

UM 2207

February 6, 2025

## Presenters:

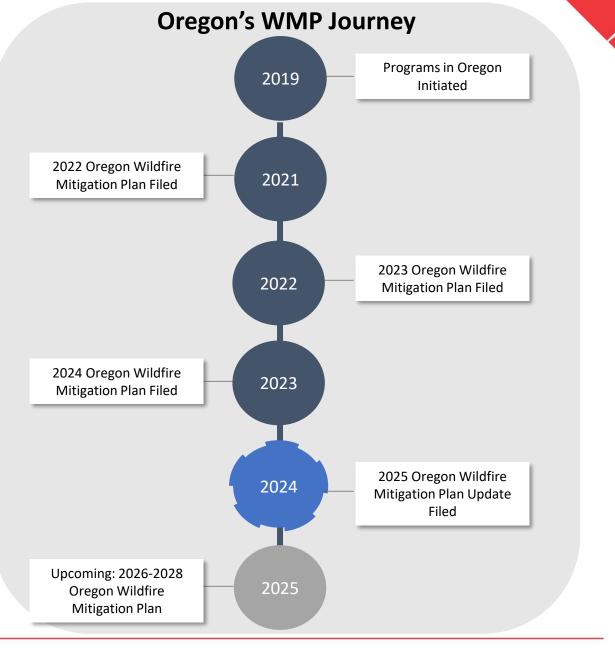
Melissa Swenson, Director, Wildfire Mitigation Program Hallie Frazee, Wildfire Mitigation Communications Program Manager





# Agenda

- Plan Foundation and Elements
- 2024 Accomplishments and Learnings
- 2024 Customer Wildfire Season Outreach and Communications
- 2025 Plan Updates
- Data Templates Implementation



# About PacifiCorp

## **General Stats**

 PacifiCorp provides electricity to approximately 623,000 Oregon customers via approximately 293 substations, 19,000+ miles of distribution lines, and about 3,000+ miles of transmission lines across nearly 21,000+ square miles





# Wildfire Mitigation Approach



- Customers
- Public Safety Partners
- Tribal Nations
- Public Utility Commission
- Industry Collaboration



# Situational

## **Awareness**

- Baseline risk modeling to inform strategic programs and investments
- Short-term forecasting to inform operational protocols



## Operational Practices

- Implement operational
  strategies during fire risk periods
- Deploy more sensitive protective coordination equipment
- Installation of new fault indicators

## System Resiliency

- Enhanced inspections and accelerated correction of certain conditions
- Enhanced vegetation management practices
- Line rebuilds



### Engagement

- Hosted nine public wildfire forums
- Participated in over 25 community and public safety partner outreach events
- Over 40 industry collaboration meetings and events



## **Situational Awareness**

- Baseline risk modeling to inform strategic programs and investments
- Implemented PSPS Circuit Forecast Tool
- Installed 25 weather stations

# 2024 Accomplishments



## **System Resiliency**

- Over 12,364 incremental trees pruned or removed and over 35,622 poles cleared
- Inspected 116,144 transmission and distribution facilities
- Upgraded or replaced 50 relays and reclosers
- Rebuilt 83 miles of overhead lines with covered conductor
- Upgraded or replaced 50 relays and reclosers
- Replacement of 9,063 expulsion fuses
- Installed 371 communicating fault current indicators (CFCIs)

# Impact of 2024 Operational Practices



## **Enhanced Safety Settings**

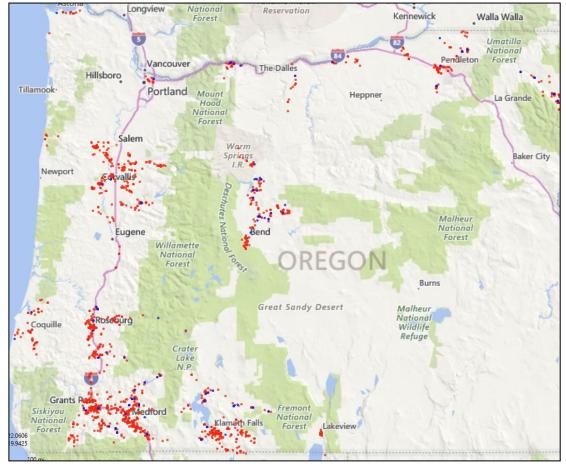
 Enhanced safety settings are enabled across the service territory; well in advance of weather conditions that have historically been related to catastrophic fires.

