



Per ORS 756.040, the Commission has authority to supervise and regulate every public utility in Oregon, and to do all things necessary and convenient in the exercise of such power and jurisdiction.

Senate Bill (SB) 762<sup>1</sup> (2021), incorporated as ORS 757.960 through 757.969, established standards for electric utility's Wildfire Mitigation Plans and required the Commission to promulgate rules related to the requirements of the Plans. Pursuant to ORS 757.963 the Commission may "approve with conditions" a public utility's Wildfire Mitigation Plan or update.

Division 300 of the OARs articulates the minimum requirements for the Plan filings as well as the process for Commission approval of the plans.

The approved PGE's 2022 WMP in Order 22-132 and directed the utility to engage with Staff and stakeholders through a workshop process prior to filing its 2023 Plan.

## Analysis

### *Background*

On December 21, 2022, PGE filed its risk-based Wildfire Mitigation Plan (WMP or Plan) with the Commission. Under SB 762 (2021) and OAR 860-300-0020, public utilities in the State of Oregon must adopt and operate in compliance with an annually updated WMP that is filed with the Commission. Staff and Bureau Veritas North America, Inc. (BVNA), an Independent Evaluator (IE), have evaluated the 2023 Plan. BVNA was selected to serve as an Expert Witness and to provide written testimony to assist in Staff's overall analysis and review of the Plan for rule compliance, and to make recommendations about Plan approval that may include conditions (i.e. future actions and/or additional requirements/updates for inclusion in upcoming year's Plan).<sup>2</sup>

Staff's analysis, detailed below, considers the Company's compliance with the Wildfire Mitigation Plan minimum requirements set forth in Division 300. The comments, recommended actions, and recommended additional requirements for inclusion in the Company's 2024 Plan, reflect Staff's review of the Company's WMP, review of the IE's Report, review of Stakeholder Comments, and ongoing participation in WMP public workshops and Stakeholder engagement.<sup>3</sup> In addition to written stakeholder comments, Staff and the IE consulted with emergency managers in some local jurisdictions to gain

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<sup>1</sup> SB 762 (2021), <https://olis.oregonlegislature.gov/liz/2021R1/Measures/Overview/SB762>.

<sup>2</sup> UM 2208, *Independent Evaluator's Report on Wildfire Mitigation Plan Compliance* (IE Report), May 23, 2023, <https://edocs.puc.state.or.us/efdocs/HAH/um2208hah91047.pdf>.

<sup>3</sup> The IE's Report and stakeholder comments can be found in Docket No. UM 2208.

insight into perceptions by the local community of the effectiveness of the utility's community outreach efforts.

BVNA developed specific assessment criteria for evaluation of the utility WMPs in 2022 and used the same criteria for evaluation of the 2023 Plans.<sup>4</sup> While Staff finds these criteria generally consistent with Division 300 requirements, the criteria were, in many cases, more rigorous or detailed than the requirements in OAR. Compliance with these criteria did not alter Staff's determination of compliance with the 2023 Plan requirements, but rather provide insight for the utilities into how they might create a more thorough and robust Plan. Additionally, the IE used evaluation rankings of "Met," "Substantially Met," "Partially Met," and "Not Met." Staff did not adopt this ranking system. Staff's analysis resulted in a conclusion that the utility either met the requirement or did not meet the requirements. Staff does agree with many of the recommendations provided by the IE and those are captured in Staff's memo. In most cases, even when Staff determined the utility met a specific requirement, Staff provided recommendations that will enhance the Company's future Plans and provide additional evidence that the Company's Plan is risk based.

### *Process*

Staff's review of 2023 plans differed significantly from the review of 2022 WMPs. This difference results from a maturing of the WMP process. 2022 WMP plan review only considered compliance with the minimum criteria articulated in SB 762 and adopted in in AR 648.<sup>5</sup> For 2023, Staff reviewed compliance with Division 300 rules which encapsulate rules adopted in both AR 648 and AR 638.<sup>6</sup> Moreover, the WMP process establish plans for years long decisions on wildfire mitigation efforts, for which the companies are seeking rapid cost recovery. Recognizing this, the 2023 WMP review process included detailed evaluation of utility planning processes and evaluation metrics used to create the WMPs.

Staff kicked off the 2023 WMP review process with a public workshop on March 14. New this year were a series of workshops or "deep dives" that allowed Staff the chance to probe deeper in seven different areas of the WMPs: Risk Analysis and Risk Drivers, including Asset Health; Risk Mitigation and Risk Spend Efficiency or other Valuation Methods; Inspection & Correction; Vegetation Management; System Hardening, including Technology Innovations; Situational Awareness & Operational Practices; and

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<sup>4</sup> These criteria were first presented to stakeholders in a workshop on January 31, 2022, prior to review of the 2022 WMPs. See <https://edocs.puc.state.or.us/efdocs/HAH/um2208hah113858.pdf>.

<sup>5</sup> Order 21-440, Docket No. AR 648, <https://apps.puc.state.or.us/edockets/orders.asp?OrderNumber=21-440>.

