3, 4
SB-36, §4(5)	A description of considerations or strategies for de-energizing power lines or modifying electric facility operations to mitigate potential wildfires, taking into consideration:	3.1, 3.2
SB-36, §4(5)(a)	The ability of the qualified utility to reasonably access the proposed power line to be de-energized.	3.1
SB-36, §4(5)(b)	The balance of the risk of wildfire with the need for continued supply of electricity to a community.	3.1

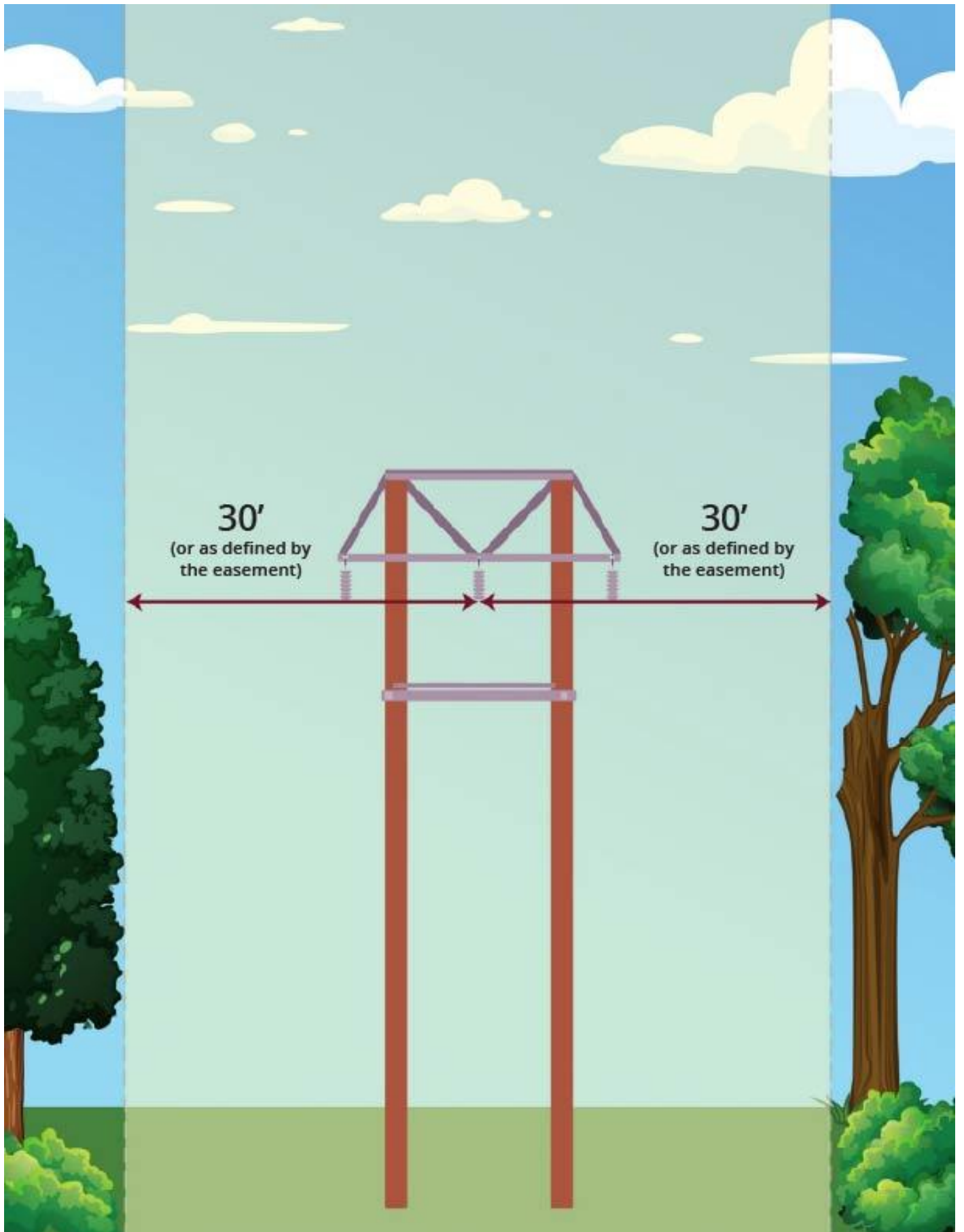
SB-36, §4(5)(c)	Any potential impact to public safety and first responders, as applicable.	3.1
SB-36, §4(6)	A description of the procedures or strategies the qualified utility intends to use to restore its electrical system in the event of a wildfire.	7.6, 7.6.1
SB-36, §4(7)	A description of the estimated incremental costs, if any, for implementation of the plan, including system improvements and upgrades.	8.6
SB-36, §4(8)	A description of community outreach and public awareness efforts before and during a wildfire season.	7.5
SB-36, §4(9)	A description of coordination with applicable state or local wildfire agencies.	7.2
SB-36, §3	Annual Report	
SB-36, §3	A qualified utility with a published wildfire mitigation plan shall submit an annual report detailing compliance with the plan for the prior calendar year, no later than June first of each year.	8.7

