Exhibit K

Land Use

Biglow Canyon Wind Farm
December 2025

Prepared for

Portland General Electric Company

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Acronyms and Abbreviations

AC	alternating current
AVA	American Viticulture Area
BCWF or Existing Facility	Biglow Canyon Wind Farm
BESS	battery energy storage system
BIGL or Project Developer	BIGL bn, LLC
BMP	best management practice
BPA	Bonneville Power Administration
Certificate Holder or PGE	Portland General Electric Company
CIP	Community Investment Plan
Council or EFSC	Oregon Energy Facility Siting Council
DLCD	Department of Land Conservation and Development
EFU	exclusive farm use
ESCP	Erosion and Sediment Control Plan
F-1	Exclusive Farm Use (zone)
FEMA	Federal Emergency Management Agency
gen-tie	generation tie
I	Interstate
kV	kilovolt
LCDC	Land Conservation and Development Commission
LGIA	large generator interconnection agreement
LOS	Level of Service
MCEDD	Mid-Columbia Economic Development District
MW	megawatts
NH	Natural Hazards (Combining zone)
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
O&M	operations and maintenance
OAR	Oregon Administrative Rules
ODOE	Oregon Department of Energy
OR	Oregon Route
ORS	Oregon Revised Statute

OSU	Oregon State University
OWRD	Oregon Water Resources Department
PILOT	Payment in Lieu of Taxes
POI	point of interconnect
PV	photovoltaic
RFA	Request for Amendment
RFPD	Rural Fire Protection District
SCCP	Sherman County Comprehensive Plan
SCSWCD	Sherman County Soil and Water Conservation District
SCZO	Sherman County Zoning Ordinance
SIP	Strategic Investment Program
Site Certificate	Site Certificate on Amendment 3
Solar Components	photovoltaic solar energy generation and battery storage
TSP	Transportation System Plan
US	U.S. Highway
USDA	U.S. Department of Agriculture
V/C Ratio	Volume to Capacity ratio
WMP	Wildfire Mitigation Plan

1.0 Introduction

The Portland General Electric Company (PGE or Certificate Holder) submits this Request for Amendment 4 (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 (PV) solar energy generation and battery storage (Solar Components) to the operating BCWF in Sherman County, OR.

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 PV solar arrays and 125 MW in battery storage capacity (Solar Components) in approximately 1,445 acres (Solar Area) sited within the existing BCWF site boundary Solar Micrositing Area (RFA 4 Site Boundary;[1] see Figure 3 in RFA 4 Division 27).

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. The permanent disturbance area impacted by Solar Components is 1,445 acres (Solar Area). The Goal 3 exception request discussed in Section 8.0, is specific to the Solar Area for RFA 4.

The proposed layout for the Solar Components includes a primary area of infrastructure improvements within the Solar Micrositing Area. The Solar Area will connect to the electrical grid through the existing point of interconnect (POI) at the Biglow Canyon Substation, which is situated within the Solar Micrositing Area shown in Figure 2 in the RFA 4 Division 27 document.

Solar Components will include solar arrays, inverters, and inverter step-up transformers. Related or supporting facilities include underground medium voltage collector lines, a collector substation, battery energy storage system (BESS) facilities and their subcomponents (i.e., inverters), approximately 600 feet of a new 230-kilovolt (kV) generation tie (gen-tie) transmission line, 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 creating a permanent impact area of up to 1,445 acres (i.e., Solar Area).

[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 RFA4 Site Boundary.

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

This Exhibit K was prepared to meet the submittal requirements in Oregon Administrative Rule (OAR) 345-021-0010(1)(k). Sections of OAR 345-021-0010(1)(k) that do not apply to the proposal have been omitted from this exhibit.

To issue a site certificate, the Council must find that the facility complies with the Statewide Land Use Planning Goals adopted by the Land Conservation and Development Commission (LCDC). See OAR 345-022-0030(1). The Certificate Holder has elected to seek a Council determination of compliance under Oregon Revised Statute (ORS) 469.504(1)(b). Under this election, a finding of compliance is required when the Council determines the following:

> *ORS 469.504(1)(b)(A) The facility complies with applicable substantive criteria from the affected local government's acknowledged comprehensive plan and land use regulations that are required by the statewide planning goals and in effect on the date the application is submitted, and with any Land Conservation and Development Commission administrative rules and goals and any land use statutes that apply directly to the facility under ORS 197.646;*
>
> *ORS 469.504(1)(b)(B) For an energy facility or a related or supporting facility that must be evaluated against the applicable substantive criteria pursuant to subsection (5) of this section, that the proposed facility does not comply with one or more of the applicable substantive criteria but does otherwise comply with the applicable statewide planning goals, or that an exception to any applicable statewide planning goal is justified under subsection (2) of this section; or*
>
> *ORS 469.504(1)(b)(C) For a facility that the council elects to evaluate against the statewide planning goals pursuant to subsection (5) of this section, that the proposed facility complies with all applicable statewide planning goals or that an exception to any applicable statewide planning goal is justified under subsection (2) of this section.*

Exhibit K demonstrates the RFA 4's compliance with the applicable substantive criteria from the Sherman County Zoning Ordinance (SCZO; Sherman County 2003) and the Sherman County Comprehensive Plan (SCCP; Sherman County 2007). In addition, Exhibit K demonstrates RFA 4's compliance with the LCDC administrative rules and goals and any land use statutes directly applicable to the Solar Components. Exhibit K also demonstrates that a "reasons" exception to Statewide Planning Goal 3, Agricultural Lands, is justified under ORS 469.300. Finally, Exhibit K provides evidence upon which the Council may find that the Solar Components meet OAR 345-022-0030.

2.0 Land Use Analysis Area – OAR 345-021-0010 (1)(k)(A)

OAR 345-021-0010 (1)(k) Information about the proposed facility's compliance with the statewide planning goals adopted by the Land Conservation and Development Commission, providing evidence to support a finding by the Council as required by OAR 345-022-0030. The applicant must state whether the applicant elects to address the Council's land use standard by obtaining local land use approvals under ORS 469.504(1)(a) or by obtaining a Council determination under ORS 469.504(1)(b). An applicant may elect different processes for an energy facility and a related or supporting facility but may not otherwise combine the two processes. Once the applicant has made an election, the applicant may not amend the application to make a different election. In this subsection, "affected local government" means a local government that has land use jurisdiction over any part of the proposed site of the facility. In the application, the applicant must:

OAR 345-021-0010 (1)(k)(A) Include a map showing the comprehensive plan designations and land use zones in the analysis area;

Response: In accordance with OAR 345-001-0010(59)(c), the RFA 4 land use analysis area includes the Solar Micrositing Area plus the area within one-half mile from the Solar Micrositing Area (Figure K-1) for land within Sherman County. Approximately 5,198 acres are located within the land use analysis area, 1,924 acres are located within the Solar Micrositing Area, and 1,445 acres are located within the Solar Area. Figure K-2 shows the Sherman County land use zones and comprehensive plan map designations within the analysis area. All land within the Solar Micrositing Area and land use analysis area is zoned Exclusive Farm Use (F-1) with the northern portions of both areas being located within the Natural Hazards (NH) combining zone.

3.0 Overview of Solar Components, Land Uses, Farmland Characteristics, and Agricultural Impacts/Mitigation

3.1 Solar Component Overview

RFA 4, including individual components and related or supporting facilities, is described in detail in RFA 4's Division 27. As discussed in RFA 4's Division 27 Section 4.1.2, the Certificate Holder is requesting to permit a range of PV and associated or supporting facility technology within the Solar Micrositing Area of approximately 1,924 acres that provides for micrositing flexibility in anticipation of perpetual technological advances and offering maximum efficiency in use of space. This flexibility provides development flexibility for potential customer's varying market requirements. As discussed in RFA 4's Division 27 Section 4.1, the Certificate Holder requests micrositing flexibility within the Solar Micrositing Area, which represents the limits of the area that may be temporarily or permanently disturbed during construction of the Solar Components.

As discussed in Section 6.3 of this exhibit, the proposed solar array and associated facilities meet the definition of "photovoltaic solar power generation facility" subject to OAR 660-033-0130(38).

Photovoltaic solar power generation facility components (Solar Components) will include solar arrays, inverters, BESS facilities and their subcomponents (i.e., inverters), a Project substation, an O&M structure, site access roads, internal roads, perimeter fencing, facility entry gate, medium voltage (34.5-kV) collector lines, and temporary laydown areas. The Certificate Holder is proposing to construct the BESS as a concentrated AC-coupled BESS yard within the fence line of the Solar Micrositing Area adjacent to the collector substation (see Figure 2 in the RFA 4 Division 27 document). In addition, the 34.5-kV collector lines are also part of the solar facility as they will collect the energy from the solar modules and transfer it to the collector substation.

The proposed 230-kV gen-tie line is not included in the definition of "photovoltaic solar power generation facility." Instead, as directed by EFSC, the proposed transmission line is treated as a *utility facility necessary for public service* pursuant to ORS 215.283(1)(c) if the standards of ORS 215.275 or 215.274 are met. Compliance with ORS 215.274 is discussed in Section 6.1 below.

For purposes of Goal 3 exception analysis (see Section 8.0), the Certificate Holder considered a permanent impact area, or Solar Area, that will occupy up to approximately 1,445 acres enclosed within the solar fenced areas inside the Solar Micrositing Area. This entire Solar Area is considered permanently disturbed and includes all PV solar power generation facility components excluding temporary features such as laydown areas (see Figure 2 in RFA 4 Division 27 document). However, within the overall footprint, actual fencing of individual components (i.e., substation, BESS, etc.) may be different than shown. All temporary disturbance areas are outside the fenced areas. This layout represents the maximum impact scenario for purposes of analyzing land use impacts (see Figure 2 in RFA 4 Division 27 document). More details can be found throughout RFA 4 Division 27 Section 4.0.

3.2 Overview of Existing Land Uses

The zoning designations, underlying land uses, and soil classifications within the Solar Micrositing Area and analysis area are relevant for purposes of analyzing RFA 4's compliance with applicable substantive criteria and directly applicable state land use regulations. Zoning designations are discussed in Section 2.0. Existing land uses are discussed in this section, while farmland characteristics, including water rights, soil classifications, and high-value farmland, are discussed in Section 3.3. There are a total of two tracts within the Solar Micrositing Area[2]. Per OAR 660-033-0020(14), "tract" means one or more contiguous lots or parcels under the same ownership. The eight tracts are mapped in Figure K-3. Compliance with applicable substantive criteria is discussed in Section 5.0, and compliance with directly applicable state land use regulations is discussed in Sections 6.0, 7.0, and 8.0.

[2] Tract 2 is owned by the Certificate Holder (PGE), includes 13 acres, and is used for an existing substation and is not farmed. More information on each tract is provided in Section 3.3.

3.2.1 Cultivated Lands

As shown on Figure K-4, the majority of the Solar Micrositing Area and land use analysis area is composed of cultivated land. These cultivated lands are a mix of summer fallow fields and fields in small grain production, primarily dryland wheat (soft white winter wheat) with approximately 25 acres of irrigated row crops. There is only one tract receiving irrigation water within the Solar Micrositing Area (see irrigation pivot east of the Biglow Canyon Substation in Figure 2.2 of Division 27 and see place of use water rights in Figure K-5). More information regarding existing agricultural uses and water rights located within the Solar Micrositing Area and analysis area is discussed in Section 3.3.1. Exhibit P and Figure P-2 provide more detail on the surveyed habitats and ground cover within the Solar Micrositing Area.

3.2.2 Surrounding Energy Facilities

As shown on RFA 4 Division 27 Figure 4, the Solar Micrositing Area is within 10 miles of renewable energy projects, Klondike III Wind Project and Golden Hills Wind Project. Transmission lines operated by the Bonneville Power Administration (BPA), PaTu Wind Farm LLC, and PacifiCorp all connect to the existing Biglow Canyon Substation connecting the POI to the regional electrical grid. As shown in Figure K-3, other non-EFSC solar and wind projects are also located within 5 mile of the Solar Micrositing Area: the six-turbine PaTu wind farm and the existing 90-acre Wy'East solar facility.

3.3 Farmland Characteristics

To support the responses to the applicable substantive criteria under OAR 660-033-0130(38) (see Section 6.3), this section describes the factors that influence whether the land within the Solar Micrositing Area and analysis area meets the definition of arable land under OAR 660-033-0130(38)(a) and/or meets the definition of high-value farmland under ORS 195.300(10). These factors include:

- Whether the land is within a place of use for a permit, certificate, or decree for the use of water for irrigation issued by the Oregon Water Resources Department (OWRD) or is within the boundaries of an irrigation district (as defined under ORS 540.505);
- Whether the land is currently irrigated or has water rights sufficient to support irrigation;
- Whether the land in a tract is predominantly composed of soils that are irrigated or not irrigated and classified by the Natural Resources Conservation Service (NRCS) as prime, unique, Class I or Class II (for high-value soils) or predominantly cultivated or composed of soils that are irrigated or not irrigated and classified by the NRCS as Class III or IV (for arable soils); and
- Whether the land is located within the Columbia Valley American Viticulture Area (AVA), as described in 27 Code of Federal Regulations 9.74 and meets the elevation, aspect, and slope criteria listed under ORS 195.300(10)(f).

The following subsections investigate each of these factors as they apply to the Solar Micrositing Area and analysis area.

3.3.1 Existing Water Rights

As discussed in Section 3.2 and shown on Figure K-5, there is one irrigation water right within Solar Micrositing Area (Oregon Certificate 57620) and one irrigation water right within the analysis area outside of the Solar Micrositing Area (Oregon Permit G 16704). None of the land within the Solar Micrositing Area or analysis area is included within the boundaries of an irrigation or diking district.

The existing water right within the Solar Micrositing Area, the Oregon Certificate 57620, is held by a participating landowner (Scharf Water Right) and allows for irrigation on up to 325.70 acres[3]. The date of water right priority for this certificate is February 17, 1976. The water comes from "Scharf Well #1 in the John Day River basin," which was drilled in 1975 to a depth of 130 feet and has an authorized limit of 0.660 cubic foot per second measured at the well (ORWD 2024a). While the Scharf Water Right authorizes about 325 acres of irrigation, aerial photographs confirm that only about 25 acres are irrigated within the Solar Micrositing Area.[4] The Certificate Holder is working with the participating landowner and exploring transferring the Scharf Water Right to industrial use for the life of the Solar Components. If successful, the transfer would allow the Certificate Holder to use the available water for construction and operation activities, including fire suppression and panel washing, and then, upon Facility retirement, the water could be transferred back to irrigation use.

The existing water right outside the Solar Micrositing Area but within the land use analysis area is Oregon Permit G 16704 (McCullough Water Right), which was issued in 2010 with a priority water right date of October 8, 2009. The authorized use of this permit is for irrigation of 125.7 acres from "Well 1 (SHER 50257) in Biglow Canyon Basin (OWRD 2024b). Per the landowner, this crop circle supports a range of crop types depending on the year that include mint, garlic, and carrot seed.

3.3.2 Soil Classifications

The NRCS geographic information system soil data indicate the analysis area comprises 10 soil types (NRCS 2024; see Table K-1 below). The NRCS database includes the physical and chemical properties of the soils in the analysis area and the soil map unit distribution. The NRCS assigns land capability classifications to each soil unit to show, in a general way, the suitability of soils for most kinds of field crops. Soils are grouped according to their limitations for field crops, the risk of

[3] Although this water right is authorized for up to 325.7 acres of irrigation in Certificate 57620, the spatial data provided by OWRD showing the location of this place of use water right only includes 311 acres within the Solar Micrositing Area (Figure K-5).

[4] According to the landowner (see Table K-8, Tract 1), the 25 acres of irrigated land within the Sharf Water Right is cultivated as row crops that rotate between garlic, carrot seed, mint, and wheat depending on the year. The removal of up to 25 acres of garlic, carrot seed, or mint crops from production is a de minimis loss of these crop types. The 25 acres was included in the economic analysis for dryland wheat farming in Attachment K-2.

damage if they are used for crops, and the way they respond to management (NRCS 2024). Soil classifications can depend on whether the soils are irrigated. As discussed in Section 3.3.1, there are approximately 25 acres of farmland receiving irrigation water within the Solar Micrositing Area; however, there are 325.7 acres of place of use water rights authorized by OWRD. There are also approximately 125 acres of irrigated agricultural land within the analysis area. Figure K-6 shows NRCS soil capability classes within the analysis area and Solar Micrositing Area for irrigated and non-irrigated capability classes.

In addition to the irrigated and non-irrigated soil capability classifications, the NRCS assigns farmland classifications to map units as prime farmland, prime farmland if irrigated, farmland of statewide importance, farmland of local importance, or unique farmland. Farmland classifications identify the location and extent of the soils that are best suited to food, feed, fiber, forage, and oilseed crops (NRCS 2024). Soils in the Solar Micrositing Area are classified by the NRCS as either prime farmland if irrigated, farmland of statewide importance, or not prime farmland. See Table K-1.

NRCS also assigns capability subclasses for each soil unit. Seven of the 10 soils listed in Table K-1 are assigned an "e" capability subclass, which indicates that the main hazard to the soils is the risk of erosion unless close-growing plant cover is maintained. For 16D Lickskillet very stony loam and 18E Lickskillet-Rock outcrop complex, NRCS assigns a "s" subclass, which shows that the soil is limited mainly because it is shallow, droughty, or stony. Soils across the entire Solar Micrositing Area are predominantly rated by NRCS as "organic matter depletion moderately high," which indicates that the soil and site have features that are conducive to the depletion of organic matter and careful management will be needed to prevent organic matter loss when these soils are farmed (NRCS 2024). Low percentage of organic matter in soil indicates low capability for the soil to retain moisture during the dry periods of the year. This means that low-organic soils can limit the potential yield for dryland crop cultivation, which relies on the moisture retained in the soil from the fallow year of the every-other-year crop rotation.

Table K-1. Soil Classifications in Solar Micrositing Area

Soil Type ID/Soil Unit	NRCS Farmland Classification	NRCS Irrigated & Non-Irrigated Soil Capability Class[1]	Acreage within Solar Micrositing Area	Percent within Solar Micrositing Area
1B/Anderly silt loam, 1 to 7 percent slopes	Prime farmland if irrigated	III	79	4%
1C/Anderly silt loam, 7 to 15 percent slopes	Farmland of statewide importance	III	195	10%
3D/Anderly silt loam, 15 to 35 percent south slopes	Farmland of statewide importance	IV	119	6%
16D/Lickskillet very stony loam, 7 to 40 percent south slopes	Not prime farmland	VII	3	<1%

Soil Type ID/Soil Unit	NRCS Farmland Classification	NRCS Irrigated & Non-Irrigated Soil Capability Class[1]	Acreage within Solar Micrositing Area	Percent within Solar Micrositing Area
18E/Lickskillet-Rock outcrop complex, 40 to 70 percent south slopes	Not prime farmland	VII	7	<1%
Nansene-Rock outcrop complex, 35 to 70 percent north slopes	Not prime farmland	VII	7	<1%
31B/Walla Walla silt loam, 1 to 7 percent slopes	Prime farmland if irrigated	II	778	40%
31C/Walla Walla silt loam, 7 to 15 percent slopes	Farmland of statewide importance	III	538	28%
32D/Walla Walla silt loam, 15 to 35 percent north slopes	Farmland of statewide importance	IV	116	6%
33D/Walla Walla silt loam, 15 to 35 percent south slopes	Farmland of statewide importance	IV	82	4%
Totals	**Total acres in Solar Micrositing Area**		**1,924[1]**	**100%**
	Total Arable soils[2] (excluding High-Value Class I and II)		**1,129**	**59%**
	Total Arable soils[3] (including High-Value Class I and II)		**1,908**	**99%**
	Non arable soils[3] (Class 5 and higher)		**17**	**1%**

Notes:

1. Soil capability class is the same for irrigated or non-irrigated conditions for soils in RFA 4 Site Boundary.
2. Per OAR 660-033-0130(38)(b), "'arable soils' means soils that are suitable for cultivation as determined by the governing body or its designate based on substantial evidence in the record of a local land use application, but 'arable soils' does not include high-value farmland soils described at ORS 195.300(10) unless otherwise stated
3. Per the USDA Soil Conservation Service, NRCS Class 1 through 4 soils are considered suitable for cultivation or arable soils while Class 5 and higher are considered non-arable soils (Helms 1992).