<sup>6</sup> Order 22-494, Docket No. AR 638, <https://apps.puc.state.or.us/edockets/orders.asp?OrderNumber=22-494>.

Community Engagement & Public Safety Protocols. Following each deep dive workshop Staff prepared, and the utilities responded, subject-specific data requests about the WMPs.

Staff acknowledges that the data request process was substantial. Notably this is the first year Staff has had the opportunity to deeply review and understand utility planning processes and evaluation metrics in the context of wildfire planning. Staff hopes that this background knowledge will help streamline the process in future years. Further, many of Staff's requests focused on providing clear and factual information regarding the risk mitigation effectiveness and costs of actions proposed in the WMP. This information is necessary to facilitate understanding of the Company's cost benefit analysis, required by OAR 860-0300-0020(1)(b), and to allow for data driven decisions to be made in the cost recovery process. Staff hopes that this information will form more of the primary content of WMPs in the future.

Finally, Staff provided stakeholders and the utilities an opportunity to provide public comments on the WMPs. At the utilities' request, Staff extended the comment period to May 31, 2023, to allow for comments on the IE report.

#### Summary of Incorporation of 2022 Plan Recommendations

In evaluating 2023 plan's evolution, Staff reviewed the utility's integration of the recommendations made during the 2022 plan review. In certain cases, the 2022 recommendations were explicitly detailed, which allowed integration in the 2023 Plans to be directly evaluated. In other cases, the recommendations may have been minimally incorporated. These recommendations and their inclusion are contained in Attachment A. All investor owned utilities (IOUs) made some modifications to their WMPs in response to IE and Staff recommendations, however they consistently fail to provide the underlying details which may have been part of the input to make changes, and as a result, Staff is unable to evaluate the objective measures which demonstrate growth of the utilities in the maturity of their WMPs; rather than words Staff and stakeholders need to have visibility into the evidence of their evolving maturity, and Staff would welcome the opportunity to participate in joint IOU development work.

#### **Stakeholder Comments Related to Overall Plan:**

Staff appreciates the time, effort, and insight provided in Stakeholder comments. Recommendations submitted in comments were considered in Staff's overall review, analysis, and recommendations for PGE's WMP efforts for Commission consideration.

Staff received only one set of comments in UM 2208, from PGE.<sup>7</sup> The Company's comments focused on the IE Report, specifically criteria used to evaluate compliance, and provided suggestions for improving the WMP review process in the future. Staff wants to make clear that the IE's recommendations and conclusions only provided guidance to Staff. The individuals with Bureau Veritas conducting the evaluation have extensive experience evaluating plans in other states, and their input has already helped improve WMPs in Oregon. Staff hopes to have future conversations with the electric utilities on the role of the IE Report in the WMP as well as the WMP review process.

*Plan Compliance Review and Recommendations by Section*  
**OAR 860-300-0020 (1)(a)(A) & (B):**

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.*

*Staff Analysis*

Portland General Electric met this requirement by describing the approach it used to conduct its analyses identifying High Fire Risk Zones (HFRZs) using quantitative risk assessment tools and techniques. Portland General Electric utilizes industry standards and processes to conduct its analyses and recognizes that this approach needs to evolve over time. Beginning in 2019, PGE began a multi-phase wildfire risk assessment and modeling process. Throughout its WMP, PGE describes several ways to tackle the risk of wildfire with an eye towards the reality that its approach will evolve in response to changes in conditions and may further adjust in response to rules or recommendations issued by the PUC. In the 2023 WMP, PGE identifies ten distinct HFRZs, which could be subject to Public Safety Power Shutoff (PSPS). Although these ten zones are substantially the same as the 2022 Plan, PGE refines the contours of the HFRZ's in its 2023 Plan. Staff recommends PGE develop a method for detailing changes recommended by local partners in establishing their HFRZs. Staff further recommends that PGE provide explicit details of assets within and outside the HFRZ. Staff believes this should be constructed using a common reporting structure across the IOUs.<sup>8</sup>

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<sup>7</sup> UM 2208, *PGE's May 31 Comments*, <https://edocs.puc.state.or.us/efdocs/HAC/um2208hac16053.pdf>.

<sup>8</sup> Common reporting structure for assets and programs within Oregon and across the company (for MSPs) relating to equipment and risk zones identified (T&D, poles, etc.). Staff is open to reviewing a joint

Additionally, PGE determines the locations in its service territory where a potential wildfire ignition would be most significant and estimates utility ignition risk from its assets. Portland General Electric calculates baseline equipment risk in terms of ignition probability, given its type, age, condition, and location. Probability values vary with age and condition, generally increasing as equipment ages. Greater analysis should be conducted of specific equipment ignition risks supported by data including that related to historic root cause analysis, which represents a modification from the subjectively identified failure values. While PGE defines three tiers of wildfire risk it demonstrates only two levels in its plan and doesn't indicate in which Tier its HFRZ is considered. Staff recommends the joint IOUs explore calibration of wildfire risk modeling methods to ensure that when and where overlaps occur, they are consistent, or explicable inconsistent, in their risk designation. Such designation and coordination across utilities may lend greater clarity for stakeholders and Staff to understand relative risks.

