Request for Amendment 5 for the Biglow Canyon Wind Farm

Exhibit M. Wildfire Prevention and Risk Mitigation

Submitted to
Oregon Energy Facility Siting Council

Prepared for



Portland General Electric Company

Prepared by



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Attachment M-2. Draft Operational Wildfire Mitigation Plan

Acronyms and Abbreviations

Acronym/Abbreviation	Definition
°F	degree Fahrenheit
AC	alternating current
BCWF or Facility	Biglow Canyon Wind Farm
BESS	battery energy storage system
BIGL 2 or Project Developer	BIGL 2, LLC
Certificate Holder or PGE	Portland General Electric Company
Council or EFSC	Energy Facility Siting Council
CWPP	Community Wildfire Protection Plan
FM	Fuel Model
gen-tie	generation tie
HVRA	highly valued resource and asset
kV	kilovolt
MW	megawatt
MWh	megawatt-hour
O&M	operations and maintenance
OAR	Oregon Administrative Rules
ODOE	Oregon Department of Energy
PGE	Portland General Electric Company
PUC	Public Utilities Commission
PV	photovoltaic
Site Certificate	Site Certificate on Amendment 4
Solar Facility	solar energy generation and battery storage components
WMP	Wildfire Mitigation Plan

1.0 Introduction

The Portland General Electric Company (PGE or Certificate Holder) submits this Request for Amendment (RFA) 5 to the Site Certificate on Amendment 4, issued March 27, 2026 (Site Certificate) for the Biglow Canyon Wind Farm (BCWF or Facility) to add a second phase of solar photovoltaic (PV) energy generation and battery storage capacity to the BCWF following the solar power generation and battery storage capacity approved under RFA 4.

BCWF, owned and operated by PGE, is located within an approved site boundary comprising approximately 25,000 acres, approximately 2.5 miles northeast of the town of Wasco in Sherman County, Oregon (Background Exhibit Figure 1). The BCWF operates under the Site Certificate from the Oregon Energy Facility Siting Council (Council or EFSC) as administered by the Oregon Department of Energy (ODOE). BCWF currently consists of 217 operating wind turbines, with a maximum blade tip height of 445 feet, and a peak generating capacity of 450 megawatts (MW) (Wind Facility). RFA 4, approved March 27, 2026, added 125 MW alternating current (AC) generating capacity from PV solar arrays and 500 megawatt-hours (MWh) in battery storage capacity. The solar energy generation and battery storage components (Solar Facility) described in RFA 4 are currently under construction.

In RFA 5, PGE proposes to add up to 200 MW AC generating capacity from PV solar arrays and 1,000 MWh in battery storage capacity (RFA 5 Solar Facility) by expanding the overall BCWF site boundary by approximately 839 acres. The RFA 5 Solar Facility is located across approximately 622 acres of the existing BCWF site boundary and 839 acres of expanded site boundary, for a total of approximately 1,461 acres (together, RFA 5 Site Boundary; see Background Exhibit Figure 4).

The RFA 5 Site Boundary provides a conservative estimate of the maximum area needed for development and micrositing through final design and construction for the RFA 5 Solar Facility, rather than the anticipated disturbance footprint. Primary infrastructure includes solar arrays, inverters, battery energy storage system (BESS) facilities and their subcomponents (i.e., inverters), one collector substation, and medium-voltage collector lines (herein collectively referred to as "Solar Components"). Additionally, the Solar Components include operations and maintenance (O&M) structures, site access roads, internal roads, perimeter fencing, facility entry gates, and temporary laydown areas. The maximum generating capacity from the Solar Components will be 200 MW AC. Power generated from the Solar Components will be transferred to the grid via a 230-kilovolt (kV) generation tie (gen-tie) transmission line, approximately 2.7 miles long. The RFA 5 Solar Facility includes the Solar Components and the gen-tie transmission line.

PGE will own and operate the RFA 5 Solar Facility as a part of the BCWF, which, to date, has been developed by BIGL 2, LLC (BIGL 2, or Project Developer). BIGL 2, in its capacity as the Project Developer, supports PGE in this RFA 5 and may construct and temporarily operate the RFA 5 Solar Facility on behalf of PGE under a Build-Transfer Agreement.

The information contained herein supports demonstration of compliance with the Wildfire Prevention and Risk Mitigation approval standard for Oregon Administrative Rules (OAR) 345-022-0115.

2.0 Wildfire Risk – OAR 345-022-0115(1)(a)

(1) To issue a site certificate, the Council must find, by way of supporting evidence from the applicant, that:

(a) The applicant has adequately characterized wildfire risk within the analysis area using current data from reputable sources, by identifying:

2.1 Analysis Area

Consistent with OAR 345-027-0360(3), ODOE concurred with the Certificate Holder's use of a defined portion of the approved BCWF Site Boundary and an expansion area outside the approved site boundary (i.e., RFA 5 Site Boundary Area) to establish study area boundaries for RFA 5 under OAR 345-001-0010(35). The RFA 5 Site Boundary Area reflects the Solar Components, and all study areas within the meaning of Oregon Revised Statutes 345-001-0010(35) are measured from the RFA 5 Site Boundary. The analysis area for wildfire is the RFA 5 Site Boundary Area plus the area within one-half mile from the RFA 5 Site Boundary Area (Figure M-1). Approximately 5,825 acres are located within the wildfire analysis area.

2.2 Baseline Risk – OAR 345-022-0115(1)(a)(A)

(A) Baseline wildfire risk, based on factors that are expected to remain fixed for multiple years, including but not limited to topography, vegetation, existing infrastructure, and climate;

The Sherman County Multiple-Jurisdictional Natural Hazards Mitigation Plan describes a county-wide risk assessment of wildfire as "high" probability and identifies many areas in the county as "conducive for large and fast-moving wildfires" due to high winds typical for regional dry conditions and terrain. The plan identifies risk factors for starting wildfires in the county as highways, railroads, lighting, power lines, debris burning, and equipment (Sherman County 2024). The baseline wildfire risk within the RFA 5 Site Boundary Area and wildfire analysis area is high, based on the existing vegetation, relatively flat overall topography and slopes, existing infrastructure, and arid climate (NPS 2019). The following subsections describe the risks of wildfire for the RFA 5 Site Boundary Area and wildfire analysis area in further detail.

2.2.1 Topography

The wildfire analysis area is generally bounded by Interstate 84 to the north, the John Day River to the east, Highway 206 to the south, and Highway 97 to the west. As shown on Figure M-1, the entire wildfire analysis area has slopes ranging from 0 to 25 degrees (Table M-1; Figure M-1).

Table M-1. Slope

Slope (degrees)	Percent of Wildfire Analysis Area	Acres of Wildfire Analysis Area	Percent of RFA 5 Site Boundary Area	Acres of RFA 5 Site Boundary Area
0-25	100	5,825	100	1,461
25-50	0	0	0	0
50-75	0	0	0	0
Total	**100%**	**5,825**	**100%**	**1,461**

2.2.2 Vegetation

As discussed in Exhibit G, habitat categorization and special status wildlife surveys were performed in June 2024 by Tetra Tech within the RFA 5 Site Boundary Area and any additional lands that have since been omitted (Exhibit G, Attachment G-1). The Survey Area covered 4,636 acres, including the entire RFA 5 Site Boundary, the RFA 4 Solar Micrositing Area, and some additional lands that have since been omitted from consideration. The most prominent habitat category in the Habitat Categorization Survey Area was Category 6, Agriculture habitat type, which included Non-irrigated Croplands, and Developed habitat subtypes. Additional habitat types included Category 4 Grasslands habitat subtype, Category 3 Sagebrush Shrub-steppe and Upland Trees habitat subtypes, as well as Category 2 Intermittent and Riparian Tree habitat subtype (Attachment G-1).

The broad fuel model groups (reflective of vegetation type) are derived from data from the Community Wildfire Protection Plan (CWPP) Planning Tool (Oregon Explorer 2025). Fuel model groups within the wildfire analysis area consist almost entirely of grass and what with small amounts of fine, dead fuel, and shrubs. As shown on Figure M-2 and described below in Table M-2, the majority of the vegetation within the RFA 5 Site Boundary Area is Fuel Model (FM) 102 – Low Load, dry climate grass (76 percent) and FM 242 – burnable wheat fields (identical to FM 102) (22 percent). Within the wildfire analysis area, the most prominent FMs are also FM 102 (66 percent) and FM 242 (31 percent). A further discussion of FMs is provided in Section 2.3.2.

Table M-2. Fuel Models

Fuel Model #	Percent of Wildfire Analysis Area	Acres of Wildfire Analysis Area	Percent of RFA 5 Site Boundary Area	Acres of RFA 5 Site Boundary Area
91	0	0	0	0
93	0	3	0	0
99	0	16	0	1
101	1	34	1	10
102	66	3,869	76	1,111
121	0	24	0	4

Fuel Model #	Percent of Wildfire Analysis Area	Acres of Wildfire Analysis Area	Percent of RFA 5 Site Boundary Area	Acres of RFA 5 Site Boundary Area
122	0	2	0	0
123	0	0	0	0
162	0	0	0	0
182	0	1	0	0
242	31	1,792	22	317
251	0	1	0	0
252	1	82	1	18
Total	**100%**	**5,825**	**100%**	**1,461**
Note: All quantities may not result in 100 percent due to rounding adjustments.				

2.2.3 Existing Infrastructure

The BCWF is an operational wind power facility that includes 217 wind turbines, three meteorological towers, collector lines, Biglow Canyon Substation, transmission lines, O&M buildings, and access roads. The RFA 4 Solar Facility, approved on March 27, 2026, added 125 MW AC generating capacity from PV solar arrays, 500 MWh in battery storage capacity, and a new collector substation (Fox Canyon Substation) to the BCWF Site Boundary. The RFA 4 Solar Facility is currently under construction.

Paved roads within the wildfire analysis area generally include Medler Lane, Oehman Road, Emigrant Springs Road, Herin Lane, and Old Wasco Heppner Highway. There are many unnamed gravel turbine string roads within the wildfire analysis area that are currently in use for the BCWF. There are no hazardous liquid pipelines or gas transmission pipelines within 10 miles of the wildfire analysis area (NPMS 2026).

As shown on RFA 5 Background Exhibit Figure 3, RFA 5 is within 10 miles of multiple renewable energy projects, including Klondike III Wind Project and Golden Hills Wind Project.

2.2.4 Climate

Climate data were used for Arlington, Oregon, which is located approximately 22 miles northeast of the RFA 5 Site Boundary Area. Based on available monthly normals of climate data between 1991 and 2020 for Arlington, the driest months on average are June, July, and August (NOAA 2026a). These months have average monthly precipitation rates of 0.48 inch (June), 0.10 inch (July), and 0.15 inch (August). July, August, and September are the hottest months of the year with average temperatures of 76.3 degrees Fahrenheit (°F) (July), 75.5 °F (August), and 66.5 °F (September). The total average annual precipitation for Arlington is 9.3 inches per year (NOAA 2026a), which is indicative of an arid climate (NPS 2019). Additionally, Arlington receives approximately 5.3 inches of snow in the winter months, with the coldest month (January) having approximately 2.0 inches of

snowfall, an average daily maximum temperature of 40.8 °F, and an average daily minimum temperature of 29.7 °F (Table M-3; NOAA 2026a).

Table M-3. Summary of Monthly Normal Temperature and Precipitation at Arlington, OR (1991–2020)

Month	Maximum Temp (°F)	Average Temperature (°F)	Precipitation (inch)
January	40.8	35.3	1.47
February	46.9	38.7	0.98
March	55.6	45.6	0.83
April	63.7	52.8	0.61
May	73.2	61.7	0.75
June	79.7	68.2	0.48
July	89.5	76.3	0.10
August	88.9	75.5	0.15
September	80.0	66.5	0.33
October	65.5	53.7	0.81
November	50.4	42.4	1.13
December	41.1	35.5	1.66
Source: NOAA 2026a			

2.2.5 Burn Probability

Burn probability is an estimate of the average annual likelihood that a wildfire will occur at any given location and is simulated using a model that integrates information about the physical landscape, historical fire occurrence, and historical weather observations (McEvoy et al. 2023). The burn probability classes range from non-burnable (fuel types such as water, agriculture, or urban) to very high burn probability.

As shown in Table M-4 and on Figure M-3, 73 percent of the wildfire analysis area has a High (0.002-0.01 percent) burn probability. The remaining acreage of the wildfire analysis area has a High (0.01-0.02 percent) burn probability (27 percent). There is a very small portion of the wildfire analysis area (4 acres) that has a Low (0-0.0002 percent)burn probability and is the site of residential and farm structures. As shown on Figure M-3, there are several areas that have a burn probability of zero. These areas have existing BCWF infrastructure including wind turbines and the Biglow Canyon Substation and are categorized as non-burnable land cover.

Similarly, 50 percent of the RFA 5 Site Boundary Area has a High (0.002-0.01 percent) burn probability and the other 50 percent is considered to have a High (0.01-0.02 percent) burn probability.

Table M-4. Burn Probability

Burn Probability	Percent of Wildfire Analysis Area	Acres of Wildfire Analysis Area	Percent of RFA 5 Site Boundary Area	Acres of RFA 5 Site Boundary Area
0	0	15	0	1
Low (0-0.0002 percent)	0	4	0	0
Moderate (0.0002-0.002 percent)	0	0	0	0
High (0.002-0.01 percent)	73	4,261	50	732
High (0.01-0.02 percent)	27	1,545	50	728
Very High (0.02-0.1 percent)	0	0	0	0
No Data	0	0	0	0
Total	**100%**	**5,825**	**100%**	**1,461**
Note: All quantities may not result in 100 percent due to rounding adjustments.				

2.3 Seasonal Risk – OAR 345-022-0115(1)(a)(B)

> *(B) Seasonal wildfire risk, based on factors that are expected to remain fixed for multiple months but may be dynamic throughout the year, including but not limited to, cumulative precipitation and fuel moisture content;*

Seasonal wildfire risk was assessed based on factors that are anticipated to remain consistent for several months but may vary throughout the year and over time. These factors include annual and monthly cumulative precipitation levels, weather advisories (including fuel moisture content data), and average flame length (the average length of flames expected during a fire given local fuel and weather conditions). The seasonal wildfire risk within the RFA 5 Site Boundary Area and wildfire analysis area is low for most of the year, but moderate to high in the summer months based on the warmer semi-arid climate, moderate average flame lengths, high burn probability, and low average rainfall during the summer months.

2.3.1 Precipitation

See Section 2.2.4 and Table M-3 for a discussion of precipitation within the wildfire analysis area.