Per OAR 660-033-0130(38)(b), *"'arable soils' means soils that are suitable for cultivation as determined by the governing body or its designate based on substantial evidence in the record of a local land use application, but 'arable soils' does not include high-value farmland soils described at ORS 195.300(10) unless otherwise stated."* Per the U.S. Department of Agriculture (USDA) Soil Conservation Service, NRCS Class I through IV soils are considered suitable for cultivation or arable soils while Class V and higher are considered non-arable soils (Helms 1992). Class I and II soils are considered high-value farmland soils per ORS 195.300(10) and the definition of arable soils per OAR 660-033-0130(38)(b) excludes high-value farmland soils. As a result, arable soils per OAR

660-033-0130(38)(a) in the Solar Micrositing Area would include a total of 1,129 acres, or 59 percent, when irrigated or not irrigated (see Table K-1).

See Sections below for a discussion of lands within the analysis area that meet the definition of high-value farmlands per ORS 195.300(10) (see Section 3.3.2.2) and arable lands per OAR 660-033-0130(38)(a) (see Section 3.3.2.3).

3.3.2.1 Soil Productivity

The NRCS soils report identifies irrigated and non-irrigated average crop yields per acre by soil map unit. The average yields per acre assume a high level of management to obtain the indicated yields (i.e. application of fertilizer, control of weeds, erosion control, etc.). The average crop yields are based mainly on the experience and records of farmers, conservationists, and extension agents. Available yield data from nearby counties and results of field trials and demonstrations also are considered. The most predominant soil classification within the Solar Micrositing Area is Walla Walla silt loam which comprises approximately 78 percent of the Solar Micrositing Area, while the second most predominant soil classification, Anderly silt loam comprises approximately 14 percent of the Solar Micrositing Area. NRCS assigns an average of 45 to 55 bushels per acre of winter wheat for non-irrigated Walla Walla silt loam and an average of 30 to 40 bushels per acre of winter wheat for non-irrigated Anderly silt loam. Landowner testimony (see Attachment K-1) reports a slightly higher 10-year average annual yield of 62 bushels per acre.

3.3.2.2 High-Value Farmland

Certain lands within the exclusive farm use (EFU) zone[5] are considered high-value farmland if they meet the definitions under ORS 195.300(10). The applicable provisions of this statute are summarized below:

- ORS 195.300(10)(a) relies on land in the EFU zone meeting the description of high-value farmland under ORS 215.710, which describes land in a tract composed predominantly of soils that, at the time the siting approval, are irrigated and classified as prime, unique, Class I, or Class II or not irrigated and classified as prime, unique, Class I, or Class II.
- ORS 195.300(10)(c) relies on the land in the EFU zone being located within a place-of-use water right, an irrigation district, or a diking district.
- ORS 195.300(10)(f) relies on the land in the EFU zone being located within the boundaries of the Columbia Valley AVA (see 27 Code of Federal Regulations Part 9, Subpart C - Approved American Viticultural Areas, Section 9.74 Columbia Valley) and meeting certain elevation (below 3,000 feet), slope (between zero and 15 percent), and aspect (between 67.5 and 292.5 degrees) criteria.

Portions of the Solar Micrositing Area qualify as high-value farmland under all three above cited definitions. Each definition is considered below.

[5] Identified as the F-1 zone in Sherman County.

ORS 195.300(10)(a)

The definition of high-value farmland under ORS 215.710 refers to land in a tract being predominately composed of soils, that at the time of the siting approval, are irrigated and classified as prime, unique, Class I, or Class II or not irrigated and classified as prime, unique, Class I, or Class II. Per guidance received from the Oregon Department of Land Conservation and Development and ODOE, if only a portion of the tract is irrigated (per the definition under OAR 660-033-0020(9)), then soils within the subject tracts shall be evaluated based on the following predominance test:

1. Identify NRCS irrigated soil capability class for "irrigated" portions of tract.
2. Identify NRCS non-irrigated soil capability class for non-irrigated portions of tract.
3. Sum all Class I, II, Prime, and Unique acres from steps 1 and 2.
4. Divide by total tract acres; if 50 percent or more are Class I, II, prime, and unique, then entire tract contains high-value farmland.

A predominance test per tract is provided in Table K-2 below. Based on the results of the predominance test, one of the two tracts in the Solar Micrositing Area have 50 percent or more Class I, II, prime, and unique soils and meet the definition of high-value farmland under ORS 195.300(10)(a) and ORS 215.710.

Table K-2. High-Value Farmland Predominance Per Tract

Tract	Owner	Total Tract Acreage	Acreage of High Value Soils (NRCS Soils Class I, II, Prime, or Unique)				Total Tract Acres of High-Value Farmland per Predominance Test
			Irrigated Portions of Tract	Non-Irrigated Portions of Tract	Total	Percent of Tract Area	
1	SCHARF, R & A LLC	3,336	194[a]	696	890	27%	0
2	PORTLAND GENERAL ELECTRIC	13	0	9	9	70%	13
Sub Totals		**3,349**	**194**	**705**	**899**	**27%**	**13**

Note:
a. Only 194 acres of the 325.7 acres authorized by the place of use water right associated with Cert: 57620 are located on Class I, II, Prime, Unique Soils. As noted in Figure K-5, a portion of the place of use water right associated with Cert: 892 is located within Tract 1; however, none of the water authorized by this water right is located on Class I, II, Prime, or Unique soils).

ORS 195.300(10)(c)

As noted in Section 3.3.1, none of the tracts within the Solar Micrositing Area are located within an irrigation district or a diking district. However, there is one irrigation water right located within the Solar Micrositing Area (i.e. the Sharf Water Right, Cert. 57620). Although this water right is authorized for up to 325.7 acres of irrigation, the spatial data provided by OWRD mapping this place of use water right only shows 311 acres within the Solar Micrositing Area (Figure K-5 and K-7). Therefore, per available data from OWRD, there is a total of 311 acres of high-value farmland in the Solar Micrositing Area, which is equivalent to 16 percent of the total Solar Micrositing Area. The

Certificate Holder is working with the participating landowner to transfer the Scharf Water Right for the life of the Solar Components to avoid forfeiture during Facility operation and preserve the ability to transfer the water back to irrigation use following Facility decommissioning.

ORS 195.300(10)(f)

The entire Solar Micrositing Area is located within the Columbia Valley AVA. Approximately 779 acres (40 percent) of the Solar Micrositing Area qualifies as high-value farmland based on being in the Columbia Valley AVA and meeting the elevation, slope, and aspect criteria under ORS 195.300(10)(f)(see Table K-3). The areas qualifying as high-value farmland under ORS 195.300(10)(f) are scattered throughout the Solar Micrositing Area (see Figure K-7) and have never been used for viticulture.

Total High-Value Farmland in Solar Micrositing Area

Per the predominance test (see Table K-2), one of the two tracts in the Solar Micrositing Area have 50 percent or more Class I, II, prime, and unique soils and meet the definition of high-value farmland under ORS 195.300(10)(a) and ORS 215.710. Portions of the Solar Micrositing Area also meet the definition of high-value farmland under ORS 195.300(10)(c)(A) (i.e., place of use water rights) and under ORS 195.300(10)(f) (i.e., location in the Columbia Valley AVA). As the lands that qualify as high-value farmland under ORS 195.300(10)(a),(c) and (f) overlap in some areas within the Solar Micrositing Area and analysis area (see Figure K-7), a composite of the lands was calculated for a net total of 1,305 acres of high-value farmland within the Solar Micrositing Area, 1,006 of which are located within the Solar Area. Table K-3 provides a breakdown by acreage of the applicable ORS 195.300(10) classifications.

Table K-3. High-Value Farmland in the Solar Micrositing Area and Tracts

Land Type	Solar Micrositing Area		Tracts		Estimated Solar Area within Solar Micrositing Area	
	Acres	Percent of Solar Micrositing Area	Acres	Percent of Total Tract Area	Acres	Percent of Solar Area
High-value land Per ORS 195.300(10)(a) (i.e. Class 1 or 2 soils)	13	1%	13	27%	0	0%
High-value land Per ORS 195.300(10)(c)(A) (i.e. within place of use water right or irrigation district)	311[2]	16%	315[2]	9%	227[2]	16%
High-value land Per ORS 195.300(10)(f) (i.e. within AVA and meets slope, elevation, aspect criteria.	779	40%	880	26%	635	44%

Land Type	Solar Micrositing Area		Tracts		Estimated Solar Area within Solar Micrositing Area	
	Acres	Percent of Solar Micrositing Area	Acres	Percent of Total Tract Area	Acres	Percent of Solar Area
Subtotal of ORS 195.300(10)(a), (c) and (f)						
High-value lands (merged all 3 HVFs)[1]	**1,305**	**68%**	**1,463**	**44%**	**1,006**	**70%**
Notes: 1. High-value farmland designations per ORS 195.300(10)(a), (c), and (f) 2. This acreage is based on the polygon data from OWRD, which is less than the 325.7 acres authorized by Cert: 57620 OR * IR.						

3.3.2.3 Arable Lands

Per OAR 660-033-0130(38)(a), "'arable land' means land in a tract that is predominantly cultivated or, if not currently cultivated, predominantly comprised of arable soils." As each tract in the Solar Micrositing Area is predominately cultivated with dryland wheat, the entire Solar Micrositing Area is considered arable land (see Figure K-8). Table K-1 in Section 3.3.2 provides a breakdown of total acreage of arable soils and non-arable soils within the Solar Micrositing Area. The Solar Micrositing Area contains approximately 1,908 acres of arable soils and 17 acres of non-arable soils (see Table K-1). However, as each tract is predominately cultivated and/or comprises arable soils, all the land within each tract of the Solar Micrositing Area is accounted for as arable land in Table K-4.

Table K-4. Tract Analysis Predominance Test of Arable Land

Tract	Owner	Total Tract Acreage	Acreage of Arable Land				
			Cultivated Land	NRCS Soils Class I-II	Acreage of Arable Soils[1]	Acreage of Cultivated Land and Arable Soils[2]	Arable Land % of Tract Area
1	SCHARF, R & A LLC	3,336	1,853	819	2,225	2,233	67%
2	PORTLAND GENERAL ELECTRIC	13	2	9	13	13	100%
Subtotals		**3,349**	**1,855**	**828**	**2,238**	**2,246**	**67%**
Notes: 1. As Class 1 and 2 soils are considered high-value farmland soils per ORS 195.300(10) and the definition of arable soils per OAR 660-033-0130(38)(b) excludes high-value farmland soils, the total acreage of arable soils includes only NRCS Class 3 and 4 soils. 2. "Arable land" is based on a predominance of arable soils and cultivated land. Since arable soils and cultivated land may overlap, this column is a composite of both.							

3.3.2.4 Summary of High-Value Farmland and Arable Lands Analysis

The Solar Micrositing Area contains 1,305 acres of high-value farmland per ORS 195.300(10)(a), (c) and (f). The entirety of the Solar Micrositing Area (1,924 acres) consists of arable lands. The Solar Components will exceed the Goal 3 12-acre threshold for high value farmland and the 20-acre threshold for arable land. Certificate Holder therefore seeks a Goal 3 exception and provides evidence in Section 8.0 to demonstrate that a "Reasons" exception from Goal 3 is appropriate for the Solar Components.

3.4 Agricultural Impacts and Mitigation

This section summarizes the potential economic impacts of removing approximately 1,445 acres of land from agricultural production using the economic impact analysis prepared by Tetra Tech (Attachment K-2, Agricultural and Fiscal Impact Analysis).

3.4.1 State and Local Agricultural Overview

Sherman County is approximately 824 square miles in size with slightly more than three-quarters (76 percent) of the county in use as agricultural land (U.S. Census Bureau 2024, USDA 2022). As of 2023, Sherman County had a total estimated population of 1,917, ranking 35 out of the 36 counties in Oregon in terms of population (Portland State University 2024). Compared to state and national density averages of 44.1 and 94.8 people per square mile, respectively, Sherman County is rural in nature with a sparse population density of 2.3 people per square mile in 2023 (U.S. Census Bureau 2024).

This section summarizes the potential economic impacts of removing approximately 1,445 acres of land from agricultural production using the economic impact analysis prepared by Tetra Tech Inc. (Attachment K-2, Agricultural and Fiscal Impact Analysis). This land is presently mostly used for dryland winter wheat production and farmed on rotation. In contrast to Oregon as a whole, based on employment, agriculture is the second largest sector in Sherman County residents, accounting for 17.7 percent of total employment, which is much higher than the corresponding state average (2.2 percent; see Table K-5).

Table K-5. Employment by Economic Sector, 2022

Economic Sector[1]	Sherman County		Oregon	
	Employment	Percent of Total	Employment	Percent of Total
Agriculture	267	17.7%	57,344	2.2%
Mining	19	1.3%	4,621	0.2%
Construction	75	5.0%	153,517	5.8%
Retail trade	152	10.1%	264,677	10.0%
Transportation and warehousing	197	13.1%	132,623	5.0%
Educational services	6	0.4%	50,885	1.9%
Health care and social assistance	26	1.7%	312,843	11.8%
Other services	49	3.3%	129,476	4.9%
Government	293	19.4%	292,132	11.0%
Other sectors[2]	423	28.1%	1,260,167	47.4%
Total employment	**1,507**	**100.0%**	**2,658,285**	**100.0%**

Notes:

1. Employment estimates include self-employed individuals. Employment data are by place of work, not place of residence, and, therefore, include people who work in the area but do not live there. Employment is measured as the average annual number of jobs, both full- and part-time, with each job counted at full weight.

2. The other sectors category consists of 12 sectors where data are not shown for Sherman County to avoid disclosure of confidential information. These sectors are: forestry, fishing, and related activities; utilities; manufacturing; wholesale trade; information; professional, scientific, and technical services; management of companies and enterprises; administration and waste services; arts, entertainment, and recreation; and accommodation and food services.

Source: U.S. Bureau of Economic Analysis 2023

IMPLAN (a regional input-output model widely used to assess the economic impacts of projects) provides detailed estimates for a series of measures including employment, labor income, output, and value for each economic sector (the model divides the economy in 528 sectors). According to IMPLAN, the grain farming sector was the largest sector by employment in Sherman County in 2023, accounting for 188 jobs, 13 percent of total county employment. Warehousing and storage and the federal government were the next largest employers. Other agricultural and related manufacturing sectors in the top 20, include beef cattle ranching and farming and all other crop farming (see Attachment K-2).

Data compiled by IMPLAN provide additional perspective on the agricultural economy in Sherman County. In 2023, an estimated 311 people were employed in agriculture, with a combined total output of $39.0 million (see Table K-6). Grain farming, which includes wheat, accounted for 188 jobs in 2023, almost two-thirds (60 percent) of total agricultural employment (Table K-6). Beef cattle ranching and farming, support activities for agriculture and forestry, and all other crop farming were the next largest agricultural employers, accounting for 46 jobs, 44 jobs, and 34 jobs, respectively (Table K-6).

Table K-6. Employment, Labor Income, and Economic Output by Agricultural Sector in Sherman County, 2023

IMPLAN Sector	Description	Employment[1]	Labor Income ($ Million)[2]	Output ($ Million)
2	Grain farming[3]	188	$9.3	$32.5
11	Beef cattle ranching and farming	46	$3.5	$3.0
19	Support activities for agriculture and forestry[4/]	44	$2.3	$2.6
10	All other crop farming[5/]	34	$0.9	$0.9
	Total	**311**	**$16.0**	**$39.0**

Notes:

1. IMPLAN jobs include all full-time, part time, and temporary positions. Employment totals include wage and salary and proprietor employment.

2. Labor income includes employee compensation and proprietor income.

3. IMPLAN Sector 2 – Grain farming includes wheat, corn, dry beans, and dry peas.

4. IMPLAN Sector 19 -- Support activities for agriculture and forestry includes a wide range of agricultural services, including crop dusting, crop spraying, cultivation services, machine harvesting of grain, hay mowing, and livestock breeding services, as well as forestry-related services, including timber cruising, forest thinning, and reforestation services.

5. IMPLAN Sector 10 – All other crop farming includes hay farming (e.g., alfalfa hay, clover hay, grass hay), hop, mint, and tea farming.

Source: IMPLAN 2024

As previously stated, the primary crop grown in Sherman County is wheat for grain, specifically winter wheat (Table K-7). Winter wheat accounted for almost all (96 percent, 98,195 acres) of total harvested acres in 2022, followed by barley for grain (3 percent, 2,677 acres), and land used for forage (hay and haylage, grass silage, and greenchop) (1 percent, 1,447 acres) (Table K-7).

Table K-7. Land in Farms and Selected Crops Harvested in Sherman County, 2022

Item	Number of Farms	Acres
Total Farms/Land in Farms	173	402,516
Total Cropland	158	257,887
Harvested cropland	97	102,408
Irrigated land	20	1,045
Selected crops harvested		
Wheat for grain, all	83	98,884
Winter wheat for grain	82	98,195
Other spring wheat for grain	5	689
Barley for grain	12	2,677
Forage	22	1,447

Source: USDA 2022a

Winter wheat yields vary by location and from year-to-year. Yields in Sherman County are consistently lower than the state average. Average annual yields from 2014 to 2023 were 49.5 bushels/acre in Sherman County and 58.3 bushels/acre in Oregon. Sherman County yields over this period were on average 8.8 bushels/acre lower than the state average. Average yields dropped sharply in both areas in 2021 due to poor growing conditions, but more than rebounded in 2022, before dropping again in 2023 (See Table 11, Figure 6 in Attachment K-2).

Average annual prices for winter wheat in Oregon were evaluated from 2014 to 2023 in Attachment K-2. Values per bushel ranged from a low of $4.44 in 2016 to a high of $8.87 in 2022, with an annual average of $6.28 (see Table 12, Figure 7 in Attachment K-2). State average prices per bushel were used to estimate the total value of winter wheat production in Sherman County, which ranged from $23.0 million to $55.1 million over a 10-year period (2014 to 2023), with an annual average of $35.5 million (see Table 13 in Attachment K-2).

3.4.2 Agricultural Impacts

The land within the RFA 4 site boundary is presently mostly used for dryland winter wheat production and farmed on rotation. The following assessment considers the conversion of the acres to solar development as a share of total harvested acres and agricultural sales and estimates the indirect and induced impacts that a corresponding reduction in farm spending would have on the local economy.

There are two tracts within the Solar Micrositing Area, one of which is in agricultural use and will be impacted by RFA 4.[6] The landowner of Tract 1, whose land is in agricultural use, was sent a letter and a survey to complete regarding the agricultural uses of their lands (Attachment K-1). The survey requested information about crop practices, historic revenues, crop yield, water availability, and value from farming operations that would be impacted. A summary of their responses is included in Table K-8 below. Based on the landowner's responses, the 10-year average annual yield per acre of winter wheat for the affected lands was 62 bushels per acre compared to the 10-year state average (58 bushels/acre) and the 10-year Sherman County average (50 bushels/acre).

[6] The second tract contains the Biglow Canyon Substation and O&M facilities.

Table K-8. Overview of Landowner Farmland Characteristics

Landowner	Crop Practices	Crop Schedule	Direct Jobs Currently Supported by Operators	Spending on Labor, Supplies and Services for Agricultural Operations (estimated reductions)	Range of Crop Yields Over the Past 5 to 10 Years	Plans for Land Outside of Solar Micrositing Area During Facility Operation
SCHARF, R & A LLC (Tract 1)	Sharf owns 4,125 total acres in Sherman County – all leased to other entities for farming/ranching. Each year, approximately 1,000 acres are cultivated in fall wheat, 1,000 acres are summer fallow, 2,100 acres in cattle range, and 25 acres under half irrigation pivot for row crops. Acreage within the RFA 4 Site Boundary includes 1,885.76 acres (Tract 1) all leased to McCulloughs who cultivate dryland wheat and the 25 acres of irrigated row crops (rotates between garlic, carrot seed, mint, wheat) are subleased to separate entity.	Seed Oct, fertilize Oct, harvest July & Aug	1,885.76 acres are leased to McCulloughs who farm 11,000+ acres of wheat in the county. McCulloughs would continue to farm lands outside of lease area.	Miscellaneous repairs and maintenance $20/acre, fuel $10.5, seed $33.30 per acre, NA3 $31.50, wheat spray $25 chem fallow $17.00 ~$137.30 per acre spending	62 bushels per acre average 10 years	Continue farming activities on land not used by RFA 4
PORTLAND GENERAL ELECTRIC (Tract 2)	Used for substation and O&M facilities, not farmed.					