The IE provides its recommendations on ORS 860-0300-0020(1)(a)(A) and (B) in Subject Area 1 of the IE report.<sup>9</sup> Staff agrees with the IE's recommendation regarding the need to integrate climate change models as the Company continues to evaluate its wildfire risk areas. The IE also recommends that PGE continue to receive input from emergency management partners regarding updating risk mapping, but also explore additional organizations with wildfire experience that may benefit in additional enhancements to the WMP.

#### Staff Recommendations for PGE's 2024 WMP:

- 1) Detail recommendations from local partners in establishing HFRZs.
- 2) Provide explicit details of assets within and outside the HFRZ.
- 3) Joint IOUs explore calibration of wildfire risk modeling methods to ensure that when and where overlaps occur, they are consistent, or explicable inconsistent, in their risk designation. Such designation and coordination across utilities may lend greater clarity for stakeholders and Staff to understand relative risks.
- 4) Provide details for incorporation of climate change modeling in establishing the HFRZ.
- 5) Provide historic root cause analysis supporting equipment ignition risk determinations.

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IOU proposal incorporating risk zones and equipment identified or leading a process to establish such a common reporting structure.

<sup>9</sup> IE Report, p 9.

**OAR 860-300-0020 (1)(b):**

*Identified means of mitigating wildfire risk that reflects a reasonable balancing of mitigation costs with the resulting reduction of wildfire risk.*

**Staff Analysis**

Portland General Electric met this requirement by describing the main activities it utilizes to reduce wildfire risk, how they reduce risk, and how they balance the costs of the identified activities versus the effectiveness of reducing wildfire risk. In its WMP, PGE identifies various activities and protocols it utilizes to reduce fire risk. These protocols include situational awareness; enhanced monitoring and communication; training and preparedness; and event response and management.

Portland General Electric indicates that it has created an ignition management-tracking database and process, the information from which allows PGE to base the system hardening investments on the risk drivers that deliver optimized risk/spend efficiencies. It anticipates that over time, the ignition probability values database can be refined to create more accurate risk projections. Staff appreciates this vision; however, PGE did not demonstrate this database nor its use in evaluating ignition risks or optimizing investments. Staff recommends that PGE provide a demonstration of its ignition management tracking database and processes, and how it accounts for information on wildfires that occurred in prior years.

Portland General Electric demonstrates its wildfire investment strategy ranking process using placeholder values with preference to the highest value wildfire risk mitigation projects, per dollar of investment. However, it did not provide actual data to demonstrate why it selected the handful of reconductoring and undergrounding projects it plans over the next years. Staff is concerned that PGE has indicated that it plans to perform mitigation efforts, which could include reconductoring, and potentially subsequently underground that same equipment. Such actions might result in certain investments having a shortened useful life, potentially being deemed imprudent or unduly cost-burdensome.

Staff recommends PGE and the other IOUs work to develop a common framework for risk spend valuation that is extensible into other risk areas, including resilience,<sup>10</sup> DSP,<sup>11</sup> CEP,<sup>12</sup> and core investment activities. This methodology should explicitly calculate the risk buy-down that occurs with the investment and should be comparable

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<sup>10</sup> See UM 2225 for exploration of resilience, including PNNL report, <https://apps.puc.state.or.us/edockets/edocs.asp?FileType=HAH&FileName=um2225hah113046.pdf&DocKetID=23160&numSequence=78>.

<sup>11</sup> See generally UM 2005.

<sup>12</sup> See generally UM 2225.

against other risk mitigation measures. To the extent that the valuation includes non-monetary utility benefits, or non-utility monetary or non-monetary benefits, such as community benefit indicators (CBI) that were explored in UM 2225 they should be incorporated into the methodology. An objective methodology is critical both for OPUC Staff and the utilities. Given current methods often rely on “talking to experts,” there is a lot of room for doubt when evaluating spending decisions. While Staff recognizes the importance of experts and their role in establishing a course of action, it limits the ability of Staff and other stakeholders to objectively evaluate spending decisions and increases the risk of disallowance of recovery after the work has been completed since clear evidence to support its prudence may be unavailable. Staff recommends PGE and other IOUs utilize the common framework to detail the projects and their priorities with their associated risk reduction values. To the extent that adjustments to priorities occur, the plan should be updated as these experiences occur.

Staff agrees with the IE's recommendations for OAR 860-300-0020 (1)(b), Subject Area 2, that PGE should include the details of the analysis comparing risk reduction activities and their costs as well as providing a more detailed description for how they will be measured in their effectiveness.<sup>13</sup> Finally, Staff agrees with the IE that in future WMPs PGE should provide information about wildfires that occurred within their service area in prior years.