2.3.2 Fuel Moisture Content

Fuel moisture content is a primary variable when observing wildfire behavior. Fuel moisture content "is a measure of the amount of water in a fuel (vegetation) available to a fire and is expressed as a percent of the dry weight of that specific fuel" (NOAA 2026b). Fuel moisture content varies with weather, both seasonally and during short periods. The higher the fuel moisture content, the greater difficulty for fires to ignite and propagate. Living plants and dead fuels respond

differently to weather changes; the drying and wetting processes of dead fuels is such that the moisture content of these fuels is strongly affected by weather changes. These moisture contents are influenced by precipitation, air moisture, air and surface temperatures, wind, cloudiness, as well as by fuel factors such as surface to volume ratio, compactness, and arrangement. Fuel moisture content within the wildfire analysis area and RFA 5 Site Boundary Area is dependent on current weather conditions, fuel moisture data, and seasonal weather patterns.

Fuel moisture varies with vegetation type. For instance, annual grasses are highly flammable whereas broadleaf vegetation is less flammable (USFS 1970). Additionally, live evergreen trees and shrubs can burn despite having a moisture content of over 100 percent.

Fuel model groups within the wildfire analysis area consist mostly of grass and wheat with small amounts of fine, dead fuel, and shrubs. As shown on Figure M-2 and described earlier in Table M-2, the majority of the vegetation within the RFA 5 Site Boundary Area is FM 102 – Low Load, dry climate grass (76 percent) and FM 242 – burnable wheat fields (identical to FM 102) (22 percent). Within the wildfire analysis area, the most prominent FMs are also FM 102 (66 percent) and FM 242 (31 percent). The primary carriers of fire in FM 102 are grass and small amounts of dead fuel. If shrubs are present, they typically do not affect fire behavior. During the hot summer months, the fuel moisture content in these areas is typically low.

2.3.3 Flame Length

Fire intensity, measured by average flame length, shows the average length of flames expected, given local fuel and weather conditions (Oregon Explorer 2025). Flame lengths have potential to exceed the mapped values shown, even under normal weather conditions. Flame length is commonly used as a direct visual indication of fire intensity and is a primary factor to consider for firefighter safety and for gauging potential impacts to resources and assets.

As shown in Table M-5 and Figure M-4, 97 percent of the wildfire analysis area and 98 percent of the RFA 5 Site Boundary Area have average flame lengths of 4 to 6 feet. These flame heights, typical of dryland grasses and burnable wheat fields, can spread quickly in dry, hot conditions when fueled by wind. Two percent of the wildfire analysis area and RFA 5 Site Boundary Area have average flame lengths of 0 to 2 feet. Areas within the wildfire analysis area and RFA 5 Site Boundary Area that have no data are where there is existing BCWF infrastructure including wind turbines and the Biglow Canyon Substation.

Table M-5. Average Flame Length

Average Flame Length (feet)	Percent of Wildfire Analysis Area	Acres of Wildfire Analysis Area	Percent of RFA 5 Site Boundary Area	Acres of RFA 5 Site Boundary Area
0-2	2	137	2	23
2-4	0	23	0	4
4-6	97	5,650	98	1,433
6-8	0	0	0	0
8-12	0	0	0	0
>12	0	0	0	0
No Data	0	16	0	1
Total	**100%**	**5,825**	**100%**	**1,461**
Note: All quantities may not result in 100 percent due to rounding adjustments.				

2.4 Areas of Heightened Risk – OAR 345-022-0115(1)(a)(C)

(C) Areas subject to a heightened risk of wildfire, based on the information provided under paragraphs (A) and (B) of this subsection;

Areas of heightened risk are described using the CWPP Planning Tool "Wildfire Risk to Individual Highly Valued Resources" and specifically "Wildfire Risk to Infrastructure and People and Property" (Oregon Explorer 2025). Wildfire Risk to Infrastructure represents the conditional wildfire risk to critical infrastructure, namely energy, communication, transportation infrastructure, as well as other essential facilities. Wildfire Risk to People and Property represents the wildfire risk to residential and non-residential structures. The risk assessment framework assumes that there are no beneficial impacts of wildfire on infrastructure or structures, and so risk is characterized only by the degree of expected loss.

As discussed in Section 2.2.3, existing infrastructure within the wildfire analysis area includes the BCWF and existing transmission lines.

Note that the majority of the RFA 5 Site Boundary Area and wildfire analysis area do not have high value assets or resources including infrastructure; this is represented under the "no data" risk rating. As shown on Figure M-5, the only areas that have infrastructure data available are where there are existing transmission lines and the Biglow Canyon Substation. As shown in Table M-6, directly around the substation but within the wildfire analysis area, there is a very high expected risk to infrastructure. Areas of low to moderate loss are the 115-kV and 230-kV transmission lines that run through the wildfire analysis area and RFA 5 Site Boundary Area.

Table M-6. Expected Risk to Infrastructure

Expected Risk	Percent of Wildfire Analysis Area	Acres of Wildfire Analysis Area	Percent of RFA 5 Site Boundary Area	Acres of RFA 5 Site Boundary Area
Very High	0	6	0	0
High	0	0	0	0
Moderate	1	69	0	4
Low	6	323	1	12
Non-Burnable/Very Low	0	0	0	0
No Data[1]	93	5,427	99	1,445
Total	**100%**	**5,825**	**100%**	**1,461**

Note: All quantities may not result in 100 percent due to rounding adjustments.

1. There are no high value assets or resources including infrastructure.

As shown on Figure M-6, the majority of the RFA 5 Site Boundary Area and wildfire analysis area do not have high value assets or resources including residential and non-residential structures; this is represented under the "no data" risk rating. However, the areas with data available within the RFA 5 Site Boundary Area show the Biglow Canyon Substation as having low to very high loss. Additionally, there are existing residences and agricultural buildings in the southeastern portion of the site. This area also shows a low to very high loss risk rating if a wildfire were to occur. Similarly, within the wildfire analysis area, areas that are mapped are existing residences and agricultural buildings and range from having low to very high loss risk.

Table M-7. Expected Risk to People and Property

Expected Risk	Percent of Wildfire Analysis Area	Acres of Wildfire Analysis Area	Percent of RFA 5 Site Boundary Area	Acres of RFA 5 Site Boundary Area
Very High	1	47	0	0
High	1	42	0	0
Moderate	0	1	0	0
Low	2	91	0	1
Non-Burnable/Very Low	0	0	0	0
No Data	97	5,645	100	1,459
Total	**100%**	**5,825**	**100%**	**1,461**

Note: All quantities may not result in 100 percent due to rounding adjustments.

1. There are no high value assets or resources including residential and non-residential structures.

2.5 High-Fire Consequence Areas – OAR 345-022-0115(1)(a)(D)

(D) High-fire consequence areas, including but not limited to areas containing residences, critical infrastructure, recreation opportunities, timber and agricultural resources, and fire-sensitive wildlife habitat; and

The CWPP data on wildfire risk (Figure M-7) are used to identify high-fire consequence areas (Oregon Explorer 2025). Integrated Expected Wildfire Risk is a representation of cumulative risk at any location based on which highly valued resources and assets (HVRAs) are present, fire intensity, and the likelihood of a fire occurring (burn probability). The integrated risk maps synthesize risk across all resources and assets present at a specific location and the result is either net beneficial or net adverse impacts. Areas that do not have data available represent that not all resources and assets are present at every location, and the integrated wildfire risk class at a specific location reflects only the resources and assets located there.

The percentages of the RFA 5 Site Boundary Area and the wildfire analysis area that fall into each Fire Risk Rating are shown in Table M-8 and displayed on Figure M-7. The RFA 5 Site Boundary Area has a 97 percent high loss risk rating. As shown on Figure M-7, the areas that are considered to have a neutral risk rating within the wildfire analysis area and RFA 5 Site Boundary Area are where there are existing roads.

The wildfire analysis area has a 90 percent high loss risk rating and a 6 percent moderate loss risk rating. Areas of moderate loss are generally where there are irrigated crop fields present or BCWF infrastructure. As shown on Figure M-7, the Biglow Canyon Substation does not have data present but the area directly around the substation is considered to have a very high loss risk rating. Roads throughout the wildfire analysis area have some data present and are considered to have a neutral risk rating.

Table M-8. Integrated Expected Wildfire Risk

Overall Fire Risk Rating	Percent of Wildfire Analysis Area	Acres of Wildfire Analysis Area	Percent of RFA 5 Site Boundary Area	Acres of RFA 5 Site Boundary Area
Very High Loss	0	22	0	0
High Loss	90	5,239	97	1,419
Moderate Loss	6	330	0	2
Low Loss	0	7	0	2
Neutral	1	81	1	12
Low Benefit	0	0	0	0
Moderate Benefit	0	0	0	0
High Benefit	0	0	0	0
No Data[1]	3	146	2	26
Total	**100%**	**5,825**	**100%**	**1,461**

Note: All quantities may not result in 100 percent due to rounding adjustments.

1. There are no highly valued resources or assets (such as critical infrastructure, developed recreation, or housing unit density) mapped in the area, or simulated wildfires did not burn the area due to low historical occurrence/absence of burnable fuel.

2.6 Sources and Methods – OAR 345-022-0115(1)(a)(E)

(E) All data sources and methods used to model and identify risks and areas under paragraphs (A) through (D) of this subsection.

Data from the CWPP Planning Tool (Oregon Explorer 2025) were used for the analyses provided in response to OAR 345-022-0115(1)(a) in Sections 2.1 through 2.4 of this Exhibit. The CWPP tool provides a range of data for fire behavior and effects to help communities assess wildfire risk in their area.

The following 2025 Oregon CWPP datasets were used throughout this analysis (Oregon Explorer 2025):

- Burn probability,
- Average flame length,
- Integrated Expected Wildfire Risk,
- Slope,
- Fuel models,
- Wildfire Risk to Infrastructure, and
- Wildfire Risk to People and Property.

Additionally, the Sherman County Multiple-Jurisdictional Natural Hazards Mitigation Plan was used to review the baseline fire risk in Sherman County (Sherman County 2024).

3.0 Wildfire Mitigation Plans – OAR 345-022-0115(1)(b)

(b) That the proposed facility will be designed, constructed, and operated in compliance with a Wildfire Mitigation Plan approved by the Council. The Wildfire Mitigation Plan must, at a minimum:

(A) Identify areas within the RFA 5 Site Boundary Area that are subject to a heightened risk of wildfire, using current data from reputable sources, and discuss data and methods used in the analysis;

(B) Describe the procedures, standards, and time frames that the applicant will use to inspect facility components and manage vegetation in the areas identified under subsection (a) of this section;

(C) Identify preventative actions and programs that the applicant will carry out to minimize the risk of facility components causing wildfire, including procedures that will be used to adjust operations during periods of heightened wildfire risk;

(D) Identify procedures to minimize risks to public health and safety, the health and safety of responders, and damages to resources protected by Council standards in the event that a wildfire occurs at the facility site, regardless of ignition source; and

(E) Describe methods the applicant will use to ensure that updates of the plan incorporate best practices and emerging technologies to minimize and mitigate wildfire risk.

PGE is an investor-owned utility regulated by the Oregon Public Utilities Commission (PUC). Under OAR 345-022-0115(2), the Council may rely upon a PUC-approved Wildfire Protection Plan that governs the construction and operation of a facility; however, because PGE's PUC-approved Wildfire Protection Plan does not include site-specific mitigation activities for individual facilities, PGE has prepared Construction and Operations Wildfire Mitigation Plans in accordance with OAR 345-022-0115(1)(b).

The Certificate Holder developed a Construction WMP for the BCWF Solar Components approved under RFA 4. The Construction WMP was approved in the Final Order on RFA 4 and will be updated to include RFA 5 Solar Components prior to construction (Attachment M-1). PGE is developing a draft Operations WMP for the Solar Components approved under RFA 4 and the RFA 5 Solar Components. The draft Operations WMP (Attachment M-2, to be submitted at a later time) will be finalized prior to beginning operation of the Solar Components approved under RFA 4, in accordance with Site Certificate Condition OPR-WF-01, and will be updated for the RFA 5 Solar Components prior to operation of the approved facility.

The Certificate Holder will integrate baseline wildfire-prevention and mitigation measures directly into the Construction WMP (Attachment M-1) and the Comprehensive Solar Revegetation and Soil Management Plan (Exhibit C, Attachment C-2). This ensures that vegetation management, defensible-space practices, and ignition-prevention standards are implemented immediately and are enforceable under the Site Certificate.

4.0 Conclusion

Per the data reviewed and presented here, wildfire risk and consequences of fire within the RFA 5 Site Boundary are typical for the vegetation type and fire regime encountered in Sherman County. Within the RFA 5 Site Boundary Area and wildfire analysis area, assets that could currently be impacted from a wildfire include BCWF infrastructure, residential structures, agricultural areas and farming operations, and roads. If a wildfire did ignite near those assets, they could be at risk. It is anticipated that, due to the existing infrastructure, high burn probability, moderate to high expected intensity as measured by average flame length, fuels, weather, and topography, overall fire risk within the RFA 5 Site Boundary would be moderate to high.

5.0 References

McEvoy, A., C. Dunn, and I. Rickert. 2023. PNW Quantitative Wildfire Risk Assessment Methods. Unpublished Manuscript. https://oe.oregonexplorer.info/externalcontent/wildfire/PNW_QWRA_2023Methods.pdf

NOAA (National Oceanic and Atmospheric Administration). 2026a. U.S. Climate Normals Quick Access. Station: Arlington Station USC00350265. https://www.ncei.noaa.gov/access/us-climate-normals/#dataset=normals-monthly&timeframe=30&location=OR&station=USC00350265

NOAA. 2026b. Dead Fuel Moisture. Available online at: https://www.ncei.noaa.gov/access/monitoring/dyk/deadfuelmoisture#:~:text=Fuel%20moisture%20is%20a%20measure,content%20would%20be%20zero%20percent

NPMS (National Pipeline Mapping System). 2026. NPMS Public Viewer. https://pvnpms.phmsa.dot.gov/PublicViewer/

NPS (National Parks Service). 2019. Arid and Semi-arid Region Landforms. Available online at: https://www.nps.gov/subjects/geology/arid-landforms.htm#:~:text=Arid%20regions%20by%20definition%20receive,centimeters)%20of%20rain%20per%20year.