The Certificate Holder commissioned the Agricultural and Fiscal Impact Analysis (Attachment K-2) that models the direct, indirect, and induced economic impact of the anticipated wheat production loss from the removal of approximately 1,445 acres of arable land from dryland wheat production (shown on Table K-16). For the purposes of analysis, the following assessment assumes that this land would otherwise be cultivated for dryland winter wheat, with half of this total (723 acres) planted and harvested each year, with the other half left fallow. Using the 10-year average annual yield value provided by the surveyed landowner (62 bushels/acre), the estimated annual value of agricultural production for the RFA 4 site boundary is $281,300.

The direct impact represents the gross value of production that the farmers would no longer receive from producing wheat (i.e., $281,300 annually), and the associated employment and labor income of farmers and their employees.

Taking the affected area out of agricultural production would not only have direct impacts as discussed above, but it will also have indirect and induced impacts to the local agricultural economy due to the associated reduction in local spending (i.e., indirect impacts or "supply chain" impacts). The farmers who currently farm the affected lands purchase fuel, seed, and fertilizer and chemicals from local suppliers including Mid-Columbia Producers, Morrow County Grain Growers, McGregor Company, and Ed Staub & Sons. The estimated induced impacts presented in Table K-9 are supported by the spending of households associated either directly or indirectly with the existing agricultural operations.

Table K-9. Economic Impacts of Current Agricultural Activities

Impact	Employment (FTE)[1]	Labor Income ($000)[2]	Output ($000)[2]
Direct	1.4	$80.3	$281.3
Indirect	0.7	$46.3	$100.0
Induced	0.1	$6.9	$25.1
Total	**2.1**	**$133.5**	**$406.5**

Notes:
1. Jobs are full-time equivalents (FTE) for a period of one year (1 FTE = 2,080 hours).
2. Labor income and economic output are expressed in thousands of Year 2025 dollars.
Source: IMPLAN 2024

For direct impacts, the landowner/farmer will experience the loss of direct agricultural production revenue, but this lost revenue will be replaced by revenue received from the Solar Components lease payments. As the revenue received from the Solar Components is substantially greater in value than the agricultural production revenue, direct impacts will be more than fully mitigated. Regarding the direct jobs shown in Table K-9, these were estimated by IMPLAN based on county-specific ratios. Interviews with the affected landowner/farmer indicated that the affected farmer would continue to farm elsewhere in the county, with no net loss in direct agricultural employment anticipated.

In regard to indirect impacts, these represent a decrease in economic activity supported by the agricultural production in the RFA 4 Site Boundary. This includes decreases in spending on inputs like seeds, fertilizer, and fuel and contract services. The annual indirect impacts modeled from the estimated annual value of agricultural production of $281,300 supports less than 1 (0.7) indirect FTE jobs, $46,300 in indirect labor income, and $100,000 in indirect economic output (Table K-9). The economic impact assessment (Attachment K-2) assumes that this spending would no longer occur when the Solar Components are built and this amount of employment, labor income, and output would be lost. Most of the indirect jobs (0.5 FTE) associated with the agricultural activities located in the RFA 4 Site Boundary are related to support activities for agriculture and forestry (0.3 FTE) and grain farming (0.2 FTE), which represents a potential reduction of less than 0.8 percent and 0.1 percent of existing employment in each sector in Sherman County, respectively.

Induced impacts are generated by the spending of households associated either directly or indirectly with ongoing agricultural operations within the RFA 4 Site Boundary. Assuming this income is no longer earned, it is not available to spend and would also represent lost economic activity when agricultural production on site stops. However, due to lease payments or other compensation to landowners by the Solar Components, minimal changes in landowner household income and spending are expected due to the Solar Components. Spending by indirectly associated households (such as the households of agricultural vendor employees) could be reduced, but the associated impacts would be to the economy in general and not to the agricultural economy.

3.4.3 Agricultural Mitigation

As detailed in Appendix K-2, the Solar Components would generate significant economic benefits for Sherman County. As noted in the ODOE's memorandum dated October 5, 2021, local economic benefits associated with a proposed solar facility typically include lease payments to underlying landowners, direct economic benefits to local governments, and various other direct and indirect benefits to the local economy (ODOE 2021a). In Section 8.1.3, the Certificate Holder outlines how the Solar Components will bring rural local economic benefit to Sherman County by 1) creating jobs as well as direct and indirect local economic benefits during construction and operation; 2) by adding to the local tax base, which directly benefits the agricultural community; 3) through creation of a community investment plan; and 4) through landowner lease payments.

In acknowledgement of the decreased economic activity supported by agricultural production in the RFA Site Boundary quantified through the calculation of annual indirect impacts modeled in IMPLAN and discussed in Section 3.4.2, the Certificate Holder and Project Developer have developed a Community Investment Plan (CIP) that will make meaningful investments in the local agricultural economy to support the Sherman County agricultural stakeholders and larger rural economy. The Certificate Holder will contribute $1,600 per acre into the mitigation fund for each acre the Solar Components remove from agricultural production[7]. PGE has partnered with Sherman County and the Mid-Columbia Economic Development District (MCEDD) to establish an agricultural

[7] Calculated over a period of 40 years of operation, and adjusting for inflation, the estimated indirect output would be $2,315,218 or $1,600 per acre of farmland taken out of production.

mitigation fund that will administer and distribute dollars for projects having a benefit to the Sherman County agricultural economy. The fund will ensure that any potential adverse impacts from the Solar Components are offset to a level acceptable to Sherman County and the community. The final decision on what projects would be funded and/or what organizations would be awarded mitigation funds will be determined by the Sherman County Court. More details regarding the CIP and agricultural mitigation fund are included in Section 8.1.3.3.

4.0 Local Land Use Approval – OAR 345-021-0010 (1)(k)(B)

OAR 345-021-0010 (1)(k)(B) If the applicant elects to obtain local land use approvals:

(i) Identify the affected local governments from which land use approvals will be sought;

(ii) Describe the land use approvals required in order to satisfy the Council's land use standard;

(iii) Describe the status of the applicant's application for each land use approval;

(iv) Provide an estimate of time for issuance of local land use approvals;

Response: The Certificate Holder has elected to address the Council's Land Use standard by obtaining a land use determination from the Council pursuant to ORS 469.504(1)(b). Therefore, these standards do not apply.

5.0 Council Determination on Land Use – OAR 345-021-0010 (1)(k)(C)

5.1 Identification of Applicable Substantive Criteria

OAR 345-021-0010(1)(k)(C) If the applicant elects to obtain a Council determination on land use:

(i) Identify the affected local government(s).

Response: The proposed changes in RFA 4 will be located entirely within Sherman County. All land within the Solar Micrositing Area is in the F-1 Zone. Therefore, the Certificate Holder has addressed applicable Sherman County criteria. Section 5.0 provides evidence of compliance with the applicable local substantive criteria for commercial solar energy generation in Sherman County.

(ii) Identify the applicable substantive criteria from the affected local government's acknowledged comprehensive plan and land use regulations that are required by the statewide planning goals and that are in effect on the date the application is submitted and describe how the proposed facility complies with those criteria.

The applicable substantive criteria of the SCZO and SCCP are addressed in Sections 5.2 and 5.3, respectively.

- Sherman County Zoning Ordinance:
    - SCZO Article 3 Use Zones
        - SCZO 3.1 Exclusive Farm Use, F-1 Zone
            - SCZO 3.1.2 Uses Permitted
            - SCZO 3.1.3 Conditional Uses Permitted
            - SCZO 3.1.4 Dimensional Standards
        - SCZO 3.7 Natural Hazards Combining Zone
    - SCZO Article 5 Conditional Uses
        - SCZO 5.1 Authorization to Grant
        - SCZO 5.2 General Criteria
        - SCZO 5.3 General Conditions
        - SCZO 5.8 Standards Governing
- Sherman County Comprehensive Plan
    - Planning Process and Citizen Involvement (Comprehensive Plan § VIII): Outreach
    - Physical Characteristics (Comprehensive Plan § XI)
        - Goal I – Physical Environment
        - Goal II – Natural Disasters & Hazards
        - Goal VI – Preserve Rural Nature
        - Goals VII & VIII – Fish & Wildlife Habitat, Plant & Animal Species
    - Social Characteristics (Comprehensive Plan § XII)
        - Goal I – Social Services & Public Facilities
        - Goal II - Historical, Cultural & Archeological Resources
    - Economics (Comprehensive Plan § XIV)
        - Goal I – Diversify Economic Base
    - Energy (Comprehensive Plan § XV)
        - Goal I - Energy Resources

5.2 Sherman County Zoning Ordinance

5.2.1 SCZO Section 3.1 Exclusive Farm Use (F-1) Zone

5.2.1.1 SCZO Section 3.1.2 Uses Permitted

In the F-l Zone, the following uses and their accessory uses are permitted:

(v) Utility Facility services lines as set forth in ORS215.283 (1) (x).

Response: The gen-tie lines required for interconnection to the POI are not included in the definition of "photovoltaic solar power generation facility" and are evaluated separately under a different use category, as determined by EFSC.[8] The gen-tie line connecting the RFA 4 collector substation to the POI is less than 200 feet tall. The gen-tie line will be constructed on approximately 80- to 160-foot-tall steel monopole structures that will be spaced 700 feet apart on average. The SCZO has not been amended since July 2003 and, therefore, does not contain uses that have been added by the Oregon State Legislature during the interim and causes the references to use categories listed under ORS 215.283(1) to be unreliable. The gen-tie line does not fall within the administrative uses listed in SCZO 3.1.2. Further, the gen-tie line does not fall within the conditional uses listed in SCZO 3.1.3 as it does not meet the SCZO use categories for a *commercial utility facility* (SCZO 3.1.3(q)) or a *transmission tower over 200 feet in height* (SCZO 3.1.3.(x)). Gen-tie lines typically fall within the use category of *utility facilities necessary for public service*, ORS 215.283(1)(c)[2023 Edition]. In summary, the gen-tie line does not fall within the current list of uses permitted provided by SCZO 3.1.2 or 3.1.3, despite the use being listed under ORS 215.283(1) as permitted subject to the required standards. Therefore, the Certificate Holder proposes to directly apply ORS 215.283(1)(c) [statute text provided below].

ORS 215.283(1)(c)

Utility facilities necessary for public service, including wetland waste treatment systems but not including commercial facilities for the purpose of generating electrical power for public use by sale or transmission towers over 200 feet in height. A utility facility necessary for public service may be established as provided in:

(A) ORS 215.275; or

(B) If the utility facility is an associated transmission line, as defined in ORS 215.274 and 469.300.

As stated above, since the transmission support structures will not be over 200 feet in height, they fall within the ORS 215.283(1)(c) threshold. The gen-tie line may be established pursuant to ORS 215.283(1)(c)(B) because it falls within the definition of "associated transmission lines" pursuant to ORS 469.300 and 215.274. The standards of ORS 215.274 are addressed in Section 6.1 below.

[8] This use category is either listed in the local jurisdiction zoning ordinance or falls within ORS 215.283(1)(c).

Therefore, the gen-tie line falls within the "utility facility necessary for public service" use category provided by ORS 215.283(1)(c)(B).

5.2.1.2 SCZO Section 3.1.3 Conditional Uses Permitted

In an F-l Zone, the following uses and their accessory uses are permitted when authorized in accordance with the requirements of Article 5 of this Ordinance and this Section:

> *(q) Commercial Utility Facilities;*
>
> *(z) Construction, reconstruction, or widening of highways, roads, bridges or other transportation projects that are in the Sherman County Transportation system plan.*

Response: The Council previously permitted the BCWF as a "commercial utility facility" in Sherman County.[9] The proposed RFA 4 will add PV solar energy generation and battery storage to the operating wind energy facility. The proposed additions will include solar arrays, inverters, BESS facilities and their subcomponents (i.e., inverters), collector substation, O&M structure, internal roads, medium-voltage collector lines, and temporary laydown areas, perimeter fencing, facility entry gate, a 230-kV gen-tie line, and site access roads. While most of these components fall within the Commercial Utility Facilities use category (SCZO 3.1.3(q)), the gen-tie line falls within ORS 215.274 use category as described in Sections 5.2.1.1 and 6.1.

If improvements to county roads are required for construction of the Solar Components, they would likely be in the form of road widening and/or improving the surface condition. To be conservative, it is assumed that the roads receiving improvements will be roads within the Sherman County Transportation System Plan; therefore, these improvements would fall within SCZO 3.1.3(z) *…widening of…roads…in the Sherman County Transportation system plan* use category.

See Section 5.2.4 for an analysis of the Solar Components' compliance with the SCZO Article 5 Conditional Uses.

5.2.1.3 SCZO Section 3.1.4 Dimensional Standards

In an F-1 (EFU) Zone, the following dimensional standards shall apply:

> *(a) New farm parcels shall be a minimum of 80 acres.*

Response: The Certificate Holder is not proposing to create new farm parcels as part of RFA 4. Therefore, this criterion is not applicable.

> *(b) MINIMUM LOT SIZE-NON-FARM PARCELS. Non-farm parcels allowed pursuant to the provisions of this Ordinance and more specifically this Section, shall meet the following standards:*
>
> > *1) Shall be of adequate size and dimensions to meet applicable setback requirements.*

[9] Final Order for Biglow Canyon Wind Farm Site, June 30, 2006, pg. 41.

2) Shall be of the minimum size necessary to accommodate the intended use and provide for subsurface sewage disposal thereof.

3) Each such parcel shall contain a minimum of I Net Buildable Acre as defined in section 1.4 of this Ordinance.

Response: The Certificate Holder is not proposing to create new non-farm-parcels as part of RFA 4. Therefore, this criterion is not applicable.

(c) SETBACK (YARD) REQUIREMENTS. In an F-l (EFU) Zone, the minimum setback requirements shall be as follows:

1) The front and rear yard setbacks from the property line shall be 30 feet, except that the front yard setback from the right-of-way line of an arterial or major collector road or street shall be 50 feet unless approved otherwise by the Planning Commission.

2) Each side yard setback from a property line shall be a minimum of 25 feet, and for parcels or lots involving a non-farm residential use with side yard(s) adjacent to farm lands, said adjacent side yards shall be a minimum of 50 feet unless approved otherwise by the Planning Commission.

Response: The Council previously recommended a 50-foot setback for all aboveground facility structures.[10] The RFA 4 solar arrays, BESS, and associated project components will be setback at least 50 feet from all property lines. Therefore, RFA 4 will meet the required setbacks.

5.2.2 SCZO Section 3.6 Significant Resource Combining Zone, SR Zone

In a (SR) Combining Zone, the following regulations shall apply:

1. *Purpose - The purpose of this Zone is to protect significant mineral, geothermal, scenic, natural, unique, archaeological and historical resources identified and so designated by the County's Comprehensive Plan, and to permit development which is compatible with such resources and the applicable protection measures.*
2. *Application - This Zone shall be applied to those sites and resources designated as Significant Resource Sites in the County's Comprehensive Plan Goal 5 Significant Resource Inventory and determined by said Plan to be worthy of full protection (i.e. a 3A Site), or a limited protection site (i.e. a 3C Site) against identified conflicting uses. Such resources identified for ongoing inventories as potential resources shall not be subject to this Zone until, as a result of such inventory(s), said resources are officially designated as a significant resource.*

. . .[criteria omitted as not applicable]

5. *Reduced Preservation Review Criteria - The environmental, social, economic and energy consequences of allowing the proposed use or activity shall be described in sufficient detail to provide a clear demonstration that the applicable criteria below are met:*

[10] Final Order for Biglow Canyon Wind Farm Site, June 30, 2006, pg. 43.

(a) All Significant Resource Sites.

1) The resource site shall not be altered or impacted to the point where it no longer has any significant resource value.

2) The amount of alteration of or impact to the significant resource shall be the minimum necessary to accomplish the purpose of the proposed use or activity.

3) An alternative site for the proposed use or activity, which would have less impact on the resource value of the site, does not exist on the applicant's lot or parcel or on contiguous lots or parcels that are reasonably available for the proposed use.

. . . (criteria omitted as not applicable)

(c) Mineral and Aggregate Resource Sites.

1) A conflicting use listed under Subsection (6) of this Section within 1,320 feet from a significant mineral or aggregate resource site (active or potential) may be required to establish setbacks in excess of those required in the underlying primary zone. The required setback shall be determined by the County after consultation with the applicant and the owner/operator of the mineral resource land (or vice versus) to insure visual and sound screening between present and future resource uses and the conflicting use or activity. Such setbacks shall be no less than that set forth by the primary zone.

6. Conflicting Uses and Activities

. . . (criteria omitted as not applicable)

(g) Mineral and Aggregate Resources.

1) Any permanent use, which reasonably precludes the development and use of such resource for the use designated or intended.

. . . (additional criteria omitted as not applicable)

Response: There is one aggregate resource site within the Solar Micrositing Area on Tax Lot 3900, Township T2N, Range 18E, Section 17 that is owned by Robert and Alda Scharf (Scharf Site). The Scharf Site is considered a "small significant site" by Sherman County Ordinance 32-2006 worthy of full protection (i.e., a 3A Site) and is identified by the Oregon Department of Geology and Mineral Industries as Permit No. 28-0032.

Placement of the Solar Components outside of the boundaries of the Scharf Site is intended to prevent impacts to the operation of the aggregate removal. As shown on Figure K-9, fencing around the Solar Micrositing Area has been placed in a manner that preserves vehicular access between the Scharf Site, the adjacent private driveway, and Herin Lane. This allows the continued and uninterrupted operation of the Scharf Site during operation of RFA 4 and maintains the significant resource value of the Scharf Site. Further, the Certificate Holder will coordinate with the landowner during construction to ensure minimal disruption to ongoing aggregate mining activities. The

Certificate Holder and construction contractor will evaluate the use of the Scharf Site as a source of aggregate for the Solar Components during construction.

The Solar Components are considered a conflicting use per SCZO 3.6(6)(g)(1) as a permanent use that would preclude development of the mining site and are located within 1,320 feet from the significant aggregate resource site. Figure K-9, shows an overlap between the Solar Micrositing Area and the significant aggregate resource site. At the time of final design, the Solar Components and fence will be relocated outside of the "avoidance area" shown on Figure K-9 such that the Solar Micrositing Area shall meet the required setback. The setback required by the primary zone is provided by SCZO 3.1.4(c) as 30 feet for front and rear yards and 25 feet for side yards. The Solar Micrositing Area will be set back at least 30 feet from the boundary of the significant aggregate resource site. As evidenced by Attachment K-3, Mr. Scharf understands that he could request a larger setback but has determined that one is not needed. The County has not stated that a larger setback is required.

5.2.3 SCZO Section 3.7 Natural Hazards Combining Zone, NH Zone

In any Zone that is combined with the (NH) Combining Zone, the requirements and standards of this Section shall apply in addition to those set forth in the primary zone, provided that if a conflict occurs, the more restrictive provisions shall govern.