Staff Recommendations for PGE's 2024 WMP:

- 6) Demonstrate the Company's ignition management tracking database and processes;
- 7) Provide valuation for undergrounding and reconductoring projects identified in the Company's 2023 WMP, in addition to any subsequently identified hardening projects;
- 8) Detail progress made towards a uniform risk-spend valuation methodology;

**OAR 860-300-0020 (1)(c):**

*Identified preventative actions and programs that the utility will carry out to minimize the risk of the utility's facilities causing wildfire.*

**Staff Analysis**

Portland General Electric met this requirement by identifying preventative programs that the utility will carry out to minimize the risk of the utility's facilities causing wildfire. The preventative programs implemented by PGE enables the Company to collect

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<sup>13</sup> IE Report, p.10.



information that helps determine high level risk and set its priorities to minimize the wildfire risk. These activities include inspection programs, vegetation management, system hardening, situational and conditional awareness, system operations, field operations, and PSPS implementation. Portland General Electric describes how each action minimizes the risk of utility facilities causing a wildfire. Portland General Electric describes each action and how it would be executed, however there is no detail to allow Staff or stakeholders to understand both short term and long-term commitments to these actions. Staff suggests that longer time horizons be considered to support a longer planning horizon for utility investment decisions; while the plan alludes to developing a four-year roadmap there was no demonstration of this level of detail in the plan. Thus, no real multi-year plan exists in PGE's WMP. Staff believes all utilities should be planning capital investments multiple years out; concurrently they should be cognizant of operations and maintenance costs of their proposed mitigation measures. Utilities should not be too reactive to short-term weather/precipitation patterns that would result in repeated changes to long-term hardening priorities and should generally "stay the course" given their current climate projections. Staff is supportive of deviations from a plan made two to three years prior based on updated information and supports seeing periodic filings of the current best information, best course given that information, and assumptions made to come to that best course are useful and should be presented to the Commission. With a multi-year plan, the Commission has more time to evaluate a given project. The more upfront vetting that can be done, and the higher the likelihood is that the project will be found prudent. Staff recommends the Commission Require PGE to provide a 2023–2026 program-level plan in advance of any requested cost recovery filing, consistent with the manner used by Idaho Power and PacifiCorp in their Tables 7 (Idaho Power O&M), 28 (PacifiCorp Capital), and 29 (PacifiCorp O&M), respectively.

Staff agrees with the IE's recommendation, see Subject Area 3, that PGE should identify the preventative actions that were taken in prior year plans compared to the original plan and the risk reduction produced for that work, both planned and actual.<sup>14</sup> Further, Staff recommends greater short- and long-term plans be contained in PGE's WMP.

#### Staff Recommendations for PGE's 2024 Plan:

- 9) Provide planned and actual work by program for the prior and future years, as well as associated estimations of risk reduction for the work completed.
- 10) Provide planned and actual work by program for the prior and future years, as well as associated estimations of risk reduction for the work completed.

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<sup>14</sup> IE Report, p.11.

- 11) Provide a multiyear plan (at least four years out) with project-level details for any capital investments and the estimated risk reduction for the selected mitigation method.

**OAR 860-300-0020 (1)(d):**

*Discussion of the outreach efforts to regional, state, and local entities, including municipalities, regarding a protocol for the de-energization of power lines and adjusting power system operations to mitigate wildfires, promote the safety of the public and first responders, and preserve health and communication infrastructure.*

**Staff Analysis**

Portland General Electric met this requirement in its 2023 WMP by describing its overarching wildfire outreach and public awareness strategy that covers its Wildfire Mitigation Plan Engagement Strategy, Wildfire Information and Awareness Strategy, Public Safety Partner Coordination Strategy, and Public Safety Power Shutoff Notification Strategy. The Company also discusses goals and objectives of PGE's Wildfire Outreach, Public Awareness efforts, and Public Safety Partners engagement.<sup>15</sup> Staff recommends that PGE create plans for community and Public Safety Partner engagement, including exercises and tabletops, such that advance notice and coordination and support from these organizations occurs and should include both PGE wildfire and emergency response teams.

Staff agrees with the IE, Subject Area 4, recommendations that PGE should include an updated summary of Public Safety Partner feedback and learnings from their interactions with these stakeholders.<sup>16</sup> Staff also believes further transparency in these conversations and actions taken as a result of them would be beneficial content to share as part of their Plan evolution. In addition, Staff believes that better coordination with Public Safety Partners, including ESF-12, would benefit PGE and its customers as they continue to learn how best to become more resilient to wildfire impacts.

**Staff Recommendations for PGE's 2024 Plan:**

- 12) Include as an appendix to its WMP a registry of Public Safety Partner events, with feedback and actions taken as a result of the feedback.

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<sup>15</sup> The Company used this outreach to develop/update a Wildfire Information and Awareness Strategy that is informed by local needs and best practices. PGE describes compliance with 1(d) beginning largely on page 64 through page 75 in Section 13. but is also touched on in other sections in the Plan.

<sup>16</sup> IE report, p.12.