Oregon Explorer. 2025. Oregon CWPP Planning Tool. https://tools.oregonexplorer.info/oe_htmlviewer/index.html?viewer=wildfireplanning

Sherman County. 2024. Sherman County Multiple-Jurisdictional Natural Hazards Mitigation Plan. https://storage.googleapis.com/proudcity/shermancountyor/2017/11/ShermanCountyNHMP2024.pdf

USFS (U.S. Department of Agriculture Forest Service). 1970. A Guide for Application of Meteorological Information to Forest Fire Control Operations: Chapter 11 - Weather and Fuel Moisture. Handbook 360. U.S. Department of Agriculture Forest Service. https://www.nwcg.gov/publications/pms425-1/weather-and-fuel-moisture

6.0 Approval Standards and Submittal Requirements

Table M-9. Approval Standards and Submittal Requirements Matrix

Requirements	Location
OAR 345-022-0115 Wildfire Prevention and Risk Mitigation	–
Submittal Requirements	
(1) To issue a site certificate, the Council must find, by way of supporting evidence from the applicant, that:	–

Requirements	Location
(a) The applicant has adequately characterized wildfire risk within the analysis area using current data from reputable sources, by identifying:	Section 2.0
(A) Baseline wildfire risk, based on factors that are expected to remain fixed for multiple years, including but not limited to topography, vegetation, existing infrastructure, and climate;	Section 2.1
(B) Seasonal wildfire risk, based on factors that are expected to remain fixed for multiple months but may be dynamic throughout the year, including but not limited to, cumulative precipitation and fuel moisture content;	Section 2.2
(C) Areas subject to a heightened risk of wildfire, based on the information provided under paragraphs (A) and (B) of this subsection;	Section 2.3
(D) High-fire consequence areas, including but not limited to areas containing residences, critical infrastructure, recreation opportunities, timber and agricultural resources, and fire-sensitive wildlife habitat; and	Section 2.4
(E) All data sources and methods used to model and identify risks and areas under paragraphs (A) through (D) of this subsection.	Section 2.5
(b) That the proposed facility will be designed, constructed, and operated in compliance with a Wildfire Mitigation Plan approved by the Council. The Wildfire Mitigation Plan must, at a minimum:	Section 3.0
(A) Identify areas within the RFA 5 Site Boundary Area that are subject to a heightened risk of wildfire, using current data from reputable sources, and discuss data and methods used in the analysis;	Section 3.0
(B) Describe the procedures, standards, and time frames that the applicant will use to inspect facility components and manage vegetation in the areas identified under subsection (a) of this section;	Section 3.0
(C) Identify preventative actions and programs that the applicant will carry out to minimize the risk of facility components causing wildfire, including procedures that will be used to adjust operations during periods of heightened wildfire risk;	Section 3.0
(D) Identify procedures to minimize risks to public health and safety, the health and safety of responders, and damages to resources protected by Council standards in the event that a wildfire occurs at the facility site, regardless of ignition source; and	Section 3.0
(E) Describe methods the applicant will use to ensure that updates of the plan incorporate best practices and emerging technologies to minimize and mitigate wildfire risk.	Section 3.0
Approval Standards	
(2) The Council may issue a site certificate without making the findings under section (1) if it finds that the facility is subject to a Wildfire Protection Plan that has been approved in compliance with OAR chapter 860, division 300.	–
(3) This Standard does not apply to the review of any Application for Site Certificate or Request for Amendment that was determined to be complete under OAR 345-015-0190 or 345-027-0363 on or before the effective date of this rule.	–

Figures

Biglow Canyon Wind Farm Request for Amendment #5

Figure M-1
Slope

SHERMAN COUNTY, OR

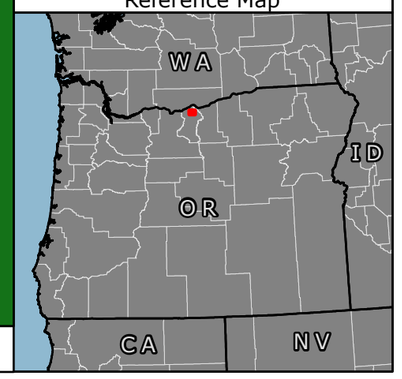
RFA5 Site Boundary
Analysis Area (0.5-mile Buffer)
State Boundary
City/Town

Slope
0 - 25 degrees

TETRA TECH

PGE

Reference Map



Wasco

1:30,000

WGS 1984 UTM Zone 10N

0 1 2 Miles

NOT FOR CONSTRUCTION

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Biglow Canyon Wind Farm Request for Amendment #5

Figure M-2
Fuel Models

SHERMAN COUNTY, OR

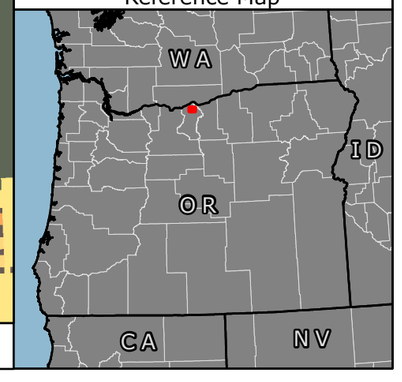
RFA5 Site Boundary
Analysis Area (0.5-mile Buffer)
City/Town

Fuel Model
- 91
- 93
- 99
- 101
- 102
- 121
- 122
- 123
- 142
- 161
- 162
- 181
- 182
- 183
- 185
- 242
- 251
- 252

TETRA TECH

PGE

Reference Map



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WGS 1984 UTM Zone 10N

0 1 2 Miles

NOT FOR CONSTRUCTION

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Biglow Canyon Wind Farm Request for Amendment #5

Figure M-3
Burn Probability

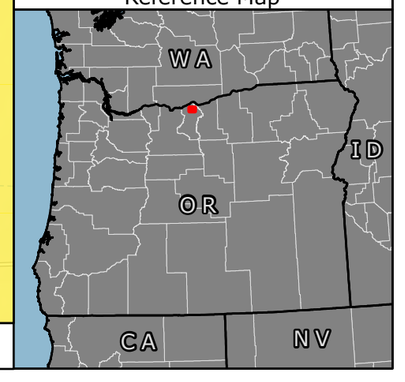
SHERMAN COUNTY, OR

RFA5 Site Boundary
Analysis Area (0.5-mile Buffer)
City/Town

Burn Probability
0
0 - 0.0001 Low (<= 1-in-10,000)
0.002 - 0.01 High (1-in-500 to 1-in-100)
0.01 - 0.02 High (1-in-100 to 1-in-50)

TETRA TECH
PGE

Reference Map



Wasco

1:30,000
WGS 1984 UTM Zone 10N
0 1 2 Miles
NOT FOR CONSTRUCTION

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Biglow Canyon Wind Farm Request for Amendment #5

Figure M-4
Average Flame Length

SHERMAN COUNTY, OR

RFA5 Site Boundary

Analysis Area (0.5-mile Buffer)

City/Town

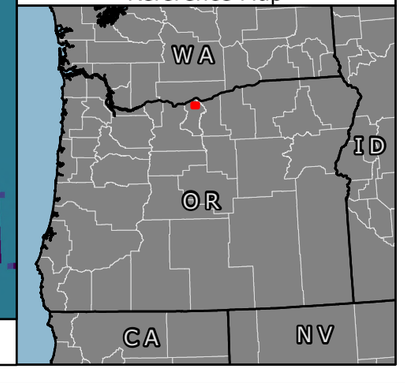
Average Flame Length

- 0 - 2 ft.
- 2 - 4 ft.
- 4 - 6 ft.
- 6 - 8 ft.
- 8 - 12 ft.
- Greater than 12 ft.

TETRA TECH

PGE

Reference Map



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1:30,000

WGS 1984 UTM Zone 10N

0 1 2 Miles

NOT FOR CONSTRUCTION

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Biglow Canyon Wind Farm Request for Amendment #5

Figure M-5
Expected Risk to Infrastructure

SHERMAN COUNTY, OR

- RFA5 Site Boundary
- Analysis Area (0.5-mile Buffer)
- City/Town

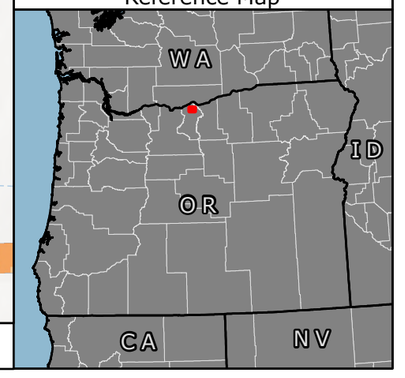
Expected Risk to Infrastructure

- Very High Loss
- High Loss
- Moderate Loss
- Low Loss

TETRA TECH

PGE

Reference Map



Wasco

1:30,000

WGS 1984 UTM Zone 10N

0 1 2 Miles

NOT FOR CONSTRUCTION

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Biglow Canyon Wind Farm Request for Amendment #5

Figure M-6
Expected Risk to People and Property

SHERMAN COUNTY, OR

RFA5 Site Boundary

Analysis Area (0.5-mile Buffer)

City/Town

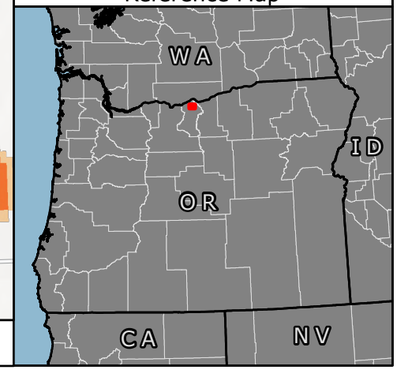
Expected Risk to People and Property

- Very High Loss
- High Loss
- Moderate Loss
- Low Loss

TETRA TECH

PGE

Reference Map



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1:30,000

WGS 1984 UTM Zone 10N

0 1 2 Miles

NOT FOR CONSTRUCTION

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Biglow Canyon Wind Farm Request for Amendment #5

Figure M-7 Integrated Expected Wildfire Risk

SHERMAN COUNTY, OR

- RFA5 Site Boundary
- Analysis Area (0.5-mile Buffer)
- City/Town

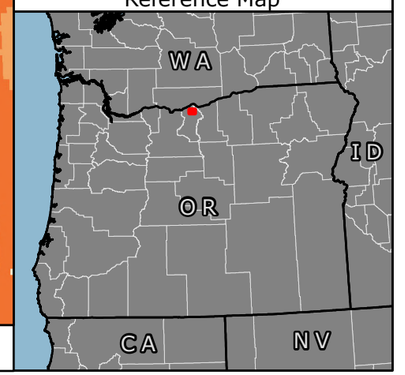
Integrated Expected Wildfire Risk

- Very High Loss
- High Loss
- Moderate Loss
- Low Loss
- Neutral
- Low Benefit
- Moderate Benefit

TETRA TECH

PGE

Reference Map



Wasco

1:30,000

WGS 1984 UTM Zone 10N

0 1 2 Miles

NOT FOR CONSTRUCTION

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Attachment M-1. Draft Construction Wildfire Mitigation Plan

Draft Construction Wildfire Mitigation Plan

Biglow Solar and BESS Facility

Prepared for

Portland General Electric Company

Prepared by

TETRA TECH

October 2026

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Attachment 1. Residence/Landowner Outreach Letter

1.0 Introduction

The Oregon Energy Facility Siting Council (EFSC) approved Portland General Electric Company's (PGE or Certificate Holder) Final Construction Wildfire Mitigation Plan (WMP) as part of the Request for Amendment (RFA) 4 to the Site Certificate for the Biglow Canyon Wind Farm (BCWF or Existing Facility), which added photovoltaic solar energy generation and battery storage (Solar Components) to the operating BCWF in Sherman County, Oregon. This approved Construction WMP will guide activities at the RFA 5 Solar Facility and will be finalized prior to construction of the RFA 5 Solar Components.

This plan is intended to satisfy the approval standards under Oregon Administrative Rules (OAR) 345- 022-0115(1)(b), which requires the Plan to:

> *(A) Identify areas within the site boundary that are subject to a heightened risk of wildfire, using current data from reputable sources, and discuss data and methods used in the analysis;*
>
> *(B) Describe the procedures, standards, and time frames that the applicant will use to inspect facility components and manage vegetation in the areas identified under subsection (a) of this section;*
>
> *(C) Identify preventative actions and programs that the applicant will carry out to minimize the risk of facility components causing wildfire, including procedures that will be used to adjust operations during periods of heightened wildfire risk;*
>
> *(D) Identify procedures to minimize risks to public health and safety, the health and safety of responders, and damages to resources protected by Council standards in the event that a wildfire occurs at the facility site, regardless of ignition source; and*
>
> *(E) Describe methods the applicant will use to ensure that updates of the plan incorporate best practices and emerging technologies to minimize and mitigate wildfire risk.*

This plan is submitted in adherence to the following Site Certificate Conditions relating to RFA 5:

> **Wildfire Prevention and Risk Mitigation Condition 1 (PRE-WF-01):** Prior to construction of any component or phase of the solar facility, the certificate holder shall finalize and submit to the Department, for review and approval, a Construction Wildfire Mitigation Plan (WMP), consistent with Attachment G to the Final Order on RFA 4.
>
> **Wildfire Prevention and Risk Mitigation Condition 2 (CON-WF-01):** During construction of the solar facility, the certificate holder shall require onsite contractors and employees to adhere to the Construction Wildfire Mitigation Plan (WMP) approved under Condition PRE-WF-01.

2.0 Final Wildlife Mitigation Plan Checklist (Prior to Construction)

2.1 Update Applicable Sections of Construction WMP

To finalize this Construction WMP prior to construction of the RFA 5 Solar Components, the Certificate Holder will update the following sections:

- Section 4.0, based on final Solar Component design, will include a brief description of areas within the site that are subject to high wildfire risk and fire prevention features at the site, such as road dimensions, setbacks, fire breaks, entry/exit locations, location of water trucks, and fire protection equipment locations.
- Section 4.1 will be updated and the Facility site maps described in Section 4.1.6 will be included in this WMP.
- Section 4.3 will be updated with contact information and emergency response procedures for the fire department, Certificate Holder, and operational manager. Section 4.3 will be updated with analysis area residence contact information and will confirm that analysis area residence contact letter were sent to residences within the site boundary and 0.5 miles from the Facility.
- Section 4.6 will be updated to describe vegetation management and areas that will be managed to be vegetation-free, noncombustible space, or gravel surface.

3.0 Prior to Construction Task List (PRE)

Prior to construction of the Solar Facility, the activities in Sections 3.1 and 3.2 will be completed.

3.1 Training

The Certificate Holder will organize and hold an on-site training with the Certificate Holder, contractors, and construction personnel, inviting specialty contractors, local fire departments, participating and adjacent landowners, emergency management office personnel, Oregon Department of Energy (ODOE), and any other emergency management agency that covers:

- Description of construction phasing;
- The type, location, and proper use of fire protection equipment;
- Fire protection equipment usage and maintenance requirements;
- The locations of water sources and proper usage, storing and maintenance for the pump, hose nozzle, and water hose;
- Overview of smoking policy and locations;

- Overview of procedures and restrictions of construction maintenance activities during Fire Season and Red Flag Warnings designated in this Plan:
    - Rescue, Alarm, Contain and Extinguish (RACE) procedures including:
        - Rescue anyone in danger (if safe to do so);
        - Alarm – call the control room, who will then determine if 911 should be alerted;
        - Contain the fire (if safe to do so); and
        - Extinguish the incipient fire stage (if safe to do so); and
- Provide information and encourage attendees to sign up for the County's emergency management notification system.