Appendix C: Vegetation Management Graphics









Appendix D: East River Wildfire Operations Plan

Wildfire Operations Plan

Purpose

The main purpose of this plan is to reduce the risk of fire ignitions caused by the operation of equipment during elevated fire danger conditions. This is accomplished by defining the different Fire Danger Categories and implementing modified operating and work practices to reduce the probability of igniting a fire.

Definitions/Background

East River utilizes the Fire Danger Categories from the National Weather Service (NWS) as defined below:

Low: *Favorable weather conditions and a high moisture content of grasses, and other dry organic material on the ground, indicate that the probability of a fast-moving fire is low. Outdoor burning under these conditions can usually be performed with reasonable safety precautions.*

Moderate: *Marginal weather conditions and lowering moisture content of grasses, and other dry organic material on the ground, indicate that there is some potential for a fire to spread. Any outdoor burning should be closely monitored.*

High: *Unfavorable weather conditions and low moisture content of grasses, and other dry organic material on the ground, indicate that there is high potential for a fire to spread. Outdoor burning should be restricted to early morning or evening hours when wind speeds are usually lower, and the relative humidity is higher.*

Very High: *Very poor weather conditions and very low moisture content of grasses, and other dry organic material on the ground, indicate that dangerous burning conditions exist. Fires will spread rapidly and show erratic behavior. Outdoor burning is not recommended.*

Extreme: *Extreme weather conditions and very low moisture content of grasses, and other dry organic material on the ground, indicate that critical burning conditions exist. All fires have the potential to become large and spread quickly becoming erratic with extreme behavioral characteristics.*

The NWS performs daily assessments using these five categories and publishes these results on their website during the fire weather season (April 1-October 31). East River utilizes these assessments for determining the areas impacted.

East River defines three different Restriction levels corresponding to each of the five Fire Danger Categories. Each Restriction level is further defined in the following sections.

NWS Fire Danger Category	East River Restrictions Level
NONE	Normal
LOW	Normal
MODERATE	Normal
HIGH	Restricted
VERY HIGH	Emergency
EXTREME	Emergency

System Operation Restriction Levels

Electric power system operation practices will be implemented for substations and lines located within the impacted areas and will also include lines and source breakers for line originating outside the impacted area.

Normal

- No restrictions, normal operating practices.

Restricted

- Breaker operations shall be patrolled as soon as possible.
- Line energization after a breaker lockout is allowed after crews have been dispatched for patrolling.
- The operation of energized disconnects and switches without load break devices shall be limited and consideration given to on-site supervision.
- Monitor the South Dakota Grassland Fire Danger Map for the impacted area daily.

Emergency

- Breaker operations will be patrolled immediately.
- Line energization and sectionalizing after a breaker lockout is only allowed after the line section has been patrolled.
- Non-emergency switching shall be kept to a minimum.
- The operation of all energized disconnects and switches shall be supervised on site.
- Monitor the South Dakota Grassland Fire Danger Map for the impacted area daily.
- Notify impacted members on fire danger status change for their respective area.

