Exhibit L

Protected Areas

Biglow Canyon Wind Farm
December 2025

Prepared for

Portland General Electric Company

Prepared by

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Acronyms and Abbreviations

AC	alternating current
ACEC	Area of Critical Environmental Concern
BCWF or Existing Facility	Biglow Canyon Wind Farm
BESS	battery energy storage system
BIGL or Project Developer	BIGL bn, LLC
Certificate Holder or PGE	Portland General Electric Company
Council or EFSC	Oregon Energy Facility Siting Council
dBA	A-weighted decibels
gen-tie	generation tie
I-84	Interstate 84
MW	megawatt
NPDES	National Pollutant Discharge Elimination System
O&M	operations and maintenance
OAR	Oregon Administrative Rules
ODOE	Oregon Department of Energy
OP	Observation Point (glare analysis)
OR-206	Oregon Route 206
RFA	Request for Amendment
Site Certificate	Site Certificate for Amendment 3
Solar Components	photovoltaic solar energy generation and battery storage
US-97	U.S. Highway 97
ZVI	zone of visual influence

1.0 Introduction

The Portland General Electric Company (PGE or Certificate Holder) submits this Request for Amendment (RFA) 4 to the Site Certificate on Amendment 3, issued October 31, 2008 (Site Certificate) for the Biglow Canyon Wind Farm (BCWF or Existing Facility) to add photovoltaic solar energy generation and battery storage (Solar Components) to the operating BCWF.

BCWF, owned and operated by PGE, is located within an approved site boundary comprising approximately 25,000 acres, approximately 4.5 miles northeast of the town of Wasco in Sherman County, Oregon. 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 wind turbines, with a maximum blade tip height of 445 feet, and a peak generating capacity of 450 megawatts (MW).

In RFA 4, PGE proposes to add up to 125 MW alternating current (AC) generating capacity from photovoltaic solar arrays and 125 MW in battery storage capacity (Solar Components) in approximately 1,445 acres of land (Solar Area) sited within the existing BCWF site boundary Solar Micrositing Area (RFA 4 Site Boundary[1]).

The Solar Micrositing Area is approximately 1,924 acres and provides a conservative estimate of the maximum area needed for development, micrositing, and temporary disturbances from the Solar Components during construction, rather than the anticipated temporary and permanent disturbance footprint. Within the Solar Micrositing Area, the Certificate Holder has identified a reduced footprint where Solar Components will be concentrated (Solar Area; 1,445 acres). Solar Components will include solar arrays, inverters, battery energy storage system (BESS) facilities and their subcomponents (i.e., inverters), a collector substation, approximately 600 feet of a new 230-kilovolt generation tie (gen-tie) transmission line, medium voltage collector lines, 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 125 MW AC, and the infrastructure will be fenced within the Solar Micrositing Area and will cover up to 1,445 acres (Solar Area).

PGE will own and operate the Solar Components as a part of the BCWF (together, Amended Facility or Facility), which, to date, have been developed by BIGL bn, LLC (BIGL or Project Developer). BIGL, in its capacity as the project developer, supports PGE in this RFA 4 and may construct and temporarily operate the Solar Components on behalf of PGE under a Build-Transfer Agreement.

The Council previously found in the Final Order on RFA 3 that the BCWF complies with the Council's Scenic Resources standard.[2] Exhibit L provides the information required by Oregon Administrative Rules (OAR) 345-021-0010(1)(L) in support of RFA 4. The information summarized

[1] Note, as described in further detail in Section 4.1.1.2 of the RFA 4 Division 27 document, the Solar Micrositing Area is the equivalent of the RFA 4 Site Boundary.
[2] Final Order on Request for Amendment 3, p. 26 (October 2008).

in this exhibit and described in RFA 4 demonstrate that the Facility, as proposed, can be designed, engineered, constructed, operated, and retired in a manner that satisfies the applicable Council standards. The proposed changes in RFA 4 do not alter the Certificate Holder's ability to comply with applicable Site Certificate Conditions and the approval standard in OAR 345-022-0040, and addresses the protected areas outlined in the updated OAR 345-001-0010(26).

2.0 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 (i.e., Solar Micrositing Area/RFA 4 Site Boundary) to establish study area boundaries for RFA 4 under OAR 345-001-0010(35). The RFA 4 Site Boundary reflects the Solar Micrositing Area, and all study areas within the meaning of ORS 345-001-0010(35) are measured from the RFA 4 Site Boundary. In accordance with OAR 345-001-0010(35)(e), the analysis area for protected areas is the area within and extending 20 miles from the Solar Micrositing Area[3] (Figure L-1).

3.0 Protected Areas Inventory – OAR 345-021-0010(1)(l)(A)(B)

OAR 345-021-0010(1)(L) Information about the potential impacts of the proposed facility on protected areas in the analysis area, providing evidence to support a finding by the Council as required by OAR 345-022-0040, including:

OAR 345-021-0010(1)(L)(A) A list of all protected areas within the analysis area identifying:

(i) The distance and direction of the protected area from the proposed facility;

(ii) The basis for protection by reference to a specific subsection under OAR 345-001-0010(26); and

(iii) The name, mailing address, phone number, and email address of the land management agency or organization with jurisdiction over the protected area;

OAR 345-021-0010(1)(l)(B) A map showing the location of the proposed facility in relation to the protected areas;

Response: Based on the proposed amendments to the BCWF in RFA 4, there are three new protected areas located within the analysis area since the Final Order on RFA 3 was issued (see Table L-1);[4] no protected areas are located within or cross the RFA 4 Site Boundary. Table L-1

[3] ODOE concurred with excluding the remaining BCWF site boundary that does not overlap with the Solar Micrositing Area from analysis in RFA 4 because no changes are proposed to any BCWF components in the remaining BCWF site boundary as part of RFA 4.
[4] Final Order on Request for Amendment 3, p. 24 (October 2008).

provides an inventory of the 12 protected areas[5] within the analysis area and indicates the distance and direction of each protected area relative to the RFA 4 Site Boundary, the basis for protection under OAR 345-001-0010(26), and the contact information for the relevant land management agencies and organizations. The solar array and related infrastructure are located at similar distances from most of the protected areas previously identified in RFA 3. Therefore, the impacts are anticipated to be similar to or less than (due to the low profile of solar versus wind infrastructure) what was previously described in RFA 3 and approved in the Final Order on Amendment 3 (see Table L-1).

The inventory of protected areas was based on review of best available geographic information system data, maps, and the most current information for the categories of protected areas listed in OAR 345-001-0010(26).[6] Figure L-1 shows the location of the protected areas identified in the analysis area.

[5] Note that the previously identified John Day Wildlife Refuge (in RFA 3) is protected within the John Day River State Scenic Waterway per Oregon Revised Statutes (ORS) 390.805 and ORS 501.425, and thus is addressed under the John Day River State Scenic Waterway analysis; it is not considered a wildlife refuge by the U.S. Fish and Wildlife Service or Oregon Department of Fish and Wildlife (ODFW 2024a, USFWS 2024a).
[6] Sources: BLM 2024a, 2024b, 2024c, 2024d, 2024e; Google Earth 2024; NOAA 2024; NPS 2024a, 2024b; National Wild and Scenic Rivers System 2024; ODFW 2024a, ODFW 2024b; OPRD 2020, 2024a, 2024b, 2024c, 2024d; OSU 2022, 2024; USFWS 2024a, 2024b; USFS 2024a, 2024b, 2024c; USGS 2024; Wilderness Connect 2024.

