

# XCEL ENERGY WILDFIRE MITIGATION

Denver City Council Transportation and Infrastructure Committee  
April 1, 2026



# AGENDA

Background

What causes sparking?

What are we doing about it.

Enhanced Powerline Safety Settings (EPSS)

Public Safety Power Shutoff (PSPS)

Maps

Additional Resources



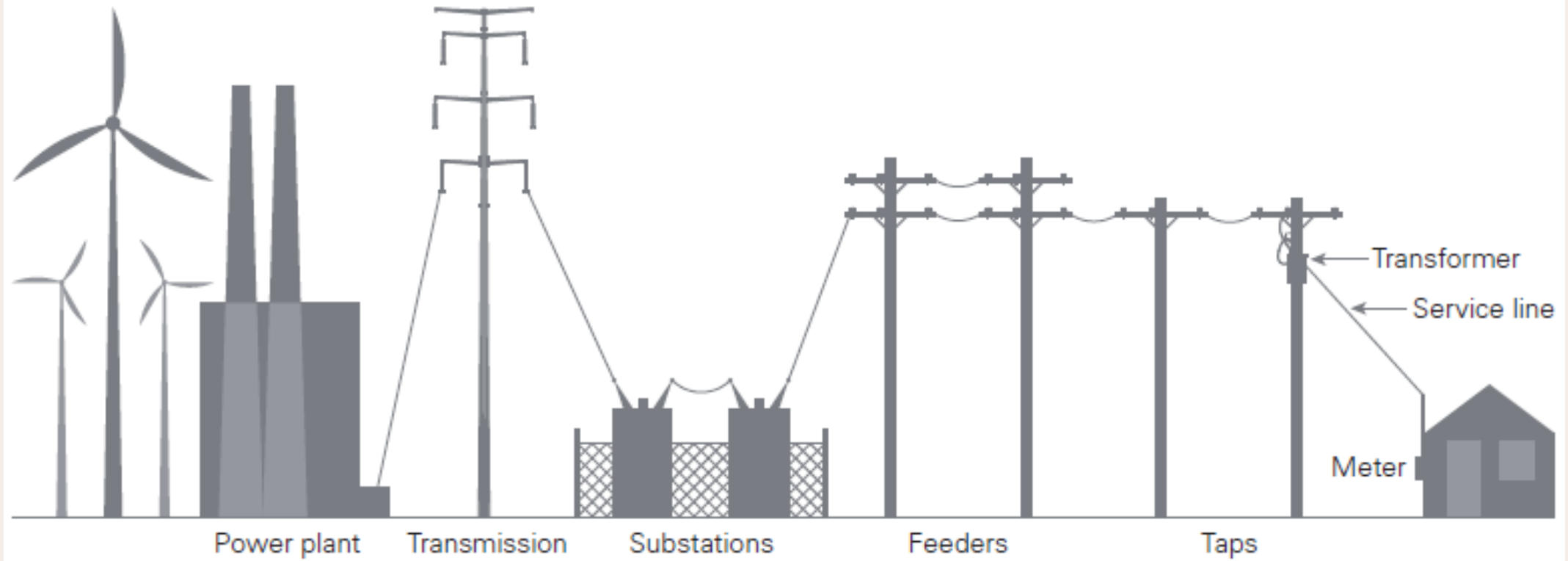


# BACKGROUND

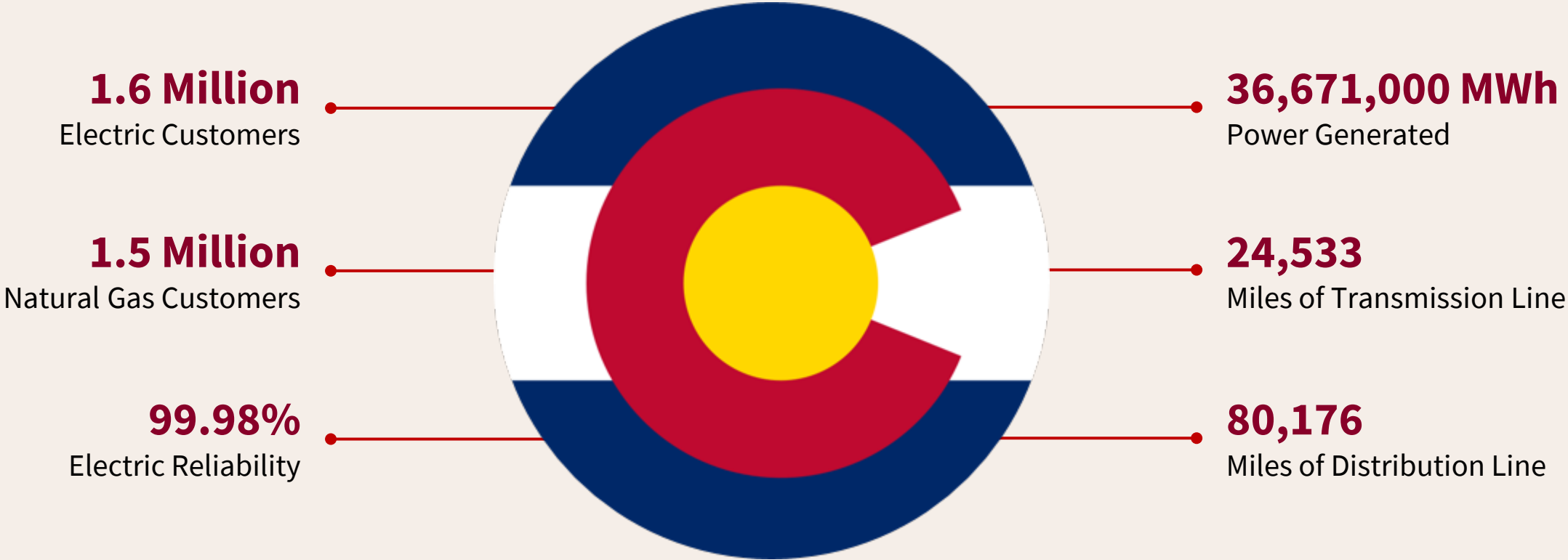


# ELECTRICAL GRID

How the electric distribution system works



# XCEL IN COLORADO



# ISSUE/SOLUTION



➤ **MORE SEVERE WEATHER  
AND DRIER CONDITIONS**

➤ **WILDFIRE SAFETY IS  
SHARED BY EVERYONE**

➤ **STRATEGIC INVESTMENTS  
AND IMPROVEMENTS**



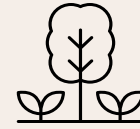
# WILDFIRE MITIGATION PROGRAM



**System  
Maintenance  
& Resiliency**



**Ignition  
Prevention  
Measures**



