Agenda Item G: Wildfire Prevention and Response Rulemaking Project Attachment 1: Issues Analysis Document May 18, 2022

This document provides a summary of the Oregon Department of Energy's analysis of issues recommended to be addressed in the Energy Facility Siting Council's Wildfire Prevention and Response Rulemaking Project. The document and any associated draft rule language are for information only and are not notice of rulemaking action by the Energy Facility Siting Council. The analysis and recommendations within are subject to change based on input from the Energy Facility Siting Council, staff, and stakeholders.

Issue 1 – Applicability of New Standard

Issue: Should a new standard for wildfire prevention and risk mitigation apply to the review of all new and pending applications and requests for amendment, or just newly submitted applications and requests for amendment?

Background: By default, a new Council standard would likely only apply to decisions made after its effective date. This means that the new standard would apply to any Application for Site Certificate submitted on or after the date the new standard took effect, as well as any Applications under consideration by the Council on that date. Facilities approved before the new standard takes effect would not be affected unless there was an amendment that resulted in the application of the Standard, such as a request by the applicant to extend construction deadlines or a request to apply later-adopted laws.

The Council could further limit the applicability by specifying that the new standard will only be applied to the review of applications submitted on or after the effective date of the proposed rules. The Council has limited authority to apply a new Standard retroactively, and for this reason we have not included the application of the new standard to both new and existing facilities as an alternative. We do note however, that the Council may require a certificate holder to comply with laws or rules adopted after the date a site certificate or amended site certificate is issued upon a clear showing of a significant threat to the public health, safety, or the environment.

Alternatives:

1. Apply new standard to the review of all Applications for Site Certificate and Requests for Amendment, including Applications and Requests currently under review.

2. Specify that the new standard will only apply to the review of Applications for Site Certificate and Requests for Amendment that are determined to be complete on or after the effective date of the new standard.

Recommendation: Considering the public health and safety implications of the proposed rule, staff recommends that Council apply the new standard to the review of all Applications for Site Certificate and Requests for Amendment, including Applications and Requests currently under review, as described in Alternative 1.

Issue 2 – Scope of New Standard

Issue: Should a new standard for wildfire prevention and risk mitigation apply to all types of energy facilities or just specific types of energy facilities such as transmission lines or electric power generation facilities?

Background: SB 762 and the implementing PUC rules in OAR chapter 860, division 300, apply to electric utilities, and establish system-wide planning requirements. So far, the PUC requirements have focused on mitigating wildfire risk from utility transmission and distribution systems, and while the rules do appear to require utilities to analyze wildfire risk within the utility's right-of-way for both generation and transmission assets, the initial wildfire mitigation plans submitted by the investor-owned utilities appear to focus solely on transmission infrastructure.

While transmission infrastructure has been the most common ignition source for electric infrastructure caused wildfires in Oregon and California, there are also documented cases of ignition caused by electric power generation facilities, including wind and solar facilities, and the associated transmission lines that transmit electric power from those facilities to the grid.¹

Alternatives:

1. Apply new standard to review of all types of proposed facilities.

2. Apply wildfire protection standard to review of all proposed electric power generation facilities and related or supporting facilities.

3. Apply wildfire protection standard to only to proposed transmission lines, including interconnecting transmission lines associated with an energy facility.

Recommendation: Because all proposed facilities may carry some risk of causing or being affected by wildfire, the Department recommends that a new wildfire prevention and response standard apply to the review of all types of facilities. Options to reduce duplication of the PUC's regulatory requirements are discussed under Issue 8.

Issue 3 - Wildfire Risk Analysis

Issue: Should specific methods or data for wildfire risk analyses be required under new standard?

Background: SB 762 and the implementing PUC rules require a utility to map areas of heightened risk of wildfire within its service territory but allow the utility to determine appropriate methods and data sources. OAR 860-300-0002(1)(a) requires that an investor-owned utility's Wildfire Protection Plan contain:

- "(a) Identified areas that are subject to a heightened risk of wildfire, including determinations for such conclusions, and are:
 - (A) Within the service territory of the Public Utility, and
 - (B) Outside the service territory of the Public Utility but within the Public Utility's right-of-way for generation and transmission assets."