Table L-1. Protected Areas within the Analysis Area

Protected Areas within 20 Miles of the RFA 4 Site Boundary Green shading indicates new protected area since RFA3			Distance to RFA 4 Site Boundary (miles)			Cardinal Direction from RFA 4 Site Boundary	Amended BCWF Potentially Visible? (Yes/No)		Visual Analysis Results	Operational Noise Analysis Results (worst-case modeled operational noise level [dBA L50] as applicable)
Applicable Protected Area Category	**Land Management Agency Contact Information**	**Area Name**	**RFA 4 Site Boundary**	**Solar Area**	**Gen-tie Line**		**Solar Area**	**Gen-tie Line**		
National Parks OAR 345-001-0010(26)(a)	N/A	None	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
National Monuments OAR 345-001-0010(26)(b)	N/A	None	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Wilderness Areas OAR 345-001-0010(26)(c)	N/A	None	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
National Wild, Scenic, or Recreational Rivers OAR 345-001-0010(26)(d)	Bureau of Land Management (BLM), Prineville District 3050 NE 3rd Street Prineville, OR 97754 (541) 416-6700 BLM_OR_PR_Mail@blm.gov	Lower Deschutes Wild & Scenic River	12.8	12.8	13.6	W	No	No	No impact. Viewshed analysis indicates no visibility of the solar areas or gen-tie line at the Lower Deschutes Wild and Scenic River. There is no management directive applicable to preservation of scenic qualities outside of or from the Lower Deschutes Wild and Scenic River. The Solar Components will not compromise the purpose of the Lower Deschutes Wild and Scenic River.	<26; Background (no increase from approved facility)
		John Day Wild & Scenic River	3.7	3.7	5.1	E	Yes	Yes	Negligible impact. Viewshed analysis indicates limited potential visibility from small portions of the Scenic River. At a middleground viewing distance of 3.7 miles or greater, the solar modules will not create a prominent feature in the viewshed. The gen-tie line is highly unlikely to be visible or otherwise discernible at the background viewing distance of over 5.1 miles, and therefore will not contribute to visual contrast from this location. If any solar facilities or gen-tie line were visible, the additional visual contrast within an existing modified landscape that includes wind turbines, aboveground transmission lines, industrial structures, and agricultural irrigation equipment will be weak. There is no management directive applicable to preservation of scenic qualities outside of the Scenic River. The addition of the solar areas and associated infrastructure will not change the previous conclusion that views of the Solar Components, if any, will not compromise the purpose of the Scenic River.	<26; Background (no increase from approved facility)
National Wildlife Refuges OAR 345-001-0010(26)(e)	N/A	None	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
National Fish Hatcheries OAR 345-001-0010(26)(f)	N/A	None	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Protected Areas within 20 Miles of the RFA 4 Site Boundary Green shading indicates new protected area since RFA3			Distance to RFA 4 Site Boundary (miles)			Cardinal Direction from RFA 4 Site Boundary	Amended BCWF Potentially Visible? (Yes/No)		Visual Analysis Results	Operational Noise Analysis Results (worst-case modeled operational noise level [dBA L50] as applicable)
Applicable Protected Area Category	**Land Management Agency Contact Information**	**Area Name**	**RFA 4 Site Boundary**	**Solar Area**	**Gen-tie Line**		**Solar Area**	**Gen-tie Line**		
National Recreation Areas, Scenic Areas, or Special Resources Management Units OAR 345-001-0010(26)(g)	U.S. Forest Service (USFS), Columbia River Gorge National Scenic Area Office 902 Wasco Avenue, Suite 200 Hood River, OR 97031 (541) 308-1700 SM.FS.r6crgnsawfb@usda.gov	Columbia River Gorge National Scenic Area	12.0	12.0	12.7	W	No	Yes	Negligible impact. Viewshed analysis indicates limited potential visibility from small portions of the Scenic Area. Viewshed analysis indicates no visibility of the solar areas at the Columbia River Gorge National Scenic Area. The gen-tie line is highly unlikely to be visible or otherwise discernible at the far background viewing distance of over 12.7 miles, and therefore will not contribute to visual contrast from this location. If any solar facilities or gen-tie line were visible, the additional visual contrast within an existing modified landscape that includes wind turbines, aboveground transmission lines, industrial structures, and agricultural irrigation equipment will be weak. There is no management directive applicable to preservation of scenic qualities outside of the Scenic Area. The addition of the solar areas and associated infrastructure will not change the previous conclusion that views of the Solar Components, if any, will not compromise the purpose of the Scenic Area.	<26; Background (no increase from approved facility)
Wilderness Study Areas OAR 345-001-0010(26)(h)	BLM, Oregon/Washington State Office 1220 SW 3rd Avenue Portland, OR 97204 (503) 808-6001 Blm_or_so_land_office_mail@blm.gov	Lower John Day Wilderness Study Area	12.6	12.6	14.9	SE	Yes	Yes	Negligible impact. Viewshed analysis indicates limited potential visibility from small portions of the Wilderness Study Area. At a far background viewing distance of 12.6 miles or greater, the solar modules will not create a prominent feature in the viewshed. The gen-tie line is highly unlikely to be visible or otherwise discernible at the far background viewing distance of over 14.9 miles, and therefore will not contribute to visual contrast from this location. If any solar facilities or gen-tie line were visible, the additional visual contrast within an existing modified landscape that includes wind turbines, aboveground transmission lines, industrial structures, and agricultural irrigation equipment will be weak. There is no management directive applicable to preservation of scenic qualities outside of the Wilderness Study Area. The addition of the solar areas and associated infrastructure will not compromise the purpose of the Wilderness Study Area.	<26; Background
Federal Land Management Plan Designated Lands OAR 345-001-0010(26)(i)	BLM, Prineville District 3050 NE 3rd Street Prineville, OR 97754 (541) 416-6700 BLM_OR_PR_Mail@blm.gov	Ferry Canyon Area of Critical Environmental Concern (ACEC)	17.5	17.5	18.2	SE	Yes	Yes	Negligible impact. Viewshed analysis indicates limited potential visibility from small portions of the ACEC. At a far background viewing distance of 17.5 miles or greater, the solar modules will not create a prominent feature in the viewshed. The gen-tie line is highly unlikely to be visible or otherwise discernible at the far background viewing distance of over 18.2 miles, and therefore will not contribute to visual contrast from this location. If any solar facilities or gen-tie line were visible, the additional visual contrast within an existing modified landscape that includes wind turbines, aboveground transmission lines, industrial structures, and agricultural irrigation equipment will be weak. There is no management directive applicable to preservation of scenic qualities outside of the ACEC. The addition of the solar areas and associated infrastructure will not compromise the purpose of the ACEC.	<26; Background

