## Oregon Department of ENERGY

Energy Facility Siting Council Wildfire Prevention and Response

Rulemaking Workshop January 27, 2022





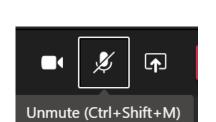
## Agenda

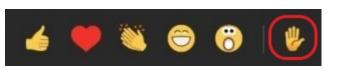
- Workshop Overview & Introductions
- Rulemaking Background & Policy Context
- Policy Discussion Topics
  - Regulatory Approach
  - Applicability
  - Risk Analysis
  - Preventative Actions and Programs
  - Other Standards and Requirements
- Wrap Up and Next Steps



## Workshop Overview

- To raise your hand in teams:
  - Click show reactions in the upper-right area of the screen
  - Then click raise your hand
- To mute/unmute yourself click the microphone icon at the bottom of the screen or ctrl+shift+M:
- This meeting is being recorded. Recordings and other materials will be available from the Council's Rulemaking Website







# Wildfire Policy In Oregon

- The Oregon Public Utility Commission (PUC) opened a rulemaking related to wildfire risk mitigation and planning in August 2020.
- SB 762 (2021) established new standards for electric utility Wildfire Protection Plans, statewide risk analysis, and wildfire mitigation efforts.
- The PUC adopted permanent rules for Wildfire Protection Plans in December 2021. Supplemental rulemaking is ongoing.
- Oregon's three investor-owned electric utilities submitted 2022 Wildfire Protection Plans to PUC in December.



# Need for Rulemaking

- Climate change is increasing the frequency and severity of wildfires in Oregon and across the Western United States.
- Several catastrophic fires, including the 2018 Camp Fire in California, were found to have been caused by electric infrastructure.
- Documented cases of wildfire at or caused by renewable energy generation facilities or associated transmission lines have raised concerns about fire safety.



Photo Credit: North Gilliam Fire Protection District. Source: https://katu.com/news/local/wind-turbine-sparks-fire-in-arlington



## Current EFSC Regulatory Approach

- To issue a site certificate the Council must find:
  - "\* \* \* the applicant has demonstrated the ability to design, construct and operate the proposed facility \* \* \* in a manner that protects public health and safety \* \* \*" OAR 345-022-0010(1)
  - "\* \* \* the construction and operation of the facility, taking into account mitigation, are not likely to result in significant adverse impact to the ability of public and private providers \* \* \* to provide \* \* fire protection \* \* \*" OAR 345-022-0110(1).



## Fire-related Assessment – ASCs/RFAs

#### Exhibit D – Organizational Expertise

- Description of 49 CFR 173.185 for safe transport of lithium-ion batteries (e.g. prevention of dangerous evolution of heat; prevention of short-circuits)
- Rarely any evaluation of fire related public health and safety risks from or to energy facility

### Exhibit K – Land Use

- Development/fire risk standards may be included in local zoning ordinances limited in facility component applicability
  - Josephine County Rural Land Development Code Article 76 Wildfire and Emergency Safety Standards
  - Wasco County Land Use Development Ordinance Chapter 10 Fire Safety Standards

### **Exhibit U - Public Services**

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- Construction Fire Risk: Risk and mitigation measures are typically included
- Operational Fire Risk: Rarely evaluated; typically focuses on project location and service provider territory/jurisdiction, rather than risk/mitigation

## Authority for Council Standards

- The Council is responsible for ensuring that state that the siting, construction and operation of energy facilities is consistent with protection of the public health and safety and the environment. ORS 469.310.
- The Council has the authority to adopt standards for the siting, construction, operation and retirement of facilities under ORS 469.470 and 469.501.



2020-21 Wildfire Perimeters Oregon Wildfire Risk Explorer: <u>https://oregonexplorer.info</u>



# Rulemaking Objectives

- Minimize the risk of a facility subject to the Council's jurisdiction causing a wildfire
- Ensure that sufficient programs and procedures are in place to ensure the protection of public health and safety in the event that a wildfire does occur at an energy facility site, regardless of the source of ignition.
- Maintain consistency with the wildfire mitigation rules adopted by the PUC to the extent possible.



## Policy Discussion Topics

- Regulatory Approach
- Applicability
- Risk Analysis
- Preventative Actions and Programs
- Other Issues



## Regulatory Approach

- ORS 757.963 requires public utilities to develop and operate in compliance with Wildfire Protection Plans.
- Mitigation must reflect "a reasonable balancing of mitigation costs with the resulting reduction of wildfire risk."
- For consistency, the Department has recommended that the Council follow a similar approach, but is interested in hearing if other options, in addition or in-lieu of planning requirements, should be considered.



## Regulatory Approach

- What approach should the Council take to prevent and mitigate wildfire risk in the siting of energy facilities?
- Is a facility-specific wildfire plan an appropriate and effective way to mitigate wildfire risk?
- Should a specific standard be used to evaluate plans (e.g. risk is minimized, risk is less than significant)?



# Applicability

- ORS 757.963 and the implementing PUC rules apply to electric utilities, including generating and transmission resources.
- The Council has jurisdiction over many types of energy facilities, generally based on size or capacity, including:
  - High-voltage transmission lines
  - Wind and solar power generation facilities
  - Natural gas power plants, pipelines and storage facilities
  - Fuel pipelines and production facilities



# Applicability Questions

- Should a Council rule apply to all newly proposed energy facilities in Oregon or just electric power generation facilities (and associated transmission lines)?
- Should other factors (i.e. geography, zoning, design) be considered?
- Are there facilities that should not be subject to a wildfire prevention and mitigation standard?
- Should special consideration be given to facilities that are subject to a PUC/COU approved wildfire protection plan?