Field Work Restrictions Levels

Work practices for line maintenance, construction, and field service operations will be implemented for impacted areas as described below.

Normal

- No restrictions, normal work practices.

Restricted

- Smoking is prohibited.
- Fires will be extinguished if safe to do so.
- Vehicle traffic restricted to established roads and trails. Vehicles with underbelly exhaust systems will not be driven or parked in tall dry fuel areas.
- ATV/UTV traffic permitted with a functional spark arrestor installed. Travel in tall dry fuel areas should be limited.
- Utilizing open fire tools or burning only under close supervision with fire suppression equipment nearby. i.e., fire extinguishers, full water tanks, rakes, and shovels, etc.
- Tree trimming/clearing should be moved to low-risk areas unless it reduces the fire potential.
- All metal grinding, welding, and cutting only when areas can be cleared of dry fuel sources and with fire suppression equipment onsite. i.e., fire extinguishers, full water tanks, rakes, and shovels, etc.

Emergency

- Smoking is prohibited.
- Fires will be extinguished if safe to do so.
- Vehicle traffic restricted to established roads and trails. Vehicles with underbelly exhaust systems will not be driven or parked in tall dry fuel areas.
- ATV/UTV traffic permitted with a functional spark arrestor installed and caution exercised in their use. Travel prohibited in tall dry fuel areas.
- Caution exercised in the use of off-road equipment in dry fuel areas.
- The use of open fire tools or open burning is prohibited.
- Tree trimming/clearing in areas with dry fuel sources is prohibited unless approved by management and it reduces the fire potential.
- All metal grinding, welding, and cutting is limited to protect property or restore power and is to be done under close supervision with fire suppression equipment onsite. i.e., fire extinguishers, full water tanks, rakes, shovels, etc.

Monitoring & Notifications

The System Operations Superintendent will monitor the South Dakota Grassland Fire Danger Map (<http://www.weather.gov/unr/rfd> & <http://www.weather.gov/fsd/rfd/sd>) that is provided and updated by the National Weather Service. System Operations will provide the day and day-ahead Fire Danger forecast update on a weekly basis during the Monday Construction & Maintenance Coordination Meeting during the fire weather season (April 1-October 31).

The South Dakota Grassland Fire Danger Map will be monitored daily when an area of East River's system enters the High Fire Danger category and Restricted Operations are implemented. The impacted areas will be evaluated based on maintenance center boundaries. Smaller areas can be considered based on circumstances in an effort to limit the impact to system reliability.

East River staff, impacted members, and impacted contractors will be notified by email if the Fire Danger Category is elevated to Very High/Extreme for a portion of East River's system and emergency operations are initiated. Emails will be sent out when East River enters or exits emergency operations.

Training

Training will be provided to inform employees about fire prevention and fire-safe work practices and restrictions. Fire prevention training is for operations and field personnel to understand the risks associated with grassland fires and how to recognize and identify high fire risk areas, and proper work practices in those areas. The training will cover the notification procedures and what measures must be taken in the event of a fire in the work area. Training will take place in years when the fire danger is anticipated to reach the HIGH index or above within the service area.

Contractors

All contractors working for East River shall, at a minimum, adhere to the work practices outlined in this plan. It is the responsibility of the contractor to safely manage fire hazards in the field based on the communication from East River and what Fire Danger Index is in place.

A contractor's East River point of contact shall be responsible for communicating current Fire Danger Index information and this communication serves as the notice for the contractor to change field work practices accordingly. If seasonal conditions appear to be trending towards drier conditions, this plan will be reviewed during pre-con meetings. However, changing conditions at any time during a project may need to be addressed. It is expected the contractor will review the Fire Danger Index during job safety briefings when any associated area of East River's system is in an elevated Fire Danger Index (Moderate or higher).

Wildfire Emergency Response:

If field crews observe a wildfire near electric transmission facilities - call 911 immediately.

After calling 911, the field crew should notify System Operations, advising location of the fire and if there is a need to de-energize any facilities.

Contact Information:

Information on this plan or current Fire Restriction Status may be obtained by contacting us by using the information below:

Phone #: 605-256-4536

Email: info@eastriver.coop