**Vegetation  
Management  
Projects &  
Partnerships**



**First  
Responder &  
Community  
Outreach**

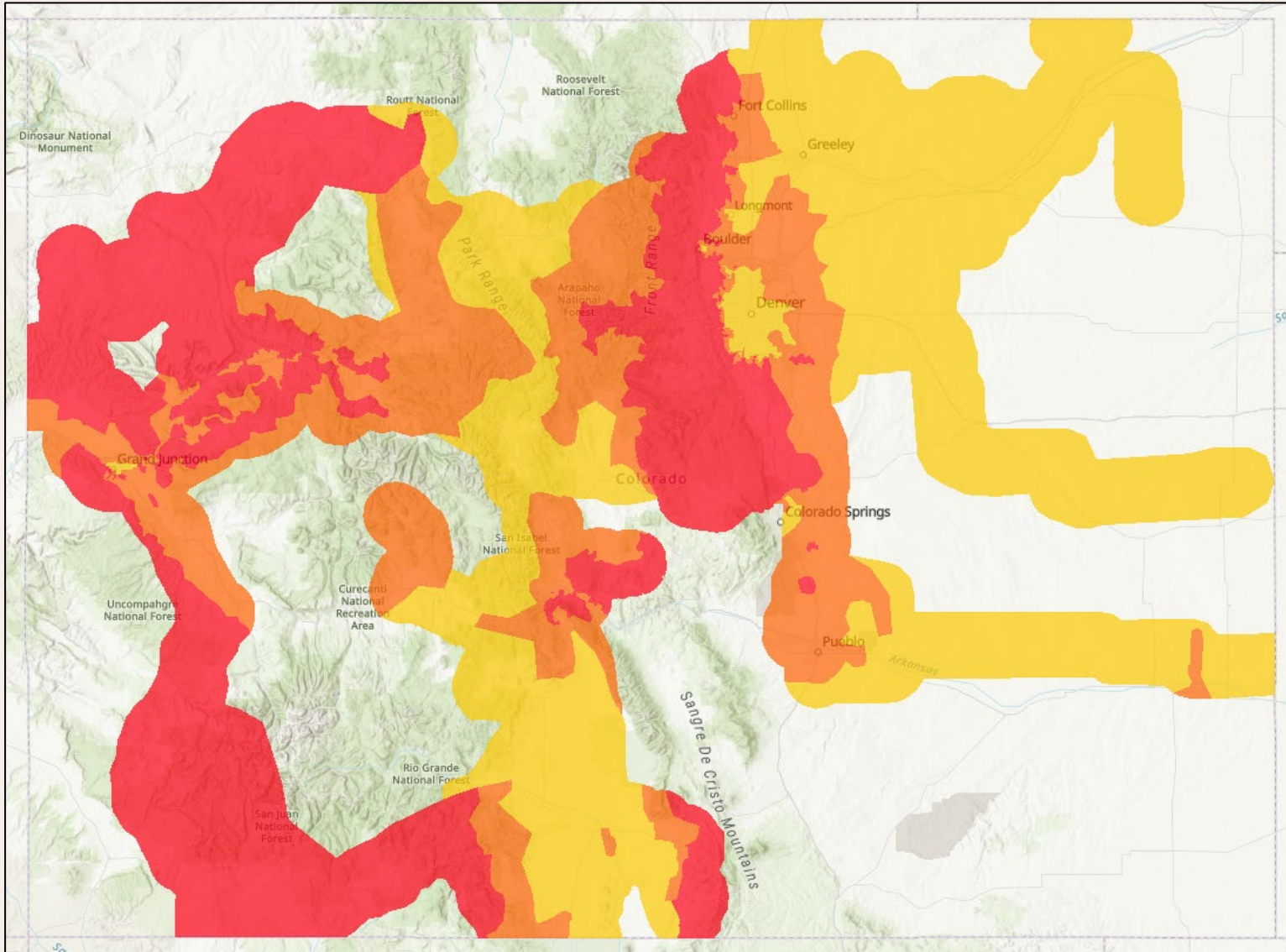


**Advanced  
Technologies  
and Planning**



**Collaborative  
Safety &  
Preparedness**

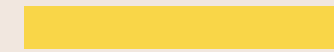




[View our interactive Wildfire Risk Tier map](#)

**Color**

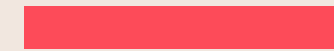
**Tier**



Tier 1



Tier 2



Tier 3

**Tier**

**Description**

**Tier 1**

Areas with significant human development and/or surfaces resistant to fire.

**Tier 2**

Areas where wildfire may cause significant damage to human infrastructure due to fuel continuity and terrain.

**Tier 3**

Areas where wildfire will likely rapidly become large, destructive or catastrophic events due to fuel continuity and population density.