1. *Purpose - The purpose of the (NH) Combining Zone is to promote and protect the public health, safety and general welfare and to minimize potential losses by providing guidelines for development in hazard areas. Development limitations are applicable to developments in areas of surface water accumulations and high groundwater, unstable or fragile soils, geological hazards, and steep slopes, generally those of 30 percent or greater.*

Response: The edges of the northernmost portion of the Solar Micrositing Area are within and adjacent to the NH Combining Zone (Figure K-2). This NH Combining Zone is assumed to be associated with the steep slopes and possible geological hazards associated with Biglow Canyon and its tributaries. Solar panels, facility components, and fencing will be located on the plateau away from steep slopes and geological hazards. These RFA 4 components will also be located on low to medium landslide susceptibility areas and outside of the high landslide susceptibility areas shown on Figure H-3. No mapped landslides are located within the Solar Micrositing Area (see Figure H-1 in Exhibit H). The Certificate Holder will perform site-specific geotechnical work prior to placement of structures and fencing where potential geologic hazards have been identified to inform the final design of RFA 4. See also Exhibit H, which indicates that the Solar Micrositing Area has been sited to avoid potential geologic hazard areas that could become destabilized by a seismic event (Figures H-2 and H-3). Groundwater is indicated to be at least 100 feet below ground surface within the bedrock based on the geotechnical investigation (Terracon 2024). Along with the relatively moderate seismic event potential, this indicates that soil liquefaction and subsidence within the Solar Micrositing Area are unlikely. Considering these site conditions, the potential for earthquake-induced landslides, lateral spreading, liquefaction, and subsidence within the Solar Micrositing Area are low. Moreover, Exhibit H also concludes that non-seismic geologic hazards,

including landslides, volcanic activity, and flooding, are not geologic hazards that will impact the Solar Components due to site conditions. Collapsible soils in the upper 10 feet of loess were identified as a potential hazard in the geotechnical investigation. Soil improvement would be implemented to mitigate hazards associated with collapsible soils. Risk of soil erosion from wind is generally high to very high, while risk from water is generally moderately low. A draft Erosion and Sediment Control Plan (ESCP) has been developed to reduce the potential for soil erosion (see Attachment I-1 to Exhibit I). The ESCP includes structural and nonstructural best management practices (BMP). Structural BMPs include the installation of silt fences or other physical controls to divert flows from exposed soils or otherwise limit runoff and pollutants from exposed areas. Nonstructural BMPs include the implementation of materials handling procedures, disposal requirements, and spill prevention methods.

Therefore, it is assumed that the Solar Components will not be built on any identified hazard area within the NH zone and the NH zone standards would not apply. Certificate Holder recommends a condition of approval stating, if it is determined that the Solar Components cannot avoid the NH zone or hazard areas, the Certificate Holder will submit an application for a Permit for Use or Development in an NH Zone to Sherman County, subject to SCZO Section 3.7.

5.2.4 SCZO Article 4. Supplementary Provisions

5.2.4.1 SCZO Section 4.3 Off-Street Parking

At the time a new structure is erected, an existing structure is enlarged, or the use of an existing structure is changed in an R-1, C-1, or M-1 or zone, off-street parking spaces shall be provided as follows, unless greater requirements are otherwise established. Where square feet are specified, the area measured shall be the gross floor area primary to the functioning of the particular use of the property.

. . .

5. Commercial Uses:	*One space per 600 square feet of floor area*
6. Industrial Uses:	*One space per 2000 square feet of floor area*

Response: The Solar Components are considered a utility, which could be considered either a commercial or industrial use. The only proposed buildings is the O&M building. The O&M building will consist of one 60-foot by 12-foot steel building and/or prefab office structure with electricity, internet, and water facilities. The O&M facility fenced area will have space for parking, service staging zone and a clearance area. Using the more conservative commercial uses off-street parking requirement above, the building will contain 720 square feet resulting in a requirement of two parking spaces for the building. There will be a total of three full-time employees on-site during operation. At a minimum, parking spaces for three staff members will be provided at the O&M building.

5.2.4.2 SCZO Section 4.9 Compliance with and Consideration of State and Federal Agency Rules and Regulations

Approval of any use or development proposal pursuant to the provisions of this Ordinance shall require compliance with and consideration of all applicable State and Federal agency rules and regulations.

Response: As evidenced by the narratives and attachments supporting this RFA, the Certificate Holder has identified all applicable state and federal agency rules and regulations and provided evidence of compliance. Further, Sections 6.0, 7.0, and 8.0 of this exhibit identify and address state agency rules specific to land use regulation. Section 9.0 of this exhibit addresses the applicability of federal land management plans to the Solar Components.

5.2.4.3 SCZO Section 4.13 Additional Conditions to Development Proposals

The County may require additional conditions for development proposals. (Ord No. 22-05-2003)

1. *The proposed use shall not reduce the level of service (LOS) below a D rating for the public transportation system. For developments that are likely to generate more than a V/C ratio of 75 or greater, the applicant shall provide adequate information, such as a traffic impact study or traffic counts, to demonstrate the level of impact to the surrounding road system. The developer shall be required to mitigate impacts attributable to the project.*
2. *The determination of the scope, area, and content of the traffic impact study shall be coordinated with the provider of the affected transportation facility, i.e. city, county, or state.*
3. *Dedication of land for roads, transit facilities, sidewalks, bikeways, paths, or accessways shall be required where necessary to mitigate the impacts to the existing transportation system caused by the proposed use.*
4. *Construction of improvements such as paving, curbing, installation or contribution to traffic signals, construction of sidewalks, bikeways, accessways, paths, or roads that serve the proposed use where necessary to mitigate the impacts to the existing transportation system caused by the proposed use.*

Response: Traffic impacts will be greatest during the peak of construction. The Certificate Holder expects an average of 165 workers on-site during the 17- to 19-month construction period, with a peak number of 350 workers while multiple disciplines of contractors complete their work simultaneously during periods of the highest activity (approximately 4 to 6 months during construction). With an anticipated capacity of 2,800 passenger cars per hour, this would give a Volume to Capacity ratio (V/C Ratio) of 0.26 along U.S. Highway (US) 97. Considering the availability of Passing Zones, the terrain, and the design speed of 60 miles per hour, this equates to a Level of Service (LOS) of B. With approximately 58 vehicles during the peak AM and PM hour under existing conditions along Oregon State Route (OR)-206, the addition of 350 commuting workers during peak construction results in a V/C Ratio of 0.15. This equates to an LOS of B, which

means minimal delays will be generated by the increase in traffic. The traffic resulting from construction personnel will not generate more than a V/C Ratio of 0.75 or greater on the surrounding road system therefore a traffic impact study is not anticipated to be required. A Construction Traffic Management Plan will be developed prior to construction, in accordance with Site Certificate Condition 79, that will include traffic minimization measures at transportation route roads, which would be implemented as needed, staggering shift start times to reduce vehicle trips through the westbound Interstate (I)-84 ramp terminal at Biggs Junction, installation of temporary traffic controls during peak construction, and other mitigation measures, as applicable. Also, the Certificate Holder will ensure that any wear or damage to county roads as a result of the proposed Solar Components are repaired and that roads are restored to pre-construction condition or better. Construction traffic is discussed further in Exhibit U.

Traffic will be significantly less during operation than during construction. The Certificate Holder expects that the Solar Components will require up to three personnel for daily maintenance activities during operations over its 40-year lifespan. The O&M staff will be hired locally, to the extent that skilled workers are available. Some outside contractors may be required from time to time for specialized maintenance tasks, such as solar array inspections or the repair of associated equipment. The traffic resulting from operation personnel will not generate more than a V/C Ratio of 0.75 or greater on the surrounding road system.

5.2.4.4 SCZO Section 4.14 Access Management

1. General - The intent of this section is to manage access to land development to preserve the transportation system in terms of safety, capacity, and function. This ordinance shall apply to all arterials and collectors within Sherman County and to all properties that abut these roadways. This ordinance is adopted to implement the access management policies of Sherman County as set forth in the Transportation System Plan.

Response: The Certificate Holder is coordinating with the Sherman County Road Department and, prior to construction, will have an agreed-upon Road Use Agreement, which will ensure compliance with the SCZO, and as appropriate, the Sherman County Transportation System Plan (TSP). The proposed Solar Components are not a residential or commercial use, and as such criteria in Section 4.14 of the SCZO are not applicable to the Solar Components and have been excluded below.

2. Corner Clearance

(a) Corner clearance for connections shall meet or exceed the minimum connection spacing requirements for that roadway.

CORNER SPACING

Functional Classification	Access Category	Urban /Rural	Intersection				Signal Spacing	Median Control
			Public Road		Private Drive			
			Type	Spacing	Type	Spacing		
Arterial[11]	Urban/ Other	U	At grade	770 ft			NA	NA
Collector	NA	R	At grade	1/4 mi.	Lt./Rt. Turns	1,200 ft.	NA	NA
Local Street	NA	R	At grade	200-400 ft	Lt./Rt. Turns	Vary	NA	NA

It should be noted that existing developments and legal accesses on the transportation network would not be affected by the recommended access management standards until one or more of the following actions is taken:

1) Either a land use action is proposed,

2) A safety or capacity deficiency is identified that requires specific mitigation,

3) A specific access management strategy/plan is developed,

4) Redevelopment of existing properties along the highway occurs, or

5) A major construction project is begun on the street.

(b) New connections shall not be permitted within the functional area of an intersection or interchange as defined in paragraph 1 above, unless no other reasonable access to the property is available.

(c) Where no other alternatives exist, the County may allow construction of an access connection along the property line farthest from the intersection. In such cases, directional connections (i.e. right in/out, right in only, or right out only) may be required.

Response: The Certificate Holder is not proposing the dedication of new public right of way or the construction of new public roads. RFA 4 Division 27, Figures 2.1 to 2.4 show new private access driveway connections to Herin Lane and Beacon Road, both local public roads. The proposed new private access driveway connections will be coordinated with the Sherman County Road Department and meet or exceed the minimum spacing required by the SCZO and TSP.

4. Access Connection and Driveway Design

(a) Driveways shall meet the following standards:

[11] Management of access to State Highway is controlled by Oregon Department of Transportation. The 1999 Highway Plan and OAR 734.051. *Deviations to access standards may be granted following the processes outlined in the Oregon Administrative Rules.*

1) *If the driveway is a one way in or one way out drive, then the driveway shall be a minimum width of 10 feet and a maximum width of 12 feet and shall have appropriate signage designating the driveway as a one way connection.*

2) *For two-way access, each lane shall have a minimum width of 16 feet and a maximum width of 24 feet.*

(b) Driveway approaches must be designed and located to provide an exiting vehicle with an unobstructed view of the street for a distance based on the stopping distance of a vehicle traveling at the posted speed of the street. Construction of driveways along acceleration or deceleration lanes and tapers shall be avoided due to the potential for vehicular weaving conflicts.

(c) The length of driveways shall be designed in accordance with the anticipated storage length needed for entering and exiting vehicles to prevent vehicles from backing into the flow of traffic on the public road or causing unsafe conflicts with on-site circulation.

Response: The Certificate Holder proposes several new private access driveways onto local public roads. These are shown on RFA 4 Division 27, Figures 2.1 to 2.4. Each driveway will provide for two-way access and shall have a minimum width of 16 feet and a maximum width of 24 feet. Prior to construction, the Certificate Holder will coordinate with the Sherman County Road Department to obtain any necessary permits for placement and construction of private access driveways and shall design the intersections and driveways in a manner consistent with the requirements of the SCZO and TSP.

5.2.4.5 SCZO Section 4.15 Pedestrian and Bicycle Access and Facilities

1. *General*

   The purpose of this section is to provide for safe and convenient pedestrian, bicycle and vehicular circulation consistent with access management standards and the function of affected streets.

2. *On-site facilities should be provided, where appropriate, to accommodate safe and convenient pedestrian and bicycle access.*

   [subsections (a) through (c) have been omitted as not applicable to utility developments]

Response: The proposed Solar Components fall within a utility use category. The RFA 4 Site Boundary is fenced and not open to the public. It is also located in a rural location with low traffic volumes. The above criteria do not require pedestrian or bicycle access or circulation for utility developments. Staff operating the Solar Components will use the proposed and existing internal driveways to maneuver within the fenced RFA 4 Site Boundary. Off-street vehicle parking is proposed adjacent to the O&M Building as shown on RFA 4 Division 27, Figures 2.1 to 2.4.

5.2.5 SCZO Article 5. Conditional Uses

5.2.5.1 SCZO Section 5.2 General Criteria

In determining whether or not a Conditional Use proposal shall be approved or denied, it shall be determined that the following criteria are either met or can be met through compliance with specific conditions of approval.

1. *The proposal is compatible with the County Comprehensive Plan and applicable Policies.*

Response: The applicable SCCP goals and policies are addressed in Section 5.3 for RFA 4. As discussed in Section 5.3, the RFA 4 is compatible with the SCCP.

2. *The proposal is in compliance with the requirements set forth by the applicable primary Zone, by any applicable combining zone, and other provisions of this Ordinance that are determined applicable to the subject use.*

Response: As previously mentioned, RFA 4 is located entirely within the Sherman County F-1 zone and a small portion is located within the NH combining zone. The Certificate Holder has addressed applicable criteria in Sections 5.2.1 and 5.2.2 above. As discussed above, the proposed additions comply with these zones. Therefore, this criterion is satisfied.

3. *That, for a proposal requiring approvals or permits from other local, state and/or federal agencies, evidence of such approval or permit compliance is established or can be assured prior to final approval.*

Response: Exhibit E lists all applicable federal, state, and local permits that the Certificate Holder will obtain prior to construction of the Solar Components.

4. *The proposal is in compliance with specific standards, conditions and limitations set forth for the subject use in this Article and other specific relative standards required by this or other County Ordinance.*

Response: RFA 4 may be authorized through a conditional use permit review in the F-1 zone pursuant to SCZO 3.1.3(q) and (z). Conditional use standards pursuant to SCZO 5.8 are addressed in Section 5.2.4.3 below.

5. *That no approval be granted for any use which is or expected to be found to exceed resource or public facility carrying capacities, or for any use which is found to not be in compliance with air, water, land, and solid waste or noise pollution standards.*

Response: As discussed in Exhibit U, the proposed changes in RFA 4 will not cause a significant burden on resource or public facility carrying capacities. RFA 4 is not expected to have any significant adverse impact on any public or private service providers in the analysis area during construction or operation. Noise compliance regulations were evaluated in Exhibit Y and determined that noise emanating from the Solar Micrositing Area during operation will comply with state standards (i.e., OAR 340-035-0035). Construction activities are temporary and categorically exempted under OAR 340-35-0035(5)(g). The Council previously found that the

BCWF was not likely to result in significant adverse impacts to public services within the analysis area,[12] and the amendments in RFA 4 do not alter that conclusion.

6. *That no approval be granted for any use violation of this Ordinance.*

Response: The solar power generation facility, BESS, supporting facilities, and access roads are permitted conditionally in the F-1 zone. Additionally, the proposed gen-tie line is a permitted use in the F-1 zone. Therefore, the changes proposed in RFA 4 will comply with all applicable SCZO criteria and SCCP policies and will not violate the SCZO.

5.2.5.2 SCZO Section 5.3 General Conditions

In addition to the standards and conditions set forth in a specific Zone, this Article, this Ordinance, and other applicable local, county, state and/or federal regulations, additional conditions may be imposed which are found to be necessary to avoid a detrimental impact on adjoining properties, the general area, or the County as a whole, and to otherwise protect the general welfare and interests of the surrounding area, the County as a whole and the general public. Such conditions may include, but are not limited to, the following:

1. *Limiting the manner in which the use is conducted, including restricting the time an activity may take place, and restrictions to minimize environmental impacts such as noise, vibration, air or water pollution, glare and odor.*
2. *Establishing a special setback or other open space requirements, and increasing the required lot size or other dimensional standards.*
3. *Limiting the height, size or location of a building or other structure or use.*
4. *Increasing street width and/or requiring improvements to public streets and other public facilities serving the proposed use, even including those off-site but necessary to serve the subject proposal.*
5. *Designating the size, number, improvements, location and nature of vehicle access points and routes, and requiring pedestrian and/or bicycle ways.*
6. *Limiting or otherwise designating the number, size, location, height, and lighting of signs and outdoor or security lighting, and the intensity and/or direction thereof.*
7. *Requiring diking, screening, fencing, or other improvements or facilities deemed necessary to protect adjacent or nearby properties, and establishing requirements or standards for the installation and maintenance thereof.*
8. *Protecting and/or preserving existing trees, other vegetation, and water, scenic, historic, archaeological, unique, landmark, or other natural or manmade significant resources.*

[12] Final Order on Request for Amendment 1, p. 120 (December 2018).

Response: The Certificate Holder understands additional conditions may be imposed upon RFA 4 by the Council, including conditions recommended by the County in its role as the Special Advisory Group.

5.2.5.3 SCZO Section 5.8 Standards Governing Specific Conditional Uses

A Conditional Use set forth by this Ordinance shall be subject to review by the Planning Commission in accordance with the public hearing requirements set forth in this Ordinance.

10. Radio or Television Transmitter Tower, Utility Station or Substation - When authorized as a Conditional Use, the following standards and limitations shall apply:

(a) In a residential zone or area, all equipment storage on the site shall be enclosed within a building.

(b) The use may be required to be fenced and provided with landscaping.

(c) Coloring of structures, buildings and other permanent installations shall be of neutral colors or as otherwise required by the Commission or reviewing authority.

Response: The Solar Components are not located in a residential zone or area. The Solar Components will be entirely fenced with security gates at vehicle entry points. The exterior of the Solar Components, specifically the collector substation, will be of a neutral color or as otherwise required by the Council.

14. Public Facilities and Services

(a) Public facilities including, but not limited to, utility substations, sewage treatment plants, storm water and water lines, water storage tanks, radio and television transmitters, electrical generation and transmission devices, fire stations and other public facilities shall be located so as to best serve the County or area with a minimum impact on neighborhoods, and with consideration for natural or aesthetic values.

(b) Structures shall be designed to be as unobtrusive as possible. Wherever feasible, all utility components shall be placed underground.

(c) Public facilities and services proposed within a wetland or riparian area shall provide findings that: Such a location is required and a public need exists; and Dredge, fill and adverse impacts are avoided or minimized.

Response: The Council previously concluded that SCZO Section 5.8.14 applies to the BCWF substation, wind turbines, and transmission lines.[13] Similarly, the Certificate Holder anticipates that the Solar Components would be considered public facilities and services subject to SCZO Section 5.8.14.

The Solar Components are sited in an area that would have minimal impacts on neighborhoods both from a natural and aesthetic value consideration. The remote location of the Solar Components

[13] Final Order for Biglow Canyon Wind Farm June 30, 2006, pg. 49

and location in context of existing electrical infrastructure render visual impacts as negligible to scenic and aesthetic values evaluated in Exhibit R. Glare impacts were evaluated in Exhibits R and U and are considered insignificant. The 52 miles of new collector lines proposed within the Solar Micrositing Area will be placed 3 feet below grade and will not be obtrusive.

As discussed in Exhibit J, there will be no impacts to wetlands during the construction or operation of RFA 4. Wetlands within the Solar Micrositing Area will have at least 50-foot buffers from construction activities and facility components, such as the proposed gen-tie line.

20. *Non-farm Uses in an F-1 Zone - Non-farm uses, excluding farm related, farm accessory uses, or uses conducted in conjunction with a farm use as a secondary use thereof, may be approved upon a finding that each such use:*

    1. *Is compatible with farm uses described in ORD 215.203(2);*

Response: The Solar Components are non-farm uses in the F-1 zone. The farm use for purposes of SCZO 5.8(20)(1) is the employment of land for raising, harvesting and selling crops for profit, primarily dryland wheat and a small area (approximately 25 acres) of irrigated crop rotations.

Typical compatibility issues for this type of farm use include disturbance of planting, farm management (spraying chemicals and fertilizer, livestock grazing rotations, etc.), and harvest schedules during facility construction. Increased traffic from construction of the Solar Components may cause the most impact on day-to-day wheat farming operations. To ensure that construction activities are compatible with day-to-day farm operations, a Construction Traffic Management Plan will be developed prior to construction, in accordance with Site Certificate Condition 79, that will include traffic minimization measures at transportation route roads, which would be implemented as needed, staggering shift start times to reduce vehicle trips through the westbound I-84 ramp terminal at Biggs Junction, installation of temporary traffic controls during peak construction, and other mitigation measures, as applicable. Also, the Certificate Holder will ensure that any wear or damage to county roads as a result of the proposed Solar Components are repaired and that roads are restored to pre-construction condition or better. Construction traffic is discussed further in Exhibit U.