Protected Areas within 20 Miles of the RFA 4 Site Boundary Green shading indicates new protected area since RFA3			Distance to RFA 4 Site Boundary (miles)			Cardinal Direction from RFA 4 Site Boundary	Amended BCWF Potentially Visible? (Yes/No)		Visual Analysis Results	Operational Noise Analysis Results (worst-case modeled operational noise level [dBA L50] as applicable)
Applicable Protected Area Category	**Land Management Agency Contact Information**	**Area Name**	**RFA 4 Site Boundary**	**Solar Area**	**Gen-tie Line**		**Solar Area**	**Gen-tie Line**		
State Parks, Waysides, Corridors, Monuments, Historic, or Recreation Areas OAR 345-001-0010(26)(j)	Oregon Parks and Recreation Department (OPRD) 725 Summer Street NE, Suite C Salem, OR 97301 (541) 739-2322 park.info@oregon.gov	Deschutes River State Recreation Area	13.2	13.3	13.9	W	No	No	No impact. Viewshed analysis indicates no visibility of the solar areas or gen-tie line at the Deschutes River State Recreation Area. There is no management directive applicable to preservation of scenic qualities outside of or from the Deschutes River State Recreation Area. The Solar Components will not compromise the purpose of the Deschutes River State Recreation Area.	<26; Background (no increase from approved facility)
		Heritage Landing (Deschutes)	13.8	13.8	14.5	W	No	No	No impact. Viewshed analysis indicates no visibility of the solar areas or gen-tie line at the Heritage Landing (Deschutes). There is no management directive applicable to preservation of scenic qualities outside of or from the Heritage Landing (Deschutes). The Solar Components will not compromise the purpose of the Heritage Landing (Deschutes).	<26; Background (no increase from approved facility)
	OPRD 725 Summer Street NE, Suite C Salem, OR 97301 (541) 394-0002 park.info@oregon.gov	Cottonwood Canyon State Park	12.2	12.2	13.1	SE	Yes	Yes	Negligible impact. Viewshed analysis indicates limited potential visibility from small portions of the Park. At a far background viewing distance of 12.2 miles or greater, the solar modules will not create a prominent feature in the viewshed. The gen-tie line is highly unlikely to be visible or otherwise discernible at the far background viewing distance of over 13.1 miles, and therefore will not contribute to visual contrast from this location. If any solar facilities or gen-tie line were visible, the additional visual contrast within an existing modified landscape that includes wind turbines, aboveground transmission lines, industrial structures, and agricultural irrigation equipment will be weak. There is no management directive applicable to preservation of scenic qualities outside of the Park. The addition of the solar areas and associated infrastructure will not compromise the purpose of the Park.	<26; Background
Willamette River Greenway OAR 345-001-0010(26)(k)	N/A	None	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Oregon Register of Natural Areas Designated Natural Areas OAR 345-001-0010(26)(L)	N/A	None	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
South Slough National Estuarine Research Reserve OAR 345-001-0010(26)(m)	N/A	None	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Protected Areas within 20 Miles of the RFA 4 Site Boundary Green shading indicates new protected area since RFA3			Distance to RFA 4 Site Boundary (miles)			Cardinal Direction from RFA 4 Site Boundary	Amended BCWF Potentially Visible? (Yes/No)		Visual Analysis Results	Operational Noise Analysis Results (worst-case modeled operational noise level [dBA L50] as applicable)
Applicable Protected Area Category	**Land Management Agency Contact Information**	**Area Name**	**RFA 4 Site Boundary**	**Solar Area**	**Gen-tie Line**		**Solar Area**	**Gen-tie Line**		
State Scenic Waterways OAR 345-001-0010(26)(n)	OPRD, Eastern Oregon River Contact 725 Summer Street NE, Suite C Salem, OR 97301 (541) 805-4493 Ivan.hartert@operd.oregon.gov	Lower Deschutes River State Scenic Waterway	12.9	12.9	13.7	W	No	No	No impact. Viewshed analysis indicates no visibility of the solar areas or gen-tie line at the Lower Deschutes River State Scenic Waterway. There is no management directive applicable to preservation of scenic qualities outside of or from the Lower Deschutes River State Scenic Waterway. The Solar Components will not compromise the purpose of the Lower Deschutes River State Scenic Waterway.	<26; Background (no increase from approved facility)
		John Day River State Scenic Waterway	3.8	3.9	5.1	E	Yes	Yes	Negligible impact. Viewshed analysis indicates limited potential visibility from small portions of the Scenic Waterway. At a middleground viewing distance of 3.9 miles or greater, the solar modules will not create a prominent feature in the viewshed. The gen-tie line is highly unlikely to be visible or otherwise discernible at the background viewing distance of over 5.1 miles, and therefore will not contribute to visual contrast from this location. If any solar facilities or gen-tie line were visible, the additional visual contrast within an existing modified landscape that includes wind turbines, aboveground transmission lines, industrial structures, and agricultural irrigation equipment will be weak. There is no management directive applicable to preservation of scenic qualities outside of the Scenic Waterway. The addition of the solar areas and associated infrastructure will not change the previous conclusion that views of the Solar Components, if any, will not compromise the purpose of the Scenic Waterway.	<26; Background (no increase from approved facility)
State Wildlife Refuges or Management Areas OAR 345-001-0010(26)(o)	Oregon Department of Fish and Wildlife (ODFW), Lower Deschutes Wildlife Area 78430 Dodson Road Tygh Valley, OR 97063 (541) 296-4628 odfw.info@odfw.oregon.gov	Lower Deschutes Wildlife Area	11.7	11.8	12.5	W	No	No	No impact. Viewshed analysis indicates no visibility of the solar areas or gen-tie line at the Lower Deschutes Wildlife Area. There is no management directive applicable to preservation of scenic qualities outside of the Wildlife Area. The Solar Components will not compromise the purpose of the Lower Deschutes Wildlife Area.	<26; Background (no increase from approved facility)
State Fish Hatcheries OAR 345-001-0010(26)(p)	N/A	None	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Protected Areas within 20 Miles of the RFA 4 Site Boundary Green shading indicates new protected area since RFA3			Distance to RFA 4 Site Boundary (miles)			Cardinal Direction from RFA 4 Site Boundary	Amended BCWF Potentially Visible? (Yes/No)		Visual Analysis Results	Operational Noise Analysis Results (worst-case modeled operational noise level [dBA L50] as applicable)
Applicable Protected Area Category	**Land Management Agency Contact Information**	**Area Name**	**RFA 4 Site Boundary**	**Solar Area**	**Gen-tie Line**		**Solar Area**	**Gen-tie Line**		
Oregon State University Designated Agricultural Experiment Stations, Experimental Areas, or Research Centers OAR 345-001-0010(26)(q)	Oregon State University (OSU), Sherman Station 66365 Lone Rock Road Moro, OR 97039 (541) 565-3522 No email listed	Columbia Basin Agricultural Research Center (Moro Unit)	12.1	12.1	12.8	SW	No	No	No impact. Viewshed analysis indicates no visibility of the solar areas or gen-tie line at the Columbia Basin Agricultural Research Center. There is no management directive applicable to preservation of scenic qualities outside of or from the Columbia Basin Agricultural Research Center. The Solar Components will not compromise the purpose of the Columbia Basin Agricultural Research Center.	<26; Background (no increase from approved facility)
Oregon State University Designated Research Forests OAR 345-001-0010(26)(r)	N/A	None	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1. Final Order on Request for Amendment 3, p. 27 (October 2008).										

4.0 Impact Assessment – OAR 345-021-0010(1)(l)(C)

OAR 340-021-0010(1)(l)(C) A description of significant potential impacts of the proposed facility, if any, on the protected areas including, but not limited to, potential impacts such as:

Response: The potential effects to protected areas in the analysis area were studied to determine whether the design, construction, and operation of the Solar Components, when taking into account mitigation, will be likely to result in any significant adverse impacts. The following sections summarize the types of potential adverse impacts evaluated and provide summaries of the analysis.