# WHAT CAUSES SPARKING



# VEHICLE ACCIDENTS



# WILDLIFE



# VEGETATION



# SEVERE WEATHER



# SEVERE WEATHER



Arvada

Evergreen



Conifer

Golden



# SEVERE WEATHER





# WHAT WE ARE DOING ABOUT IT



# 2025 – 2027 WILDFIRE MITIGATION PLAN OVERVIEW

REDUCING WILDFIRE RISK WHILE PROMOTING RESILIENCY

**82.7%**

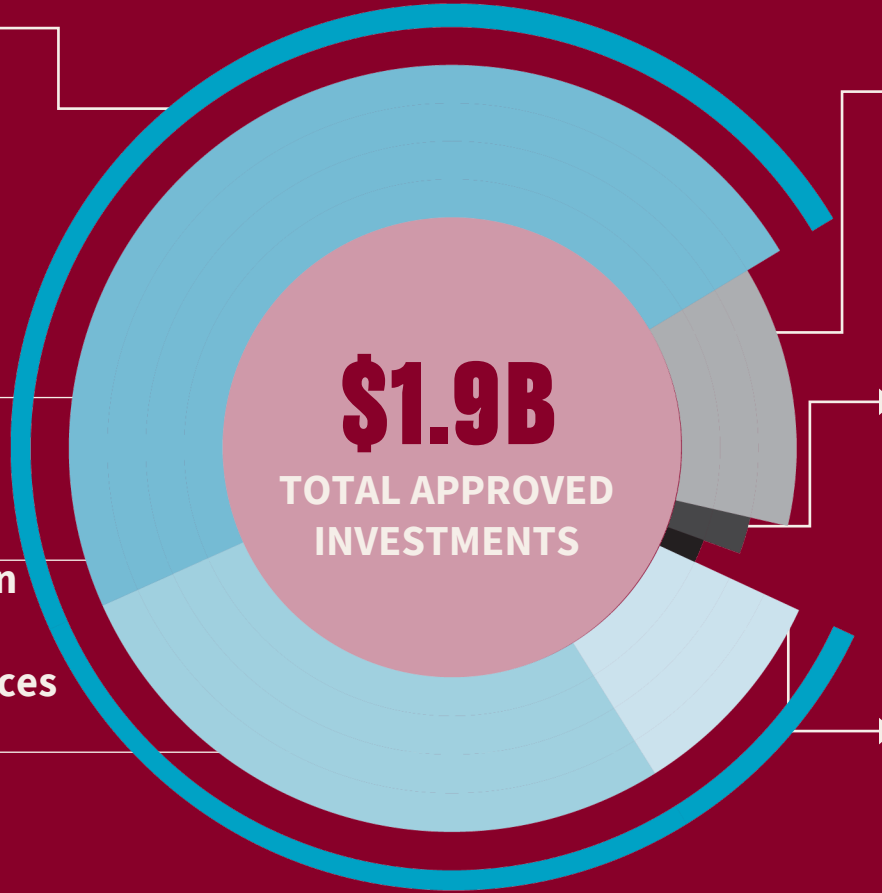
**System Resiliency**

\$1.56 billion

57% Pole Remediation  
\$897 million

32% Power Line Improvements  
\$496 million

11% Vegetation Management and Tech Services  
\$175 million