The PUC's supplemental Phase II rules establish more specific standards that public utilities must follow to identify High Fire Risk Zones within their service territories. The proposed PUC rule is not prescriptive in stating which models or sources of information a utility must use, but instead requires the utility identify sources of information and models used in the plan. Basic elements of the analysis include:

¹ For an example, see: <u>https://katu.com/news/local/wind-turbine-sparks-fire-in-arlington</u>

- Baseline wildfire risk, which include elements of wildfire risk that are expected to remain fixed for multiple years. Examples include topography, vegetation, utility equipment in place, and climate.
- Seasonal wildfire risk, which include elements of wildfire risk that are expected to remain fixed for multiple months but may be dynamic throughout the year. Examples include cumulative precipitation and fuel moisture content.
- Risks to residential areas served by the Public Utility
- Risks to substation or powerline owned by the Public Utility²

In preparing their Wildfire Protection Plans, the three investor-owned utilities used similar methodologies using historic climatology, fuels data and moisture estimates, and probabilistic ignition and spread modeling to identify areas with high probability of an uncontained fire event and a high consequence of damage to residences, critical infrastructure, and other structures.

The focus of the PUC rules, and the IOU Wildfire Protection plans appears to be to mitigate risks to people and property. We note that other wildfire risk mapping methodologies such as those used in the US Forest Service's Pacific Northwest Quantitative Wildfire Risk Assessment which informs the <u>Oregon Wildfire Risk</u> <u>Explorer</u>, also incorporate potential impacts to a broader set of values and resources, including recreation opportunities, timber and agricultural resources, and wildlife, into the analysis.³

A council standard could establish a specific methodology or set of assumptions that must be addressed in an energy facility wildfire prevention plan, or it could allow an applicant to identify a methodology that it believes is best suited for the proposed facility's characteristics and location.

Alternatives:

1. Require applicant to identify areas that are subject to a heightened risk of wildfire within the analysis area for a proposed facility, using its own methods.

2. Require applicant to identify areas that are subject to a heightened risk of wildfire within the analysis area for a proposed facility, using the Oregon Wildfire Risk Explorer.

3. Require applicant to identify areas that are subject to a heightened risk of wildfire within the analysis area for a proposed facility, using another methodology.

Recommendation: To maintain consistency with the PUC rules, and to allow an applicant some flexibility in determining what data and methods are appropriate, staff recommends the Council Require applicant to identify areas that are subject to a heightened risk of wildfire, or areas of high-wildfire consequence using its own methods, as described in Alternative 1.

Issue 4 – Study Area for Wildfire Risk

Issue: What is the appropriate study area for wildfire risk?

Background: When an applicant submits its Notice of Intent, it must include initial information about the proposed facility and site based on the study areas established under OAR 345-001-0010(59). Study areas

² OPUC Staff Report for January 18, 2022 Public Meeting, Item No. RM1, Docket AR 638,

³ Oregon Wildfire Risk Explorer is available at: <u>https://oregonexplorer.info/topics/wildfire-risk?ptopic=62</u>

include the area within the proposed site boundary and the area within the following distances from the site boundary:

- One-half mile for land use impacts and impacts to fish and wildlife habitat
- 5 miles for impacts to threatened and endangered plant and animal species and recreational opportunities
- 10 miles for impacts to scenic resources and to public services
- 20 miles for impacts to protected areas

The appropriate buffer for a wildfire risk analysis is dependent on a number of factors, including landscape conditions and the purpose of the analysis. For an analysis of whether a certain area is at risk of wildfire occurring, a buffer of 10-20 miles may be needed to account for the effect of distant fires reaching the area of interest. The required buffer may be even larger in fire-prone areas such as grassy plains with frequent highwinds.⁴ To determine the likelihood that a fire that starts within a particular area will spread uncontrollably, a smaller buffer encompassing the area and its immediate surroundings may be sufficient.

The buffers used in the three IOU Wildfire Protection Plans vary greatly. Idaho Power Company considered ignition locations within 1-kilometer (.62 miles) of its transmission lines in its wildfire risk analysis. Portland General Electric's risk analysis focused solely on areas within its service territory, but the plan includes heightened monitoring of areas within 1 mile of its assets and within 5 miles of PGE-owned parks. PacifiCorp provided a more expansive risk analysis which included the area within its service territory and within a 25-mile buffer of all PacifiCorp owned transmission lines.

We note that regardless of the study area size, the Department or Council can establish a larger analysis area based on the information provided in the Notice of Intent.