4.1 Noise Impacts – OAR 345-021-0010(1)(l)(C)(i)

(i) Noise resulting from facility construction or operation;

Response: Table L-1 provides a summary of cumulative operational noise levels from the Existing Facility and Solar Components at protected areas within the analysis area. The Solar Components propose no significant additional noise impacts to protected areas from the Existing Facility. Exhibit Y provides an assessment of the existing acoustical environment and anticipated cumulative sound levels from the Existing Facility and Solar Components; the methodology for noise modeling is detailed in that exhibit. Activities associated with construction of the proposed solar areas and related or supporting facilities will be limited to the temporary duration of construction and similar to the construction noise already reviewed by Council for the Existing Facility.

Exhibit Y describes sound level thresholds derived from the Oregon Department of Environmental Quality noise regulations (OAR 340-035-0035), which are used to assess the significance of impacts to noise sensitive properties. As defined in OAR 340-035-0035, "noise sensitive properties" are "real property normally used for sleeping, or normally used as schools, churches, hospitals or public libraries. Property used in industrial or agricultural activities is not Noise Sensitive Property unless it meets the above criteria in more than an incidental manner." None of the protected areas within the analysis area are considered to be a noise sensitive property aside from camping areas along the John Day River (see Exhibit T).

Based on the results of operations noise modeling, described in detail in Exhibit Y, operation of the Existing Facility plus the Solar Components will not create new noise impacts to protected areas beyond those that were previously identified for the Existing Facility. As detailed in Exhibit Y, the solar modules will create no significant operational noise, and operational noise from primarily cooling equipment associated with the BESS and electrical equipment will be similar to operational noise already reviewed by the Council for the Existing Facility. The cumulative noise produced by the Existing Facility and Solar Components noise will attenuate to below 26 A-weighted decibels (dBA)[7], or less than the background/ambient (nighttime) noise level, within approximately 3.2

[7] Note that the 26 dBA value was selected as representative because OAR 340-035-0035(1)(b)(B)(iii)(I) allows for an assumed ambient sound level of 26 dBA for wind energy facilities. Site-specific ambient sound data was not collected for the Solar Components, but 26 dBA is assumed to be a conservative estimate.

miles from the RFA 4 Site Boundary. All protected areas are located more than 3.2 miles from the Solar Micrositing Area, so will not be affected by cumulative operational noise from the Existing Facility and Solar Components.

Noise from construction will similarly be less than 26 dBA within 26 miles from the RFA 4 Site Boundary (daytime ambient sound level) and potentially audible at all protected areas. Pursuant to OAR 340-035-0035(5), noise from construction activities is exempt from the state noise standards. Construction activities associated with adding the Solar Components to the Existing Facility have the potential for localized noise on a temporary basis as construction activities progress through certain locations within the RFA 4 Site Boundary. Noise-generating activities during construction could result from the use of heavy machinery, such as heavy trucks, bulldozers, graders, and cranes. Based on the estimated noise levels of construction equipment provided in Exhibit Y (i.e., a composite of all construction equipment), construction noise levels at the two closest protected areas—the John Day Wild and Scenic River and John Day River State Scenic Waterway—would peak at approximately 43 dBA; this noise level is comparable to a quiet rural residential area (43-46 dBA), and the remaining, more distant, protected areas are anticipated to experience diminished noise levels. These elevated noise levels will occur sporadically while Solar Components infrastructure such as the solar areas closest to the John Day Wild and Scenic River and John Day River State Scenic Waterway are built. As construction progresses elsewhere in the Solar Micrositing Area, noise levels will drop to background levels. Continued implementation of Site Certificate Condition 89 will help reduce construction noise impacts through the requirement of exhaust mufflers on combustion engine-powered equipment, confining the noisiest operation of heavy construction equipment to daylight hours, and establishment of a noise complaint response system; Site Certificate Conditions 90 and 91 (Noise Control Regulations) are not applicable to the amendments proposed by RFA 4 because they only apply to wind turbine construction. At this time, pending geotechnical investigation of the final layout, blasting is not anticipated to be required for Solar Components construction.

The Council previously found that the Existing Facility noise will not result in a significant adverse impact to protected areas[8] and the amendments in RFA 4 do not alter that conclusion.

4.2 Traffic Impacts – OAR 345-021-0010(1)(l)(C)(ii)

(ii) Increased traffic resulting from facility construction or operation;

Response: Traffic impacts in general are addressed in greater detail in Exhibit U, including information on anticipated traffic levels and typical travel routes for the Solar Components.

Based on the analysis provided in Exhibit U, the primary transportation route used for construction of the Solar Components will be the same as what was already evaluated for the Existing Facility. The primary route for construction-related traffic will be Interstate 84 (I-84) to south on U.S. Highway 97 (US-97) to Wasco, southeast on Oregon Route 206 (OR-206), east on either Klondike Road or the Old Wasco Heppner Highway, and then onto various County roads. The secondary

[8] Final Order on Request for Amendment 3, p. 25 (October 2008).

route for strictly construction-related commuter traffic will be I-84 to south on Scott Canyon Road to either Herin Lane or Medler Lane; this route is not suitable for oversize/overweight traffic. Protected areas west of US-97 (i.e., the five Deschutes River-related protected areas) and the Columbia River Gorge National Scenic Area are not accessed by Solar Components transportation routes other than I-84[9]. The remaining six protected areas can be accessed by roads anticipated to carry Solar Components-related truck traffic: the John Day Wild and Scenic River, Lower John Day Wilderness Study Area, Ferry Canyon Area of Critical Environmental Concern (ACEC), Cottonwood Canyon State Park, John Day River State Scenic Waterway, and the Columbia Basin Agricultural Research Center. Construction worker traffic may occur on roads providing access to these resources; however, construction worker traffic will be dispersed on multiple roads throughout the area, and the nominal level of worker traffic anticipated on roads other than I-84, US-97, and OR-206 will not adversely affect level of service on those roads (see Exhibit U).

Timing patterns for construction-related traffic and recreational traffic to protected areas will likely differ substantially. Construction traffic will primarily be dispersed throughout the business work week and primarily during commuter hours, whereas peak recreational traffic will be greatest during the weekend. Additionally, no roads providing access to protected areas within the analysis area are expected to be closed during construction or operation of the Solar Components.

The six aforementioned protected areas can be accessed from US-97 to OR-206; the Columbia Basin Agricultural Research Center can be accessed solely from US-97. The temporary construction-related traffic created on US-97 and OR-206 is anticipated to be inconsequential as they were constructed to design, safety, and load-bearing standards (see Exhibit U).

Temporary, short-term delays are most likely to occur only during deliveries of oversized loads, which will occur sporadically and will be accompanied by traffic control teams. Construction of the Solar Components in general will be short in duration (lasting up to 30 months) and thus any construction traffic impacts will be temporary.

Although there will be no significant traffic impacts to protected areas, the Certificate Holder will continue to implement Site Certificate Condition 79, which requires adhering to various traffic control measures. Site Certificate Condition 77 in turn requires the Certificate Holder to monitor roads for signs of degradation so that preconstruction conditions can be compared with conditions after construction has been completed; coordination with the County and Oregon Department of Transportation will be required. Any damage or wear to county roads from Solar Components construction will be repaired and restored per Site Certificate Condition 78. Therefore, no significant adverse traffic impacts to protected areas are anticipated from construction of the Solar Components.