**OAR 860-300-0020 (1)(e):**

*Identified protocol for the de-energization of power lines and adjusting of power system operation to mitigate wildfires, promote the safety of the public and first responders, and preserve health and communication infrastructure.*

**Staff Analysis**

Portland General Electric met the requirement to describe its PSPS protocol by providing an overview of the stages of a PSPS event and the actions taken within each step. This includes what happens during a PSPS event, the levels during a PSPS event, from a PSPS Watch through PSPS Demobilization in its Plan.<sup>17</sup> Portland General Electric also met the requirement to identify adjustments to system operation by describing adjustments it will implement to its power system operations to prevent its equipment from potentially igniting a wildfire and describing operations in non-wildfire threat conditions. Specifically, PGE states that once the fire season has been declared, operational changes are implemented to reduce the risk of ignitions caused by its infrastructure and activities, primarily related to adjusting its protection schemes. An example of these system changes is manually blocking non-remote controlled non-Supervisory Control and Data Acquisition (SCADA) distribution reclosers in the HFRZs from automatically reclosing circuits following a momentary outage. Portland General Electric crews will patrol the downstream circuit before beginning to restore the service to reduce the risk of utility-caused ignitions during fire season. Portland General Electric further states that distribution feeders servicing its HFRZs, which may be equipped with SCADA or outfitted with certain relays, could be set to operate in a specialized wildfire protective mode.

Staff shares the IE's concern that more information about the analysis used to make decisions for modifying operations during the fire season is needed. Staff recommends that PGE continue to analyze and provide the results of analysis regarding operational modifications based upon "fire season" or other relevant elevated wildfire periods and make the information regarding these modifications more clearly known by Public Safety Partners and customers.

Staff agrees with the IE, Subject Area 5, that additional information on roles of personnel involved in implementing the Company's WMP should be contained within the Plan.<sup>18</sup> Staff further concurs with the need for ongoing analysis of areas at risk for PSPS, and additional articulation of the distinction between immediate safety

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<sup>17</sup> In its 2023 WMP, PGE describes its PSPS protocol in Sections 9, 9.1, 9.2 and 9.3 on pages 43-51 but the subject is also touched on in other sections of the plan.

<sup>18</sup> IE report, p 14.

de-energization and a PSPS. Additionally, PGE should explore practices to identify when or if providing a Community Resource Center (CRC) is appropriate. Finally, Staff believes that IOUs and other electric operators should align on language to ensure that Public Safety Partners and the public generally understand the various operational modes which could impact their utility service reliability. These modes include utility practices such as “sensitive settings” and the likelihood of more prolonged sustained outages during extreme weather, in addition to immediate de-energization (in areas not explicitly identified as PSPS areas) as well as those within designated PSPS areas and receiving notification consistent with OARs.

Staff Recommendations for PGE’s 2024 Plan:

- 13) Provide findings of analyses on operational modifications based upon “fire season” or other relevant elevated wildfire periods.
- 14) Staff recommends that PGE outline roles and responsibilities that are in place during PSPS activations; PGE should communicate this structure to Public Safety Partners, at a minimum during tabletops or exercises.
- 15) Staff recommends that PGE continue to develop its experience in placing and operating CRCs when activated.
- 16) Joint IOUs establish language for Public Safety Partners and communities regarding modified operational practices, including “sensitive settings”, PSPS and other utility operational modes to mitigate wildfire risk.

***OAR 860-300-0020 (1)(f):***

*Identification of the community outreach and public awareness efforts that the utility will use before, during, and after a wildfire season.*

***Staff Analysis:***

Portland General Electric met this requirement by listing and describing its community outreach and public awareness efforts.<sup>19</sup> Portland General Electric provides additional detail about how the previous year’s Public Safety Partner input influenced the WMP through After-Action Reports (from exercises and events), surveys or other feedback mechanisms, and Company lessons learned influence the WMP, including lessons learned from the September 2022 PSPS event. Portland General Electric discusses the workshops/public outreach throughout the year to solicit feedback/input from public safety partners, community-based organizations, local community stakeholders, and customers, as well as how these efforts shape the WMP.

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<sup>19</sup> PGE describes its outreach in Section 13.4 on pages 66 through, but also discusses this topic in other sections in the Plan.

It is important to note that these workshops were not well attended, which PGE's metrics would suggest that there was a lack of interest by the public. However, this may be an incorrect conclusion, depending upon the level of coordination and involvement with partners and communication and notification of these workshops to achieve proper attendance. Further, broadening the topic to wildfire safety generally, and inviting other Public Safety Partners could have yielded better outcomes for the customers and communities in achieving resilience to wildfire risks. Staff recommends PGE communicate and consider expanding its communication with local and state Public Safety Partners to apprise them of their wildfire community outreach methods (before, during and after wildfire season) consistent with their processes and experiences and where overlap of Public Safety Partners exist, coordinate outreach among utilities.

Staff agrees with the IE recommendation, Subject Area 6, to detail metrics and use them to evaluate the effectiveness of outreach efforts.<sup>20</sup> Further Staff recommends that the IOUs consider coordinating community outreach (where overlap of Public Safety Partners may exist) and developing consistent methods for evaluating the effectiveness of their public outreach and their Public Safety Partner outreach and establish methods. Further, when results indicate modifications to outreach, these should be explicitly detailed in future WMPs.

Staff Recommendations for PGE's 2024 Plan:

- 17) Coordinate community outreach with partners, including ESF-12, and consider broadening the workshop to include relevant community safety topics, inviting Public Safety Partners regarding other topics appropriate to the community.
- 18) Detail methods for determining the effectiveness of customer outreach and describe any modifications made to outreach strategies as a result.