**11.5%**

**Operational Mitigations**  
\$217 million

**1.3%**

**Customer & Other Support**  
\$24 million

**4.5%**

**Situational Awareness**  
\$50 million



**System Resiliency**

**50** miles of underground power lines  
**10,000** pole replacements



**Operational Mitigations**

**100%** feeders enabled with Enhanced Powerline Safety Settings (EPSS)



**Situational Awareness**

**3x** AI-enabled wildfire monitoring cameras  
**29,000** fault detection sensors deployed



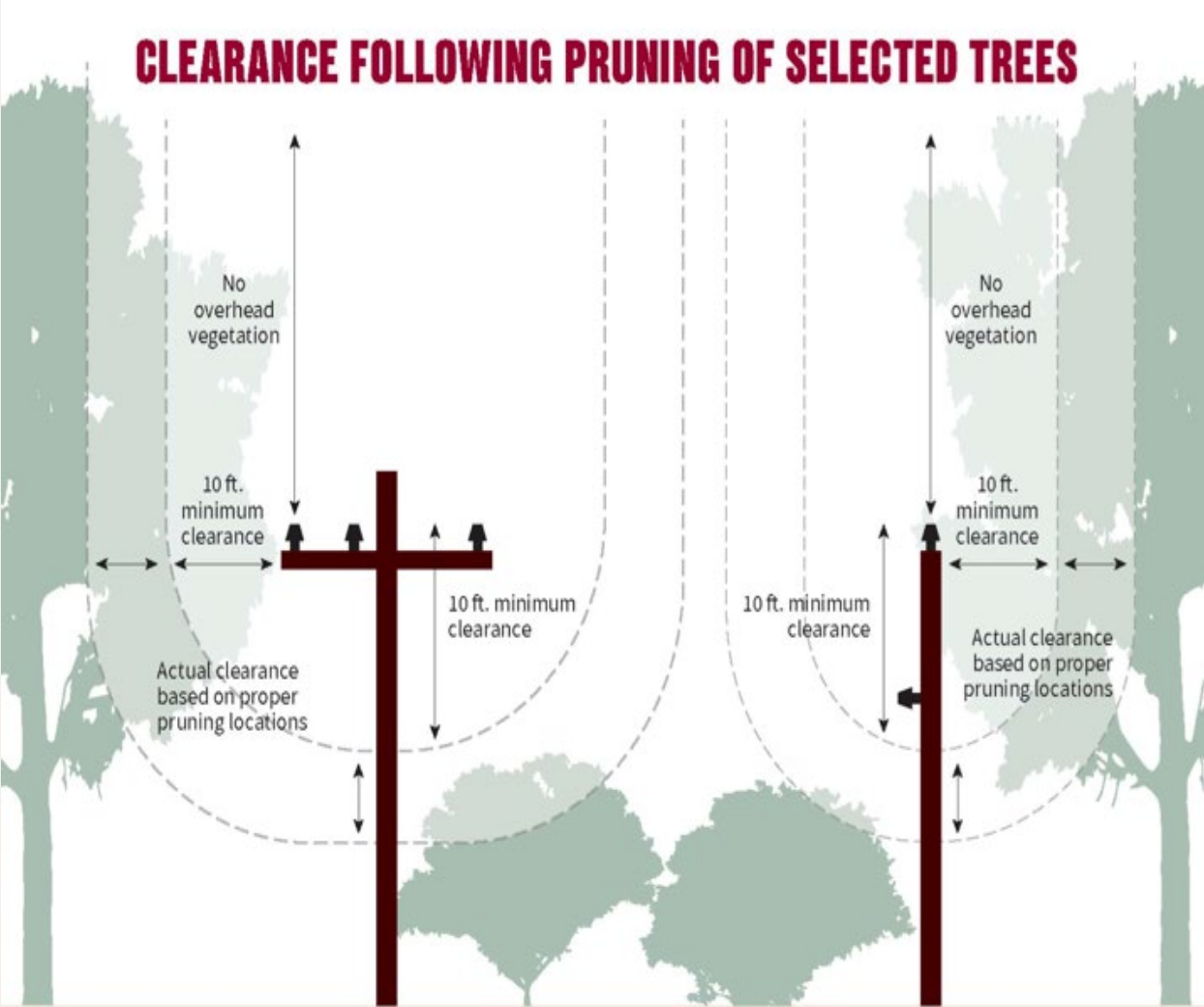