During operations, traffic will be minimal, as the Solar Components will permanently employ up to three personnel. Solar and BESS-related equipment will require periodic maintenance, but traffic

[9]Due to the average daily traffic volumes on this applicable segment of I-84 within the analysis area (i.e., west of OR-19 to east of US-197), Solar Components construction-related traffic (i.e., trucks, commuter vehicles) is not anticipated to affect the Level of Service on this portion of the interstate (see Exhibit U for further detail).

associated with repair or maintenance visits will be low and daily traffic generated by operation of the Solar Components is not expected to affect operations of any of the state or local county roads used to access the protected areas within the analysis area.

The Council previously found that the construction and operational traffic will not be likely to result in significant adverse impacts to protected areas within the analysis area,[10] and the amendments in RFA 4 do not alter that conclusion.

4.3 Water Use and Wastewater – OAR 345-021-0010(1)(l)(C)(iii)(iv)

(iii) Water use during facility construction or operation.

(iv) Wastewater disposal resulting from facility construction or operation;

Response: No significant water or wastewater impacts to protected areas are anticipated from the Solar Components. Sources of water during construction and operations are provided in Exhibit O, and relevant Site Certificate Conditions will continue to be implemented as applicable (e.g., Site Certificate Conditions 74 and 75). No construction or operational water will be extracted from a protected area or be delivered in a fashion that generates significant impacts to a protected area. Water used during the construction and operation of Solar Components will not impact water availability or use at protected areas.

Sources of wastewater during construction and operations are provided in Exhibit W. The nature of the Solar Components is such that it will not produce industrial wastewater. Except for sanitary wastewater generated in portable toilets and sanitary facilities during construction, all other wastewater will remain within the RFA 4 Site Boundary and none will be disposed of in protected areas within the analysis area. Sanitary wastewater generated in portable toilets during the temporary construction phase will be disposed of in accordance with local jurisdictional regulations and cleaned regularly by a licensed contractor (Site Certificate Condition 82). The existing O&M building includes toilets for use by maintenance staff during operations, handled by an existing on-site septic system; the new O&M buildings will require additional on-site septic systems. The sanitary sewage will be collected and treated by sanitary septic sewage systems in compliance with county permit requirements (Site Certificate Conditions 83). Wash down of concrete trucks shall be in compliance of Site Certificate Condition 86.

It is expected that any excess water used during construction and for solar panel washing during operations will be lost within the RFA 4 Site Boundary through evaporation and infiltration. As described in Exhibit W, the disposition of construction wastewater and the disposal of solar panel washwater during operations would be permitted under a Water Pollution Control Facility Permit.

During construction, stormwater runoff will continue to be managed onsite according to the best management practices as described in the National Pollutant Discharge Elimination System (NPDES) 1200-C Permit and draft Erosion and Sediment Control Plan (see Exhibit I, Attachment I-1; per Site Certificate Condition 26) such that no stormwater will leave the RFA 4 Site Boundary.

[10] Final Order on Request for Amendment 3, p. 25 (October 2008).

Stormwater discharges will be managed in accordance with the NPDES 1200-C permit, and appropriate control measures will be installed to ensure compliance with the discharge and water quality requirements of the permit. During operations, the Solar Components may result in some changes to the stormwater drainage as a result of new impervious surfaces (e.g., gravel roads, concrete foundations, etc.). However, impervious surfaces will be a low percentage of the total area within the RFA 4 Site Boundary.

Exhibit O provides additional information on water use and Exhibit W provides information on wastewater. The Council previously found that water use and wastewater discharge from the Existing Facility will have no impact to protected areas[11] and the modifications proposed in RFA 4 do not alter that conclusion.

4.4 Visual Impacts – OAR 345-021-0010(1)(l)(C)(v)(vi)

(v) Visual impacts of facility structures or plumes, including, but not limited to, changes in landscape character or quality; and

(vi) Visual impacts from air emissions resulting from facility construction or operation, including, but not limited to, impacts on Class 1 Areas as described in OAR 340-204-0050.

Response: The inclusion of the additional solar modules and associated infrastructure at the Solar Components will result in a change to the existing viewshed, but this change will not result in a significant visual impact on any of the surrounding protected areas due to overall height of infrastructure, distance to the Solar Components, topographical screening, low impact to users, no specified management of scenic or visual qualities beyond the boundaries of each protected area, and presence of similar structures within the existing viewshed. To reduce visual impacts to protected areas, Site Certificate Condition 50 will continue to be implemented, which requires the usage of low-reflective finishes on the O&M building and substation and enforces signage restrictions. The O&M building will be designed and constructed to be consistent with the character of buildings in the surrounding area and painted in a neutral color, per Site Certificate Condition 51. Exterior nighttime lighting will continue to be restricted to security lighting at the O&M building and substation, and as necessary for repairs, emergencies, according to Site Certificate Condition 52. Note that the single Protected Areas Site Certificate Condition, 36, does not apply to RFA 4, it only applies to the construction of wind turbines.[12]

The Solar Components will not generate any emissions plumes, so will not cause any visual impacts from air emissions. Potential visual impacts due to dust created during construction of the Solar Components will be largely prevented by following best management practices for dust control, as detailed in Exhibit I.

Class I areas consist of the 12 federally designated Wilderness Areas in Oregon defined in OAR 340-204-0050, none of which are located within the analysis area.

[11] Final Order on Request for Amendment 3, p. 25 (October 2008).
[12] Third Amended Site Certificate for the Biglow Canyon Wind Farm, p. 9 (October 2008).

4.4.1 Visual Impact Assessment Methodology

The potential for visual impacts from the Solar Components are primarily related to the components that will be the most prominent in terms of size and scale. The two most prominent components in terms of height off the ground and overall surface area include the solar areas and the 230-kilovolt gen-tie line. Thus, these two components were the main focus of the visual impact assessment.

A zone of visual influence (ZVI) analysis, also known as a viewshed analysis, was performed using Esri geographic information system software and a bare-earth 10-meter digital elevation model to identify those areas from which the solar areas and the gen-tie line might be visible (Figures L-2 and L-3). The ZVI analysis assumed a maximum height of 15 feet for the solar modules and maximum height of 160 feet for the gen-tie line. All other components proposed with RFA 4 were deemed less visually impactful (due to height, being dispersed throughout the RFA 4 Site Boundary, or adjacent to taller infrastructure, etc.) and addressed by the assessment of the solar areas and gen-tie line. A typical viewing height of 1.8 meters (6 feet) was assumed. Visibility of the two components was defined by visible or not visible, indicated by color coding (see Figures L-2 and L-3), and by proximity, i.e., foreground (less than 0.5 mile), middleground (0.5 to 5 miles), or background distances (more than 5 miles).

Based on these ZVI analyses, Visual Analysis Key Observation Points (KOPs) were identified based on locations from which the Solar Components would potentially be visible and noticeable to the casual observer (see Figure R-4 in Exhibit R). Thus, some of the protected areas are represented as KOPs in the analysis of visual impacts in Exhibit R; these are noted below as applicable. Additionally, a glare analysis was also performed using the Sandia Laboratories Solar Glare Hazard Analysis Tool; See Exhibit R for the full methodology. The glare results are noted below as applicable to specific protected areas and KOPs.