Once constructed, the Solar Components are not anticipated to result in compatibility issues for ongoing wheat cultivation. The solar arrays are generally oriented adjacent and parallel to existing roads (see Figure 2, RFA 4 Division 27), and have been sited to maximize efficiency while also consolidating the solar arrays to areas that do not constrain the current and future dryland wheat farming activities on the remainder of the tracts or on neighboring tracts. Access roads will not be constructed outside of the solar array fence line. The Certificate Holder will design and construct the Solar Components using the minimum land area necessary for safe construction and operation. The Solar Components will utilize existing access roads to the extent practicable.

For these reasons, the Council may find that the Solar Components will be compatible with wheat farming operations and meet SCZO 5.8.20.1.

2. Does not interfere seriously with accepted farming practices on adjacent lands devoted to farm use;

Response: The criterion above is included in the criteria of OAR 660-033-0130(5), which are addressed below in Section 6.2.

3. Does not materially alter the overall land use pattern of the area;

Response: For purposes of this criterion, Certificate Holder defines the "area" as the portion of Sherman County east of US-97 and north of Grass Valley Canyon. The existing land use pattern of the area can be characterized as dryland crop cultivation (wheat and similar grains), rangeland and renewable energy facilities, both wind and solar (Figure K-3, Google Earth 2024 and Landowner Survey Attachment K-1). Beyond the 0.5-mile analysis area shown on Figure K-4, and except for incorporated towns and rural nodes, the topography similarly consists of rolling hills and drainages with dryland wheat farming as the main use. As discussed above, Sherman County is predominantly composed of farmland, the majority of which is in use for crop production. Only 1,045 acres of land in Sherman County was irrigated indicating the heavy reliance on dryland crop production (USDA 2022a). Using the permanent impact area of 1,445 acres, the Certificate Holder finds that the Solar Components would remove approximately 0.6 percent of Sherman County cropland from cultivation during the life of the Facility (USDA 2022a).

As shown on Figure 2, no small or isolated pieces of property will be created as a result of the proposed RFA 4 Site Boundary. Solar arrays and facility components fill in the areas of the RFA 4 Site Boundary not used by the BCWF wind turbines or occupied by wetlands, protected habitats, or steep slopes. Farmable areas within the Solar Micrositing Area that are not used for placement of components and are located outside the solar fence area will be made available for continued farming operations. Overall, farming will continue to occur in between solar fence areas and outside the RFA 4 Site Boundary. Therefore, the land use pattern will continue to include farmland as well as solar components and will not materially change.

4. Is situated upon generally unsuitable land for the production of farm crops and livestock, considering the terrain, adverse soil or land conditions, drainage and flooding, vegetation, location and size of the tract, and the availability of necessary support resources for agriculture;

Response: The Certificate Holder cannot demonstrate compliance with this criterion because of the underlying site characteristics, including soil classification and existing and historic farming operations. The Certificate Holder seeks a Goal 3 exception to nonetheless allow the Solar Components as "Reasons" warrant the exception and approval of the Solar Components.

5. Complies with other applicable significant resource provisions; and

Response: There are no known other significant resource provisions applicable to the Solar Components that have not been previously addressed.

6. Complies with such other conditions as deemed necessary.

Response: RFA 4 will comply with all conditions of approval imposed by the Council in granting the site certificate.

5.3 Sherman County Comprehensive Plan

As required under SCZO Section 5.2.1, the Certificate Holder must show that the RFA 4 is compatible with the goals and objectives of the SCCP. The SCZO implements the goals and objectives of the SCCP and compliance with the SCZO ensures that the Solar Components are compatible with applicable SCCP policies. For the sake of completeness, the Certificate Holder addresses the applicable SCCP goals and policies to show how, on balance, the RFA meets SCZO 5.2.1.

5.3.1 Planning Process and Citizen Involvement (Comprehensive Plan § VIII): Outreach

Goal I. To provide the opportunity for all citizens and effected agencies to participate in the planning process.

Policy I. All land use planning public hearings, requiring public notice, shall be advertised in a general circulation newspaper and be open to the public.

Policy II. All effected agencies and effected landowners shall be notified by written notice of any proposed site-specific land use change.

Response: The Certificate Holder is seeking a Council determination of compliance with land use standards and the Council's procedures rather than the County's specific procedures. Relevant Sherman County development criteria, comprehensive plan policies, OARs, and ORSs are addressed in this narrative. Citizen involvement is a key element of the amendment process. Community members and public agencies will be notified of the amendment request and given the opportunity to comment on the proposed changes.

5.3.2 Physical Characteristics (Comprehensive Plan § XI)

Goal I. Improve or maintain the existing quality of the physical environment within the County.

Policy I. Erosion control provisions shall be incorporated into the subdivision requirements of the Development Code. These shall require that the best practical methods be used to control erosion from road and building construction sites as well as other changes in land use, which may degrade the quality of the land, air and water.

Response: The Certificate Holder will obtain a National Pollutant Discharge Elimination System (NPDES) 1200-C permit from the Oregon Department of Environmental Quality prior to construction of RFA 4. As required by the NPDES Construction Stormwater Discharge General permit 1200-C, an ESCP must be submitted which includes BMPs (see Exhibit I, Attachment I-1 for the draft/example ESCP). The proposed BMPs are included in Exhibit I. Overall, the Certificate Holder does not anticipate RFA 4 having major effects from erosion.

Policy II. Lands designated as potential natural hazard areas shall be evaluated by a competent authority prior to the initiation of construction of any permanent structure. The evaluation shall include base data and contain an analysis of the probable physical impacts of the proposed development. Such an evaluation shall be done at the expense of the developer. The County shall support and assist reasonable efforts to more explicitly define natural hazard areas. When such information becomes available it shall be incorporated into the Resource Document. If appropriate, goals and policies will be developed, adopted and integrated into the Comprehensive Plan.

Response: Potential natural hazards within the land use analysis area include earthquakes, landslides, volcanic activity, flooding, and wildfire. These hazards are identified and addressed in Exhibits H and V. The SCCP states that "natural hazards are primarily limited to those areas with cross-slopes greater than 40% and along waterways" and provides protection for those areas through the designation of the NH Zone and by participating in the National Flood Insurance Program. Portions of the Solar Micrositing Area are within the NH Zone. However, as described in Section 5.2.2 above, through the final design process as informed by a site-specific geotechnical report and Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map panels, the Solar Components will be located outside of natural hazard areas.

Policy III. Proposals for development on lands designated as flood prone areas shall be subject to the provisions of the National Flood Insurance Program and subsequent revisions thereof. Structures specifically designed to control soil erosion or store water shall be exempt from this policy.

Response: As shown on Figure H-3 (Exhibit H), no components of RFA 4 are located on lands designated as flood prone as provided by Flood Insurance Rate Map Panels 410191 0125B and 410191 0050B both effective on September 24, 1984 (FEMA 2024).

Goal VI. Encourage preservation of the rural nature the Sherman County landscape.

Response: The SCCP does not provide a description or definition of "rural nature." The opposite of rural land in Oregon is all land located within an urban growth boundary or within city limits. The Certificate Holder understands rural landscapes to generally be considered low population density areas with homes on parcels 2 acres or larger and development typically related to agricultural, industrial or resource businesses. RFA 4 does not include the construction of any homes within the Solar Micrositing Area and would not result in the establishment of urban infrastructure such as a community or public water or sewer system. The majority of the solar and BESS components are low-lying (under 20 feet tall) with taller structures being transmission lines or utility poles. As discussed above in Sections 5.2.4.3 and 6.2, RFA 4 will not interfere seriously with accepted farming practices on adjacent lands devoted to farm use nor will it materially alter the overall land use pattern of the area.

Goal VII. Encourage preservation of fish and wildlife habitat in the County.

Response: As discussed in Exhibit P, due to the multi-year construction schedule of the Solar Components, both permanent and temporary impacts to fish and wildlife habitat will occur in phases

over this time period. Permanent impact areas are those that would be converted from the existing condition to a different condition for the life of the Solar Components. Temporary impact areas are those areas that would be disturbed during construction activities but would not become permanent parts of the Solar Components. Direct impacts to habitat include permanent loss and temporary disturbance of some specific habitat types; indirect impacts may include increased potential for the invasion of noxious weeds, particularly along fence lines and roads. Before each phase of construction, some areas within the construction footprint will be cleared of vegetation, with permanent and temporary impacts to habitats within the Solar Micrositing Area. As shown in Table K-10 below, no Category 1 habitat is located within the Solar Micrositing Area. The bulk of the habitat within the Solar Micrositing Area and the majority of Solar Components impacts will be to Category 6 habitat, which accounts for 96.3 percent of the habitat to be impacted temporarily during construction and 98.4 percent of the habitat to be impacted permanently. In this manner, fish and wildlife habitat have been preserved through the siting of the Solar Micrositing Area.

Table K-10. Acres of Temporary and Permanent Disturbance by Habitat Category

ODFW Habitat Category	Habitat Type	Habitat Sub-Type	Temporary Disturbance (acres)	Permanent Disturbance[2] (acres)
1	N/A	N/A	-	-
2	Riparian	Riparian Trees	<0.1	<0.1
	Shrub-steppe	Sagebrush Shrub-Steppe	0.3	20.7
	Category 2 Subtotal		**0.3**	**20.7**
4	Grassland-steppe	Grasslands	0.1	3.0
	Surface Water	Ephemeral Streams	<0.1	<0.1
	Category 4 Subtotal[1]		**0.1**	**3.0**
5	N/A	N/A	-	-
6	Agriculture	Irrigated Cropland	0.1	52.0
	Agriculture	Non-Irrigated Cropland	9.4	1,365.0
	Developed	Developed	1.0	3.9
	Category 6 Subtotal		**10.5**	**1,420.9**
Total			**10.9**	**1,444.6**

Note: Totals in this table may not sum correctly due to rounding; "-" = no impact; <0.1 = greater than zero but less than 0.05 acre.

1. There are not any temporary disturbances in open water habitat types. Refer to Exhibit J for detailed analysis of impacts on wetlands and waters.
2. The permanent disturbance is equivalent to the Solar Area as discussed in Section 1.0.

One issue of potential concern can be the increased need for herbicides to control weeds in crop fields due to construction activity. Construction equipment is a source of the dispersal of weed seed that may not otherwise be found in the area, and disturbed ground offers an opportunity for weeds to establish themselves. The Certificate Holder shall control the introduction and spread of noxious

weeds in accordance with the methods, monitoring procedures and success criteria set forth in the Comprehensive Solar Revegetation and Soil Management Plan (Exhibit I, Attachment I-2). The plan will be finalized in consultation with the Sherman County Weed Department and will likely include BMPs to prevent the spread of existing noxious weeds and ensure that new populations of species are not accidentally introduced. These BMPs include flagging and treating areas of noxious weed infestations prior to construction, cleaning vehicles and equipment prior to ground disturbance, strategic use of herbicide, mechanical removal and revegetation of disturbed soils. Additional steps may include monitoring areas of disturbance for noxious weeds after construction, training construction and operations staff and limiting vehicle traffic in noxious weed-infested areas.

Goal VIII. Encourage the diversity of plant and animal species within the County.

Response: As described in Exhibit P, the Solar Micrositing Area includes a very limited amount of wildlife habitat above Category 6. Of the approximately 1,445 acres of permanent impact area within the Solar Micrositing Area, only 23.7 acres, or 1.6 percent, consist of ODFW designated wildlife habitat types. The remaining 1,420.9 acres are considered developed or agriculture (Category 6 habitats; see Table K-10 above). After construction of the Solar Components, the Certificate Holder will revegetate non-agricultural portions of the site using an approved seed mix comprising several species of native grasses and forbs. Revegetation of cultivated agricultural areas will be coordinated with the appropriate landowner and/or farmer. Further, through weed management strategies during both construction and operation, noxious weeds will be prevented from negatively impacting habitats within or adjacent to the Solar Micrositing Area.

A wetland delineation was performed for the Solar Components (see Exhibit J). This assessment determined will be no impacts to waters of the State during the construction or operation of the Solar Components.

5.3.3 Social Characteristics (Comprehensive Plan § XII)

Goal I. To improve or maintain the current level of social services available with the County and to assure the provision of public facilities consistent with the intensity of land use.

Policy I. To improve or maintain the current level of social services available with the County and to assure the provision of public facilities consistent with the intensity of land use. The County Court shall encourage the location of industries, businesses and commercial services to diversify activities within the County consistent with the desired population growth and other goals and policies.

Policy II. The County Court shall continue to cooperate with the school districts to assure the provision of educational facilities in an efficient manner consistent with the demands of the Sherman County populace.

Policy IV. The County road system shall be maintained and improved consistent with the needs of the Sherman County citizenry, when funds are available. It shall be the policy of the County Court

to maintain school bus routes. Further oiling and graveling of existing roads shall be undertaken to provide the greatest benefit to the greatest number of rural residents.

Response: These policies are directives to Sherman County. However, the Solar Components are not anticipated to cause a significant demand on public services within Sherman County (Exhibit U). As described above and in Exhibit U, there are adequate public services and providers available within Sherman County to accommodate the influx of employees during construction of the Solar Components. Existing public roads that will be utilized during construction of RFA 4 and will be improved to their original condition after construction if damage occurs. As mentioned in Exhibit U, construction and operation of the Solar Components will not create significant delays or amounts of traffic on local roads. Due to the minimal number of permanent employees during operation (up to 7), the Certificate Holder anticipates traffic returning to its original condition after construction is complete.

Goal II. To protect historical, cultural and archeological resources from encroachment by incompatible land uses and vandalism.

Policy XI. The following areas and structures shall be considered historically, archaeologically, or culturally significant: all archeological sites; the Sherman County Courthouse; portions of the Old Oregon Trail which are visible and pass over rangeland; and the old Union Pacific Railroad bed through DeMoss Park.

Response: The Sherman County Courthouse and the old Union Pacific Railroad bed through DeMoss Park are not located within the Solar Micrositing Area. A cultural resource survey and report of RFA 4 has been completed and is discussed in detail in Exhibit S. Any archaeological sites that are found within the Solar Micrositing Area and recommended for National Register of Historic Places (NRHP) listing or a deemed NRHP-eligible cultural resources will be directly avoided by the Solar Components. If avoidance is not practicable in the final design, any significant resources (i.e., NRHP-eligible or unevaluated resources) will be mitigated to reduce impacts to a status of less than significant.

5.3.4 Economics (Comprehensive Plan § XIV)

Goal I. Diversify the economic base of the County and maintain the viability of the agricultural sector.

Policy II. Appropriate provisions shall be incorporated into the zoning, subdivision and other necessary ordinances to assure conservation and retention of agricultural lands in agricultural uses. At a minimum, agricultural lands shall be zoned as exclusive farm use and taxed accordingly.

Response: RFA 4 continues to diversify the local economic base through the addition of construction, maintenance and renewable energy industry-specific jobs without undermining the viability of the agricultural sector as demonstrated by the agricultural and fiscal impacts analysis and the agricultural mitigation strategy discussed in Section 8.1 below.

5.3.5 Energy (Comprehensive Plan § XV)

Goal I. Conserve energy resources.

Policy I. Cooperate with public agencies and private individuals in the use and development of renewable resources.

Response: As discussed, the Solar Components are a renewable energy facility. The energy produced by the Solar Components will be transported to the regional electric grid via an existing POI at the Biglow Canyon Substation, whereupon the energy will be distributed to the public. The Solar Components support this goal and policy because it is a renewable energy facility that will supply renewable resources to the grid and be made available for public use.

5.3.6 Land Use (Comprehensive Plan § XVI)

Goal I. To provide an orderly and efficient use of lands within Sherman County.

Response: As provided by SCZO 3.1.3, *Commercial Utility Facilities* may be authorized as a conditional use. Additionally, OAR 660-033-0130(38) expressly lists *Photovoltaic solar power generation facility* as a use that may be allowed in exclusive farm use designated land as a conditional use. RFA 4 is locationally dependent on proximity to transmission facilities and the existing Biglow Canyon Substation. RFA 4 will be co-located with BCWF and compatible with adjacent agricultural activities. All these factors contribute to RFA4 being compatible with this goal.

6.0 Directly Applicable Rules, Statutes, and Goals – OAR 345-021-0010 (1)(k)(C)(iii)

(iii) Identify all Land Conservation and Development Commission administrative rules, statewide planning goals and land use statutes directly applicable to the facility under ORS 197.646(3) and describe how the proposed facility complies with those rules, goals and statutes;

6.1 ORS 215.274

(1) As used in this section, "associated transmission line" has the meaning given that term in ORS 469.300.

ORS 469.300(3) "Associated transmission lines" means new transmission lines constructed to connect an energy facility to the first point of junction of such transmission line or lines with either a power distribution system or an interconnected primary transmission system or both or to the Northwest Power Grid.

Response: RFA 4 includes a 600-foot 230-kV gen-tie line that will connect the Solar Components to the existing Biglow Canyon Substation POI. As a result, the proposed gen-tie line meets the definition of "associated transmission lines" provided by ORS 469.300.

> *(2) An associated transmission line is necessary for public service if an applicant for approval under ORS 215.213 (1)(c)(B) or 215.283 (1)(c)(B) demonstrates to the governing body of a county or its designee that the associated transmission line meets:*
>
> *(a) At least one of the requirements listed in subsection (3) of this section; or*
>
> *(b) The requirements described in subsection (4) of this section.*

Response: The proposed gen-tie line meets the requirements referenced in ORS 215.274(2)(b). See below for responses to the criteria of ORS 215.274(4).

> *(4)(a) Except as provided in subsection (3) of this section, the governing body of a county or its designee shall approve an application under this section if, after an evaluation of reasonable alternatives, the applicant demonstrates that the entire route of the associated transmission line meets, subject to paragraphs (b) and (c) of this subsection, two or more of the following factors:*
>
> *(A) Technical and engineering feasibility;*

Response: A gen-tie line is required to connect the collector substation to the Biglow Canyon Substation. The gen-tie line allows for distribution of the power generated by the Solar Components to the regional grid via the Biglow Canyon Substation. It is more efficient to consolidate the transmission of power into one higher voltage transmission line than to site, construct, and maintain a series of lower voltage transmission lines over the same route. Without the proposed 230-kV gen-tie line, numerous parallel long stretches of 34.5-kV collector lines would be required to transfer the energy from the solar arrays in each solar area to the Biglow Canyon Substation. These 34.5-kV collector lines would cause as much or more disturbance to the land as the gen-tie line.

Further, the collector substation has been located adjacent to the Biglow Canyon Substation allowing for a gen-tie line of only 600 feet. Therefore, this factor is met.

> *(B) The associated transmission line is locationally dependent because the associated transmission line must cross high-value farmland, as defined in ORS 195.300, or arable land to achieve a reasonably direct route or to meet unique geographical needs that cannot be satisfied on other lands;*

Response: The Certificate Holder evaluated the feasibility of alternative transmission routes to minimize potential impacts to arable land and high-value farmland. The existing Biglow Canyon Substation is in a fixed location and all tracts directly adjacent and surrounding the substation consist of arable land. Additionally, as shown on Figure K-7, this surrounding land contains high-value soils as defined by ORS 195.300(10)(f). The irregular placement and dispersed pattern of these high-value soils prevents connecting to the POI without crossing high-value soils.

The 600-foot gen-tie line is located entirely within Solar Micrositing Area and is the minimum length needed to directly connect the collector substation to the existing POI. There is no alternative transmission route that can avoid high-value farmland and arable land and further minimize impacts to farm fields and transmit energy from the Solar Components to the existing POI. Therefore, it meets the locationally dependent criterion.

> *(C) Lack of an available existing right of way for a linear facility, such as a transmission line, road or railroad, that is located above the surface of the ground;*

Response: The 600-foot gen-tie line is located entirely within the Solar Micrositing Area and is the minimum length needed to directly connect the collector substation to the existing POI. There is no existing available right-of-way directly connecting the collector substation to the POI.

> *(D) Public health and safety; or*

Response: The Certificate Holder is minimizing health and safety risks from exposure to magnetic fields or shock by limiting the length of the transmission line for the Solar Components and locating the transmission line away from populated areas, specifically rural residences in the area. However, the rationale for route selection was not based on health and safety risks and does not meet this criterion.