Alternatives:

- 1. Establish a 1/2 mile study area, consistent with study area for land use impacts
- 2. Establish a 10-mile study area, consistent with study area for public services
- 3. Establish other study area

Recommendation: Since the primary purpose of the information provided in the Notice of Intent is to help establish requirements for the Application, staff recommends a smaller study area may be acceptable, and as a result we recommend that the Council establish an initial study area of the area within and extending ½-mile from the site boundary, as described in Alternative 1. While this area should be sufficient to determine the baseline wildfire hazard and occurrence rate at a site, a larger analysis area may be needed to fully determine the likely consequences of a fire if the facility is proposed to be located in an area prone to fire spread. If the Council would like this information to be established earlier in the siting process, a 10-mile study area may be more appropriate.

⁴ Scott, Thompson, and Calkin. 2013. "A wildfire risk assessment framework for land and resource management." Gen. Tech. Rep. RMRS-GTR-315. U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station. Available at: <u>https://www.fs.fed.us/rm/pubs/rmrs_gtr315.pdf</u>

Issue 5 – Standard for Wildfire Prevention and Risk Mitigation

Issue: What criteria should be used to evaluate the wildfire risk associated with a proposed facility?

Background: SB 762 and the implementing rules require an electric utility to analyze wildfire risk within the utility service territory and then operate in compliance with a plan designed to mitigate these risks. The PUC rules contain a number of implied or explicit criteria by which the plans will be evaluated. For example, OAR 860-300-0020(1)(b) requires the plan to identify wildfire risk mitigation "that reflects a reasonable balancing of mitigation costs with the resulting reduction of wildfire risk" and subsection (1)(c) requires identification of preventative actions and programs "to minimize the risk of utility facilities causing wildfire."

The Council's standards also include specific criteria by with the application for site certificate will be evaluated. For example, most standards involving the protection of resources rely on a finding of "no significant impact" as the basis for a Council decision. Because wildfire generally involves varying levels of risk, rather than varying levels of resource impacts, a "no significant impact" standard likely isn't appropriate in this case.

While there are numerous standards the Council could use to address the wildfire risk associated with a proposed facility, we focus on three below. The Council could adopt a standard requiring the minimization of risk, which would generally require an applicant to demonstrate that it has taken, or will take, all reasonable measures to reduce the level of wildfire risk associated with the proposed facility by avoiding high-risk or consequence areas or utilizing appropriate safety devices and procedures. The Council could also adopt a standard requiring a finding that the proposed facility will not significantly increase wildfire risk at the site, which would generally require an applicant to demonstrate that its proposed mitigation, including any preventative actions or programs included in a Wildfire Mitigation Plan, will generally address any additional risks to public health and safety associated with the construction and operation of the energy facility. An alternative approach to relying on risk minimization or mitigation would be to prohibit the construction and operation of an energy facility in any high fire risk zone.

Alternatives:

1. Require a finding that the design, construction, and operation of the facility will minimize the risk of an energy facility-caused wildfire.

2. Require a finding that the facility can be designed, constructed, and operated in a manner that, taking into account mitigation, is not likely to result in a significant increase in wildfire risk at the site.

3. Require a finding that the proposed facility will not be located within a high fire risk zone

Recommendation: Staff recommends that Council require a finding that the facility can be designed, constructed, and operated in a manner that, taking into account mitigation, is not likely to result in a significant increase in wildfire risk at the site, as described in Alternative 2.

Issue 6 – Wildfire Mitigation Planning Requirement

Issue: Should a Council wildfire standard require some, or all, energy facilities to operate in compliance with a wildfire mitigation plan?

Background: SB 762 and the PUC rules require all investor-owned electric utilities to develop and comply with a wildfire protection plan that is reviewed and approved by the PUC. Consumer-owned utilities are also required to develop and comply with wildfire protection plans, but these plans are subject to review and approval by the governing body of the utility.

A Council standard could take a similar approach and require all energy facilities to operate in compliance with a wildfire mitigation plan. This would provide for consistent decision making, and would ensure that wildfire is appropriately monitored and mitigated at all sites.

As an alternative, the Council could require all applicants to characterize the wildfire risk associated with the proposed facility, and then only require the submittal of a plan if there are high-wildfire risk or consequence areas located within or near to the proposed site. This would reduce the compliance burden for facilities located in low-risk zones, including industrial zones.