# WILDFIRE MITIGATION PLANNING COMPONENTS

## System Maintenance and Upgrades

- Advanced reclosures to enable Enhanced Powerline Safety Settings (EPSS)
- Newer components designed not to spark
- Covered wiring replacement
- Inspection process, including drone usage
- Rebuild transmission, including underground when possible



# VEGETATION MANAGEMENT



# WILDFIRE MITIGATION PLANNING COMPONENTS



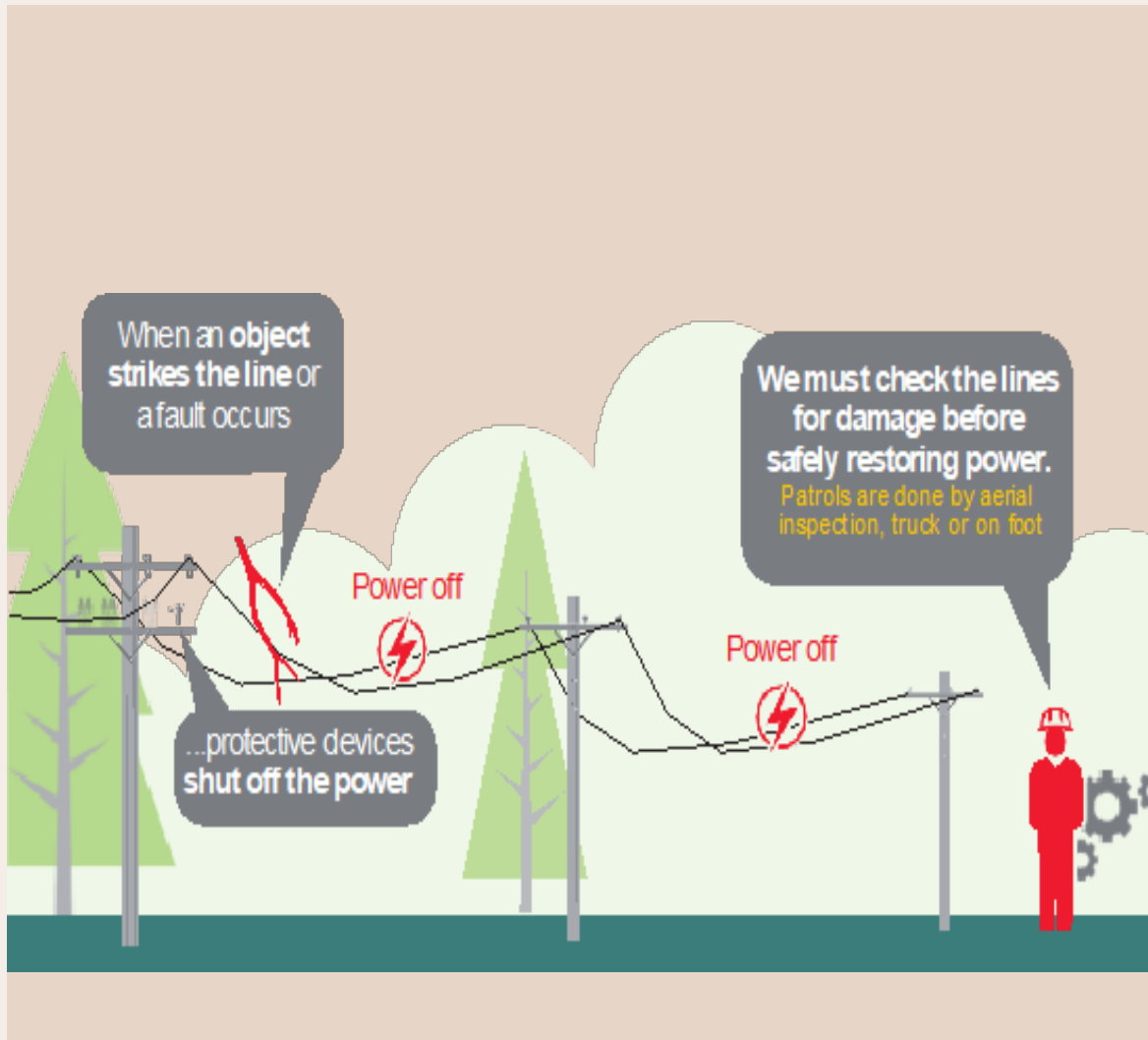
- Community Outreach
- Offices of Emergency Management
- Pano AI camera network
- Risk modeling (Technosylva)
- Weather stations
- Additional first responders
- Public