**OAR 860-300-0020 (1)(g):**

*Description of procedures, standards, and time frames that the Public Utility will use to inspect utility infrastructure in areas the Public Utility identified as heightened risk of wildfire.*

**Staff Analysis**

Portland General Electric met this requirement by describing its inspection activities and procedures in HFRZs. Portland General Electric employs a two-person crew to inspect and immediately repair most corrections with a single visit to the pole. The Company indicates that when not able to immediately correct, PGE adheres to timing in

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<sup>20</sup> IE Report, p. 16.

OAR 860-024-018. Portland General Electric treats ignition prevention inspections as a standalone activity, separate and distinct from its Facility Inspection & Treatment to National Electrical Safety Code (FITNES) program, which complies with Oregon Administrative Rules<sup>21</sup> regarding utility inspection and correction requirements. While PGE indicates that ignition prevention inspections fulfill the requirement for patrol inspections required under OAR 860-024-010, it did not indicate how this overlap and funding, via proposed AACs, might be netted out of base rates.

Staff generally agrees with the IE recommendation, Subject Area 7, regarding quality assurance and quality control (QA/QC) programs,<sup>22</sup> but further recommends that PGE identify the cost analysis it undertook to establish that a two-person crew is the optimal resource for inspecting these facilities. This should be supported with inspection finding history, correction action details and turnaround time for corrections which were not able to be immediately repaired with the two-person crew. They should also demonstrate how they plan to net out the cost difference such that AACs are not redundantly funding base rate activities.

Staff Recommendations for PGE's 2024 Plan:

- 19)Portland General Electric provide cost analysis supporting its inspection-correction process for Ignition Prevention Inspections, including demonstrable details that substantiate this selection.
- 20)Portland General Electric demonstrate the use of its ignition management tracking database to support its approach to ignition prevention inspections.
- 21)Portland General Electric explore the results of its QA/QC program for ignition prevention inspections and determine a reasonable quality assurance level and associated costs for administering the program.

**OAR 860-300-0020 (1)(h):**

*Description of the procedures, standards, and timeframes that the utility will use to carryout vegetation management in areas it has identified as heightened risk of wildfire.*

**Staff Analysis**

Portland General Electric met the requirement by providing the description of its vegetation management program by outlining its Advanced Wildfire Risk Reduction (AWRR) program. PGE treats the AWRR as a standalone program, separate and

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<sup>21</sup> OAR 860-024-0000.

<sup>22</sup> IE Report, p. 17.

distinct from its Routine Vegetation Management (RVM) program used to ensure compliance with Oregon Administrative Rules.<sup>23</sup> PGE indicates the AWRR is only used in its HFRZ however with the potential changes to designated HFRZs creates some opacity into what vegetation program was conducted at a point in time using which program and funding method. In other words, changes in the HFRZs could implicate whether AWRR or RVM is used to achieve vegetation work. Since this is the single largest cost of the PGE mitigation program, supporting analysis demonstrating the alignment of the mitigation costs versus the risk reduction seems as important as that associated with reconducting decisions. It is not clear that any substantial cost benefit analysis was performed to support the decision and such analysis aligns with prior recommendations regarding risk valuation.

Staff agrees with the IE's recommendation, Subject Area 8, in which they advise that PGE should provide analysis of historic events relating to AWRR program design, focusing on logic and details that guided the decision making.<sup>24</sup>

Staff Recommendations for PGE's 2024 Plan:

- 22) Staff recommends PGE utilize the previously recommended RSE methodology to determine the risk reduction that AWRR delivers to customers.
- 23) Staff recommends that root cause analysis for vegetation-related risks be conducted to support the determination of how AWRR is employed.
- 24) Staff recommends that PGE demonstrate its use of its ignition management tracking database to evaluate the logic of its programmatic decisions for vegetation management in HFRZs.

**OAR 860-300-0020 (1)(i):**

*Identification of the development, implementation, and administrative costs for the plan, which includes discussion of risk-based cost and benefit analysis, including consideration of technologies that offer co-benefits to the utility's system.*

**Staff Analysis**

Portland General Electric met the requirement of this rule by providing a summary of the 2023 costs associated with implementation of this plan. As with the 2022 Plan recommendations, Staff would like to see more evidence of quantitative analysis, directly derivative of the previously recommended risk valuation methodology. These

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<sup>23</sup> See, OAR 860-024-0016.

<sup>24</sup> IE Report, p.18.

Plans are to be risk-based and this is one of the areas in which PGE can provide more objective and quantitative discussion of how it selected mitigations, prioritized programs and projects and optimized costs for the associated risk reduction. There is no discussion about how technologies that might offer co-benefits to the utility's system are evaluated, or evidence of objective risk-based cost and benefit analysis; PGE outlines how it would conduct the calculation but doesn't provide details for the selected programs and specified handful of projects. The Company could have provided examples of potential solutions with cost and benefit to demonstrate it is making the best choices for customers. Ideally, this would be tied to best practices and innovative options identified participating in activities described in OAR 860-300-0020(1)(U) or research performed by the company itself.