It should be noted that this bare-earth modeling approach (based only on the effects of terrain on visibility) results in a highly conservative assessment of potential visibility for several reasons. First, a bare-earth analysis does not take into account the effects of vegetation or buildings, which will in practice block or screen views in some places. Finally, the model does not account for distance, lighting, weather, and atmospheric attenuation factors that diminish visibility under actual field conditions. The solar modules will be the most visible components within the solar areas (see RFA 4 Division 27 document for full description). The visibility of the solar modules within the solar areas will depend primarily on topographic or other view obstructions and the distance from the viewer to the solar areas. With a maximum height of 15 feet to the top edge of the solar module when fully tilted, the modules will not be visible from sites lower in elevation than the area on which the solar modules are constructed. From sites that are similar in elevation to the solar modules, viewers will see only a line on the horizon and not individual solar panels. Depending on the viewing distance, viewers at sites higher in elevation may have views of the modules, especially if the view direction is toward the angle at which the module is tilted toward the sun. To the extent practicable, reflectivity of solar modules will be minimized. Antireflective

coating will be used to reduce glare, and the surface of the modules will have high transmittance to increase the amount of light reaching the photovoltaic cells. With these methods, the modules will be less reflective than a natural water body or a coated glass surface that is not antireflective.

4.4.2 Visual Impact Assessment Results

Based on the results of the ZVI analysis, there is the potential for visibility of some portions of the Solar Components from 6 of the 12 protected areas in the analysis area (see Figures L-2 and L-3, and Table L-1). The visibility of the solar areas and gen-tie line are characterized as visible or not visible. The discussion below provides additional detail on the updated visual impact analysis that was conducted for RFA 4.

Potential visibility is one of several factors that comprise an assessment of visual impact to a protected area. Other factors to consider include the existing visual context, particularly other sources of visual contrast present within the view; the likely number and nature of visitors to a protected area; and whether there is any management direction related to preservation of scenic quality (see Exhibit R), either within the protected area or outside of it.

Table L-1, above, provides a summary of the visual impact assessment for each of the protected areas in the analysis area. Table L-1 also considers the visibility of the solar areas and gen-tie line. Again, the proposed solar areas and gen-tie line will potentially be visible from six protected areas. However, the visual impact is considered to be negligible for all protected areas, primarily due to their distance from the proposed infrastructure for the Solar Components, ranging from 11.7 to 17.5 miles. Views of the solar areas and gen-tie line from most protected areas will therefore be at a background viewing distance where viewers will be highly unlikely to detect or identify the low-profile solar modules, and both the solar modules and gen-tie line will occupy a limited portion of the total viewshed. Moreover, the six protected areas with potential views of the Solar Components currently have views of other wind farms, transmission lines, industrial development, and agricultural irrigation equipment (not including/considering the components of the Existing Facility), so the Solar Components will not introduce a new or unusual feature to the view. In addition, potential views from some of the protected areas will be partially to fully screened by terrain, and man-made structures.

The protected areas closest to the Solar Components—the John Day Wild and Scenic River and John Day River State Scenic Waterway—will have middleground views of the Solar Components; the associated visual impacts were found to be similar to or less than the Existing Facility.[13] The following paragraphs provide a more in-depth visual impact assessment for these protected areas.

4.4.2.1 John Day Wild and Scenic River

The John Day Wild and Scenic River is located approximately 3.7 miles east of the RFA 4 Site Boundary; over 60 miles of the 147-mile John Day River are within the analysis area. The portion of the Mainstem segment within the 20-mile analysis area, from approximately 12 miles east of Grass

[13] Final Order on Request for Amendment 3, p. 25-26 (October 2008).

Valley/I-97 to where the river meets the Columbia River, is included under the state and federal designations. This portion of the John Day River is part of the John Day River Canyon identified by the applicable federal management plan as well as the Sherman County Comprehensive Plan as an important scenic resource where significant adverse visual impacts should be avoided (BLM 1986, 2001; Sherman County 2007; see Exhibit R). The river corridor is popular for its diverse recreational opportunities including hunting, fishing, sightseeing, horseback riding, hiking, camping, and whitewater rafting within the river canyon, especially during the summer (BLM 2024f).

The overall visual impact from the solar areas and gen-tie line on the John Day Wild and Scenic River would be negligible. The ZVI analysis demonstrates only intermittent visibility along a small portion of the John Day Wild and Scenic River within the analysis area from a middleground viewing distance; these views are confined to the upper ridges of the John Day River Canyon and the Solar Components will not be visible from within the canyon, where most of the recreational opportunities are concentrated (see Figures L-2 and L-3). Views of both the solar areas and gen-tie line are anticipated to be intermittent and subordinate to the existing landscape due to existing wind and utility infrastructure in the viewshed, and topographical screening limiting Solar Components visibility. Thus, the solar areas and gen-tie line will not represent a new or unusual feature in the viewshed and will create—at most—weak additional contrast within the current visual context. Therefore, due to distant proximity, topographical screening, and existing views of other wind farms and utility infrastructure from the John Day Wild and Scenic River, visual impacts from the Solar Components are anticipated to be negligible.

4.4.2.2 John Day River State Scenic Waterway

The John Day River State Scenic Waterway is also contained within the John Day River Canyon and thus significantly overlaps with the John Day Wild and Scenic River (OPRD 2024a). This portion of the John Day River is part of the John Day River Canyon identified by the applicable federal management plan as well as the Sherman County Comprehensive Plan as an important scenic resource where significant adverse visual impacts should be avoided (BLM 1986, 2001; Sherman County 2007; see Exhibit R). Similar to the John Day Wild and Scenic River, recreational opportunities include water-associated activities, hunting, sightseeing, horseback riding, hiking, and camping within the river canyon, and demand is primarily during the summer (BLM 2024f).

As was the case for the John Day Wild and Scenic River, the overall visual impact from the solar areas and gen-tie line on the John Day River State Scenic Waterway would be negligible. The ZVI analysis displays intermittent visibility along a small portion of the John Day River State Scenic Waterway within the analysis area from a middleground viewing distance; these views are confined to the upper ridges of the John Day River Canyon and the Solar Components will not be visible from within the canyon (see Figures L-2 and L-3). Views of both the solar areas and gen-tie line are anticipated to be intermittent and subordinate to the existing landscape due to existing energy infrastructure in the viewshed, and topographical screening limiting Solar Components visibility. Thus, the solar areas and gen-tie line will not represent a new or unusual feature in the viewshed

and will create—at most—weak additional contrast within the current visual context. Therefore, due to distant proximity, topographical screening, and existing views of other wind farms and utility infrastructure from the John Day River State Scenic Waterway, visual impacts from the Solar Components are anticipated to be negligible.

4.4.2.3 Visual Impact Summary

Based on this analysis, the Certificate Holder concludes that there will be no significant visual impacts to protected areas within the analysis area, and any associated visual impacts will be similar to the previously Existing Facility.[14] While 6 of the 12 protected areas will potentially have some level of visibility, for most protected areas the Solar Components will be in the background, and the solar modules and gen-tie line will not represent a new or unusual features in the landscape because there are already wind turbines, transmission lines, and other utility infrastructure visible, as well as topographical screening present. Two protected areas will have middleground views of the solar areas and gen-tie line. However, these views will predominately be intermittent due to existing screening, and any views of the proposed infrastructure will not be dominant in the surrounding landscape. Only a few of the protected areas have any management direction related to scenic quality, and that direction does not apply to siting of the Solar Components *outside* of the protected areas themselves. Additionally, views from most of the protected areas already include wind turbines, transmission lines, and other industrial or agricultural infrastructure, indicating that viewers cannot reasonably expect pristine views free of developed infrastructure. No significant amounts of glare are predicted for any applicable OP or route segments. Therefore, as modified by RFA 4, the solar areas, gen-tie line, and other related or supporting facilities will not result in a significant adverse visual impact to protected areas.