# EPSS



# ENHANCED POWERLINE SAFETY SETTINGS (EPSS)



When EPSS is activated, power lines are more sensitive and can quickly stop the flow of energy if an issue is detected, like a tree branch or other object touching the line. When that occurs, the power will remain off until our crews can inspect the line to make sure it's safe to turn it back on.

It is intended to enhance public safety during heightened risk conditions, but it means power outages are likely to occur more frequently, and if they do, are likely to last longer because crews need to patrol the line before restoring power.

EPSS is used in risk zones identified by the CO State Forest Service and risk probability models considering facts like weather, housing density, terrain, miles of overhead lines.





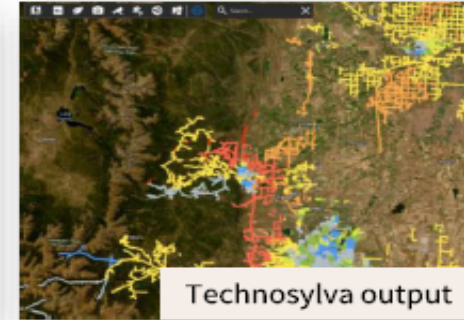
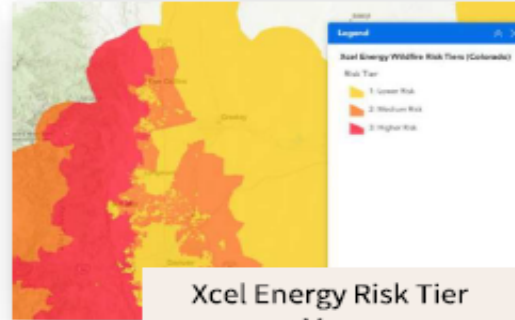
# PSPS



# What Drives a PSPS?



Forecast for Wednesday December 17, 2025			
ZONE	Max Wind Gust	Min RH	WFI
PSCO Z3	70-90 mph	18-23%	High
PSCO Z5	70-90 mph	17-21%	High
PSCO Z6	65-75 mph	18-22%	High

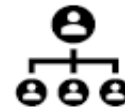


Forecast for Friday December 19, 2025			
ZONE	Max Wind Gust	Min RH	WFI
PSCO Z3	70-100 mph	13-19%	High
PSCO Z5	65-80 mph	10-14%	High

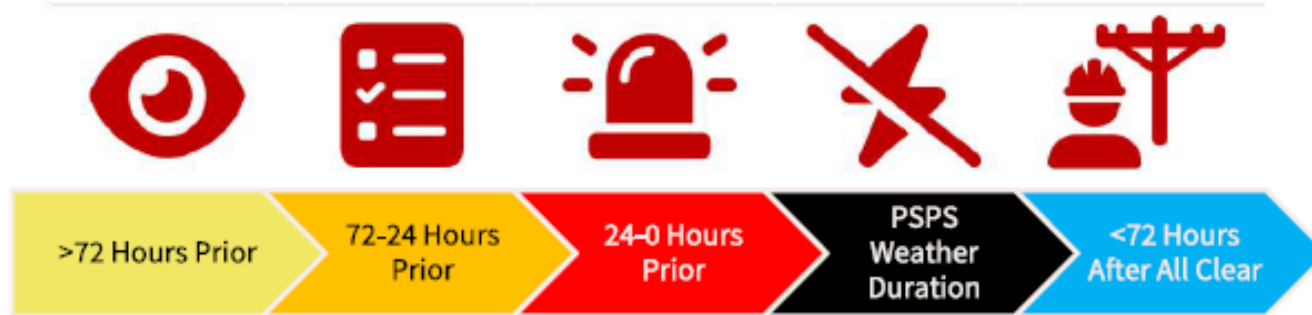
Overhead Assets  
Assets in Wildfire Risk Tier 2 & 3