Staff agrees with the IE recommendation, Subject Area 9, that PGE should delineate program and project costs and benefits and outline how these priorities and the related risk reduction are quantified consistent with industry best practices.<sup>25</sup> Staff also recognizes the substantial development of this subject area in House Bill 2021, relating to Clean Energy Plans and the investigation conducted at the direction of the legislature in UM 2225 regarding resilience and community benefit indicators. The IE also recommends that PGE provide at minimum a three-year program-level forecast of costs. Staff believes, particularly with the focus on cost recovery and multi-year investment decisions that this cannot be a recommendation for the 2024 WMP, but rather provided in advance of any consideration of interim cost recovery, as previously recommended.

Staff Recommendations for PGE's 2024 Plan:

- 25)Portland General Electric include a summary of the quantitative analysis used in the choice and prioritization of specific solutions and investments.
- 26)Portland General Electric include how solutions providing co-benefits have been considered in its investment strategies.
- 27)Portland General Electric discuss the impact of participation in expert forums on identification of solutions most likely to provide the benefits anticipated. This should include:
  - a. Cited research, reports, and studies used in any analysis, unless the source is confidential.
  - b. How the factors unique to the Company's facilities and service territory were used when considering the applicability of specific options to its systems.

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<sup>25</sup> See IE Report, p.20.



**OAR 860-300-0020 (1)(j):**

*Description of participation in national and international forums, including workshops identified in section 2, chapter 592, Oregon Law 2021, as well as research and analysis the utility has undertaken to maintain expertise in leading edge technologies and operational practices, as well as how such technologies and operational practices have been used to develop and implement cost effective wildfire mitigation solutions.*

**Staff Analysis**

Portland General Electric met the requirement of this rule. However, consistent with the IE recommendation, Subject Area 10, Staff believes more specific details, including general knowledge sharing as well as specific information obtained from industry forums would be advisable.<sup>26</sup> Staff believes the evolution of these plans, the valuation methods, the underlying equipment and the practices employed by utilities is at a very rich state of growth and anticipates that shared broadly would benefit a variety of stakeholders in understanding the demonstrable improvements the utilities are making, particularly since customers bear the costs of these learnings. Further, Staff believes there is an opportunity to leverage process which others have deployed relating to technology vision and maturity of the vision, using a maturity model. Staff believes the utilities may be at a point in their evolution to articulate the expected journey through the development of a maturity model, like the model developed by the CPUC's Wildfire Safety Division (WSD).<sup>27</sup> Such clarity of vision would be helpful for stakeholders and regulators to gauge performance of the utilities in the future.

28) In Recommendation 27, Staff recognized certain of the industry learnings were likely related to risk valuation, however directly responsive to the broader research and development and industry participation, Staff recommends PGE provide specifics on program changes made in response to learnings from industry forums, as well as greater detail of who from the company participates and in what roles they function in various industry forums.

29) Staff recommends PGE and joint utilities evaluate the CPUC WSD maturity model and develop an Oregon IOU rubric as part of their 2024 WMPs; Staff would welcome the opportunity to participate in such a collaborative work effort.

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<sup>26</sup> IE Report, p.21.

<sup>27</sup> <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M322/K150/322150488.PDF>

**OAR 860-300-0020 (1)(k):**

*Description of ignition inspection programs, as described in Division 24 of these rules, including how the utility will determine, and instruct its inspectors to determine conditions that could pose an ignition risk on its own equipment and pole attachments.*

**Staff Analysis**

Portland General Electric met the requirement of this rule. Staff further agrees with the IE's recommendation, Subject Area 11, that more rationale demonstrating any changes needed should be evidenced.<sup>28</sup> As a further recommendation, Staff believes summarization of root cause analyses of ignitions reported should be used to explain how the inspection program changes are further dialed in.

Staff Recommendations for PGE's 2024 Plan:

- 30) Staff recommends PGE demonstrate the use of its ignition management database to perform root cause analyses which led to any ignition inspection program changes.

**Conclusion**

Staff recommends approval of PGE's 2023 WMP. Staff provides its observation on modifications to be included in PGE's next WMP and includes them in Attachment A.

As expressed in 2022, Staff considers WMPs to be living documents that demonstrate where the companies are in their evolution, on a journey, rather than a specific destination. Because of this journey, it is important that the WMP be not only the best representation of where the company is heading, but also provide mile markers for where they are and which mile posts they have already passed. Therefore, clearly identifying what data or experiences led to adoption of a certain process, technology or strategy is critical to their value. To explain further, Staff finds it important to instill the collaborative and transparent nature in developing WMPs to support the shared growth among the utilities, stakeholders, and regulators, and found the hesitancy and dismissal of Staff requests for decision-supporting details to be divisive and disruptive. This led Staff to feel that the utilities may have seen Plans as rhetoric over substance; serving as a "check the box" activity rather than a detailed exploration demonstrating the logic of their decisions.

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<sup>28</sup> See IE Report, p.22.

