Exh. ALB-4
Docket UE-19____
Witness: Allen L. Berreth

BEFORE THE WASHINGTON

UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION, Complainant, v. PACIFICORP dba PACIFIC POWER & LIGHT COMPANY Respondent.	Docket UE-19____

PACIFICORP

EXHIBIT OF ALLEN L. BERRETH

Pacific Power Wildfire Mitigation Presentation

December 2019

Pacific Power Wildfire Mitigation Plan

November 19, 2019





PACIFIC POWER

POWERING YOUR GREATNESS

Wildfire Mitigation: PacifiCorp

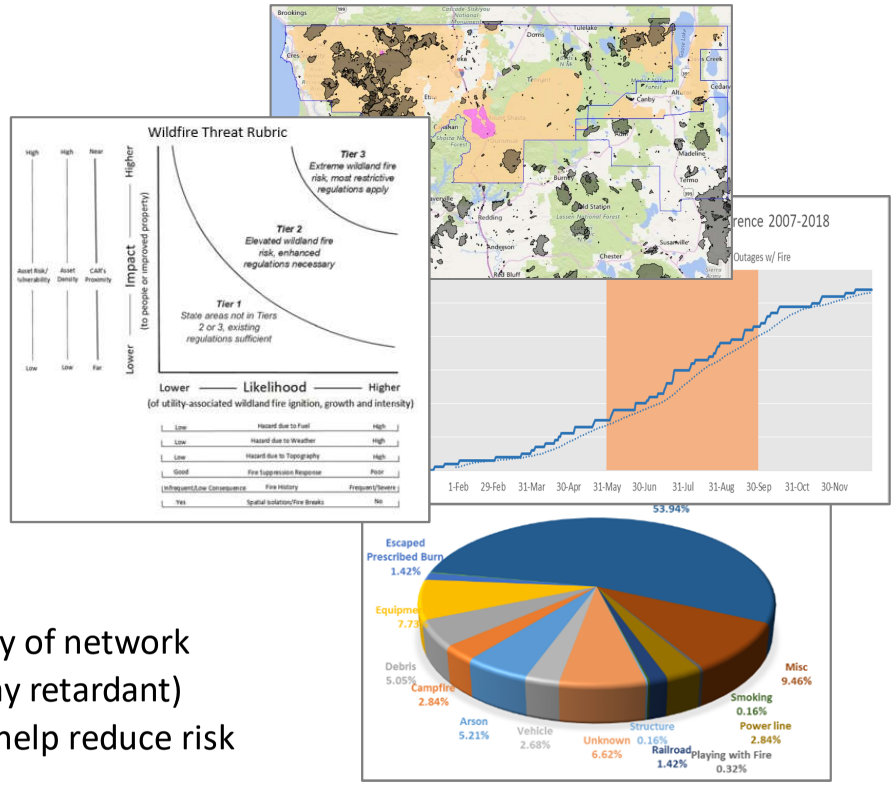
Utilizing the California Wildfire Mitigation Plan as a template;
PacifiCorp has developed a mitigation plan for the six state system as a whole.

Minimize Risk of Fault Source being the Utility

- Inspect / Correct Programs
- Vegetation Management
- Asset Hardening (insulated conductor)
- Construction Standards
- Fire threat Monitoring
- Proactive De-Energization

React When Faults Occur

- Modernizing infrastructure (Relays / Reclosers)
- Operational Response



Be Resilient to Non-utility Ignitions

- Monitor lightning events and react when in proximity of network
- Protect base of pole from grass fire (Pole wrap / spray retardant)
- Education of public on fire threat and how they can help reduce risk

Respond when Fires Put Utility Equipment at Risk

- Emergency Action Center process
- Monitor situation to be able to rapidly coordinate with authorities when fires are near utility facilities
- Reactively de-energize consistent with local fire authorities