Alternatives:

1. Require all Energy Facilities to operate in compliance with a Wildfire Mitigation Plan.

2. Require energy facilities located in or near areas of heightened wildfire risk or consequence to operate in compliance with a Wildfire Mitigation Plan.

Recommendation: Because not all facilities may be associated with high levels of wildfire risk, staff recommends the Council only require energy facilities located in or near areas of heightened wildfire risk or consequence to operate in compliance with a Wildfire Mitigation Plan, as described in Alternative 2.

Issue 7 – Wildfire Mitigation Planning Criteria

Issue: If the Council requires applicants to submit a wildfire mitigation plan, what should the minimum criteria for acceptance be?

Background: SB 762 and the implementing PUC rules in OAR chapter 860, division 300, establish criteria for what must be included in Wildfire Protection Plans prepared by investor-owned electric utilities. In general, these plans must, at a minimum:

- Identify areas of heightened risk of wildfire within the utility's service territory or near the utility's generation or transmission assets.
- Identify a means for mitigating wildfire risk.
- Identify preventive actions and programs that the utility will carry out to minimize the risk of utility facilities causing a wildfire.
- Identify a protocol for Public Safety Power Shutoffs.
- Describe inspection procedures for areas of heightened wildfire risk.
- Describe the procedures, standards and time frames for vegetation management in areas of heightened wildfire risk.
- Identify the development, implementation and administration costs for the plan.
- Identify the community outreach and public awareness efforts that the public utility will use before, during and after a wildfire season.

While the Council is not bound to follow the framework established by SB 762 or the PUC rules, it does seek to maintain consistency with the PUC's wildfire mitigation rules to the extent possible to avoid the creation of

conflicting or inconsistent regulatory requirements. However, because the PUC rules establish criteria for system-wide plans, rather than plans for specific facilities, not all of the criteria included in the PUC's rules may be appropriate for a Council Wildfire Prevention Standard. Aside from jurisdictional transmission lines, which are already regulated by the PUC, Council jurisdictional energy facilities are mostly generating facilities which provide power to the bulk transmission grid rather than residential customers or other end-users of electricity, the provisions related to Public Safety Power Shutoffs and community engagement may not be necessary for these facilities. In addition, because cost recovery is not part of the EFSC review process generally, cost information is likely irrelevant to the Council's decision.

Alternatives:

1. Adapt PUC Wildfire Protection Plan requirements, excluding requirements related to Public Safety Power Shutoffs, community engagement, and cost development

2. Adopt other Wildfire Mitigation Plan requirements or criteria

Recommendation: Adapt PUC Wildfire Protection Plan requirements, excluding requirements related to Public Safety Power Shutoffs, community engagement, and cost development, as described in Alternative 1.

Issue 8 – Exception from Standard

Issue: Should there be an exception for facilities that are subject to a PUC or Consumer-Owned Utility Approved Wildfire Prevention Plan?

Background: SB 762 and the PUC rules require all investor-owned electric utilities to develop and comply with a wildfire protection plan that is reviewed and approved by the PUC. Consumer-owned utilities are also required to develop and comply with wildfire protection plans, but these plans are subject to review and approval by the governing body of the utility. Because the plans are system-wide, they often lack facility specific information but still provide general guidance on the programs and procedures that will be used to mitigate wildfire risk, including but not limited to, inspections, vegetation management, and Public Safety Power Shutoffs.

While the Council has the authority to establish separate standards and requirements for jurisdictional energy facilities, it could rely on the PUC rules to address wildfire risk at energy facilities that are owned and operated by an electric utility and are subject to a PUC or COU approved Wildfire Protection Plan. As noted elsewhere in this document, this would likely include any utility-owned transmission line but may not necessarily include all utility owned-generating assets or interconnections lines. Even if the Council decided not to provide a specific exception in rule, it is likely that at least some certificate holders could rely upon the PUC or COU approved plan to meet some of all requirements of a Council wildfire Standard.

Alternatives:

1. Do not provide an exception for facilities subject to a PUC or COU approved Wildfire Protection Plan

2. Provide an exception for facilities subject to a PUC or COU approved Wildfire Protection Plan

Recommendation: To reduce potentially duplicative processes or requirements, staff recommends Council provide an exception for facilities subject to a PUC or COU approved Wildfire Protection Plan, as described in Alternative 2.