Fire Behavior Index  
Buildings Impacted

Material Health Condition  
System Hardening  
Vegetation Strike Potential  
Operational Constraints  
Critical Infrastructure  
Bulk Electric System Impacts



# PSPS ACTIONS



PSPS Stages		
Stage	Timeframe*	Purpose
<b>Stage 1 Increased Situational Awareness</b>	As early as 10 days prior to PSPS implementation	To identify potential PSPS events, activate limited Incident Management Team for increased awareness.
<b>Stage 2 Deliberate Planning</b>	No later than 3 days prior to PSPS implementation (based on preparation needs), earlier if high confidence in forecast	Activation of larger Incident Management Team (IMT) to conduct Preparation for potential PSPS event
<b>Stage 3 Final Preparations</b>	24-hours leading up to the moment of de-energization	To finalize PSPS preparation
<b>Stage 4 De-Energization Period</b>	The duration of De-energization, from the start until “Weather Safe”	Process of executing a PSPS event and responding to emergency responder calls to make safe
<b>Stage 5 Restoration</b>	Restoration activities are occurring until return to normal operations is declared; could last several days depending on the damage	To safely restore power when conditions are no longer dangerous
<b>Post Event Analysis</b>	After Action Meeting held within three weeks of return to normal operations.	After Action Analysis and develop a completed After-Action Report / Improvement Plan (AAR/IP) within three weeks

**\*The timing for implementing the stages is based on weather forecasts; however, unexpected meteorological changes may accelerate the process.**





# MAPS



# PUBLIC SAFETY PARTNER PORTAL

OEM Data Sharing Map

Michael Chancey 320944

**Layers**

- PSCO Overhead Distribution Primary Feeders
- PSCO Underground Distribution Primary Feeders
- PSCO Overhead Transmission Conductor Circuits
- PSCO Underground Transmission Conductor Circuits
- TEST Grand Junction PSPS TEST
- Xcel Energy Wildfire Risk Tiers
- County Boundary

Add

**Map tool that allows vetted users access to GIS data layers of Xcel assets and critical infrastructure locations.**

**Targeted for OEM, Public Safety (Fire, LE, Comms), Water/Wastewater, Forestry, Addition Response Partners**

Esri, NASA, NGA, USGS | Esri, TomTom, Garmin, SafeGraph, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, USDA, USFWS | Sources: Esri; U.S. Department of Com

# PUBLIC FACING OUTAGE MAP

### Outages

Total of **58** outages affecting **1,164** customers.

Update list as map moves

**List All** | By County | By State

<b>ADAMS • CO</b> <b>Estimated Restoration Time:</b> 11:30 a.m., 3/23/2026 <b>Cause:</b> Unplanned <b>Comments:</b> Crews are working to restore power as quickly and safely as possible. Please continue to check back for estimated restoration time updates. Thank you for your patience. <b>Time Off:</b> 8:33 a.m., 3/23/2026	<b>1</b> Customers Affected <a href="#">View on Map</a>
<b>ADAMS • CO</b> <b>Estimated Restoration Time:</b> 12:00 p.m., 3/23/2026 <b>Cause:</b> Unplanned <b>Comments:</b> Crews are working to restore power as quickly and safely as possible. Please continue to check back for estimated restoration time updates. Thank you for your patience. <b>Time Off:</b> 9:04 a.m., 3/23/2026	<b>1</b> Customers Affected <a href="#">View on Map</a>
<b>ARAPAHOE • CO</b> <b>Estimated Restoration Time:</b> 5:00 p.m., 3/23/2026 <b>Cause:</b> Unplanned	<b>8</b> Customers Affected

Search for an address or place

Legend

### DENVER • CO

**Estimated Restoration Time:** 11:30 a.m., 3/23/2026

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**Customers Affected:** 17

**Cause:** Unplanned

**Comments:** Crews are working to restore power as quickly and safely as possible. Please continue to check back for estimated restoration time updates. Thank you for your patience.