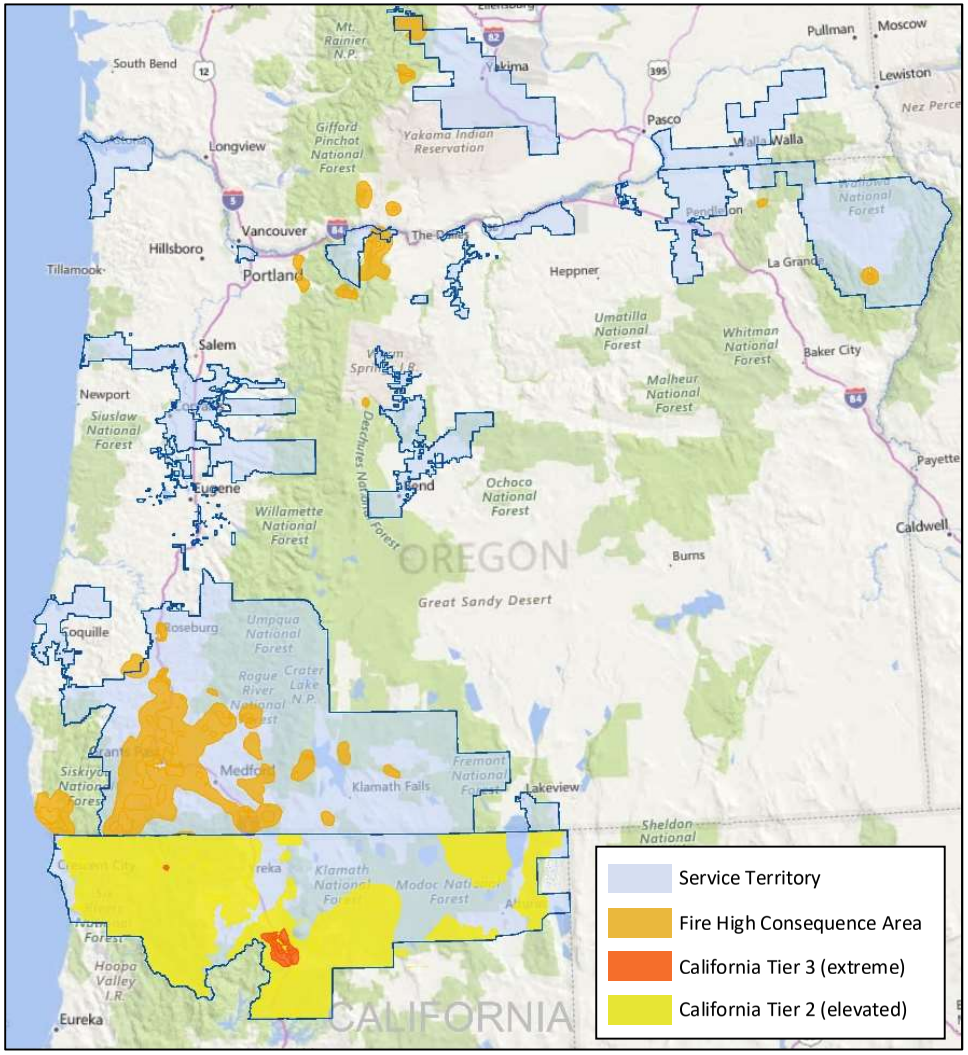
RISK-BASED APPROACH: Fire High Consequence Areas (FHCA)

- Utilizing the same modeling concepts used in California, areas were identified in Oregon and Washington where there is an elevated risk of utility-associated wildfires to ***occur*** and ***spread rapidly***, and where communities face an elevated risk of damage or harm from wildfires

- Per state requirement in California, Tier 3 and Tier 2 are shown regardless if facilities exist in the area; making the impact of Tier 2 seem larger than it is

- In Oregon and Washington, a similar methodology was used to identify FHCAs

- FHCAs are used to prioritize wildfire mitigation initiatives, such as, increased inspections, system hardening and proactive de-energization



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OPERATIONAL PRACTICES

- Non-reclosing strategies, field procedures (e.g., line patrols before re-energization; on-site fire prevention/response practices) and/or test energization policies are being evaluated

- Exploring alternative recloser settings (that can be set remotely) during periods of elevated fire-risk conditions for specifically identified distribution circuits within FHCAs

INSPECTIONS AND CORRECTIONS

- Modifications to inspection frequency and condition correction schedules to mitigate fire risk conditions are being considered in all three states

- Increased frequency of inspections to one year visual and five year detail in FHCAs and accelerating correction timeframes for identified fire risk conditions

SYSTEM HARDENING

- System hardening programs and design standards have been developed to improve wildfire resistance; reducing the susceptibility of assets to external factors such as contamination and incidental contact
- System hardening alternatives in FHCAs, including installation of insulated conductor, pole replacements, and relays in 2020

VEGETATION MANAGEMENT

- Wildfire mitigation plan includes conducting additional annual vegetation inspections, maintaining clearances at all times, pole clearing, and reducing the high risk tree inventory

SITUATIONAL AWARENESS

- Established process to monitor publically available weather information to alert System Operations of Red Flag Warning days
- Install weather monitoring equipment on candidate proactive de-energization circuits providing more localized weather information to inform triggering thresholds for de-energization

PROACTIVE DE-ENERGIZATION

- Under identified extreme wildfire weather conditions in the FHCA, proactive de-energization will be implemented on pre-identified circuits or sections of circuits

1. Utilizing automated weather systems monitoring, an alert is generated when thresholds are exceeded (wind, temperature, humidity, precipitation, and cumulative moisture deficiency), and a proactive de-energization event is triggered.
2. When an event is triggered, a Proactive De-energization Event Plan is prepared which contains the timing details, area, and forecasted duration of the event.
3. Notifications are then made to internal departments for next steps:
   - Customer Service for customer notification (48 hours notice is desired)
   - Emergency Management for local emergency services coordination and feedback
   - Regulation for notification to the director of the CPUC safety and enforcement division (SED).
   - Local Operations for required switching / line patrolling
   - Regional Business Manager for preparation of customer care centers and large customer contact
4. Conditions are continuously monitored and when thresholds are no longer exceeded, lines are patrolled and re-energized.