### **Emergency De-energization**

 Fires within a specified distance of equipment, based on wind and fuel conditions, results in emergency de-energization.

### **Public Safety Power Shutoff**

 Proactive de-energization used as a last resort to reduce the risk of wildfires during extreme fire risk conditions.



Enhanced Safety Setting De-energization Emergency De-energization Due to Fire Encroachment

# 2024 Customer Outreach and Communications



# 2024 Wildfire Season Communications and Outreach



Outreach to customers begins before wildfire season and continues through the season.

# 2024 Wildfire Season Communications and Outreach

## **Tribal Nations**

- Shared wildfire safety information with Tribal Nation's media and publications.
- New Tribal Liaison to lead consultation and outreach efforts with the Tribes.

## **Public Safety Partners**

 Emergency Management briefings with public safety partners on wildfire preparations and sharing of collateral materials and informational videos.

## **Non-Residential Customers**

- Regional Business Managers shared wildfire information with their large customers.
- Discussions at local service organization meetings.
- New Access and Functional Needs (AFN) Program Manager to coordinate across programs and outreach efforts.





# De-energization Communications Cadence

## Public Safety Power Shutoff

- Set notification cadence
- Advanced notice provided in multiple formats



# Enhanced Safety Settings

- When settings are turned on for the season
  - Email or letter

## • When an outage occurs

 Standard outage notifications based on customer communications preferences

# • Emergency Deenergization

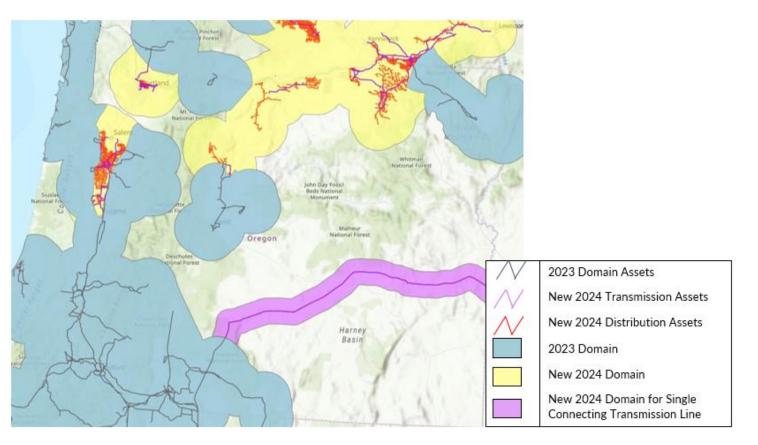
- Pending: fires getting close to equipment
  - May be able to provide advanced notification
- Immediate: When a fire is reported as too close, power is turned off immediately
  - Not able to provide advanced notification

# 2025 Plan Updates



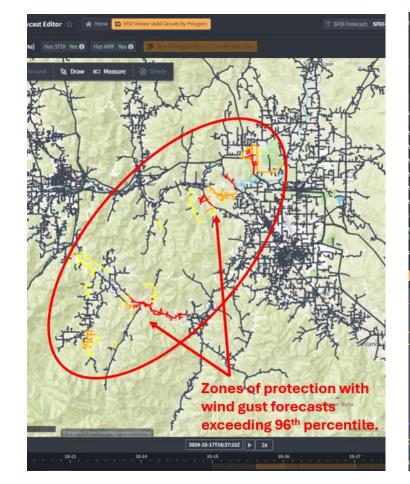
# Changes to FireSight Risk Model

- Expanded domain
- Fuel models updates
- Weather days
- Estimation of live fuel moisture content
- Wildfire urban interface update
- Historic fire incident analysis disturbance analysis



# New Public Safety Power Shutoff Circuit Forecast Editor

- Identifies zones of protection that are forecast to meet the threshold for a PSPS event.
- Forecasts timing of event for each circuit.