> *(E) Other requirements of state or federal agencies.*

Response: As documented through the site certificate process, the Solar Components comply with other requirements of state and federal agencies. However, the siting of the associated transmission line was not determined by state or federal agencies, and as such the associated transmission line route selection does not meet this criterion.

> *(b) The applicant shall present findings to the governing body of the county or its designee on how the applicant will mitigate and minimize the impacts, if any, of the associated transmission line on surrounding lands devoted to farm use in order to prevent a significant change in accepted farm practices or a significant increase in the cost of farm practices on the surrounding farmland.*

Response: The Certificate Holder has located the gen-tie line in a manner that minimizes, to the greatest extent practicable, impacts on surrounding lands devoted to farm use. The gen-tie line is located entirely within the fence line of the Solar Micrositing Area and is the minimum length possible (approximately 600 feet) to connect the collector substation (located adjacent to the POI) and the Biglow Solar Substation.

During construction there may be some disturbance to the land. However, when construction is completed, lands temporarily affected by construction will be restored to their original condition. As discussed in Section 5.2.3.3, the Certificate Holder will coordinate with the landowners to minimize disturbances to agricultural production due through the establishment of a construction traffic management plan. More discussion of how the Certificate Holder will minimize impacts to surrounding farmland uses from construction traffic, spread of noxious weeds, construction dust, wildfire risk, or limitations for farmland access is provided in Section 5.2.4.

Because permanent impacts of the gen-tie lines are minimal, and the lines have been sited in consideration of farming practices, neither will force a significant change in accepted farm practices or a significant increase in the cost of farm practices on the surrounding farmland.

> *(c) The governing body of a county or its designee may consider costs associated with any of the factors listed in paragraph (a) of this subsection, but consideration of cost may not be the only consideration in determining whether the associated transmission line is necessary for public service.*

Response: Costs were not the only consideration in determining whether the gen-tie line is necessary for public service. As discussed above, the location of the gen-tie line is based on technical and feasibility and locational dependency. The entirety of the land within the analysis area is within the EFU zone and in farm use. No alternative location exists, regardless of costs, to locate the gen-tie line on non-EFU land.

6.2 OAR 660-033-0130(5)

OAR 660-033-0130 Minimum Standards Applicable to the Schedule of Permitted and Conditional Uses

(5) Approval requires review by the governing body or its designate under ORS 215.296. Uses may be approved only where such uses:

(a) Will not force a significant change in accepted farm or forest practices on surrounding lands devoted to farm or forest use; and

(b) Will not significantly increase the cost of accepted farm or forest practices on surrounding lands devoted to farm or forest use.

(c) For purposes of subsection (a) and (b), a determination of forcing a significant change in accepted farm or forest practices on surrounding lands devoted to farm and forest use or a determination of whether the use will significantly increase the cost of accepted farm or forest practices on surrounding lands devoted to farm or forest use requires:

(A) Identification and description of the surrounding lands, the farm and forest operations on those lands, and the accepted farm practices on each farm operation and the accepted forest practices on each forest operation;

(B) An assessment of the individual impacts to each farm and forest practice, and whether the proposed use is likely to have an important influence or effect on any of those practices; and

(C) An assessment of whether all identified impacts of the proposed use when considered together could have a significant impact to any farm or forest operation in the surrounding area in a manner that is likely to have an important influence or effect on that operation.

(D) For purposes of this subsection, examples of potential impacts for consideration may include but are not limited to traffic, water availability and delivery, introduction of weeds or pests, damage to crops or livestock, litter, trespass, reduction in crop yields, or flooding.

(E) For purposes of subsection (a) and (b), potential impacts to farm and forest practices or the cost of farm and forest practices, impacts relating to the construction or installation of the proposed use shall be deemed part of the use itself for the purpose of conducting a review under subsections (a) and (b).

(F) In the consideration of potentially mitigating conditions of approval under ORS 215.296(2), the governing body may not impose such a condition upon the owner of the affected farm or forest land or on such land itself, nor compel said owner to accept payment to compensate for the significant changes or significant increases in costs described in subsection (a) and (b).

Response:

Identification and Description of Surrounding Lands, Farm Operations and Farm Practices [OAR 660-033-0130(5)(c)(A)]

For purposes of evaluating OAR 660-033-0130(5), the "surrounding lands devoted to farm or forest use" are defined as land between the Solar Micrositing Area boundary and 0.5 mile from the Solar Micrositing Area (see OAR 345-001-0010(59)(c) for the definition of the land use study area evaluated under EFSC and see "Analysis Area" on Figure K-1). No forest operations exist within the surrounding lands; therefore, compliance with OAR 660-033-0130(5) includes an evaluation of farm use and farming practices. "Accepted farming practices" is defined by ORS 215.203(2)(c) as "a mode of operation that is common to farms of a similar nature, necessary for the operation of such farms to obtain a profit in money, and customarily utilized in conjunction with farm use." The accepted farming practice on the lands adjacent to the Solar Micrositing Area is primarily cultivation of dryland wheat, which includes fallowing half of the wheat fields each year, thus allowing the soil to collect 2 years of moisture to produce one crop. In addition to wheat cultivation, the surrounding lands (outside the Site Boundary) include one crop circle (approximately 125 acres) of irrigated crops[14] and livestock grazing rangeland (landowner survey, Attachment K-1). The rangeland is primarily located in the northeastern portion of the analysis area, shown as non-cultivated land in Figure K-4. A list of landowners within surrounding lands and a description of the accepted farming practices occurring on these lands (as well as other existing land uses) is provided in Table K-11 below.

[14] See Permit: G 16704 * IR located within Analysis Area on Figure K-5; crops have included rotations of mint, garlic, and carrot seed.

Table K-11. Farm Practices within Surrounding Lands

Landowner	Map and Tax Lot	Surrounding Lands Acreage	Also has Land Leased to RFA 4 (Yes/No)	Farm Practices and Other Land Uses within Surrounding Lands
Gray, Brett L & Trena D	02N18E00004800, 02N18E00004700	~ 274	No	Dryland wheat farming and BCWF turbines and access road.
Sherman County School District	02N18E00004500	~1	No	Dryland wheat farming, no structures.
Kaufman Darlene, Janis Smith	02N18E00004600	~162	No	Dryland wheat farming and BCWF turbines and access road.
Thomas, Ronald Kent	02N18E00004200	~132	No	Dryland wheat farming and BCWF turbines and access road.
Gray, Brett L & Trena D	02N18E00007600,	~148	No	Dryland wheat farming and BCWF turbines and access road. Homesite and farm structures are also present.
Hulse Trust, Roseanna	02N17E00004900, 02N18E00004100	~316	No	Dryland wheat farming and BCWF turbines and access road.
Macnab, James Stuart	02N17E00004901	~3	No	Homesite and accessory structures.
Skiles, Shawn	02N17E00004800, 02N17E00003400	~318	No	Dryland wheat farming and BCWF turbines and access road. Homesite and farm structures are also present.
Fields, John & Nancy	02N17E00003300	~121	No	Dryland wheat farming and BCWF turbines and access road.
McMillin Farms LLC	02N18E00001400	~609	No	Irrigated crops within one ~125-acre crop circle, dryland wheat farming and BCWF turbines and access road. Homesite and farm structures also present.
Fields, John & Nancy	02N18E00001301, 02N18E00001500,	~142	No	Dryland wheat farming and BCWF turbines and access road.
Home on the Range LLC	02N18E00001000	~174	No	Dryland wheat farming and BCWF turbines and access road.
Scharf, R & A LLC	02N18E0000900, 02N18E0000800, 02N18E00001600, 02N18E00001700, 02N18E00001800,	~986	Yes	Dryland wheat farming, cattle ranching, transmission lines and BCWF turbines and access road.
Thomas, Reine Marlene	02N18E00003700	~157	No	Dryland wheat farming and BCWF turbines and access road.
Weir, James Memorial Trust	02N18E00003600	~159	No	Dryland wheat farming and BCWF turbines and access road.

Landowner	Map and Tax Lot	Surrounding Lands Acreage	Also has Land Leased to RFA 4 (Yes/No)	Farm Practices and Other Land Uses within Surrounding Lands
Fridley, Barbara Ann Trustee	02N18E00004900	~162	No	Dryland wheat farming and BCWF turbines and access road.

Potential Impacts to Farm Practices During Construction and Operation of Solar Components [OAR 660-033-0130(5)(c)(B),(D)&(E)]

The following paragraphs address the potential impacts listed in OAR 660-033-0130(5)(c)(D) that may result from construction and operation of the Solar Components (as required by OAR 660-033-0130(5)(c)(E)).

Typical interference or potential adverse impacts to the accepted farming practices in the surrounding area that may occur during facility construction may include construction traffic, spread of noxious weeds, damage to crops, or other nuisance from construction dust. Potential impacts related to glare, wildfire, and/or limitations to farmland access are also evaluated in this section although not listed in OAR 660-033-0130(5)(c)(D). The Certificate Holder evaluates whether these potential impacts rise to the level of significant in the discussion below and demonstrates that the Solar Components will be made compatible with other adjacent uses through the implementation of BMPs and mitigation measures and will not result in significant impacts to farming practices on surrounding lands.

Traffic

As discussed in Exhibit U, the primary and secondary transportation routes for the Solar Components will be the same as for BCWF. The landowner involved in RFA 4 had farming operations occurring during the construction of BCWF and have stated in their survey response that, while impacts could occur to the operations, these can be mitigated through coordination with the local farmers. County roadway traffic volumes are assumed to be minimal, with some increase in traffic during the summer and early fall for harvest of various crops in the area. Construction and operation of the Solar Components will temporarily increase the traffic volume within the primary transportation route. However, construction-related traffic typically occurs during off-peak hours. Construction trucks typically use roads in the middle of the day during off-peak hours. The private vehicle traffic will also generally occur out of phase with the truck traffic, as the workers report earlier and leave later than most of the truck traffic. Overall, construction activities may cause short-term traffic delays, but they will be temporary and can be minimized by implementing specific measures outlined in Exhibit U. The Certificate Holder will encourage carpooling for construction workers and include traffic safety as part of its safety training program. To ensure that construction activities are compatible with day-to-day farm operations, a Construction Traffic Management Plan will be developed prior to construction, in accordance with Site Certificate Condition 79. This plan will include traffic minimization measures at transportation route roads, which would be implemented as needed; staggering shift start times to reduce vehicle trips through the westbound I-84 ramp terminal at Biggs Junction; installation of temporary traffic controls

during peak construction; and other mitigation measures, as applicable. Also, the Certificate Holder will ensure that any wear or damage to county roads as a result of the proposed Solar Components is repaired and that roads are restored to pre-construction condition or better.

After construction is complete, only three full-time employees are anticipated to be visiting the site daily. This will result in minimal impacts to the existing traffic using the roads in the vicinity of the Solar Components. Occasionally, additional vehicles or trucks may be required for maintenance and operations, but this will be an infrequent occurrence.

Water Availability and Delivery

There is one irrigation place of use water right within the surroundings lands (Oregon Permit G 16704, see Section 3.3.1 above). This water right is associated with the land owned by McMillin Farms LLC (map and tax lot 02N18E00001400) and is being used to support a crop circle. The authorized use of this permit is for the irrigation of 125.7 acres from "Well 1" (SHER 50257) in Biglow Canyon Basin (OWRD 2024b). All other crops grown within the surroundings lands are dryland crops and do not require irrigation. There are no crops within the surrounding lands supported by water delivery; as a result, water delivery will not be significantly impacted.

As described in Exhibit O, water for construction and operation will be obtained from the City of Wasco through the municipality's existing water rights and trucked to the site. The Certificate Holder may also source some water from an on-site exempt well provided such use of well water would not cause the rate of extraction to exceed 5,000 gallons in any one-day period and/or from an on-site well in accordance with a water right granted by the Oregon Water Resources Department.

Due to water either being trucked in from off-site or within the 5,000 gallons per day exemption threshold and the majority of crops within the surrounding lands being dryland crops, there is no expectation that water availability will be significantly impacted.

Weeds and Pests

The Certificate Holder will control the introduction and spread of noxious weeds in accordance with the methods, monitoring procedures, and success criteria set forth in the Comprehensive Solar Revegetation and Soil Management Plan (Exhibit I, Attachment I-2). The Certificate Holder currently contracts with the Sherman County Weed Control District to inspect and treat weeds at BCWF. They inspect and treat all turbine pads and roads. Weed control has been effective and there have been no issues. During the 2024 site inspection, ODOE noted "six rows of turbines were observed for evidence of noxious weeds. No state or federal noxious weeds were observed, and all the areas were under cultivation." The Certificate Holder will continue to use Sherman County Weed Control District services to treat the Solar Micrositing Area; contingent upon their capacity to perform the work. If the District is unable to provide these services, the Certificate Holder will collaborate with other local weed board or other agricultural community organizations to implement BMPs to prevent the spread of existing noxious weeds and ensure that new populations of species are not accidentally introduced. These BMPs include flagging and treating areas of noxious weed infestations prior to construction, cleaning vehicles and equipment prior to ground

disturbance, strategic use of herbicide, mechanical removal, and revegetation of disturbed soils. Additional steps may include monitoring areas of disturbance for noxious weeds after construction, training construction and operations staff and limiting vehicle traffic in noxious weed-infested areas. Using these BMPs during construction and operation will reduce the risk of weed infestation in cultivated land and the associated cost to the farmer for weed control (see Exhibit I).

Damage to Crops or Livestock

No damage to crops or livestock in the surrounding lands is anticipated from the construction and operation of the Solar Components. There is a livestock operation within Tract 1 owned by R & A Scharf LLC. as provided by the landowner survey (see Attachment K-1), Mr. Scharf is not concerned with impacts to the livestock operation. Concerns for the spread of dust during construction is addressed below. Concerns for spread of noxious weeds is addressed above.

Litter and Trespass

Generation of waste from construction will be minimized through the detailed estimating of materials and through efficient construction BMPs. As discussed in Exhibit W, solid waste will be stored in a manner that does not constitute a fire, health, or safety hazard until such waste can be hauled off-site for recycling or disposal, as appropriate. Disposal and recycling containers will be of adequate size, design, and number to handle the amount of waste being generated. Containers approximately 10 tons in capacity will be used to collect scrap metal, wood, and paper products, and other recyclable materials. Removal of the waste to appropriate disposal facilities will be done by a licensed waste hauler, under contract to the construction contractor (Site Certificate Condition 84). Licensed waste haulers must comply with OAR 340-093-0220 for transportation of wastes. Disturbed soil and rock materials will be contained using appropriate BMPs as part of the NPDES 1200-C permit to prevent sedimentation release to local habitat. Wastes generated at the proposed O&M buildings will be collected in appropriate waste or recycling containers, to be removed by a licensed waste hauler. All operational waste will be handled according to the Operations Waste Management Plan (Site Certificate Condition 87). As discussed in Exhibit G, the Certificate Holder will implement a Construction Waste Management Plan for the Solar Components. The plan will include measures to segregate all hazardous and universal wastes such as used oil, oily rags, mercury-containing lights, and lead-acid and nickel-cadmium batteries for disposal by a licensed firm that specializes in their proper recycling/disposal. Office waste generated at the proposed O&M buildings/structures will be disposed of at the Wasco County Landfill or Columbia Ridge Landfill.

The Certificate Holder has coordinated and will continue to coordinate with the Sherman County Sheriff's Office to verify they will be able to provide law enforcement services to the Solar Components in the event of an emergency without impacting services to other areas under their jurisdiction (Attachment U-1). If needed, additional law enforcement service is available through the Oregon State Police, with offices in The Dalles, Heppner, and Hermiston, and through The Dalles Police Department. The Solar Components will be entirely fenced with security gates at vehicle entry points. After construction is complete, up to three full-time employees are anticipated to be visiting the site daily.

Reduction in Crop Yields

The Solar Components will be entirely enclosed within the RFA 4 Site Boundary and will not be located within the surrounding lands. As discussed above, traffic will be managed during construction to prevent disruptions in adjacent farm management schedules, and the introduction and spread of noxious weeds will be prevented through methods set forth in the Comprehensive Solar Revegetation and Soil Management Plan (Exhibit I, Attachment I-2). The Certificate Holder currently contracts with the Sherman County Weed Control District to inspect and treat weeds at BCWF. The landowner survey (see Attachment K-1) indicated that there were no concerns with potential impacts from the solar facility to their ongoing farm operations outside the RFA 4 Site Boundary.

Flooding

No portion of the surrounding land is located within the regulated floodplain (Exhibit H, Figure H-3). The Solar Components are not anticipated to cause flooding within the surrounding lands due to stormwater runoff or on-site water use. The Certificate Holder will monitor construction stormwater impacts in accordance with an NPDES 1200-C construction stormwater permit issued by ODEQ, and an associated ESCP (Site Certificate Condition 26; see Exhibit I for further information). The ESCP describes BMPs for erosion and sediment control, spill prevention and response procedures, proper disposal procedures, regular maintenance for vehicles and equipment, and employee training on spill prevention. During operation, any sediment-laden stormwater runoff will be contained within the RFA 4 Site Boundary and infiltrate into the soils. If needed, solar panel washing will occur during the summer and will use quantities of water that will evaporate or will infiltrate into the ground within the immediate vicinity of its use.

Glare

Solar arrays reflect light that can interfere with road and air travel. As discussed in Exhibit U Section 4.3.8.6 and Exhibit R Section 5.3, a glare analysis was completed for this project using a modeling/compliance analysis tool within the GlareGauge software application. Glare is categorized using three tiers of severity: red (glare predicted with a potential for permanent eye damage), yellow (glare predicted with a potential for temporary after-image), and green (glare predicted with a low potential for temporary after-image).

The results of this analysis indicate that no instances of red glare are predicted for any glare analysis observation points or route segments. The solar arrays were predicted to result in an average annual amount of 192 hours of green glare and 153 hours of yellow glare. Based on 12 hours of daylight, this equates to green glare approximately 4 percent of the time and yellow glare approximately 3 percent of the time. This amount of green and yellow glare is considered insignificant. In addition, this is a conservative prediction, as the GlareGauge model does not account for varying ambient conditions (i.e., cloudy days, precipitation), atmospheric attenuation, screening due to existing vegetation or structures unless specified through obstruction modeling, and screening due to existing topography not located within the defined array layouts. As such, the predicted results are considered conservative and will likely be significantly lower than predicted.

Dust

The Certificate Holder will minimize dust during construction through application of water and other dust control measures as discussed in Exhibit I. Further, the solar panels will safeguard soil health by protecting soils from wind and soil erosion through vegetation establishment under solar panels. Since the Solar Components are not an urbanized use, they will not have urban use characteristics such as traffic, noise, and emissions and will not require urban infrastructure such as water and sewer. The Certificate Holder will also sign and record in the deed records of Sherman County a document prohibiting them from pursuing a claim for relief or cause of action alleging injury from farming practices as defined in ORS 30.930(2) and (4).

Wildfire

Wildfire prevention and risk mitigation for the Solar Components are addressed in Exhibit V. The Certificate Holder and Project Developer have prepared a draft construction Wildfire Mitigation Plan (WMP; Exhibit V, Attachment V-1) that is included with this RFA. PGE is an investor-owned utility with governance from the Oregon Public Utility Commission that provides electric service in Oregon and is subject to the requirements of OAR 860, Division 300, which requires PGE to have a risk-based WMP filed and approved by the Public Utility Commission (Exhibit V, Attachments V-2 and V-3). If construction of the Solar Components in RFA 4 proceeds, the following annual update for the WMP will include a re-evaluation of risks considering the Solar Components and PGE's corporate-wide WMP will serve as the operational WMP for the facility.

Prior to construction and operations, the Certificate Holder and Project Developer will coordinate with local fire districts, as well as local emergency management agencies, to receive and incorporate input into the final WMPs. The Solar Components will be equipped with fire protection equipment in accordance with the Oregon Fire Code, and operations at the Solar Components will be performed in accordance with the WMP. Through compliance with fire safety standards and the implementation of a fire protection and prevention plan, the Certificate Holder will minimize the risk of wildland fire during construction and operation.