The training attendee list and training materials will be provided to ODOE to demonstrate compliance. The Certificate Holder will fill out and submit to ODOE the template residence outreach letter provided as Attachment 1 of this WMP. Once ODOE confirms the letter to be sufficient, the letter will be mailed to each residence within the 0.5-mile analysis area. The mailing will be confirmed and submitted to ODOE.

3.2 RFA 5 Site Boundary Area Site Maps Submission

The Certificate Holder will update site maps from Section 4.1.6 concurrently to local fire departments and ODOE.

4.0 Construction Wildfire Mitigation Plan (CON)

4.1 Summary of Solar Component Design Features and Fire Protection Equipment

4.1.1 Construction Phasing

The Certificate Holder and contractors will maintain vegetation within the RFA 5 Site Boundary and will also maintain a defensible space clearance along Facility features. Defensible space will be free of combustible vegetation or other materials. Roads and parking areas will be maintained to be free of vegetation tall enough to contact the undercarriage of the vehicle.

During construction clearing, grubbing, and grading, the contractor will establish a clear, brush-free area extending a minimum of 10 feet inside the fence line and a graveled, vegetation-free area extending a minimum of 10 feet outside the fence line. Vegetation within the 10-foot buffer area inside the fenceline will be managed in accordance with the recommendations of the local fire official and the Comprehensive Solar Revegetation and Soil Management Plan (see Exhibit C, Attachment C-1).

While hot work permits are not generally anticipated for the construction of the Solar Components, such permits or formal approval will be required during fire season if any hot work is to be conducted.

Fuel storage and handling protocols include the following:

- Any equipment or vehicles carrying fuel must remain parked at a designated location along the county-right-of way.
- Vehicles leaving the right-of-way must not carry fuel containers, with the exception of a single five-gallon container used to operate the water truck pump.
- Smoking will be restricted to designated areas within the Facility only.

4.1.2 Wildfire Risk

The data sources used in this Plan to identify areas within the RFA 5 Site Boundary Area subject to heightened risk of wildfire include the Oregon Community Wildfire Protection Plan (CWPP) Planning Tool (Oregon Explorer 2025) and the Sherman County Multiple-Jurisdictional Natural Hazards Mitigation Plan (Sherman County 2024).

The Sherman County Multiple-Jurisdictional Natural Hazards Mitigation Plan describes a county-wide risk assessment of wildfire as "high" probability and identifies many areas in the county as "conducive for large and fast-moving wildfires" due to high winds typical for regional dry conditions and terrain. The plan identifies risk factors for starting wildfires in the county as highways, railroads, lighting, power lines, debris burning, and equipment.

Exhibit M, Figure M-7 shows the integrated expected wildfire risk at the Biglow Solar and BESS Facility site. The RFA 5 Site Boundary Area is considered a high loss risk rating. Areas with the highest risk rating are generally around the Biglow Canyon Substation and existing residences and farm structures.

4.1.3 Fire Prevention

The greatest risk of fire is during construction, when welding and metal cutting will take place, and vehicles and construction equipment may be used in areas of tall, dry grass. To prevent fires from occurring, the construction contractor will implement a number of systems and procedures. These will include requirements to conduct welding or metal cutting only in areas cleared of vegetation, and to keep firefighting equipment on-site, as discussed in Section 4.4. Construction workers will keep vehicles on roads during the dry months of the year, unless off-road activities are required for emergency purposes, in which case fire precautions will be observed. Construction workers will be prohibited from parking vehicles in areas of tall, dry vegetation to prevent fires caused by contact with hot mufflers or catalytic converters. In the event of a large fire, emergency responders will be dispatched.

Fire prevention specific to solar arrays is dependent on proper installation and maintenance of electrical equipment to prevent short-circuits and consequent sparking, and reduction in fuel to

reduce the chance of fire spreading. Qualified staff will be employed to install and maintain electrical equipment. The solar array will have shielded electrical cabling, as required by applicable code, to prevent electrical fires. All electrical equipment will meet National Electrical Code and Institute of Electrical and Electronics Engineers standards. With proper maintenance and safety checks, the electrical collection system and generation tie (gen-tie) lines are unlikely to cause a fire. The substrate on the ground inside the solar array fence line will be gravel where needed for maintenance and access roads or where gravel already exists, and vegetation where gravel is not needed or already present. Weeds will be managed in accordance with the weed management procedures described in the Comprehensive Solar Revegetation and Soil Management Plan.

New roads needed for emergency access shall be sufficiently sized and designed for emergency vehicles in accordance with 2022 Oregon Fire Code requirements, including Section 503 and Appendix D - Fire Apparatus Access Roads. Road approaches up to the solar array will be 20 feet wide. Within the solar array fencing, the facility has been designed with 16-foot interior access roads. Roads accessing the substation and battery energy storage system (BESS) will be 24 feet wide. Interior access roads for the substation will be 20 feet wide and 24 feet wide for the BESS. Vegetation along service roads will be managed by mowing or other vegetation removal. The areas immediately around the operations and maintenance (O&M) buildings, proposed substation, and BESS will be graveled, with no vegetation present.

Additionally, the RFA 5 solar arrays, BESS, and associated components will be set back at least 50 feet from all property lines of non-participating landowners.

4.1.4 Battery Energy Storage System Fire Prevention

The Certificate Holder will implement the following fire prevention and control methods to minimize fire and safety risks for the lithium ion (Li-ion) batteries proposed for the BESS:

- The batteries will be stored in completely contained, leak-proof modules.
- The Li-ion battery system will be kept in a temperature-controlled facility with individual battery modules isolated to prevent the spread of fire if it were to occur.
- The batteries will be based on lithium iron phosphate chemistry, which has a lower risk of fire.
- The Li-ion battery system will comprise multiple temperature-controlled battery enclosures, each with its own fire detection, monitoring, and fire protection systems. The battery enclosures will be spaced at a minimum recommended distance from each other as required by the battery supplier, Authority Having Jurisdiction requirements, and applicable codes and standards. Minimum spacing isolates each battery enclosure and reduces the risk of fire propagation between battery enclosures in the unlikely event of a fire.
- Ample working space will be provided around the BESS for maintenance and safety purposes.

- Twenty-four-hour monitoring of the BESS will be implemented and will include shutdown capabilities.
- Transportation of Li-ion batteries is subject to 49 Code of Federal Regulations (CFR) 173.185 – Department of Transportation Pipeline and Hazardous Material Administration. This regulation contains requirements for prevention of a dangerous evolution of heat, prevention of short circuits, prevention of damage to the terminals, and prevention of batteries coming into contact with other batteries or conductive materials. Adherence to the requirements and regulations, personnel training, safe interim storage, and segregation from other potential waste streams will minimize any public hazard related to transport, use, or disposal of batteries.
- Design of the BESS will be in accordance with applicable Underwriters Laboratories (UL 2023; specifically 1642, 1741, 1973, 9540A), National Electric Code, and National Fire Protection Association (specifically 855) standards, which require rigorous industry testing and certification related to fire safety and/or other regulatory requirements applicable to battery storage at the time of construction.
- Additionally, the Certificate Holder will employ the following design practices, as applicable to the available technology and design at time of construction:
    - Employment of an advanced and proven battery management system;
    - Qualification testing of battery systems in accordance with UL 9540A (Revision 4) at the battery cell, module, and unit level;
    - Installation of fire sensors, smoke and hydrogen and/or carbon monoxide detectors, alarms, emergency ventilation systems, cooling systems within each battery enclosure;
    - Employment of fire control panels with 24-hour battery backup;
    - Installation of doors that lock with restricted access to authorized personnel only;
    - Implementation of locks and fencing to prevent entry of unauthorized personnel;
    - Installation of remote power disconnect switches; and
    - Clear and visible signs to identify remote power disconnect switches.

4.1.5 Facility Access

Facility access will primarily come from existing County roads. The perimeter fencing will have lockable vehicle access gates. The number of gates will be included in the finalized plan. Each solar array would be enclosed by wire mesh, chain link, or similar perimeter fencing, up to 7-8 feet in height.

4.1.6 Facility Site Maps

Facility site maps can be found attached to the Background Exhibit as Figure 2. The site maps include the proposed RFA 5 Site Boundary Area, access roads, gen-tie line, BESS, project substation, and O&M building. As discussed above, locations of specific access points and gates will depend on final configuration of the Solar Components and related infrastructure. As discussed in Exhibit M, integrated expected wildfire risk is used to identify high-fire consequence areas. Integrated expected wildfire risk is shown on Figure M-7.

The following information will be verified and provided on a figure included in the revised final Construction WMP prior to construction:

- The phasing for construction of facility features and components.
- Location of vegetation-free, noncombustible, defensible spaces.
- Location and dimensions of facility roads.
- The location of facility access points.
- A description and the location of emergency access procedures, including how emergency responders and/or adjacent landowners may access the site for fire protection equipment or to extinguish an on-site fire when personnel will not be onsite.
- The type and location of fire protection equipment on site.
- The locations of water sources that will be on site during construction.
- High-fire consequence areas/resources (includes existing infrastructure, residences, sensitive habitat, or cultural resources).

4.2 Specifications for Fire Protection Equipment

The following fire suppression equipment will be carried in vehicles conducting maintenance activities and stored on site at the O&M building at all times:

- Fire Extinguisher: Dry chemical. 2A:10BC (5-pound), properly mounted or secured;
- Pulaski;
- Hand Shovel: Round point. 26 to 28 inches "D" Handle, blade - 12 inches long and 10 inches wide; and
- Collapsible Pail or Backpack Pump: 5-gallon capacity.

During fire season (designated Fire Season or June to October each year), water trucks/water source, water buffalo, or tank with minimum 500-gallon capacity must be on site. The water truck or water supply shall include the following, approved by ODOE:

- Pumps should be maintained ready to operate and capable of providing a discharge of not less than 20 gallons per minute at 115 pounds per square inch at pump level. Note: Volume

pumps will not produce the necessary pressure to effectively attack a fire start. Pressure pumps are recommended.

- Provide enough hose (500 feet minimum) not less than ¾-inch inside diameter to reach areas where power driven machinery has worked.
- Water supply, pump, and at least 250 feet of hose with nozzle must be maintained as a connected, operating unit ready for immediate use.

All internal combustion engines must be equipped with exhaust systems, mufflers and screens, or include an appropriate spark arrester, and must be kept in good operating condition. All combustion engines (including but not limited to off road vehicles, chainsaws, and generators) will be equipped with a spark arrester that meets U.S. Forest Service Standard 5100-1.

All power-driven machinery will be kept free of excess flammable material that may create a risk of fire.

4.3 Solar Component Contact Information and Emergency Response Procedures

Local fire department and county emergency management contact information is as follows:

- North Sherman County Rural Fire Protection District: (541) 442-5252 or 911
- Sherman County Emergency Services: (541) 565-3100 or 911

Fire department response times to the site: 15 to 20 minutes

Certificate Holder primary contact and contact of construction contractor managers:

Certificate Holder Primary Contact Information	
Name	Dan Wilson
Company	Portland General Electric Company
Street Address	121 SW Salmon Street, 3WTC0403
City/State/Zip	Portland, OR 97204
Phone	503-630-8138
Email	Dan.Wilson@pgn.com
Construction Contractor Manager Contact Information	
Name	(Will be updated prior to construction)
Title	
Street Address	
City/State/Zip	
Phone	
Email	

Residence addresses within and 0.5 mile from the RFA 5 Site Boundary:

- The residence/landowner outreach letter, provided as Attachment 1, was provided to residences within the analysis area for RFA 4 and will similarly be provided to residences within the analysis area for RFA 5 before the start of construction.
- A list of property owners within the RFA 5 Site Boundary and a 0.5-mile radius is included in the Background Information Exhibit as Attachment 2.

Contact 911 in the event of:

- A fire or emergency on-site that cannot be addressed by personnel on-site and requires the assistance of fire or emergency medical personnel;
- A fire ignition on-site that spreads out of the fence line;
- Any fire off-site that does not have emergency responders on site.
    - To the extent that construction personnel can safely assist and/or provide equipment to help extinguish off-site fires until emergency responders are on site, it is encouraged to do so to assist in the spread of the fire, loss of life, property and damage to the environment.

4.4 Use of Vehicles and Power-Driven Machinery at Site

The following best management practices (BMPs) to minimize fire risk from vehicle travel, equipment use, and fueling activities will be implemented at the site during construction:

- The movement of vehicles will be planned and managed to minimize fire risk.
- The contractors will be responsible for identifying and marking paths for all off-road vehicle travel. All off-road vehicle travel will be required to stay on the identified paths. No off-road vehicle travel will be permitted while working alone. Travel off road or parking in vegetated areas will be restricted during fire season as designated in this Plan.
- Areas with grass that are as tall or taller than the exhaust system of a vehicle must be wetted or mowed before vehicles travel through them.
- Workers will be instructed to shut off the engine of any vehicle that gets stuck and periodically inspect the area adjacent to the exhaust system for evidence of ignition of vegetation. Stuck vehicles will be pulled out rather than “rocked” free, and the area will be inspected again after the vehicle has been moved.
- The contractors will designate a location for field fueling operations at the temporary construction yards. Any fueling of generators, pumps, and the like shall take place at this location only.
- Fuel containers, if used, shall remain in a vehicle or equipment trailer, parked at a designated location alongside a county right-of-way. No fuel containers shall be in the vehicles that exit the right-of-way except the five-gallon container that is required for the water truck pump.

- All power-driven machinery will be kept free of excess flammable material that may create a risk of fire.

4.5 Fire Weather Monitoring and Restrictions during Fire Season

4.5.1 Definitions

- **Non-Fire Season –** Approximately October–May
- **Fire Season –** Approximately June–September, formally designated by the Oregon Department of Forestry (ODF). Under Oregon Revised Statutes (ORS) 478.960 (4), a Fire Chief can establish Fire Season within a Fire District when ODF, under ORS 477.505, declares Fire Season. This begins a period of seasonal restrictions for public and industry.
- **Fire Weather Watch –** A fire weather watch is issued when there is a high potential for the development of a red flag event. A watch is issued 18 to 96 hours in advance of the expected onset of criteria. The intent of a fire weather watch is to alert forecast users at least a day in advance for the purposes of resource allocation and fire fighter safety. A watch means critical fire weather conditions are possible but not imminent or occurring.
- **Red Flag Weather Warning –** A red flag warning is used to warn of impending or occurring red flag conditions. Its issuance denotes a high degree of confidence that weather and fuel conditions consistent with local red flag event criteria will occur in 48 hours or less. Specific Red Flag criteria differ for each situation and district in Oregon. Be extremely careful with open flames and other activities that emit sparks.
- **Hot Work –** Any cutting, grinding, welding, or other activity that creates spark or open flame.

4.5.2 Fire Watch Service

Fire watch shall:

- Be physically capable of and experienced in operating firefighting equipment.
- Have facilities for transportation and communications to summon assistance.
- Observe portions of the facility where equipment activity occurred during the day.