The Council previously found that the Existing Facility and other related or supporting facilities will not cause significant visual impacts to protected areas[15] and the changes proposed in RFA 4 do not alter the basis for that conclusion.

5.0 Conclusions

The analysis area contains all or part of 12 protected areas. The Certificate Holder analyzed potential impacts to these areas and concluded as follows:

- Noise. Based on the results of the noise modeling presented in Exhibit Y, operational noise was determined to likely be less than 26 dBA at all protected areas, which is consistent with a rural nighttime background ambient according to OAR 340-035-0035. Construction noise may be audible at the protected areas nearest the Solar Components; however, construction noise will be short-term and intermittent, and will not be considered a significant impact to any protected area. Therefore, the Solar Components will result in no significant difference

[14] Final Order on Request for Amendment 3, p. 25 (October 2008).
[15] Final Order on Request for Amendment 3, p. 25 (October 2008).

in operational or construction noise at the thirteen protected areas within the analysis area relative to the Existing Facility.

- Traffic. Construction and operations traffic for the Solar Components will not be located to significantly impact any protected areas. Some short-term, intermittent, and temporary delays could be possible during construction by visitors, specifically at the six protected areas accessed by US-97 and OR-206; however, these will be temporary and traffic conditions will return to typical low levels following construction. Therefore, consistent with previous conclusions for the Existing Facility, there will be no significant impact to protected areas resulting from the construction or operations traffic of the Solar Components.
- Water. The Solar Components will not use water in sufficient quantities or from sources that will significantly impact any protected areas. Therefore, consistent with previous conclusions for the Existing Facility, there will be no significant impacts to protected areas by water use for the Solar Components.
- Wastewater. The Solar Components will not change the fact that the Solar Components will manage its wastewater almost exclusively within the RFA 4 Site Boundary and will thus not significantly impact any protected areas. Therefore, consistent with previous conclusions for the Existing Facility, there will be no significant impacts to protected areas due to wastewater generated by the Solar Components.
- Visual. No Class I areas are present within the analysis area. The Solar Components will potentially be visible from 6 of the 12 protected areas in the analysis area, with 2 of the 6 protected areas in the analysis area having middleground views as compared to background views. However, due to the overall height of solar components, distance from the Solar Components, topographic obstructions, other features within view (i.e. wind turbines and other utility infrastructure), low impact to users, an overall lack of management direction applicable to scenic quality beyond the boundaries of each protected area, and no significant amounts of glare, the Solar Components will not alter the Council's previous finding that the Existing Facility will not have a significant visual impact on any protected area.

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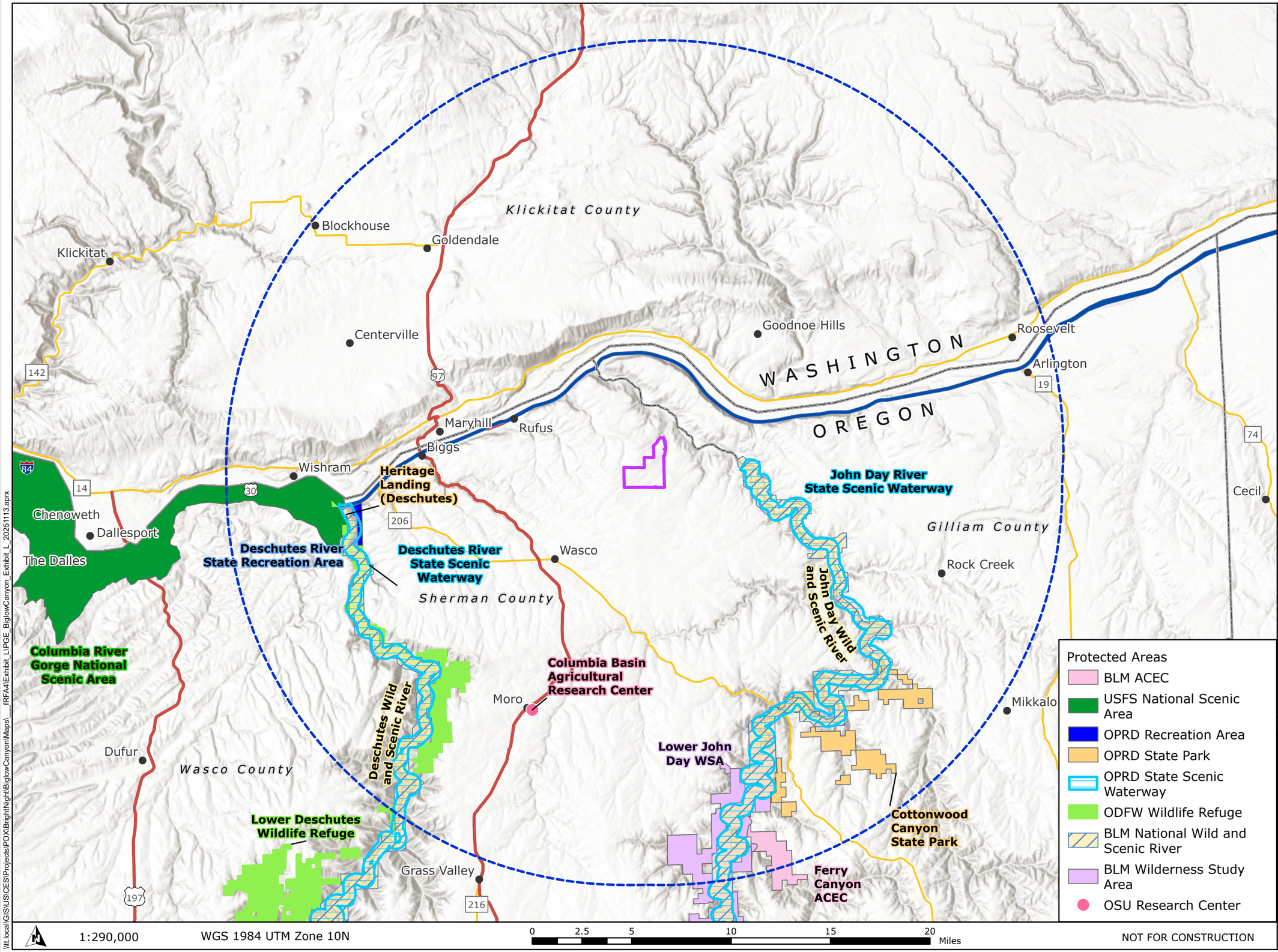
Figures

Biglow Canyon Wind Farm Request for Amendment #4

Figure L-1 Protected Areas within the Analysis Area

SHERMAN COUNTY, OR



- Solar Micrositing Area
- Protected Areas Analysis Area (20-mile buffer)
- State Boundary
- County Boundary
- City/Town
- Interstate Highway
- US Highway
- State Highway

Protected Areas

- BLM ACEC
- USFS National Scenic Area
- OPRD Recreation Area
- OPRD State Park
- OPRD State Scenic Waterway
- ODFW Wildlife Refuge
- BLM National Wild and Scenic River
- BLM Wilderness Study Area
- OSU Research Center