## Criteria for Wildfire Protection Plans under ORS 757.963

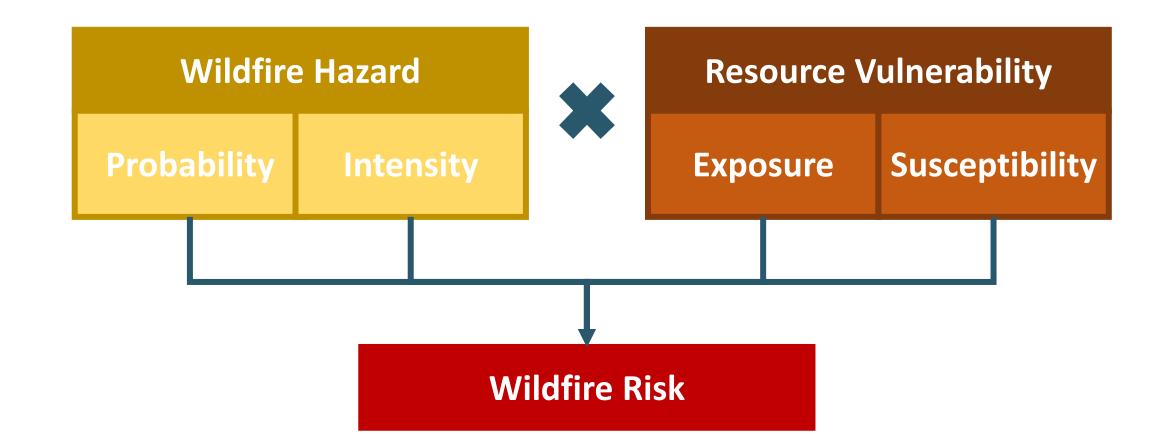
- Identification of areas of heightened risk of wildfire
- Means for mitigating wildfire
- Preventive actions and programs to minimize risk of facilities causing wildfire
- Protocols for deenergizing power lines and adjusting power system operations



- Vegetation management protocols
- Development, implementation and administration costs
- Community outreach and public awareness efforts



## What is Wildfire Risk?





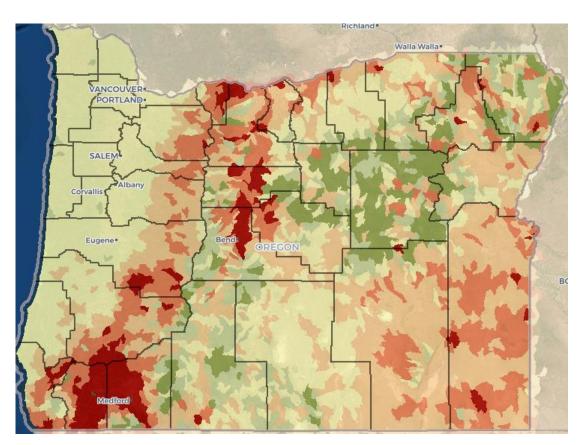
Adapted from: Gilbertson-Day, J. W., Stratton, R.D., Scott, J. H., Vogler, K. C., & Brough, A. (2018). Pacific northwest quantitative wildfire risk assessment: methods and results. *Pyrologix: Missoula, MT, USA*.

## Risk Analysis

- ORS 757.963 requires utilities to identify areas subject to a heightened risk of wildfire in service territory.
- Proposed PUC rules allow utilities to choose what models or sources of information to use, but require risk analysis to identify:
  - Baseline wildfire risk, including topography, vegetation, utility equipment in place, and climate.
  - Seasonal wildfire risk, including cumulative precipitation and fuel moisture content.
  - Risks to residential areas served by the Public Utility
- Risks to substation or powerline owned by the Public Utility

## **Risk Analysis**

- ORS 477.490 establishes the Oregon Wildfire Risk Explorer as the Oregon's official wildfire planning and risk classification mapping tool.
- The Wildfire Risk Explorer considers recreation opportunities, timber and agricultural resources, and wildlife, into the vulnerability analysis.



Watershed level wildfire risk summaries Oregon Wildfire Risk Explorer: <u>https://oregonexplorer.info</u>



## Risk Analysis Questions

- What criteria for an applicant's risk analysis should be included in a council rule or standard?
- Should a specific methodology or data source, such as the Oregon Wildfire Risk Explorer, be required?
- What is the appropriate analysis area for wildfire risk analysis? Should it extend beyond the site boundary?
- Should analysis focus on public health and safety, or should a broader set of resources be considered?
- How should potential impacts of climate change be considered?



## Preventative Actions and Programs

- Preventative actions and programs included in PUC rules and current Wildfire Protection Plans include:
  - Deenergization of Power Lines (i.e. Public Safety Power Shutoffs)
  - Enhanced inspections in high fire risk zones
  - Enhanced vegetation management in high fire risk zones
  - System hardening



## Preventative Actions and Programs

- What preventative actions and programs should be required under a Council rule or standard? How should they be evaluated?
- Should a Council Standard require specific de-energization protocols or operational requirements?
- Should a Council rule prescribe specific standards or requirements for visual inspections and vegetation management for a generating facility's associated transmission lines?
- Should specific safety devices or design features be required or recommended?



## Other Standards

- Should particular land use/development standards (e.g. defensible space requirement, access standards) be required?
- Should the Council adopt or enforce specific fire safety codes or standards for construction or operation of a facility?
- Are there special training needs for emergency responders or fire protection service providers associated with certain types of facilities or facility components?



## Next Steps

- Please provide written comments or suggestions to <u>EFSC.rulemaking@energy.oregon.gov</u> by March 1, 2022.
- Are additional workshops or engagement opportunities needed?
- Are there specific persons or communities likely to be affected by the proposed rules?



## Thank You

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