**Time Off:** 9:26 a.m., 3/23/2026



# ADDITIONAL RESOURCES



# ADDITIONAL LINKS FOR RESIDENTS

## Wildfire Preparedness

### Wildfire Preparedness

Our most important job is to provide reliable, safe, affordable and clean energy to power your day-to-day.

[Sign Up for Alerts](#)

[Outage Map](#)

[Check Outage Status](#)

[PSPS Event Update Page](#)



**Preparing for an Outage**



**Outage Checklist**



**Restoring Outages**

# ADDITIONAL PROGRAMS

## Red Truck

- Direct customer support
- Resolve billing concerns
- Enroll in energy-saving programs
- Rebates
- Bill education

## Safe for Colorado

- Notifications
- Medical Certification
  - Suspend late fees/disconnection
- Colorado Medical Exemption
  - Discounted electric rates
- Battery Energy Storage System



# QUESTIONS?



**THANK YOU.**

**Grace Lopez Ramirez**

Senior Area Manager

Grace.L.Ramirez@xcelenergy.com

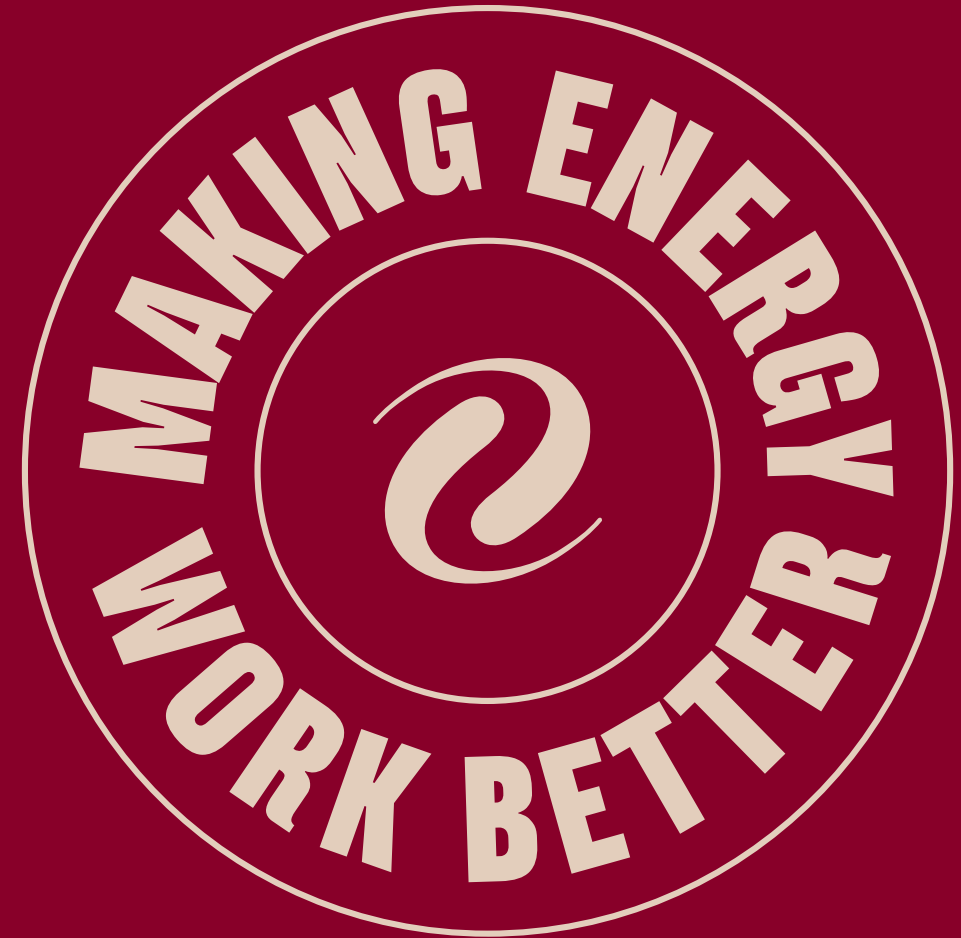
(303) 877.8173

**Lyle Moore, MPH, TLO**

Community Resilience Manager

Lyle.moore@xcelenergy.com

(303) 957-8407



[xcelenergy.com](https://www.xcelenergy.com)