Upon discovery of a fire, fire watch personnel must first report the fire, summon any necessary firefighting assistance, describe intended fire suppression activities, and then, after determining a safety zone and an escape route that will not be cut off if the fire increases or changes direction, immediately proceed to control and extinguish the fire, consistent with firefighting training and safety.

4.5.3 Fire-Prevention Measures and Restrictions

The Certificate Holder shall maintain a log when construction activities are impacted by Fire Restrictions during Fire Season as designed in this section. The log will include:

- The date;
- Fire Precaution Level; and
- Description of actions taken, including if any measures were taken to reduce wildfire risk that are not identified in this Plan.

4.5.3.1 Non-Fire Season

- All hot work must be conducted on roads or on non-combustible surfaces.
- Smoking must occur in designated areas only.

4.5.3.2 Fire Season

- All hot work (any cutting, welding, or other activity that creates spark or open flame) must be conducted on roads or on non-combustible surfaces.
- Water source meeting specifications in this Plan will be on site during fire season.
- Following the completion of hot work, the Certificate Holder or contractors must maintain a fire watch for 60 minutes to monitor for potential ignition.
- Fire watch shall be on duty during any breaks and for one hour after all power-driven machinery used by the operator has been shut down for the day.
- Smoking in designated areas only.

4.5.3.3 Fire Weather Watch

- No hot work permitted.
- Driving and parking only permitted on graveled or paved surfaces.
- Fire watch shall be on duty during any breaks and for one hour after all power-driven machinery used by the operator has been shut down for the day.
- No smoking on site.

4.5.3.4 Red Flag Weather Warning

- No hot work permitted.
- On-site personnel must be aware of Red Flag Warning.
- Driving and parking only permitted on graveled or paved surfaces.
- Fire watch shall be on duty during any breaks and for one hour after all power-driven machinery used by the operator has been shut down for the day.
- No smoking on site.

Table 1. Fire Prevention Measures during Fire Season

Requirement	Non-Fire Season	Fire Season	Fire Weather Watch	Red Flag Warning
Fire weather advisory	Not required	Not required	Not required	On-site personnel must be aware of Red Flag Warning.
On-site water source	N/A	As specified in Section 4.2	As specified in Sections 4.2 and 4.3.	As specified in Sections 4.2 and 4.3.
Hot work	Only permitted on roads or on non-combustible surfaces.	Only permitted on roads or on non-combustible surfaces; fire watch required for 60 minutes after completion	Not Permitted	Not Permitted
Fire Watch Service	Not required	During breaks and for 60 minutes after all power-driven machinery has been shut down for the day.	During breaks and for 60 minutes after all power-driven machinery has been shut down for the day.	During breaks and for 60 minutes after all power-driven machinery has been shut down for the day.
Driving and parking	As described in Section 4.4.	As described in Section 4.4.	Only permitted on roads or on non-combustible surfaces and Section 4.4.	Only permitted on roads or on non-combustible surfaces and Section 4.4.
Smoking	Designated areas only	Designated areas only	Not permitted	Not permitted

4.6 Vegetation Management

4.6.1 Vegetation-free, Noncombustible Space, and Vegetation Standards

Vegetation within the fence line and below the solar arrays will be maintained in accordance with the Comprehensive Solar Revegetation and Soil Management Plan (see Exhibit C, Attachment C-2) for the facility.

- Vegetation within and adjacent to the Solar Components will be maintained as follows:
    - During the dry season (June to October), vegetation height will be limited to 4 to 8 inches. Vegetation will be mowed to a height of 4 inches prior to June of each year.
    - Outside the dry season (November to May), vegetation will be maintained at a maximum height of less than 12 inches.
- A minimum vertical clearance of 12 inches from electrical and mechanical equipment will be maintained at all times.

- Vegetation exceeding the heights listed above shall be removed or mowed. Mowing must be done in advance of fire season or in accordance with any fire restrictions.
- A minimum 20-foot clear, brush-free area will be maintained around the perimeter of fenced solar arrays (10 feet inside the fence consisting of managed vegetation and 10 feet outside the fence consisting of vegetation-free gravel). Activities necessary to maintain the area as clear, brush-free shall be based on consultation with the local fire code official.
- Vegetation along service roads will be managed by mowing or other vegetation removal.
- At no point shall vegetation come in contact with electrical equipment.
- Any vegetation removed from the site will be disposed of and not stored onsite.
- The Certificate Holder and contractors will prevent the accumulation of combustible burn piles on site.

The following areas will be managed to be vegetation-free, noncombustible space, or gravel surface:

- Fenced areas around the collector substation and operations and maintenance structure will be graveled, with no vegetation present.
- All newly constructed roads will be graded and graveled to meet load requirements for all equipment.
- Vegetation in these areas will be managed by the following techniques:
    - Mechanical Clearing: mowing, brushing, chipping, tree trimming/felling;
    - Manual Clearing: hand tools (chainsaws, machetes, handsaws); and
    - Chemical Treatment: use of approved herbicides by licensed applicators to control or suppress vegetation growth (broadcast spray, spot treatment, cut-stump/basal bark).

4.7 Construction Trainings

4.7.1 Safety Training

Once per year after construction begins, the Certificate Holder will organize and hold an on-site training with construction personnel, inviting equipment manufacturers, specialty contractors, local fire departments, participating and adjacent landowners, emergency management office personnel, ODOE, and any other emergency management agency that covers:

- The location of electrical facility components and the fire safety measures associated with each component that have been constructed;
- Description of remaining construction phasing;
- The type, location, and proper use of fire protection equipment;
- Fire protection equipment usage and maintenance requirements;

- The locations of water sources and proper usage, storing and maintenance for the pump, hose nozzle; and water hose;
- Overview of smoking policy and locations;
- Overview of procedures and restrictions of construction activities during Fire Season, Fire Weather Watches, and Red Flag Warnings designated in this Plan;
- RACE procedures including:
    - Rescue anyone in danger (if safe to do so);
    - Alarm – call the control room, who will then determine if 911 should be alerted;
    - Contain the fire (if safe to do so); and
    - Extinguish the incipient fire stage (if safe to do so).
- Provide information about the County's emergency management notification system.

5.0 Plan Updates: Amendments and Reporting Requirements:

The following will be provided to ODOE in the semi-annual construction report required per OAR 345-026-0080:

- Sections 4.1 and 4.2: any changes in wildfire risk at the site or changes in facility components or preventative features.
- Section 4.3: any changes in local fire protection agency personnel and operational managers.
- Section 4.3: any changes in analysis area residence/landowner addresses or contact information.
- A copy of the Fire Season Restriction Log identified in Section 4.5.3.
- Changes in wildfire risk if different from the Site Plan provided prior to construction. Evaluation of wildfire risk will be consistent with the requirements of OAR 345-022-0115(1) using current data from reputable sources.

This information may be used to establish the performance of the Construction WMP. If determined by the Certificate Holder or ODOE, adjustments or improvements must be proposed to ensure the Construction WMP provides wildfire mitigation. Any ODOE-required updates shall be implemented within 14 days, unless otherwise agreed to by ODOE based on a good faith effort to address wildfire hazard.

This Plan may be amended from time to time by agreement of the Certificate Holder and EFSC or ODOE, acting within its delegated authority of EFSC. Such amendments may be made without amendment of the site certificate. EFSC authorizes ODOE to agree to amendments to this Plan. ODOE will notify EFSC of all amendments, and EFSC retains the authority to approve, reject, or modify any amendment of this Plan agreed to by ODOE.

6.0 References

Oregon Explorer. 2025. Oregon CWPP Planning Tool. https://tools.oregonexplorer.info/oe_htmlviewer/index.html?viewer=wildfireplanning

Sherman County. 2024. Sherman County Multiple-Jurisdictional Natural Hazards Mitigation Plan.

Attachment 1. Residence/Landowner Outreach Letter

Portland General Electric
121 SW Salmon Street
Portland, Ore. 97204
PortlandGeneral.com

13123 E Emerald Coast Pkwy
Ste B #158
Inlet Beach, FL 32461
info@brightnightpower.com

[date], 2027
Biglow

Re: Community Outreach Letter for Biglow Solar Facility

My name is Dan Wilson and I'm the Director for Renewable Operations at Portland General Electric Company (PGE). We are the certificate holder of the Biglow Solar Facility, approved by the Oregon Energy Facility Siting Council (EFSC) in [month] 2027. Phase 1 of the Biglow Solar Facility, a 125-megawatt solar and battery storage facility located near Wasco in Sherman County, Oregon, was approved by Oregon EFSC in March 2026 and is currently under construction. The Project Developer, BrightNight (BN), will begin construction of the second phase of the Solar Facility in [month] 2027. Phase 2 of the Solar Facility is a 200-megawatt solar and battery storage facility located south of the Phase 1 facility. You are receiving this letter because your address is within 0.5 miles of the Phase 2 facility site boundary and we want to make sure you are aware of the following information:

- Safety at the facility is our highest priority. We have emergency procedures in place in the event of an emergency on site or off site that may impact the facility and adjacent areas. These procedures include a Wildfire Mitigation Plan (WMP) that addresses vegetation management, facility inspections, and maintenance protocols to minimize the risk of fire ignition and spread. The WMP also requires fire protection equipment to be on site and allows for emergency access to the site for fire departments in the event of a fire on site or off site.
- In the event of an emergency on site or off site that cannot be addressed by facility personnel, local emergency and law enforcement will be contacted and procedures designated by the Sherman County's Office of emergency management will be followed, as necessary.
- If you have not already done so, we recommend you sign up for Sherman County emergency notification system. You may sign up via the County's webpage or directly via this link: Link: https://www.co.sherman.or.us/question/get-notified-county-emergency-alerts/#/city/answers/public-information/get-notified-county-emergency-alerts

Please contact us if you have any questions about the facility, PGE or BrightNight, or any other concerns regarding construction and operation of the facility. Further, the Oregon Department of Energy (ODOE) is staff to EFSC and can be contacted if you have questions. Follow the link below for contact information:

https://www.oregon.gov/energy/facilities-safety/facilities/Pages/Compliance-Program.aspx

Sincerely,

Daniel Wilson
Director, Renewable Operations

Kathleen Campanella
Senior Director, Development

Portland General Electric
121 SW Salmon Street
Portland, Ore. 97204
PortlandGeneral.com

13123 E Emerald Coast Pkwy
Ste B #158
Inlet Beach, FL 32461
info@brightnightpower.com

Portland General Electric Company
Dan.Wilson@pgn.com
(503) 630-8138

BrightNight
kathleen.campanella@brightnightpower.com
(850) 714-3094

Attachment M-2. Draft Operational Wildfire Mitigation Plan

Draft Operational Wildfire Mitigation Plan
Biglow Solar and BESS Facility

Prepared for
Portland General Electric Company

Prepared by



October 2026

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Attachment 2. Residence/Landowner Outreach Letter (to be provided prior to operations)

Attachment 3. List of Residences (to be provided prior to operations)

Attachment 4. Manufacturer Recommendations (to be provided prior to operations)

1.0 Introduction

Portland General Electric Company (PGE or Certificate Holder) submits this Draft Operations Wildfire Mitigation Plan (WMP) as part of the Request for Amendment (RFA) 5 to the Site Certificate on Amendment 4, issued March 27, 2026 (Site Certificate) for the Biglow Canyon Wind Farm (BCWF or Facility) to add a second phase of photovoltaic solar energy generation and battery storage (Solar Components) to the operating BCWF in Sherman County, Oregon.

This plan uses the template provided by the Oregon Department of Energy (ODOE) on January 28, 2025, and includes preventative actions, procedures, and standards commonly proposed to meet the requirements of Oregon Administrative Rules (OAR) 345-022-0115(1)(b) and reflects practices that ODOE has identified as appropriate to minimize wildfire risk at solar photovoltaic power generation facilities. This plan is intended to satisfy the approval standards under OAR 345-022-0115(1)(b), which requires the Plan to:

> *(A) Identify areas within the site boundary that are subject to a heightened risk of wildfire, using current data from reputable sources, and discuss data and methods used in the analysis;*
>
> *(B) Describe the procedures, standards, and time frames that the applicant will use to inspect facility components and manage vegetation in the areas identified under subsection (a) of this section;*
>
> *(C) Identify preventative actions and programs that the applicant will carry out to minimize the risk of facility components causing wildfire, including procedures that will be used to adjust operations during periods of heightened wildfire risk;*
>
> *(D) Identify procedures to minimize risks to public health and safety, the health and safety of responders, and damages to resources protected by Council standards in the event that a wildfire occurs at the facility site, regardless of ignition source; and*
>
> *(E) Describe methods the applicant will use to ensure that updates of the plan incorporate best practices and emerging technologies to minimize and mitigate wildfire risk.*

Additionally, this plan will be the basis for the plan submitted in adherence to the following Site Certificate Conditions relating to RFA 4:

> **Pre-Operational PRO-WF-01(a):** *Prior to operation of the solar facility, phase or component, as applicable, the certificate holder shall submit to the Department for review and approval, an Operational Wildfire Mitigation Plan that complies with the requirements of OAR 345-022-0115(1)(b).*
>
> **Operation Condition OPR-WF-01:** *During operation of the solar facility, the certificate holder must adhere to the requirements of the Operational Wildfire Mitigation Plan as approved by the Department under Condition PRO-WF-01, as updated in accordance with the requirements of the plan.*

2.0 Finalizing Wildfire Mitigation Plan Prior to Operation (PRO)

The Draft and Final Operational WMP will be developed in accordance with ODOE's WMP guidance and outlines the following required actions to mitigate wildfire risk and prevent wildfires during operation of the Solar Components. This WMP will be updated to reflect final design details prior to beginning operations.

2.1 Update Applicable Sections of WMP

To finalize this Operational WMP prior to operation of the Solar Components, the following sections will be updated; additional sections may be updated as necessary:

- Update Section 4.1 based on final Solar Component design, including a brief description of areas within the site that are subject to high wildfire risk; fire prevention features at the site, such as road dimensions, setbacks, fire breaks, entry/exit locations, location of water trucks; and fire protection equipment locations.
- Include in this WMP as Attachment 1 the facility site maps described in Section 4.2.
- Update Section 4.3 with contact information and emergency response procedures for the fire department, Certificate Holder, and operational manager. Update Section 4.3 with analysis area residence contact information and confirm analysis area residence contact letter sent to residences within site boundary and 0.5 miles from the facility.
- Update Section 4.6 to describe vegetation management and areas that will be managed to be vegetation-free, noncombustible space, or gravel surface.

3.0 Prior to Operation Task List (PRO)

Prior to operation of the facility, the activities in Sections 3.1 and 3.2 will be completed.