Summary of Potential Impacts to Individual Farm Practices

As shown in Table K-11, there are 14 landowners within the surrounding lands. All of the surrounding lands are being farmed with the exception of map and tax lots 01N18E0700104 and 02N17E00004901, which are being used for a substation and a homesite, respectively. There is a mixture of land being farmed by their respective landowners and land being farmed through lease agreements. These lease agreements are not publicly available. The farm practices identified are predominantly dryland wheat cultivation with small areas of cattle grazing and one irrigated crop circle.

In summary, none of the impacts discussed above have risen to the level of significant for the dryland wheat, irrigated crops, or cattle grazing. The potential impacts either do not impact the farm operations within the surrounding lands to a significant level or are mitigated such that the impacts remain minimal.

Cumulative Impacts to Farm Operations [OAR 660-033-0130(5)(c)(C)]

None of the impacts discussed above under *Potential Impacts to Farm Practices During Construction and Operation of Solar Components* have risen to the level significant enough to have an important influence or effect on that operation. Prevention, mitigation, and monitoring efforts discussed above and in Exhibits I, G, P, R, U, V, and W collectively alleviate potential impacts from traffic, water availability and delivery, weeds and pests, damage to crops or livestock, litter and trespassing, reduction in crop yields, flooding, glare, dust, and wildfire. The only unique farm practice within the surrounding lands is the irrigated crop circle on parcel 02N18E00001400 (outside the RFA 4 Site Boundary). While the crop circle is unique compared to the predominant farm practice of dryland wheat, the crops being grown are not specialty perennial crops such as blueberries, raspberries, apples, pears, or grapes. There is no orchard or vineyard being supported by the crop circle. As a result, the crops within the irrigation circle are managed in a similar fashion to the dryland crops and do not need specialized care in a manner that would need unique mitigation measures beyond those already being proposed.

As noted elsewhere in this exhibit, the landowner with agricultural lands in the RFA 4 Site Boundary was sent a survey with questions regarding the agricultural uses of their lands, including lands within and outside the Solar Micrositing Area. The survey requested information about their concerns for impacts to adjacent farming operations and any concerns from their experience with construction of other energy facilities in the surrounding area including BCWF. The response indicated that they had no concerns with potential impacts from the solar facility on their ongoing farmlands outside the fence line. The landowner indicated that communication with the local farmers to gain local knowledge will help coordinate minimization of impacts (i.e. dust, traffic) from construction activities and construction traffic. The landowner survey response (Attachment K-1) described no anticipated negative impact on their other agricultural operations. Further, the landowner (who currently hosts wind turbines on their tract) did not have major concerns regarding construction of the solar arrays adjacent to their surrounding farmlands.

The Solar Components are not anticipated to significantly increase the cost of accepted farm practices on surrounding lands.

Limitations to Conditions [OAR 660-033-0130(5)(c)(F)]

OAR 660-033-0130(5)(c)(F) is directed to the County/EFSC and does not require findings from the Certificate Holder.

OAR 660-033-0130(5) Conclusion

For the above stated reasons, the Council may find that the Solar Components will not significantly change the accepted farming practices within the surrounding area. Because the Solar Components will not result in significant impacts, the Council can draw the conclusion that the Solar Components will also not result in significant costs to accepted farming practices. Therefore, the Solar Components will not seriously interfere with accepted farming practices on adjacent lands devoted to farm use.

6.3 OAR 660-033-0130(38)

OAR 660-033-0130 Minimum Standards Applicable to the Schedule of Permitted and Conditional Uses

(38) A proposal to site a photovoltaic solar power generation facility shall be subject to the following definitions and provisions:

(a) "Arable land" means land in a tract that is predominantly cultivated or, if not currently cultivated, predominantly comprised of arable soils.

(b) "Arable soils" means soils that are suitable for cultivation as determined by the governing body or its designate based on substantial evidence in the record of a local land use application, but "arable soils" does not include high-value farmland soils described at ORS 195.300(10) unless otherwise stated.

(c) "Dual-use development" means developing the same area of land for both a photovoltaic solar power generation facility and for farm use.

(d) "Nonarable land" means land in a tract that is predominantly not cultivated and predominantly comprised of nonarable soils.

(e) "Nonarable soils" means soils that are not suitable for cultivation. Soils with an NRCS agricultural capability class V–VIII and no history of irrigation shall be considered nonarable in all cases. The governing body or its designate may determine other soils, including soils with a past history of irrigation, to be nonarable based on substantial evidence in the record of a local land use application.

Response: The above definitions have been used to determine the land categories for the Solar Micrositing Area. As discussed in Section 3.3.2.3. and Table K-4 above, all tracts within the Solar Micrositing Area comprise arable land. No dual-use development is proposed as part of the Solar Components. While some nonarable soils exist within the Solar Micrositing Area, there is no "nonarable land."

(f) "Photovoltaic solar power generation facility" includes, but is not limited to, an assembly of equipment that converts sunlight into electricity and then stores, transfers, or both, that electricity. This includes photovoltaic modules, mounting and solar tracking equipment, foundations, inverters, wiring, storage devices and other components. Photovoltaic solar power generation facilities also include electrical cable collection systems connecting the photovoltaic solar generation facility to a transmission line, all necessary grid integration equipment, new or expanded private roads constructed to serve the photovoltaic solar power generation facility, office, operation and maintenance buildings, staging areas and all other necessary appurtenances. For purposes of applying the acreage standards of this section, a photovoltaic solar power generation facility includes all existing and proposed facilities on a single tract, as well as any existing and proposed facilities determined to be under common ownership on lands with fewer than 1,320 feet of separation from the tract on which the new facility is proposed to be sited. Projects connected to the same parent company or individuals

shall be considered to be in common ownership, regardless of the operating business structure. A photovoltaic solar power generation facility does not include a net metering project established consistent with ORS 757.300 and OAR chapter 860, division 39 or a Feed-in-Tariff project established consistent with ORS 757.365 and OAR chapter 860, division 84.

Response: The proposed solar array and associated facilities meet the definition of "photovoltaic solar power generation facility." The Solar Components will include solar arrays, inverters, a BESS facility and subcomponents (i.e., inverters), a collector substation, an O&M enclosure, site access roads, internal roads, perimeter fencing, facility entry gate, medium-voltage (34.5-kV) collector lines, and temporary laydown areas. The BESS facility will be consolidated near the O&M enclosure within the Solar Micrositing Area, and within the solar facility fence line. In addition, the 34.5-kV collector lines are also part of the solar facility as they will collect the energy from the solar modules and transfer it to the collector substations.

The proposed 600-foot 230-kV gen-tie line is not included in the definition of "photovoltaic solar power generation facility." Instead, as directed by EFSC, proposed transmission line is treated as a *utility facility necessary for public service* pursuant to ORS 215.283(1)(c) if the standards of ORS 215.274 are met. Compliance with ORS 215.274 is discussed in Section 6.1 above.

(g) For high-value farmland described at ORS 195.300(10), a photovoltaic solar power generation facility shall not use, occupy, or cover more than 12 acres unless:

(A) The provisions of paragraph (h)(H) are satisfied; or

(B) A county adopts, and an applicant satisfies, land use provisions authorizing projects subject to a dual-use development plan. Land use provisions adopted by a county pursuant to this paragraph may not allow a project in excess of 20 acres. Land use provisions adopted by the county must require sufficient assurances that the farm use element of the dual-use development plan is established and maintained so long as the photovoltaic solar power generation facility is operational or components of the facility remain on site. The provisions of this subsection are repealed on January 1, 2022.

Response: The definition of high-value farmland under ORS 195.300(10)(a) cites ORS 215.710, which describes land in a tract composed predominantly of high-value farmland soils, that at the time of the siting approval, are irrigated and classified as prime, unique, Class I, or Class II or not irrigated and classified as prime, unique, Class I, or Class II. As such, soil characteristics for all lots and parcels under common ownership also need to be analyzed. As discussed above in Section 3.3.2.2 and shown in Table K-3, there are a total of 1,305 acres of high-value farmland per ORS 195.300(10)(a), (c) and (f) within the Solar Micrositing Area. Due to the irregular and dispersed nature of the high-value farmland as shown on Figure K-7, the Solar Components are unable to avoid the use of less than 12 acres of high-value farmland. As a result, the criteria of OAR 660-033-0130(38)(h) will apply and an exception to Goal 3 is required. See Section 8.0 for the statewide planning Goal 3 exception justification.

(h) The following criteria must be satisfied in order to approve a photovoltaic solar power generation facility on high-value farmland described at ORS 195.300(10).

(A) The proposed photovoltaic solar power generation facility will not create unnecessary negative impacts on agricultural operations conducted on any portion of the subject property not occupied by project components. Negative impacts could include, but are not limited to, the unnecessary construction of roads dividing a field or multiple fields in such a way that creates small or isolated pieces of property that are more difficult to farm, and placing photovoltaic solar power generation facility project components on lands in a manner that could disrupt common and accepted farming practices;

Response: As shown on Division 27 Document Figure 2, no small or isolated pieces of property will be created as a result of the RFA 4 Site Boundary. Solar arrays and facility components are located in the areas of the Solar Micrositing Area not used by the BCWF wind turbines and are set back from wetlands, protected habitats, and steep slopes. The one farmable area in the northwest portion of the Solar Micrositing Area that is not used for placement of components is located outside the solar facility area fence, is contiguous to adjacent farmed land, and, as such, is available for continued farming operations. According to landowner testimony, all the farmers operating within the Solar Micrositing Area intend to continue their farming operations on lands outside the Solar Micrositing Area and do not anticipate issues. All local public roads adjacent to and within the Solar Micrositing Area will remain outside of the fenced area. As described in Exhibit U, traffic during the operation of RFA 4 will be minimal with up to three personnel for daily maintenance activities.

As discussed above in Section 5.2, farming on surrounding lands will continue alongside the Solar Components without a significant change to accepted farming practices and without an increase to the cost of those accepted farm practices. Survey responses provided by the landowners did not identify or anticipate any adverse impact, or any increase in the cost of farming practices, in the vicinity of the solar arrays. No forest practices or viticulture occur within the Solar Micrositing Area or surrounding lands. Potential impacts such as traffic, dust, wildfire, weeds, noise, or emissions will not occur or will be mitigated through management plans as provided in Exhibits I, P, U, and V and their attachments. The Solar Components will safeguard soil health by protecting soils from wind and soil erosion and minimizing construction impacts using ESCP BMPs (see Exhibit I) and by promoting long-term vegetation establishment under solar panels due to no soil tillage during operation of the Solar Components. The Certificate Holder will sign and record in the deed records of Sherman County a document prohibiting them from pursuing a claim for relief or cause of action alleging injury from farming practices as defined in ORS 30.930(2) and (4). Post-construction, the Solar Components will not result in increased traffic impacts, air emissions, or dust from ongoing agricultural use, in consideration of drought conditions that could become longer and more severe due to climate change (Parks 2021). Common and accepted farming practices may need to change in response to changing conditions, and accessory uses, such as temporary long-term leases, may become more reliable sources of income.

The solar arrays are generally oriented adjacent and parallel to existing roads (see Figure 2, Division 27), and have been sited to maximize efficiency while also consolidating the solar arrays to

areas that do not constrain the current and future dryland wheat farming activities on the remainder of the tracts or on neighboring tracts. Access roads will not be constructed outside of the solar array fence line. The Certificate Holder will design and construct the Solar Components using the minimum land area necessary for safe construction and operation. The Solar Components will utilize existing access roads to the extent practicable. The Solar Components will not create negative impacts on agricultural operations conducted on any portion of the subject property not occupied by Solar Components because:

- The Solar Components will not limit or impact current or future farm activities on the surrounding land and will not diminish the opportunity for neighboring parcels to expand, purchase, or lease any vacant land available for agricultural uses.
- The Certificate Holder will control noxious weeds during construction and operation to reduce the risk of weed infestation in cultivated land and the associated cost to the farmer for weed control as described in the Comprehensive Solar Revegetation and Soil Management Plan (Exhibit I, Attachment I-2).
- Construction of the Solar Components could adversely affect soil quality by erosion or compaction. Some farmland would be temporarily disturbed and unavailable for farming during construction. To avoid or reduce adverse impacts to soil quality, the Certificate Holder will implement dust control and erosion control measures during construction and operation of the Solar Components (see Exhibit I). To the extent practicable, the Certificate Holder proposes to reduce impact to soils by using areas that are already disturbed and limiting the area of new disturbance.

Ultimately, construction, operation, and maintenance of the solar array and associated equipment will not change existing land use practices on lands surrounding the Solar Micrositing Area.

> *(B) The presence of a photovoltaic solar power generation facility will not result in unnecessary soil erosion or loss that could limit agricultural productivity on the subject property. This provision may be satisfied by the submittal and county approval of a soil and erosion control plan prepared by an adequately qualified individual, showing how unnecessary soil erosion will be avoided or remedied. The approved plan shall be attached to the decision as a condition of approval;*

Response: The prevention of soil erosion is discussed in Exhibit I. Construction will be performed under an NPDES 1200-C permit, including an Oregon Department of Environmental Quality ESCP, which will also include erosion and sediment control BMPs. After completing construction within RFA 4, the Certificate Holder will monitor the area and coordinate with the landowners, who understand the specifics about the land, to evaluate whether construction-related impacts to soils are being adequately addressed by the mitigation procedures described in the Draft Erosion and Sediment Control Plan (see Exhibit I, Attachment I-1) and the Comprehensive Solar Revegetation and Soil Management Plan (see Exhibit I, Attachment I-2).

> *(C) Construction or maintenance activities will not result in unnecessary soil compaction that reduces the productivity of soil for crop production. This provision may be satisfied*

by the submittal and county approval of a plan prepared by an adequately qualified individual, showing how unnecessary soil compaction will be avoided or remedied in a timely manner through deep soil decompaction or other appropriate practices. The approved plan shall be attached to the decision as a condition of approval;

Response: The extent of grading during construction of RFA 4 will be limited to specific areas within the Solar Micrositing Area. Additionally, potential soil impacts during construction, operation and decommissioning and prevention and mitigation strategies are discussed in Exhibit I. This document, in addition to the draft ESCP (see Exhibit I, Attachment I-1), meets the requirement for a plan prepared by an adequately qualified individual as required by the above standard.

(D) Construction or maintenance activities will not result in the unabated introduction or spread of noxious weeds and other undesirable weed species. This provision may be satisfied by the submittal and county approval of a weed control plan prepared by an adequately qualified individual that includes a long-term maintenance agreement. The approved plan shall be attached to the decision as a condition of approval;

Response: The Certificate Holder has prepared a Comprehensive Solar Revegetation and Soil Management Plan (see Exhibit I, Attachment I-2) to address prevention, monitoring, and control measures for noxious weeds in Sherman County. This plan was prepared using the Sherman County noxious weed list (Sherman County 2024). At the time of RFA submittal, the plan will be reviewed by Sherman County and ODOE and will be subject to comment and approval by both agencies.

(E) Except for electrical cable collection systems connecting the photovoltaic solar generation facility to a transmission line, the project is not located on those high-value farmland soils listed in OAR 660-033-0020(8)(a);

Response: As discussed in Section 3.3.2.2 above, one of the two tracts within the Solar Micrositing Area is predominantly composed of those high-value farmland soils listed in OAR 660-033-0020(8)(a). It is not possible to site the solar arrays completely avoiding the OAR 660-033-0020(8)(a) high-value farmland soils primarily due to the patchy and irregular nature of the Class II soils (see Figure K-6) throughout the tracts. As the Solar Components will preclude more than 12 acres of high-value farmland from use as a commercial agricultural enterprise, a Goal 3 exception is being requested pursuant to ORS 469.504(1)(b) and OAR 345-022-0030(4) (see Section 8.0).

(F) The project is not located on those high-value farmland soils listed in OAR 660-033-0020(8)(b)-(e) or arable soils unless it can be demonstrated that:

(i) Non high-value farmland soils are not available on the subject tract;

(ii) Siting the project on non high-value farmland soils present on the subject tract would significantly reduce the project's ability to operate successfully; or

(iii) The proposed site is better suited to allow continuation of an existing commercial farm or ranching operation on the subject tract than other possible sites also located on the subject tract, including those comprised of non high-value farmland soils; and

Response: OAR 660-0033-0020(c), (d) and (e) provides definitions for high-value farmland for land within the Willamette Valley, west of the summit of the Coast Range, and west of U.S. Highway 101, respectively, and are not applicable to RFA 4. OAR 660-0033-0020(b) is specific to the production of "specified perennials" which are defined as *perennials grown for market or research purposes including, but not limited to, nursery stock, berries, fruits, nuts, Christmas trees, or vineyards, but not including seed crops, hay, pasture or alfalfa*. As provided by the landowner testimony, no specified perennials are grown within the Solar Micrositing Area. Instead, the land is used for crops such as seed crops, hay, pasture, alfalfa, wheat, and barley. As a result, RFA 4 is not located on those high-value farmland soils listed in OAR 660-033-0020(8)(b)-(e).

Per OAR 660-033-0130(38)(b), *"'arable soils' means soils that are suitable for cultivation as determined by the governing body or its designate based on substantial evidence in the record of a local land use application, but 'arable soils' does not include high-value farmland soils described at ORS 195.300(10) unless otherwise stated."*

As shown on Figure K-4, almost the entirety of the analysis area and the Solar Micrositing Area is shown as land in cultivation. Additionally, as discussed above in Section 3.3.2.3 and shown in Table K-1, 1,810 acres, or 45 percent, of the Solar Micrositing Area consists of arable soils.

Some non-high-value farmland soils are available on the subject tracts, as shown on Figure K-7. However, as also shown on Figure K-7, due to the irregular and dispersed pattern and the limited quantity of the non-high-value farmland soils, it would not be possible to site the solar energy facility components on only non-high-value farmland soils without significantly impairing the ability of the Solar Components to operate successfully.

Tract 2 is entirely within the Solar Micrositing Area. The portion of Tract 1 located outside of the Solar Micrositing Area is land interspersed with drainages and steep slopes and generally not suitable for placement of solar panels.

> *(G) A study area consisting of lands zoned for exclusive farm use located within one mile measured from the center of the proposed project shall be established and:*
>
> > *(i) If fewer than 48 acres of photovoltaic solar power generation facilities have been constructed or received land use approvals and obtained building permits within the study area, no further action is necessary.*
> >
> > *(ii) When at least 48 acres of photovoltaic solar power generation facilities have been constructed or received land use approvals and obtained building permits, either as a single project or as multiple facilities within the study area, the local government or its designate must find that the photovoltaic solar power generation facility will not materially alter the stability of the overall land use pattern of the area. The stability of the land use pattern will be materially altered if the overall effect of existing and potential photovoltaic solar power generation facilities will make it more difficult for the existing farms and ranches in the area to continue operation due to diminished opportunities to expand, purchase or lease farmland,*

acquire water rights, or diminish the number of tracts or acreage in farm use in a manner that will destabilize the overall character of the study area.

Response: As shown on Figure K-10, no PV solar power generation facilities have been constructed or received land use approvals and obtained building permits within the study areas of either the Solar Micrositing Area. As a result, no further action is necessary.

(H) A photovoltaic solar power generation facility may be sited on more than 12 acres of high-value farmland described in ORS 195.300(10)(f)(C) without taking an exception pursuant to ORS 197.732 and OAR chapter 660, division 4, provided the land:

(i) Is not located within the boundaries of an irrigation district;

(ii) Is not at the time of the facility's establishment, and was not at any time during the 20 years immediately preceding the facility's establishment, the place of use of a water right permit, certificate, decree, transfer order or ground water registration authorizing the use of water for the purpose of irrigation;

(iii) Is located within the service area of an electric utility described in ORS 469A.052(2);

(iv) Does not exceed the acreage the electric utility reasonably anticipates to be necessary to achieve the applicable renewable portfolio standard described in ORS 469A.052(3); and

(v) Does not qualify as high-value farmland under any other provision of law; or

Response: As discussed in Section 3.3.2.2 above, an exception to Goal 3 pursuant to ORS 197.732 and OAR chapter 660, division 4 is required.

(k) An exception to the acreage and soil thresholds in subsections (g), (h), (i), and (j) of this section may be taken pursuant to ORS 197.732 and OAR chapter 660, division 4.