TETRA TECH

PGE

Reference Map

1:290,000

WGS 1984 UTM Zone 10N

0 2.5 5 10 15 20 Miles

NOT FOR CONSTRUCTION

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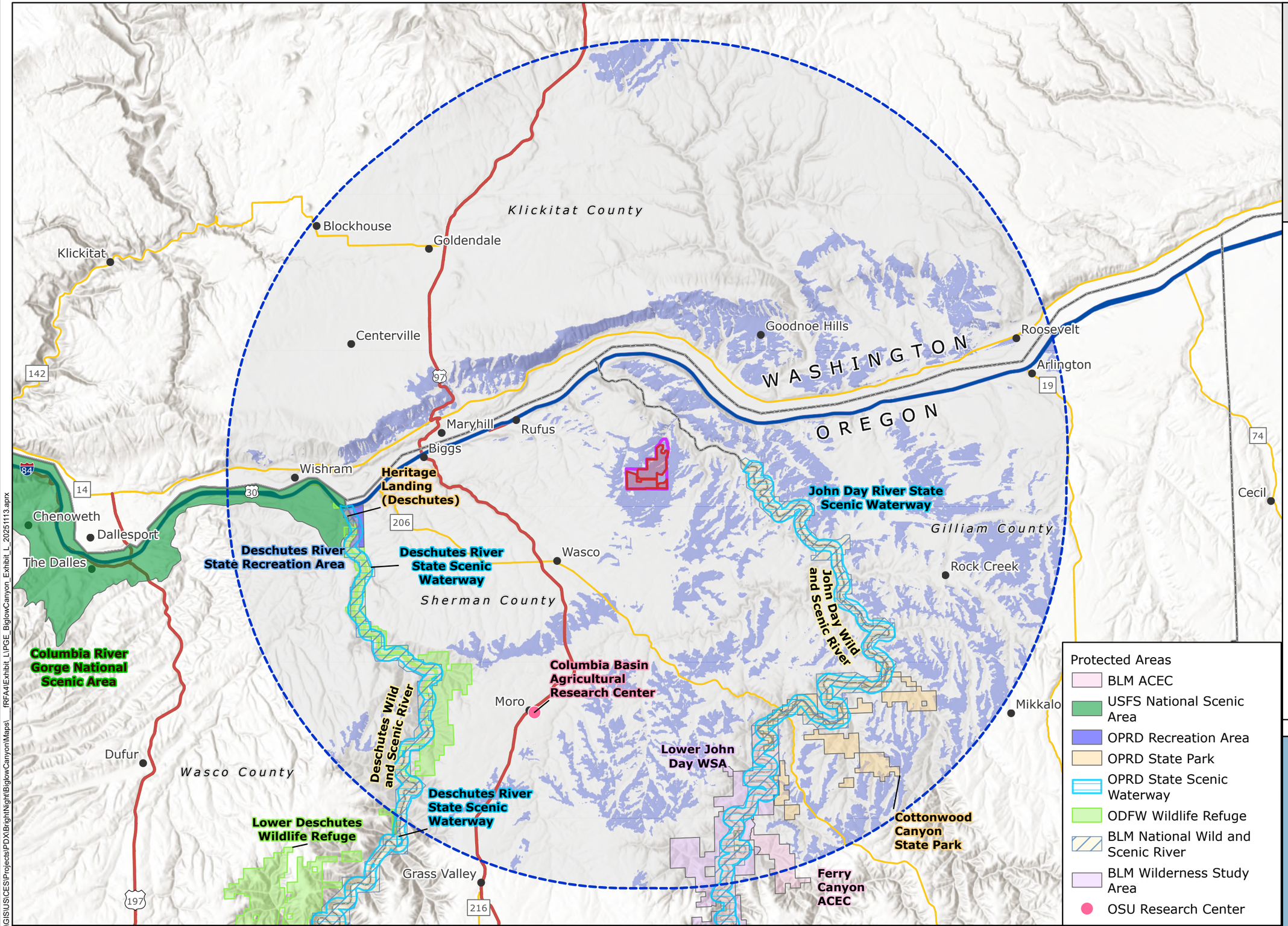
Biglow Canyon Wind Farm Request for Amendment #4

Figure L-2 ZVI Map, Solar Array

SHERMAN COUNTY, OR



- Solar Micrositing Area
- Protected Areas Analysis Area (20-mile buffer)
- Fenceline
- State Boundary
- County Boundary
- City/Town
- Interstate Highway
- US Highway
- State Highway

Viewshed

- Solar Array Not Visible
- Solar Array Potentially Visible

*Potential solar array visibility calculated using a 10 meter bare-earth digital elevation model with panel heights of 15 feet (4.572 meters) and a viewing height of 6 feet (1.8 meters).

Protected Areas

- BLM ACEC
- USFS National Scenic Area
- OPRD Recreation Area
- OPRD State Park
- OPRD State Scenic Waterway
- ODFW Wildlife Refuge
- BLM National Wild and Scenic River
- BLM Wilderness Study Area
- OSU Research Center

TETRA TECH

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Reference Map

1:290,000 WGS 1984 UTM Zone 10N

0 2.5 5 10 15 20 Miles

NOT FOR CONSTRUCTION

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Biglow Canyon Wind Farm Request for Amendment #4

Figure L-3
ZVI Map, Gen-tie Lines

SHERMAN COUNTY, OR

Klickitat County
Blockhouse
Goldendale
Klickitat
Centerville
Goodnoe Hills
Roosevelt
Arlington
WASHINGTON
OREGON
Maryhill
Rufus
Biggs
Wishram
Heritage Landing (Deschutes)
Chenoweth
Dallesport
The Dalles
Deschutes River State Recreation Area
Deschutes River State Scenic Waterway
Wasco
Sherman County
John Day River State Scenic Waterway
Gilliam County
Rock Creek
Cecil
John Day Wild and Scenic River
Columbia River Gorge National Scenic Area
Columbia Basin Agricultural Research Center
Moro
Mikkalo
Deschutes Wild and Scenic River
Dufur
Wasco County
Lower John Day WSA
Cottonwood Canyon State Park
Deschutes River State Scenic Waterway
Lower Deschutes Wildlife Refuge
Ferry Canyon ACEC
Grass Valley
142
97
84
14
30
206
19
74
216
197

- Solar Micrositing Area
- Protected Areas Analysis Area (20-mile buffer)
- State Boundary
- County Boundary
- City/Town
- Interstate Highway
- US Highway
- State Highway
- Gen-Tie Line (230 kV)

Viewshed

- Transmission Line Not Visible
- Transmission Line Potentially Visible

*Potential transmission line visibility calculated using a 10 meter bare-earth digital elevation model with gen-tie structure heights of 160 feet (48.768 meters) and a viewing height of 6 feet (1.8 meters).

Protected Areas

- BLM ACEC
- USFS National Scenic Area
- OPRD Recreation Area
- OPRD State Park
- OPRD State Scenic Waterway
- ODFW Wildlife Refuge
- BLM National Wild and Scenic River
- BLM Wilderness Study Area
- OSU Research Center

TETRA TECH

PGE

Reference Map

CANADA
MT
WA
ID
OR
CA
NV

1:290,000

WGS 1984 UTM Zone 10N

0 2.5 5 10 15 20 Miles

NOT FOR CONSTRUCTION

\\tt.local\GIS\US\CES\Projects\PDX\Bright\Night\BiglowCanyon\Maps__fRFA4\Exhibit_L\PGE_BiglowCanyon_Exhibit_L_20251113.aprx