3.1 Training (PRO)

Before beginning operation, the Certificate Holder will hold an on-site training with the Certificate Holder, contractors, and operations personnel, inviting equipment manufacturers, specialty contractors, local fire departments, participating and adjacent landowners, emergency management office personnel, ODOE, and any other emergency management agency. The training will cover:

- Description of Solar Component operations, their locations, and the fire safety measures associated with each component;
- Battery safety protocols, including how to appropriately address chemical fires, in the event of an emergency;
- The type, location, and proper use of fire protection equipment;
- Fire protection equipment maintenance requirements;

- The locations of water sources and proper usage, storing and maintenance for the pump, hose nozzle; and water hose;
- Overview of smoking policy and locations;
- Overview of procedures and restrictions of operations and maintenance (O&M) activities during Fire Season and Red Flag Warnings designated in this Plan;
- Fire Response Protocol including:
    - Stop work and address personal safety;
    - Notification of emergency services and PGE Biglow emergency line;
    - Evacuation and containment under applicable emergency procedures;
    - Fire suppression only when reasonable and safe; and
    - Evidence preservation and incident reporting.
- Provide information and encourage attendees to sign up for the County's emergency management notification system.

The training attendee list and training materials will be provided to ODOE to demonstrate compliance. The Certificate Holder will fill out and submit to ODOE the template residence outreach letter provided as Attachment 2 of this WMP. Once ODOE confirms the letter to be sufficient, the letter will be mailed to each residence within the 0.5-mile analysis area. The mailing will be confirmed and submitted to ODOE.

3.2 Solar Micrositing Area Site Maps Submission

The Certificate Holder will update site maps from Section 4.2 concurrently to local fire departments and ODOE.

4.0 Operational Wildfire Mitigation Plan (OPR)

4.1 Summary of Solar Component Design Features and Fire Protection Equipment

Prior to operations, the Certificate Holder will provide a summary and description of areas within the site that are subject to high wildfire risk and fire prevention features at the site, such as road dimensions, setbacks, fire breaks, entry and exit locations, and water truck(s) and fire protection equipment locations.

The Certificate Holder will also describe fire detection, fire suppression, and emergency shut off systems that will be activated in the event of a fire.

4.1.1 During Operations

The Certificate Holder and contractors will maintain vegetation within the Solar Micrositing Area and will also maintain a defensible space clearance along Facility features. Defensible space will be free of combustible vegetation or other materials. Roads and parking areas will be maintained to be free of vegetation tall enough to contact the undercarriage of the vehicle.

During operations, the contractor will establish a noncombustible buffer zone extending a minimum of 10 feet inside the fence line and another minimum 10-foot limits of disturbance buffer outside the fence line for a total of a minimum of 20 feet of noncombustible buffer around the perimeter of the site.

While hot work permits are not generally anticipated for the operation of the Solar Components, such permits or formal approval will be required during fire season if any hot work is to be conducted.

Fuel or oils needed for maintenance will be delivered by a licensed maintenance contractor on an as-needed basis, and no substantial quantities will be stored on-site during operations. Fuel storage and handling protocols include the following:

- Any equipment or vehicles carrying fuel must remain parked at a designated location along a county-right-of way.
- Vehicles leaving the right-of-way must not carry fuel containers, with the exception of a single 5-gallon container used to operate the water truck pump.
- Smoking will be restricted to designated areas within the Facility only.

Water storage tanks will be placed and maintained near the battery energy storage system (BESS) yard(s), and additional tanks will be placed and maintained in other locations near the Solar Micrositing Area, outside the perimeter fence line. These tanks will be available to support local firefighting efforts and will be refilled as necessary. The locations of the tanks will be shown on the site map.

4.1.2 Wildfire Risk

Risk conclusions for the Solar Micrositing Area are informed by current external wildfire-risk data used in this Operational WMP, including the Oregon Community Wildlife Protection Plan (CWPP) Planning Tool (Oregon Explorer 2025) and the Sherman County Multiple-Jurisdictional Natural Hazards Mitigation Plan (Sherman County 2024). Based on those sources, the Solar Micrositing Area includes areas rated moderate and high for wildfire loss, and Sherman County identifies wildfire probability as high with conditions conducive to large, fast-moving wildfires due to dry conditions, high winds, and terrain.

The resulting risk characterization is used to identify heightened-risk areas and to inform site-specific mitigation measures, including noncombustible buffers, vegetation management, inspection and maintenance frequencies, fire-season work restrictions, emergency access, water supply placement, and fire-protection equipment locations. This approach aligns the Operational WMP with

PGE's corporate generation-risk methodology while applying site-specific controls required for the Solar Components.

The data sources used in this Plan to identify areas within the Solar Micrositing Area subject to heightened risk of wildfire include the Oregon CWPP Planning Tool (Oregon Explorer 2025) and the Sherman County Multiple-Jurisdictional Natural Hazards Mitigation Plan (Sherman County 2024).

The Solar Micrositing Area has a 43 percent moderate loss rating and 36 percent high loss rating. Moderate to high ratings are generally where existing BCWF infrastructure is present. Overall, it is anticipated that, due to the existing infrastructure, high burn probability, moderate to high expected intensity as measured by average flame length, fuels, weather, and topography, overall fire risk for the RFA 5 Solar Facility would be moderate to high.

The Sherman County Multiple-Jurisdictional Natural Hazards Mitigation Plan describes a county-wide risk assessment of wildfire as "high" probability and identifies many areas in the county as "conducive for large and fast-moving wildfires" due to high winds typical for regional dry conditions and terrain. The plan identifies risk factors for starting wildfires in the county such as highways, railroads, lighting, power lines, debris burning, and equipment.

4.1.3 Fire Prevention

To prevent fires from occurring, the O&M contractor will implement a number of systems and procedures. These will include requirements to conduct welding or metal cutting only in areas cleared of vegetation, and to keep firefighting equipment on-site as discussed in Section 4.2. Workers will keep vehicles on roads during the dry months of the year, unless offroad activities are required for emergency purposes, in which case fire precautions will be observed. Workers will be prohibited from parking vehicles in areas of tall, dry vegetation to prevent fires caused by contact with hot mufflers or catalytic converters. In the event of a large fire, emergency responders will be dispatched.

Fire prevention specific to solar arrays is dependent on proper installation and maintenance of electrical equipment to prevent short-circuits and consequent sparking, and reduction in fuel to reduce the chance of fire spreading. Qualified staff will be employed to install and maintain electrical equipment. The solar array will have shielded electrical cabling, as required by applicable code, to prevent electrical fires. All electrical equipment will meet National Electrical Code and Institute of Electrical and Electronics Engineers standards. Proper installation, maintenance, and safety inspections reduce the potential for the electrical collection system and generation tie (gen-tie) lines to initiate a fire. The substrate on the ground inside the solar array fence line will be gravel where needed for maintenance and access roads or where gravel already exists, and vegetation where gravel is not needed or already present. Weeds will be managed in accordance with the weed management procedures described in the Comprehensive Solar Revegetation and Soil Management Plan. Additional fire prevention and response measures for BCWF as a whole—including best management practices related to worker activities, maintenance of fire suppression equipment, and coordination with the local fire district—are described in Exhibit L.

The new roads proposed within the Solar Micrositing Area shall be sufficiently sized for emergency vehicle access in accordance with 2022 Oregon Fire Code requirements, including Section 503 and

Appendix D - Fire Apparatus Access Roads. Road approaches up to the solar array will be 20 feet wide. Within the solar array fencing, the facility has been designed with 16-foot interior access roads. Roads accessing the substation and BESS will be 24 feet wide. Interior access roads for the substation will be 20 feet wide and 24 feet wide for the BESS. The areas immediately around the O&M buildings, proposed substation, and BESS will be graveled, with no vegetation present. See Exhibit L for additional discussion of fire prevention measures and coordination with local emergency responders.

Additionally, the solar arrays, BESS, and associated facility components will be set back at least 50 feet from all non-participating landowner property lines.

4.1.4 Battery Energy Storage System Fire Prevention

The Certificate Holder will implement the following fire prevention and control methods to minimize fire and safety risks for the lithium-ion (Li-ion) batteries proposed for the BESS:

- The batteries will be stored in completely contained, leak-proof modules.
- The Li-ion battery system will be kept in a temperature-controlled facility with individual battery modules isolated to prevent the spread of fire if it were to occur.
- The batteries will be based on lithium iron phosphate chemistry, which has a lower risk of fire.
- The Li-ion battery system will comprise multiple temperature-controlled battery enclosures, each with its own fire detection, monitoring, and fire protection systems. The battery enclosures will be spaced at a minimum recommended distance from each other as required by the battery supplier, Authority Having Jurisdiction requirements, and applicable codes and standards. Minimum spacing isolates each battery enclosure and reduces the risk of fire propagation between battery enclosures in the unlikely event of a fire.
- Ample working space will be provided around the BESS for maintenance and safety purposes.
- Twenty-four-hour monitoring of the BESS will be implemented and will include shutdown capabilities.
- Transportation of Li-ion batteries is subject to 49 Code of Federal Regulations 173.185 – Department of Transportation Pipeline and Hazardous Material Administration. This regulation contains requirements for prevention of a dangerous evolution of heat, prevention of short circuits, prevention of damage to the terminals, and prevention of batteries coming into contact with other batteries or conductive materials. Adherence to the requirements and regulations, personnel training, safe interim storage, and segregation from other potential waste streams will minimize any public hazard related to transport, use, or disposal of batteries.
- Design of the BESS will be in accordance with applicable Underwriters Laboratories standards and codes (specifically, 1642, 1741, 1973, 9540A), National Electric Code, and National Fire Protection Association (specifically 855) standards, which require rigorous

industry testing and certification related to fire safety and/or other regulatory requirements applicable to battery storage at the time of operations.

- Additionally, the Certificate Holder will employ the following design practices, as applicable to the available technology and design at time of operations:
    - Employment of an advanced and proven battery management system;
    - Qualification testing of battery systems in accordance with UL 9540A (Revision 4) at the battery cell, module, and unit level;
    - Installation of fire sensors, smoke and hydrogen and/or carbon monoxide detectors, alarms, emergency ventilation systems, cooling systems within each battery enclosure;
    - Employment of fire control panels with 24-hour battery backup;
    - Installation of doors that lock with restricted access to authorized personnel only;
    - Implementation of locks and fencing to prevent entry of unauthorized personnel;
    - Installation of remote power disconnect switches; and
    - Clear and visible signs to identify remote power disconnect switches.

4.1.5 Facility Access

The locations of specific access points and gates will depend on the final configuration of the Solar Components. The perimeter fencing will have lockable vehicle access gates. As currently designed, a total of seven gates are included for both phases of the Solar Facility. Additional gates may be included for emergency exits or for removal of wildlife. Wire mesh perimeter fencing, up to 8 feet in height, will enclose the Solar Areas.

4.2 Facility Site Maps

Prior to operations of any solar component, this Operational WMP will be updated to include facility site maps that identify:

- The Solar Micrositing Area;
- The locations of operations facility features and components such as the gen-tie line, BESS, project substation, and inverter locations;
- Location and dimensions of facility roads;
- Location of vegetation free, noncombustible, defensible spaces;
- Wildfire risk at the site;
- High-fire consequence areas/resources (includes existing infrastructure, residences, sensitive habitat, or cultural resources);
- The location of facility access points;

- A description and the location of emergency access procedures, including how emergency responders and/or adjacent landowners may access site for fire protection equipment or to extinguish an on-site fire when personnel will not be on site;
- The type and location of fire protection equipment on site; and
- The locations of water sources that will be on-site during operations.

4.3 Specifications for Fire Protection Equipment

The following fire suppression equipment will be carried in vehicles conducting maintenance activities and stored on-site at the O&M building at all times:

- Fire Extinguisher: Dry chemical. 2A:10BC (5 pound), properly mounted or secured;
- Pulaski;
- Hand Shovel: Round point. 26-28 inch "D" Handle, blade - 8 inches wide; and
- Collapsible Pail or Backpack Pump: 5-gallon capacity (during fire-season to avoid freezing during winter months).

During the officially designated fire season, and at other times when site conditions warrant, water trucks/water source, water buffalo, or tank with minimum 500-gallon capacity must be on site. The water truck or water supply shall include the following, unless approved by ODOE:

- Pump should be maintained ready to operate and capable of providing a discharge of not less than 20 gallons per minute at 115 pounds per square inch at pump level. Note: Volume pumps will not produce the necessary pressure to effectively attack a fire start. Pressure pumps are recommended.
- Provide enough hose (500 feet minimum) not less than 3/4-inch inside diameter to reach areas where power-driven machinery has worked.
- Water supply, pump, and at least 250 feet of hose with nozzle must be maintained as a connected, operating unit ready for immediate use.

All internal combustion engines must be equipped with exhaust systems, mufflers, and screens, or include an appropriate spark arrestor, and must be kept in good operating condition. All combustion engines (including but not limited to off-road vehicles, chainsaws, and generators) will be equipped with a spark arrester that meets U.S. Forest Service Standard 5100-1.

All power-driven machinery will be kept free of excess flammable material which may create a risk of fire.

4.4 Solar Component Contact Information and Emergency Response Procedures

Local fire department and county emergency management contact information:

- North Sherman County Rural Fire Protection District: (541) 442-5252 or 911

- Sherman County Emergency Services: (541) 565-3100 or 911

Fire department response times to the site are 15 to 20 minutes.

Certificate Holder primary contact and operations contractor manager information will be provided below:

Certificate Holder Primary Contact Information	
Name	Dan Wilson
Company	Portland General Electric Company
Street Address	121 SW Salmon Street, 3WTC0403
City/State/Zip	Portland, OR 97204
Phone	503-630-8138
Email	Dan.Wilson@pgn.com
Operations Contractor Manager Contact Information	
Name	Operations contractor managers contact information will be provided in the final Operations WMP.
Title	
Street Address	
City/State/Zip	
Phone	
Email	

Residence addresses within the site boundary and 0.5 miles from the site boundary:

- Attachment 3 will be updated with a list of property owners within the Biglow Solar Site Boundary and a 0.5-mile radius prior to operations.
- A residence/landowner outreach letter is provided as Attachment 2 of this WMP. This letter will be provided to new and updated residences within the analysis area as designated in Section 5.0, Plan Updates: Amendments and Reporting Requirements.

Contact 911 in the event of:

- A fire or emergency on-site that cannot be addressed by personnel on-site and requires the assistance of fire or emergency medical personnel;
- A fire ignition on-site that spreads out of the fence line;
- Any fire off-site that does not have emergency responders on-site.
    - To the extent that operations personnel can safely assist and/or provide equipment to help extinguish off-site fires until emergency responders are on-site, it is encouraged

to do so to assist in the spread of the fire, loss of life, property and damage to the environment.