As demonstrated each year during fire season, wildfire risks are substantial and widely impactful. Staff finds PGE's tone uncomfortable for people in high wildfire risk areas and for utility customers who will bear the costs of these plans, especially in light of affordability concerns raised by the current economic situation and stakeholders in UE 416, PGE's current rate case. The rate cases and the automatic adjustment applications the utilities have filed, make clear that the utilities are seeking very large quantities of funds to address these risks. However, without appropriate information provided in the wildfire mitigation plans, Staff is unable to assess whether the measures the utility is taking actually address the risk and/or are economically justifiable.

While Staff recommends the Commission accept PGE's 2023 WMP, Staff's review makes no judgement on reasonableness. Commission acceptance of the Plan does not constitute a determination on the prudence of any individual actions discussed in the Plan. Staff understands that those individual actions, including project specific data, will be reviewed through the cost recovery process. Given the information lacking from the WMP review process the Company will need to provide additional information to prove that the actions contained in its WMP were prudent.

**PROPOSED COMMISSION MOTION:**

Approve PGE's 2023 Wildfire Mitigation Plan, direct PGE to submit a supplemental filing which provides a program level budget plan covering years 2023–2026, and incorporate Staff's recommendations in its 2024 Plan.

- 1) Detail recommendations from local partners in establishing HFRZs.
- 2) Provide explicit details of assets within and outside the HFRZ.
- 3) Joint IOUs explore calibration of wildfire risk modeling methods to ensure that when and where overlaps occur, they are consistent, or explicably inconsistent, in their risk designation. Such designation and coordination across utilities may lend greater clarity for stakeholders and Staff to understand relative risks.
- 4) Provide details for incorporation of climate change modeling in establishing the HFRZ.
- 5) Provide historic root cause analysis supporting equipment ignition risk determinations.
- 6) Demonstrate the Company's ignition management tracking database and processes;
- 7) Provide valuation for undergrounding and reconductoring projects identified in the Company's 2023 WMP, in addition to any subsequently identified hardening projects;
- 8) Detail progress made towards a uniform risk-spend valuation methodology;
- 9) Provide planned and actual work by program for the prior and future years, as well as associated estimations of risk reduction for the work completed.
- 10) Provide planned and actual work by program for the prior and future years, as well as associated estimations of risk reduction for the work completed.
- 11) Provide a multiyear plan (at least four years out) with project-level details for any capital investments and the estimated risk reduction for the selected mitigation method.
- 12) Include as an appendix to its WMP a registry of Public Safety Partner events, with feedback and actions taken as a result of the feedback.
- 13) Provide findings of analyses on operational modifications based upon "fire season" or other relevant elevated wildfire periods.
- 14) Staff recommends that PGE outline roles and responsibilities that are in place during PSPS activations; PGE should communicate this structure to Public Safety Partners, at a minimum during tabletops or exercises.
- 15) Staff recommends that PGE continue to develop its experience in placing and operating CRCs when activated.
- 16) Joint IOUs establish language for Public Safety Partners and communities regarding modified operational practices, including "sensitive settings", PSPS and other utility operational modes to mitigate wildfire risk.
- 17) Coordinate community outreach with partners, including ESF-12, and consider broadening the workshop to include relevant community safety topics, inviting Public Safety Partners regarding other topics appropriate to the community.
- 18) Detail methods for determining the effectiveness of customer outreach and describe any modifications made to outreach strategies as a result.

- 19)Portland General Electric provide cost analysis supporting its inspection-correction process for Ignition Prevention Inspections, including demonstrable details that substantiate this selection.
- 20)Portland General Electric demonstrate the use of its ignition management tracking database to support its approach to ignition prevention inspections.
- 21)Portland General Electric explore the results of its QA/QC program for ignition prevention inspections and determine a reasonable quality assurance level and associated costs for administering the program.
- 22)Staff recommends PGE utilize the previously recommended RSE methodology to determine the risk reduction that AWRR delivers to customers.
- 23)Staff recommends that root cause analysis for vegetation-related risks be conducted to support the determination of how AWRR is employed.
- 24)Staff recommends that PGE demonstrate its use of its ignition management tracking database to evaluate the logic of its programmatic decisions for vegetation management in HFRZs.
- 25)PGE include a summary of the quantitative analysis used in the choice and prioritization of specific solutions and investments.
- 26) PGE include how solutions providing co-benefits have been considered in its investment strategies.
- 27) PGE discuss the impact of participation in expert forums on identification of solutions most likely to provide the benefits anticipated. This should include:
  - a. Cited research, reports, and studies used in any analysis, unless the source is confidential.
  - b. How the factors unique to the Company's facilities and service territory were used when considering the applicability of specific options to its systems.
- 28)In Recommendation 27,Staff recognized certain of the industry learnings were likely related to risk valuation, however directly responsive to the broader research and development and industry participation, Staff recommends PGE provide specifics on program changes made in response to learnings from industry forums, as well as greater detail of who from the company participates and in what roles they function in various industry forums.
- 29) Staff recommends PGE and joint utilities evaluate the CPUC WSD maturity model and develop an Oregon IOU rubric as part of their 2024 WMPs; Staff would welcome the opportunity to participate in such a collaborative work effort.
- 30)Staff recommends PGE demonstrate the use of its ignition management database to perform root cause analyses which led to any ignition inspection program changes.