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		13 **	eather Stations in Forecast			
VG Station ID	Station Source	Gust 95th Percentile	Gust 99th Percentile	P95 Gust Start Timestamp	P95 Gust End Timestamp	
C-3447	PacifiCorp	28	34			
C-3393	PacifiCorp	23	26			
C-3459	PacifiCorp	28	35.8			
C-3431	PacifiCorp	37.4	45.9			
C-3406	PacifiCorp	21.2	30.8	Oct 12, 2024, 7:00 PM	Oct 12, 2024, 8:00 PM	
C-3450	PacifiCorp	21.7	27.7	Oct 12, 2024, 7:00 PM	Oct 12, 2024, 8:00 PM	
	RAWS	39	50			
C-3447	PacifiCorp	28	34			
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12 PM

# **New Initiatives**

Engagement

- Western Utilities Wildfire Communications Workshop
- Situational Awareness (
- Wildfire Intelligence Center

**Operational Practices** 

Distribution Protection
 Settings Review

System Resiliency

- Line Rebuild Transmission
- Transmission Pole Replacement
- Pole Wrapping



# Changes in Initiative Targets

Initiative	Initiative Subcategory	Units	2025 Target in 2024 WMP	2025 Target in WMP Update	% Change
Community Outreach and Public Awareness	Best Practice Sharing with Other Utilities	Meetings	0	2	100%
Grid Design and System Hardening	Distribution Pole Replacements and Reinforcements	Assets	2,750	4,225	54%
Grid Design and System Hardening	Covered Conductor Installation: Tree Wire and Spacer Cable	Miles	125	175	40%
Grid Design and System Hardening	Installation of System Automation Equipment	Assets	2,540	1,258	-50%
Grid Design and System Hardening	Installation of System Automation Equipment (CFCI)	Assets	4,070	2,170	-48%
Grid Design and System Hardening	Grid Design and System Hardening: Other Technologies Not Listed Above	Assets	5,537	8,000	44%
Grid Design and System Hardening	Traditional Overhead Hardening	Miles	0	10	100%
Grid Design and System Hardening	Transmission Pole/Tower Replacements and Reinforcements	Assets	0	180	100%
Inspect/Correct	Asset Inspections	Miles	2,250	2,574	29%
Inspect/Correct	Fire Season Safety Patrols	Assets	71,500	124,321	74%
PSPS/Emergency Preparedness	Battery Programs	# of Medically Vulnerable Customers	200	50	-75%

# Areas for Continued Improvement

#### Engagement

### PacifiCorp

- Public Safety Partners Definition
- Community Based Organization Outreach
- Customer and Partner Outreach Effectiveness
- Customer Battery Program Effectiveness

### Joint IOU: Phase 1

- Determination of WMP Compliance
- Transition to Multi-year WMPs
- Standard Reporting Templates: Programs, Inspection and Correction, Vegetation Management

### Joint IOU: Phase 2

- Shared IOU Terminology
- Standard WMP Format
- Standard Reporting Templates: Industry Engagement, Technology Pilots, PSPS Event Joint IOU: After Phase 2
- Industry Collaboration: System Reliability Learnings, Public Safety Partner Coordination and Outreach, Customer and Community Outreach Regarding Operational Practices



#### **Situational Awareness**

### PacifiCorp

- Risk Modeling: Climate Change, Fuels, Modeling Processes, Calculation
- Investigation of Equipment Failures and Risk Events
- Segment, Circuit, and Zone of Protection Risk Quantification
- System Risk Quantification

Joint IOU: Phase 1

### Joint IOU: Phase 2

- Risk Model Calibration
- Foundational Risk Maps
- Cost Valuation

### **Operational Practices**

### PacifiCorp

- PSPS Restoration Practices
- Joint IOU: Phase 1
- Joint IOU: Phase 2



#### **System Resiliency**

### PacifiCorp

- Grant Update
- Communicating Fault Circuit Indicator Deployment
- Inspection and Correction Optimization
- Vegetation Management Optimization Joint IOU: Phase 1

Joint IOU: Phase 2



# Data Template Implementation



# Key Data Template Implementation Challenges

## Definitions

 Missing definitions, which could hinder comparisons and common understanding.

## **Data Availability**

- Data is available but is not combined in the ways required
- Data is not currently collected by PacifiCorp; proxy data is used where available.

## **Transition Period**

 Retroactive application of new categories and subcategories to work in progress

## **Implementation Costs**

Implementation cost range identified but want to ensure there is clarity on items like definitions and any format changes before completing detailed requirements to finalize costs.

Thank you