4.5 Fire Potential Index Required Controls and Work Permissions during Fire Season

The Certificate Holder will implement Fire Potential Index (FPI) required controls and work restrictions to reduce the risk of ignition from operational activities during periods of elevated wildfire risk. These site-specific restrictions implement the Fire-Season readiness practices described in PGE's 2026–2028 Wildfire Mitigation Plan, Section 10.2.1, (https://portlandgeneral.com/outages-safety/safety/wildfire-safety-and-prevention). These practices provide that when PGE declares fire season, field employees and suppliers follow operational protocols to reduce ignition risk, including use of fire suppression tools, required firefighting equipment, wildfire-mitigation training, hazard identification, emergency response practices, and operational restrictions.

As an Oregon utility operating critical generation assets across diverse landscapes, PGE implements robust wildfire risk mitigation measures to protect public health, safety, and natural resources. PGE's generation facilities follow all Fire Season protocols as outlined in Section 10.2.1 of PGE's Wildfire Mitigation Plan.

During fire season, PGE requires specific fire suppression equipment, safe work practices, and operational restrictions based on fire danger conditions (see Table 1 below). When fire danger elevates, stricter operational restrictions apply, and PGE may deploy supplemental mitigation measures for critical work that must continue. In addition to following all Fire Season protocols, power generation site personnel must also adhere to their site-specific Emergency Response Plans (ERPs). These ERPs include procedures adaptable to seasonal fire risks and established communication channels with local fire agencies.

Table 1. Fire Prevention Measures During Fire Season Summary

Category	Requirement
Required Equipment	• All vehicles: Round-pointed shovel (8" wide, 26" handle), Pulaski (26" handle), fire extinguisher (2A:10BC/5 lb.) • Power-driven equipment: One 2A:10BC fire extinguisher per internal combustion engine • Power saws: 8-oz pressurized fire suppressant container and round-pointed shovel per saw • Fire trailers as supplemental equipment when conditions warrant
General Operating Procedures	• Review fire weather forecasts for work locations. • Check for Red Flag Warnings in effect. • Maintain required fire suppression tools ready for immediate use. • Follow site-specific wildfire action plans. • Adhere to Industrial Fire Precaution Level (IFPL) restrictions (if applicable).
Safe Work Practices	• Park only on non-combustible surfaces. • Prevent contact between hot equipment and vegetation. • Maintain vegetation-free 10-foot radius around spark-emitting work. • Allow internal combustion engines to cool before refueling. • Use non-incendiary road flares when possible.

Category	Requirement
	• Avoid hot work (grinding, welding) during high-risk periods unless proper safety protocols are in place. • Avoid working near dry vegetation during high-risk fire conditions.
Red Flag Warning (RFW) Protocols	• In HFRZs: Postpone non-permissible work (overhead line work, spark-emitting activities, off-road travel, ground disturbance, refueling). • Fire trailers are required if operating in HFRZs. • Take extra precautions even outside HFRZs based on local conditions. • Consider fire risk across all wildfire risk classifications (WRA, HFRZ, OFRZ, EFRZ).
Fire Response Protocol	• Stop work and address personal safety. • Notify emergency services and PGE Control Center. • Attempt to suppress fire only if reasonable and safe to do so. • Preserve evidence. • Submit detailed incident reports. • Evacuate the area promptly if fire spreads beyond control.
Dynamic Operations	• Implement work modifications during elevated fire-weather conditions. • Adjust operations based on Red Flag Warnings and IFPL levels (if applicable). • Potentially suspend high-risk activities when conditions warrant.
Compliance with External Regulations	• Follow fire season restrictions for federal lands (U.S. Forest Service, Bureau of Land Management), state lands (Oregon Department of Forestry), and Tribal lands • Adhere to any project-specific fire season protocols or waiver restrictions required by the authority having jurisdiction.
WRA = Wildfire Risk Area; HFRZ = High Fire Risk Zone; OFRZ = Outlying Fire Risk Zone; EFRZ = Elevated Fire Risk Zone	

4.6 Vegetation Management

4.6.1 Vegetation-free, Noncombustible Space, and Vegetation Standards

The following areas within the fence line and below the solar arrays will be maintained, in accordance with the approved Comprehensive Solar Revegetation and Soil Management Plan for the facility:

- Vegetation within and adjacent to the Solar Components will be maintained as follows:
    - During the dry season (June to October), vegetation height will be limited to 4 to 8 inches. Vegetation will be mowed to a height of 4 inches prior to June of each year.
    - Outside the dry season (November to May), vegetation will be maintained at a maximum height of less than 12 inches.
- A minimum vertical clearance of 12 inches from electrical and mechanical equipment will be maintained at all times. At no point shall vegetation come in contact with electrical infrastructure, inverters, or cable runs.
- Vegetation exceeding the heights listed above shall be removed or mowed. Mowing must be done in advance of fire season or in accordance with any fire restrictions.
- There will be 20-foot clearance along the fenced perimeter of the site boundary:
    - Ten feet of clear, brush-free defensible space buffer inside the fenceline.

  - Ten feet of clear, brush-free defensible space buffer or 10 feet of gravel outside the fenceline, depending on the phase of project.
  - Activities necessary to maintain the buffer shall be based on consultation with the local fire code official.

- Vegetation along service roads will be managed by mowing or other vegetation removal.
- Any vegetation removed from the site will be disposed of and not stored on-site. Certificate Holder and contractors will prevent the accumulation of combustible "burn piles" on-site.
- Vegetation buildup in the fence line(s) shall be removed.

The following areas will be managed to be vegetation-free, noncombustible space, or gravel surface:

- 16-foot-wide service roads within solar fence line – graveled.
- 20-foot-wide exterior access roads – graveled.
- Within a 20-foot perimeter of the inverter/transformer pads, collector substation and BESS.
- Parking and O&M building perimeter – graveled.

Vegetation will be managed by the following techniques:

- Mechanical Clearing: mowing, brushing, chipping, tree trimming/felling.
- Manual Clearing: hand tools (chainsaws, machetes, handsaws).
- Chemical Treatment: use of approved herbicides by licensed applicators to control or suppress vegetation growth (broadcast spray, spot treatment, cut-stump/basal bark).

4.6.2 Vegetation Surveys and Management

A vegetation assessment survey of the fenced area will be completed at least twice a year to monitor vegetation clearances and maintenance of fire breaks, and wildfire hazards. One survey will occur before the fire season begins, in May or June. The second survey will occur in October or November. Additional vegetation surveys and management may be required throughout the year based on seasonally heightened fire risk, vegetation growth, or observations from operational maintenance staff.

The survey will be conducted by a vegetation specialist and will be used to assess the frequency of upcoming vegetation maintenance and will assess and document the following:

- Location;
- Species;
- Height;
- Proximity to facility components;
- Estimated growth rate;
- Abundance;
- Clearance/setbacks; and
- Risk of fire hazard.

Results of surveys shall be provided in the annual report required by Condition OPR-OE-01.

Vegetation control includes:

- Mechanical mowing or trimming to maintain vegetation below the maximum height standard;
- Hand cutting, string trimming, or manual removal in areas where mowing equipment cannot safely operate, including around electrical equipment, solar array supports, fence lines, gates, and drainage features;
- Targeted removal of vegetation that contacts, overhangs, obstructs, or presents a credible fire or access risk to facility components;
- Maintenance of defensible space around electrical equipment, access roads, parking areas, gates, equipment pads, and other critical facility areas;
- Removal or treatment of vegetation accumulations along fence lines and other areas where fine fuels may collect;
- Use of approved herbicide treatments, where allowed by the revegetation plan, landowner agreements, environmental permits, and product label requirements;
- Prohibition on grazing by sheep or goats without written approval from ODOE;
- Removal and off-site disposal of cut vegetation, slash, or combustible debris that could contribute to on-site fuel loading;
- Inspection-triggered corrective actions when vegetation exceeds height standards, encroaches on equipment, obstructs access, or increases fire risk; and
- Documentation of vegetation conditions, maintenance actions, timing, and follow-up needs to support annual WMP reporting and ongoing compliance.

4.7 Inspections and Maintenance

Facility components will be inspected and maintained as designated in Table 2 below or similar table or tracking software developed prior to beginning operations. Update Table 2 based on manufacturer recommendations associated with each type of facility component and vegetation management consistent with this WMP and Revegetation Plan.

Table 2 includes an operational check list that will be filled out designating which personnel conducted inspections and maintenance, the dates of inspections and maintenance, and results. As designated in Section 4.0, of this WMP, this table checklist will be submitted to demonstrate compliance with the WMP and used to determine if changes to the WMP are necessary. Other checklists may be provided prior to operation and in the annual review of the WMP, as approved by the Department.

Manufacturers' recommendations, or excerpts for inspections and maintenance will be included as Attachment 4 to this plan.

<u>Lock Out/Tag Out Program:</u>

- During maintenance activities, electrical equipment is de-energized and physically locked or tagged in the de-energized positions to avoid inadvertent events that could result in arc flash.
- Ensure equipment is maintained to prevent and control sources of ignition.

Table 2. Operational Electrical Component and Vegetation Inspection and Maintenance Schedule and Results

Facility Component(s)	Inspection Procedure	Inspection Frequency	Standard[1]	Maintenance Schedule	Date and Personnel Completing Inspection(s); Inspection Results	Date and Personnel Completing Maintenance; Maintenance Results
System Protection	Protection Relays • Verify calibration and check functionality. Breaker Trip Testing • Verify the ability to trip breakers via coil.	X	Manufacturer's maintenance recommendations	Repair or replace once every X years	Date: Personnel: Results: Notes:	Date: Personnel: Results: Notes:
System Protection	System Protection Potential Transducers ("PTs") and Current Transducers ("CTs") • Verify calibration and check functionality.	X	Manufacturer's maintenance recommendations	Repair or replace once every X years	Date: Personnel: Results: Notes:	Date: Personnel: Results: Notes:
Solar Inverter	• Visual inspection of inverter and surrounding area. • Verify torque specifications. • For alternating current (AC)/direct current (DC), perform inspection of communication and control power terminations. • Cycle AC/DC disconnects, inspect AC/DC contactors and cooling fans. • Perform infrared scan. Inverter Testing and Preventative Parts Replacement • Preventative maintenance replacement of inverter parts (e.g.: cooling system and power supplies that are operating effectively but scheduled for replacement per manufacturer's recommendations).		Spill Prevention, Control, and Countermeasures (SPCC) Plan[3] Manufacturer's maintenance recommendations	• Monthly SPCC Plan • Preventative Maintenance per manufacturer's recommendations	Date: Personnel: Results: Notes:	Date: Personnel: Results: Notes:
	Vegetation: Visual inspection during component inspections and visual inspections during vegetation surveys twice a year.	Vegetation: Twice a year during vegetation surveys and additional visual inspections during routine inspections of components.	Vegetation: Herbicide application on gravel pad around inverter to prevent vegetation growth. IEEE 80 NEC 70	Vegetation: Yearly, depending on vegetation condition. Or more frequent based on vegetation survey results or upon visual inspections listed above.	Date: Personnel: Results: Notes:	Date: Personnel: Results: Notes:

Facility Component(s)	Inspection Procedure	Inspection Frequency	Standard[1]	Maintenance Schedule	Date and Personnel Completing Inspection(s); Inspection Results	Date and Personnel Completing Maintenance; Maintenance Results
Tracker System	• Perform visual inspection of tracking components; sync data with the Applicant's Operations Center. • Perform visual inspection of module clamps and rail fasteners for integrity. • Perform visual inspection of gear drives and shaft assemblies for alignment. • Grease gear boxes and/or drive shaft. • Verify wind stow functionality and lubricate slew ring.		Manufacturer's maintenance recommendations	• Per manufacturer's recommendations	Date: Personnel: Results: Notes:	Date: Personnel: Results: Notes:
Solar Array Structures	• Perform visual inspection of mounting structures, grounding, and cabling.		Manufacturer's maintenance recommendations	Repair or replace annually	Date: Personnel: Results: Notes:	Date: Personnel: Results: Notes:
Solar Array Panels, Harnesses, and Combiner Boxes	At Applicant's sole discretion, to perform one of the following options: • Infra-red ("IR") Flyover a. IR scan of Site providing DC health of the Facility down to string level reporting; or • Physical DC Health Inspection a. Perform visual inspection of whips and wires connectors for damage or exposed conductors in gutters of harness combiner boxes. b. Measure and record current of each whip using clamp-on meter and identify low performing whips.		Applicant's discretion Manufacturer's maintenance recommendations	Repair or replace annually	Date: Personnel: Results: Notes:	Date: Personnel: Results: Notes:
	Vegetation: Visual inspection during component inspections and visual inspections during vegetation surveys twice a year.	Vegetation: Twice a year during vegetation surveys and additional visual inspections during routine inspections of components	Vegetation: Vegetation under solar arrays will be maintained to a height of 10-12 inches, with a minimum clearance of 12 inches from electrical equipment. Methods include manual removal, mowing, or as designate din this Plan.	Vegetation: Twice a year, or more often, as designated in this Plan.	Date: Personnel: Results: Notes:	Date: Personnel: Results: Notes:

Facility Component(s)	Inspection Procedure	Inspection Frequency	Standard[1]	Maintenance Schedule	Date and Personnel Completing Inspection(s); Inspection Results	Date and Personnel Completing Maintenance; Maintenance Results
Collector Substation	• Perform visual inspection of the grounding system. • Perform thermographic and visual inspection. • Perform uninterrupted power supply (UPS) inspection and maintenance.		Manufacturer's maintenance recommendations North American Electric Reliability Corporation (NERC)	Repair or replace annually	Date: Personnel:	Date: Personnel:
	Vegetation: Visual inspection during component inspections and visual inspections during vegetation surveys twice a year.	Vegetation: Twice a year during vegetation surveys and additional visual inspections during routine inspections of components.	Vegetation: Herbicide application on substation gravel pad. IEEE 80 NEC 70	Vegetation: Yearly, depending on vegetation condition. Or more frequent based on vegetation survey results or upon routine visual inspections.	Results: Notes:	Results: Notes:
BESS	• Set battery maintenance (system check, cell balancing). • Battery cable, appearance, grounding, dust removal. • Inspect battery management system alarms. • Visual inspection of electrical terminations using thermal imager.		Manufacturer's maintenance recommendations	Repair or replace annually	Date: Personnel:	Date: Personnel:
	Vegetation: Visual inspection during component inspections and visual inspections during vegetation surveys twice a year.	Vegetation: Twice a year during vegetation surveys and additional visual inspections during routine inspections of components.	Vegetation: Herbicide application on substation gravel pad. IEEE 80 NEC 70	Vegetation: Yearly, depending on vegetation condition. Or more frequent based on vegetation survey results or upon routine visual inspections.	Results: Notes:	Results: Notes:
Unit Control Enclosure Battery	• Check for correct operations of battery monitoring system and battery charging system. • Perform visual inspection of the battery room, mounting rack, batteries, and connections.		Manufacturer's maintenance recommendations	Repair or replace monthly	Date: Personnel:	Date: Personnel:
					Results: Notes:	Results: Notes:
Unit Control Enclosure Battery	• Perform individual cell float charge and specific gravity checks.		Manufacturer's maintenance recommendations	Repair or replace quarterly	Date: Personnel:	Date: Personnel:
					Results: Notes:	Results: Notes:

Facility Component(s)	Inspection Procedure	Inspection Frequency	Standard[1]	Maintenance Schedule	Date and Personnel Completing Inspection(s); Inspection Results	Date and Personnel Completing Maintenance; Maintenance Results
Unit Control Enclosure Battery	• Measure float cell voltage, pilot cell voltage, and electrolyte temperature of pilot cell.		Manufacturer's maintenance recommendations	Repair or replace annually	Date: Personnel: Results: Notes:	Date: Personnel: Results: Notes:
Supervisory, Control and Data Acquisition (SCADA) & Network Equipment	• Plant equipment will be evaluated every 5 years to determine state of health and provide recommendations.		Manufacturer's maintenance recommendations	Upgrade, repair, or replace every 5 years	Date: Personnel: Results: Notes:	Date: Personnel: Results: Notes:
BESS Junction Box/ Auxiliary System/Miscellaneous	• Auxiliary equipment maintenance and inspection. • Enclosure dust removal. • Inspect cable entry, grounding, sealing, dust removal. • Critical sensor calibration check. • Maintenance report.		Manufacturer's maintenance recommendations	Repair or replace annually	Date: Personnel: Results: Notes:	Date: Personnel: Results: Notes:
BESS Fire Safety System	• Fire alarm and detection system inspection. • Fire alarm and detection system maintenance. • Fire suppression System Inspection.		Manufacturer's maintenance recommendations	Repair or replace annually	Date: Personnel: Results: Notes:	Date: Personnel: Results: Notes:
BESS Thermal Management System	• Thermal management system inspection. • Thermal management system maintenance. • Motor Lubrication. • Clean Filters by rinsing with water. • Electric Heater - Dust accumulation on the coil, signs of overheating on the heater frame, traces of water or rust on the electric heater control box.		Manufacturer's maintenance recommendations	Repair or replace semi-annually	Date: Personnel: Results: Notes:	Date: Personnel: Results: Notes:

Facility Component(s)	Inspection Procedure	Inspection Frequency	Standard[1]	Maintenance Schedule	Date and Personnel Completing Inspection(s); Inspection Results	Date and Personnel Completing Maintenance; Maintenance Results
BESS Thermal Management System	• Coolant tester visual inspection.		Manufacturer's maintenance recommendations	Repair or replace annually	Date: Personnel: Results: Notes:	Date: Personnel: Results: Notes:
BESS General	• System configuration check.		Manufacturer's maintenance recommendations	Repair or replace annually	Date: Personnel: Results: Notes:	Date: Personnel: Results: Notes:
Medium Voltage (MV) and High Voltage (HV) Breaker	• Clean out dirt and debris. • Perform a manual operation test. • Perform an electrical test. • Perform a gas leakage test.		Manufacturer's maintenance recommendations NERC	Repair or replace per manufacturer's recommendations	Date: Personnel: Results: Notes:	Date: Personnel: Results: Notes:
Generator Step-Up (GSU) Transformer	• Perform a visual inspection and check for proper operation of fan motor, oil pump motor, and breather. • Inspect and maintain substation transformer bushings and control panel. • Perform visual inspection of bushings for indications of local heating, oil leaks, proper oil level and indication of contaminants.		SPCC Plan[3] Manufacturer's maintenance recommendations	Repair, overhaul, refurbish, or replace per manufacturer's recommendations	Date: Personnel: Results: Notes:	Date: Personnel: Results: Notes:
Inverter Step-up Transformer	• Perform infrared scans on low side of transformer when power is >80%. • Verify temperature and pressure sync with the contractor's Operations Center. • Perform visual inspection of the physical integrity of the enclosure		SPCC Plan[3] Manufacturer's maintenance recommendations	Replace or repair per manufacturer's recommendation	Date: Personnel:	Date: Personnel:

Facility Component(s)	Inspection Procedure	Inspection Frequency	Standard[1]	Maintenance Schedule	Date and Personnel Completing Inspection(s); Inspection Results	Date and Personnel Completing Maintenance; Maintenance Results
	and check for oil leakage. • Perform visual inspection for damage or discoloration of bushings. • Perform oil sample analysis on MV transformer(s). • Collect MV transformer oil sample(s) for 3rd party analysis. • Perform electrical test of transformer. • Verify integrity of surge arresters and check for proper tap position.				Results: Notes:	Results: Notes:
	Vegetation: Visual inspection during component inspections and visual inspections during vegetation surveys twice a year.	Vegetation: Twice a year during vegetation surveys and additional visual inspections during routine inspections of components.	Vegetation: Herbicide application on gravel pad around inverter to prevent vegetation growth. IEEE 80 NEC 70	Vegetation: Yearly, depending on vegetation condition. Or more frequent based on vegetation survey results or upon visual inspections listed above.	Date: Personnel:	Date: Personnel:
					Results: Notes:	Results: Notes:
Overhead electrical lines	Visual inspection of components, grounding and APLIC measures.		APLIC		Date: Personnel:	Date: Personnel:
	Vegetation: Visual inspection of vertical clearance distance between conductor and vegetation.		Vegetation: National Energy Reliability Corporation (NERC) - Vegetation maintenance standard FAC-003-0. Mow vegetation to achieve clearance requirements between conductor and ground.	Vegetation: Yearly, depending on vegetation condition.	Results: Notes:	Results: Notes:

1. The Operational SPCC Plan for the Facility will require these components to be inspected monthly for spills. During these inspections, operational staff will also visually inspect the component and surrounding area.

4.8 Use of Vehicles and Power Driven Machinery at Site

The following best management practices (BMPs) to minimize fire risk from vehicle travel, equipment use, and fueling activities will be implemented at the site during operations:

- The movement of vehicles will be planned and managed to minimize fire risk.
- The contractors will be responsible for identifying and marking paths for all off-road vehicle travel. All off-road vehicle travel will be required to stay on the identified paths. No off-road vehicle travel will be permitted while working alone during Fire Season. Travel off road or parking in vegetated areas will be restricted during fire season as designated in this Plan.
- Areas with grass that is as tall or taller than the exhaust system of a vehicle must be wetted or mowed before vehicles travel through it.
- Workers will be instructed to shut off the engine of any vehicle that gets stuck, and periodically inspect the area adjacent to the exhaust system for evidence of ignition of vegetation. Stuck vehicles will be pulled out rather than "rocked" free and the area will be inspected again after the vehicle has been moved.
- Fuel containers, if used, shall remain in a vehicle or equipment trailer, parked at a designated location alongside a county right-of-way. No fuel containers shall be in the vehicles that exit the right-of-way except the five-gallon container that is required for the water truck pump.
- All power-driven machinery will be kept free of excess flammable material that may create a risk of fire.

4.9 Operational Trainings

4.9.1 Annual Safety Training

Once per year after operation begins, and preferably before Fire Season, the Certificate Holder will organize and hold an on-site safety training and wildfire-preparedness exercise for Certificate Holder personnel and operations personnel. The Certificate Holder will invite, as appropriate, equipment manufacturers, specialty contractors, local fire departments, participating and adjacent landowners, emergency management office personnel, ODOE, and any other emergency management agency with jurisdiction or response responsibility.

This site-specific training implements the wildfire training and readiness practices described in PGE's 2026–2028 Wildfire Mitigation Plan. Section 10.2.1 provides that Fire Season Readiness includes preparing field personnel and suppliers through specialized training on wildfire mitigation techniques, including fire-prevention practices, hazard identification, emergency response, and proper use of fire suppression tools and equipment. Section 11.2.2 further describes PGE's annual emergency preparedness training and exercises with Public Safety Partners and annual training for wildfire risk awareness and emergency communication procedures.

The on-site training will cover, at a minimum:

- Fire Season readiness requirements applicable to the facility;
- Wildfire risk awareness and wildfire mitigation practices;
- Hazard identification and reporting procedures;
- Emergency communications and notification procedures;
- Site-specific emergency response procedures;
- Proper use of fire suppression tools and firefighting equipment maintained on-site;
- Fire prevention measures, safe work practices, and operational restrictions applicable during elevated wildfire risk conditions;
- Fire Weather Watch, Red Flag Warning, and other wildfire-related operational restrictions applicable to maintenance activities;
- Electrical hazard awareness, including identification of energized equipment, safe approach distances, downed or damaged electrical equipment, and coordination with PGE during emergency situations;
- BESS safety considerations, including alarms, emergency notifications, shutdown or isolation procedures, responder coordination, and applicable manufacturer guidance; and
- The location of site access points, fire-protection equipment, onsite water sources, and emergency contact information.

Training attendance and training materials shall be documented and maintained in accordance with facility recordkeeping requirements.

4.9.2 Electrical Safety Program

All operational workers will be trained in electrical safety and the specific hazards of the facility. This training will address:

- Minimum experience requirements to work on different types of electrical components;
- Lockout/tagout procedures
- Electrical equipment testing and troubleshooting;
- Switching system;
- Provisions for entering high voltage areas (e.g., substation);
- Minimum approach distances; and
- Required personal protective equipment.

4.10 Facility Monitoring

Facility components that are monitored via the supervisory, control, and data acquisition (SCADA) system are the solar inverters, collector substation, BESS, and overhead electrical lines associated with the gen-tie line.

Facility components will be monitored remotely with the SCADA system 24 hours a day, 7 days a week.

Smoke and fire detectors are placed throughout the facility, will be connected to the SCADA system, and will contact local firefighting services if needed. The BESS will also have integrated fire safety and monitoring systems to detect and alarm if a fire condition is detected.

Remote shutdown capability details will be provided prior to operations.

5.0 Plan Updates: Amendments and Reporting Requirements:

The following will be provided to ODOE in the annual operations report required per OAR 345-026-0080:

- Sections 4.1 and 4.2: any changes in wildfire risk at the site or changes in facility components or preventative features.
- Section 4.4: any changes in local fire protection agency personnel and operational managers.
- Section 4.4,: any changes in analysis area residence/landowner addresses or contact information.
- Fill out Table 2: *Operational Electrical Component and Vegetation Inspection and Maintenance Schedule and Results*, with the dates, personnel, and results of inspections and maintenance performed. A different form or checklist of operational inspection, vegetation management, and maintenance may be used if approved by the Department.
- A copy of the Fire Season Restriction Log identified in Section 4.5.

The Certificate Holder must review this WMP annually to determine if updates to the WMP are necessary. In its annual review, the Certificate Holder will evaluate changes in standards, policies, future technologies, or best practices that could be implemented at the facility to address wildfire prevention or protection, including but not limited to those identified in Table 3, below.

Information from the annual reporting and from the Certificate Holder or Department review of sources in Table 3 may be used to establish the performance of the WMP. If determined by Certificate Holder or Department, adjustments or improvements must be proposed to ensure the WMP provides wildfire mitigation. Any Department required updates shall be implemented within 14 days, unless otherwise agreed to by the Department based on a good faith effort to address wildfire hazard.

This Plan may be amended from time to time by agreement of the Certificate Holder and the Oregon Energy Facility Siting Council (EFSC) or ODOE, acting within its delegated authority of EFSC. Such amendments may be made without amendment of the site certificate. EFSC authorizes ODOE to agree to amendments to this Plan. ODOE will notify EFSC of all amendments, and EFSC retains the authority to approve, reject, or modify any amendment of this Plan agreed to by ODOE.

Table 3. Standards for Future Review

Reference	Description	Method
American Clean Power (ACP)	Industry ground that establishes best practices for renewable energy projects.	The Certificate Holder is a member of ACP and participates in best practice development[1].
National Electric Reliability	National Energy Reliability Corporation (NERC) develops electrical standards for large energy facilities.	The Certificate Holder will follow NERC Standard FAC-003-0 for its vegetation management program of transmission lines[2], or updates to this standard as approved by NERC.
Oregon Specialty Building Codes	Building codes applicable to inhabitable spaces, including the O&M building and the substation enclosure.	Remodeling to the O&M and enclosure structure that requires permits will follow any updates to the OSPC at that time.
Oregon Fire Code	The Oregon State Fire Marshal adopts the Oregon Fire Code, establishing minimum fire prevention and protection systems requirements applicable to certain structures, including but not limited to, energy systems.	The Certificate Holder will adhere to any applicable standards of the Oregon Fire Code and will incorporate features necessary to meet those standards into the design of the facility. Certificate Holder will annually review and apply applicable standards that may apply to an operational facility.
National Fire Protection Association (NFPA) Codes and Standards	The National Fire Protection Association publishes codes and standards intended to minimize the possibility and effects of fire and other risks/	The Certificate Holder will identify and adhere to any applicable codes and standards and will incorporate features necessary to meet those standards into the design of the facility. Certificate Holder will annually review and apply applicable standards that may apply to an operational facility.
Avian Powerline Interaction Committee (APLIC)	Avian protection methods for electrical facility reduce fires related to bird/mammal nests on electrical equipment.	The Certificate Holder is a member of the APLIC[3]. An operational wildlife monitoring program will inspect for wildlife nesting on facilities that could cause fire, and take actions following applicable laws (e.g., Migratory Bird Treaty Act).
Oregon Revised Statutes (ORS) chapter 477, OAR chapter 629-043	Standards and rules for fire prevention in forest and range land administered by Oregon Department of Forestry.	The Certificate Holder will be familiar with and operate consistently with the applicable standards, including any updates to rules or standards and will provide a summary of standards that are updated and implemented at the facility.
OAR chapter 860, division 024	Safety standards for transmission lines adopted by Oregon Public Utilities Commission.	The Certificate Holder will maintain consistency with any applicable vegetation clearance requirements, pruning standards, and high fire risk zone safety standards and will

Reference	Description	Method
		provide a summary of standards that are updated and implemented at the facility.
1. Link to ACP Standards & Practices: https://cleanpower.org/resources/types/standards-and-practices/. 2. NERC FAC-003-0: https://www.nerc.com/pa/Stand/Reliability%20Standards/FAC-003-0.pdf. 3. Link to APLIC member organization: https://www.aplic.org/member_websites.php.		

6.0 References

Oregon Explorer. 2024. Oregon CWPP Planning Tool. https://tools.oregonexplorer.info/oe_htmlviewer/index.html?viewer=wildfireplanning.

Sherman County. 2024. Sherman County Multiple-Jurisdictional Natural Hazards Mitigation Plan.

Attachment 1. Site Map(s)

(to be provided prior to operations)

Attachment 2. Residence/Landowner Outreach Letter

(to be provided prior to operations)

Attachment 3. List of Residences

(to be provided prior to operations)

Attachment 4. Manufacturer Recommendations

(to be provided prior to operations)