Response: As discussed in Section 3.3.2.2 above, an exception to Goal 3 pursuant to ORS 197.732 and OAR chapter 660, division 4 is required.

(l) The county governing body or its designate shall require as a condition of approval for a photovoltaic solar power generation facility, that the project owner sign and record in the deed records for the county a document binding the project owner and the project owner's successors in interest, prohibiting them from pursuing a claim for relief or cause of action alleging injury from farming or forest practices as defined in ORS 30.930(2) and (4).

Response: The Certificate Holder acknowledges this condition of approval.

(m) Nothing in this section shall prevent a county from requiring a bond or other security from a developer or otherwise imposing on a developer the responsibility for retiring the photovoltaic solar power generation facility.

Response: A bond or other security is required by the Council and the security is issued in the name of the State. The Certificate Holder is providing financial assurance for site restoration after project retirement as provided in Exhibit X.

> *(n) If ORS 469.300(11)(a)(D) is amended, the commission may re-evaluate the acreage thresholds identified in subsections (g), (i) and (j) of this section.*

Response: The Certificate Holder acknowledges the above criterion.

7.0 Applicable Statewide Goals Compliance – OAR 345-021-0010(1)(k)(C)(iv)

> *OAR 345-021-0010(1)(k)(C)(iv) If the proposed facility might not comply with all applicable substantive criteria, identify the applicable statewide planning goals and describe how the proposed facility complies with those goals;*

Response: As discussed in Section 6.3, the Solar Components do not meet the standards under OAR 660-033-0130(38)(g) and (h) as they will permanently occupy more than 12 acres of high-value farmland and more than 20 acres of arable land for the commercial solar energy facility. Further, as discussed in Section 5.2.4, the standards of SCZO 5.8.20.4 cannot be met as the soils within the Solar Micrositing Area are generally suitable for the production of farm crops and livestock. Because the Solar Components do not comply with all applicable local land use criteria, this section provides analysis, under ORS 469.504(1)(b)(B), on whether the proposed Solar Components "does otherwise comply with the applicable statewide planning goals." For a use located within an EFU zone, the "applicable statewide planning goal" is Goal 3, which is the State's Agricultural Lands goal. Thus, the Solar Components requires an exception to Statewide Planning Goal 3 pursuant to ORS 469.504(2) and OAR 345-022-0030(4). The justification for an exception to Statewide Planning Goal 3 is set forth in Section 8.1 below.

8.0 Statewide Planning Goal Exceptions – OAR 345-021-0010 (1)(k)(C)(v)

> *OAR 345-021-0010(1)(k)(C)(v) If the proposed facility might not comply with all applicable substantive criteria or applicable statewide planning goals, describe why an exception to any applicable statewide planning goal is justified, providing evidence to support all findings by the Council required under ORS 469.504(2); and*

Response: As discussed in Section 3.3 and 6.3 of this exhibit, the Solar Components will occupy more than 12 acres of high-value farmland and more than 20 acres of arable land, and therefore does not meet the acreage standards under OAR 660-033-0130(38)(g) and (i) and requires an exception to Statewide Planning Goal 3 (i.e., Goal 3). In addition, because the land within RFA 4 Site Boundary is currently cultivated, the Certificate Holder cannot provide evidence to demonstrate

that the Facility, as amended, meets SCZO5.8.20.4. The Certificate Holder provides reasons under the Goal 3 exception to justify not meeting this applicable substantive criterion along with the acreage thresholds in OAR 660-033-0130(38).

The Council may take an exception to Goal 3 for an energy facility under the Council's jurisdiction if the controlling criteria listed under ORS 469.504(2)(c) and OAR 345-022-0030(4)(c) are met. The Certificate Holder demonstrates below that a "reasons" exception is warranted under ORS 469.504(2)(c) and OAR 345-022-0030(4)(c).

ORS 469.504(2) provides that an exception may be taken on any of three grounds:

- That the land is "physically developed to the extent that the land is no longer available for uses allowed by the applicable goal;"
- That the land "is irrevocably committed … to uses not allowed by the applicable goal;" or
- That certain standards are met because the facility is compatible with existing adjacent uses and other relevant factors are met; or what is referred to as a "reasons" exception.

The Solar Micrositing Area is not "physically developed" or "irrevocably committed" within the meaning of the rule. However, this section demonstrates that the Solar Components meet the standards for a "reasons" exception to Goal 3 under ORS 469.504(2)(c) and OAR 345-022-0030(4)(c) because:

1. Reasons justify why the state policy embodied in Goal 3 should not apply (see Section 8.1).
2. The Solar Components will avoid, minimize, and mitigate potential significant environmental, economic, social, and energy consequences (see Section 8.2).
3. The Solar Components will be made compatible with other adjacent uses through the implementation of BMPs and mitigation measures (see Section 8.3).

Further, the Certificate Holder demonstrates that locating the solar array anywhere within the permanent impact area within the Solar Micrositing Area, subject to the proposed conditions, will be compatible with adjacent farm uses. The permanent impact area consists of 1,445 acres within the 1,924-acre Solar Micrositing Area. The Certificate Holder is requesting maximum flexibility of site design within the permanent impact area. As a result, while the actual footprint of the Solar Components will likely be less than the permanent impact area, the Goal 3 exception analysis assumes the entire permanent impact area will be developed and remove 1,006 acres of high-value farmland from Goal 3 protection.[15]

[15] The Certificate Holder anticipates impacting less than 1,006 acres of high-value farmland in the final design, and the final acreage requested to be removed from Goal 3 protection will be provided with the Solar Components' as-built drawings.

8.1 Demonstration that a "Reasons" Exception is Appropriate

ORS 469.504(2)(c)(A); OAR 345-022-0030(4)(c)(A) Reasons justify why the state policy embodied in the applicable goal should not apply;

Response: In accordance with OAR 660-015-0000(3), the policy of Goal 3 is:

To preserve and maintain agricultural lands.

ORS 469.504(2)(c)(A) and OAR 345-022-0030(4)(c)(A) provide that the Council may find a facility justifies an exception to Statewide Planning Goal 3 if "reasons" justify why the policy embedded in Goal 3 (i.e. to preserve and maintain agricultural lands) should not apply to the facility. ORS 469.504(2)(c)(A) and OAR 345-022-0030(4)(c)(A) do not say that the "reasons" must be embedded in the statewide planning goal subject to the exception. Rather, the Council has discretion in determining what "reasons" justify the exception. The Oregon legislature adopted a goal exception test that is intentionally less stringent than the goal exception test in ORS chapter 197. EFSC has the ability to identify reasons outside of the statewide planning goals to justify an exception to carry out the state's energy policy goals. The Oregon Supreme Court recognized that the Council's powers "include the authority to take an exception to any of the statewide planning goals when considering approving a proposed energy facility if the [C]ouncil deems such an exception justified." *Matter of Nolin Hills Wind Power Project*, 372 Or 194, 222 (2024). The Court also recognized that the legislature intentionally omitted the more stringent alternative analysis test from the EFSC test. *Save Our Rural Oregon v. Energy Facility Siting Council*, 339 Or 353, 372 (2005).

The Council has discretion to approve a Goal 3 exception based on "reasons" it determines warrant the exception. As evidenced by previous Goal 3 exception approvals, the Council may rely on reasons specific to Goal 3 policies (i.e., minimal impacts to agriculture, economic benefits to the local agricultural community) or reasons that are not associated with Goal 3 policies (i.e., locational dependency, limited impacts to other environmental resources, general rural economic benefits, etc.). The Council has the discretion and authority to balance the policies that are embedded in the goal for which an exception is sought with its policy directive in ORS 469.010, other statewide planning goal policies and objectives, and other policy reasons that the Council determines warrant the requested exception.

In the following discussion, the Certificate Holder provides the following reasons to justify why Goal 3 should not apply to the agricultural lands that will be impacted by the Solar Components:

1. The Solar Components are locationally dependent because of their proximity to an existing substation with interconnection capacity to connect the Solar Components to the regional grid for interconnection and energy supply end users, thus avoiding the need to construct new regional substations or lengthy high-voltage transmission lines and helping address load demand. The Solar Components are also co-located with the BCWF which will optimize the energy generated by the wind component by allowing excess wind energy to charge the BESS while keeping infrastructure costs to a minimum.

2. The Solar Components avoid and minimize impacts on other resources protected by Council Standards.
3. The Solar Components provide local rural economic development benefits.
4. The Solar Components are consistent with Oregon's Policies and Goals Requiring the State to Address the Climate Crisis.

8.1.1 Locational Dependency

According to ODOE's 2024 memorandum, *Agenda Item C (Information Item): Land Use Standard (OAR 345-022-0030) – Goal 3 Exceptions (Part I) for the December 13, 2024 EFSC Meeting*, locational dependency refers to the "proximity and interrelatedness of operations of a proposed solar facility and existing energy infrastructure or proximity to/ability to take advantage of uncommon geographical attributes." The Council has previously considered three locational dependency characteristics justified: proximity to the regional transmission grid[16], proximity to existing energy infrastructure,[17] and proximity to major transportation corridors/infrastructure.[18]

8.1.1.1 Proximity to the Regional Transmission Grid

The Solar Micrositing Area of RFA 4 has been sited around the existing Biglow Canyon Substation. As shown on Figure K-3, Biglow Canyon Substation is connected to the regional grid through six transmission lines (BPA 230-kV Biglow Canyon, BPA 230-kV Biglow Canyon-John Day, BPA 230-kV Biglow Canyon-Klondike Schoolhouse, PacifiCorp 69-kV Biglow Canyon, PacifiCorp 35-kV Biglow Canyon, and Patu Wind Farm LLC 115-kV Biglow Canyon transmission lines; U.S. Energy Atlas 2024). Another nearby connection to the regional grid is the Klondike Schoolhouse Substation located within the project boundary of Klondike III Wind Project (see Figure K-3). The two substations are connected by the BPA 230-kV Biglow Canyon-Klondike Schoolhouse transmission line (U.S. Energy Atlas 2024).

The BPA 230-kV Biglow Canyon-John Day transmission line connects the Biglow Canyon Substation to the John Day Substation located outside of Rufus near I-84 and the Columbia River. The John Day Substation is an important component of the electrical grid connecting Oregon and Washington

[16] Wheatridge Wind Energy Facility - Final Order on Request for Amendment 4 (Page 63, https://www.oregon.gov/energy/facilities-safety/facilities/Facilities%20library/2019-11-22-WRWAMD4-Final-Order-on-Request-for-Amendment-4.pdf);
[17] Nolan Hills Wind Final Order (Page 132, https://www.oregon.gov/energy/facilities-safety/facilities/Facilities%20library/2023-08-30-NHW-APP-Final-Order.pdf); Wheatridge Wind Energy Facility - Final Order on Request for Amendment 4 (Page 63, https://www.oregon.gov/energy/facilities-safety/facilities/Facilities%20library/2019-11-22-WRWAMD4-Final-Order-on-Request-for-Amendment-4.pdf); Montague Wind Project Amendment 4 Final Order (Page 98, https://www.oregon.gov/energy/facilities-safety/facilities/Facilities%20library/2019-09-06-MWP-AMD4-Final-Order.pdf)
[18] Nolan Hills Wind Final Order (Page 132, https://www.oregon.gov/energy/facilities-safety/facilities/Facilities%20library/2023-08-30-NHW-APP-Final-Order.pdf); West End Solar Project Final Order (page 86, https://www.oregon.gov/energy/facilities-safety/facilities/Facilities%20library/2023-03-24-WES-APP-Final-Order-on-ASC.pdf)

electrical grids together and sends power west to the Portland metro region. The Certificate Holder has an existing interconnection with Biglow Substation and the John Day Substation for the power generated from BCFW. PGE is working with BPA on a surplus large generator interconnection agreement (LGIA) expected in January 2026. Surplus interconnection refers to the use of unused or "surplus" capacity on an existing electrical interconnection to export additional energy—typically from a new source like solar or BESS—without the need to upgrade the existing infrastructure. In this case, PGE's BCWF is not utilizing all the capacity available under their LGIA with BPA. The solar and BESS will utilize the unused capacity. The total power exported will never exceed the originally approved interconnect limit.

The Solar Components are locationally dependent on the existing Biglow Canyon Substation because the Certificate Holder's existing interconnection agreement with BPA requires the power produced at BCWF to be delivered from the Biglow Canyon Substation via the BPA 230-kV Biglow Canyon-John Day transmission line to the John Day Substation, where the surplus interconnection is located. The surplus LGIA will require interconnection at the Biglow Canyon Substation.

There are at least twelve 500-kV transmission lines emanating from the John Day Substation (U.S. Energy Atlas 2024). The proposed location of the Solar Components is less than 6 miles from a key regional energy transportation hub and eliminates the need for a new regional substation or lengthy high-voltage transmission line to connect to this hub. The Solar Components will increase the utilization of existing grid infrastructure thereby allowing for efficient use of existing transmission infrastructure. This project will help Certificate Holder to address load demand while keeping infrastructure costs to a minimum.

8.1.1.2 Proximity to Existing Energy Infrastructure

As discussed above in Section 8.1.1.1, the Solar Components are locationally dependent on the existing Biglow Canyon Substation and the high-voltage transmission lines that emanate from it to connect to the regional grid. The Solar Components are being proposed by the Certificate Holder because of the existing surplus interconnection capacity at the John Day Substation and, to access this surplus capacity, the energy produced by the Solar Components must be delivered via the Biglow Canyon Substation and the BPA 230-kV Biglow Canyon-John Day transmission line per the BPA interconnection agreement. Existing transmission line capacity is increasingly scarce in the Pacific Northwest transmission line grid (ODOE 2023a). This constraint to existing transmission capacity, coupled with ODOE's forecast that by 2030 Oregon's electricity demand could increase approximately 40 percent (ODOE 2025), indicates that opportunities to produce electricity in a location where grid interconnection is available is increasingly critical for Oregon's energy needs. In the case of RFA 4, the Certificate Holder seeks to produce electricity within the same area as an existing energy facility (i.e., the BCWF) using existing electric infrastructure and utilizing existing transmission capacity. By locating the Solar Components adjacent to this existing electrical infrastructure, more electricity will be delivered to the power grid without the need to build new transmission capacity.

The Solar Components are also co-located with BCWF and will utilize, in part, existing turbine access roads. Co-locating the Solar Components with the BCWF will not only optimize the total energy produced in proximity to available interconnection supply but will also optimize the energy generated by the wind component by allowing excess wind energy to charge the BESS. The proposed location consolidates land use impacts to agricultural lands that are already within or adjacent to the boundaries of renewable energy projects rather than spreading the impacts across a broader more dispersed portion of the county. Additionally, it does not require the construction of a new regional substation.

In several previous final orders for solar facilities under EFSC jurisdiction, the Council has found proximity to existing energy infrastructure as a reason for a Goal 3 exception. The Final Orders of Nolin Hills Wind, Wheatridge Wind Energy Facility Request for Amendment 4, and Montague Wind Project Amendment 4 all reference proximity to existing energy infrastructure (i.e., wind turbines) or proximity to a proposed co-located wind project as justification for a Goal 3 exception. For example, page 98 of the Montague Wind Power Facility Final Order on Request for Amendment 4 states: "It is relevant to the Goal 3 exception reasons to consider that the Phase 2 solar facility components would be located in close proximity to existing infrastructure, "co-located" with the Phase 1 Montague facility currently under construction." The Phase 1 Montague facility referenced in the Final Order is Phase 1 of the wind facility. In the Nolin Hills Final Order, page 132, the Council found:

> "… the land on which the solar site would be located, is particularly suited for development of a solar facility given its proximity to the proposed wind facility components and infrastructure because the solar facility would be able to: utilize an existing road during construction and operation of both wind and solar facility components; share energy infrastructure with wind facility components; and avoid any impacts to irrigated agriculture."

In all three Final Orders (i.e., Nolin Hills Wind, Wheatridge Wind Energy Facility Request for Amendment 4, and Montague Wind Project Amendment 4), where locational dependency reasons are discussed, there is no reference to agricultural activities or soil analysis to justify the locational dependency reason related to co-location to existing or proposed wind facilities for these solar projects. Therefore, in past decisions, EFSC found that the "locational dependency" reason is not dependent on the context of the agricultural activities or soil types found within the exception area.

While not directly applicable to the analysis, the Certificate Holder also points ODOE to the Department of Land Conservation and Development (DLCD) rules in OAR 660-004-0022 that expressly deem locational dependency a justifiable reason for approving a Goal 3 exception for a solar facility as rural industry development. That rule was amended in February 2022 to enumerate solar as a type of rural industry development that may rely on the DLCD locational dependency reason. That rule also has no relationship or requirement to address soils. As stated above in Section 8.1.1, the locational dependency reason is relevant to "proximity and interrelatedness of operations of a proposed solar facility and existing energy infrastructure or proximity to / ability to take advantage of uncommon geographical attributes." In this case, the Solar Components would be

sited near the existing BCWF electrical infrastructure and supporting facilities (i.e., collector roads). As shown on Figure K-3 and more extensively on Figure 4 in the RFA 4 Division 27 document, several renewable energy projects are also located within 10 miles of the Solar Components:

- Biglow Canyon Wind Farm, 450 MW, operating
- Golden Hills Wind Farm, 200 MW, operating
- Hay Canyon Wind Power, 100.8 MW, operating
- Klondike III Wind Projects, 300 MW, operating
- Leaning Juniper IIA Wind Power Facility, 90.3 MW, operating
- PaTu Wind Farm LLC, 9 MW, operating (U.S. Energy Atlas 2024)
- Summit Ridge Renewable Energy Facility, 261 MW, under review

In addition to the factors described above regarding the justification for the Solar Components locational dependency, the location of the Solar Components provides additional benefits from being sited near existing energy infrastructure, including the ability to leverage the established skilled workforce trained in renewable energy installations.

As discussed in the Economics Section XIV of the Sherman County Comprehensive Plan, Sherman County has benefitted from utility-scale renewable energy projects since the beginning of the 21st Century. The continued development and maintenance of these facilities within the county over the past twenty years has created a "significant job market for high-tech maintenance people and thus a significant impaction the small communities, in terms of job creation and housing to serve the new technicians." In order to locally meet the employment demand in these new technologies, local organizations, such as the Mid-Columbia Council of Governments and the Columbia Gorge Community College, have developed renewable energy facility-specific training programs (CGCC 2024). The on-going construction of new renewable energy facilities will leverage the existing local workforce skilled in constructing, maintaining and operating these facilities. Leveraging the use of the existing local renewable energy workforce will not only benefit the Certificate Holder by having access to a local skilled work force but will also benefit the local community through creation of additional job opportunities for this established workforce (thus building additional resiliency for job security for existing workers and perhaps providing additional opportunities to attract more workers into the community) as well as for local contractor work.

8.1.1.3 Proximity to Major Transportation Corridors/Infrastructure

The Solar Components are within 5 miles or less of a major transportation corridor. To the north is I-84 and to the west is US-97 and OR-206. These transportation corridors have successfully provided access and materials transport for many existing renewable energy facilities, including the BCWF, Klondike III Wind Project, PaTu Wind Farm LLC, Golden Hills Wind Farm, Hay Canyon Wind Farm, Star Point Wind Project LLC, Wheat Field Wind Power Project, Leaning Juniper Wind Power III, and many others. There is also an extensive network of existing county roads traveling both

adjacent to and through the Solar Micrositing Area. These roads include N Klondike Road, Old Wasco-Heppner Highway, Medler Lane, Oehman Road, Herin Lane, and Biglow Canyon Road. There are also private roads along the BCWF turbine corridor that run within the Solar Micrositing Area.

As shown on Figure U-2 and discussed in Exhibit U, existing county roads and the Old Wasco-Heppner Highway directly connects the Solar Components to US-97 and OR-206, which has been identified by the Certificate Holder as a primary transportation route. The location of the Solar Micrositing Area therefore eliminates the need to construct major new access routes to connect with the regional transportation network, as well as minimizes the need for new access roads within the Solar Micrositing Area. As a result of this proximity to existing roadways and the larger transportation network, the ability for materials and workers to reach the Solar Micrositing Area is more efficient, less costly, and less impactful to the environment than another site that lacks similar existing access and would require substantially greater roadway construction.

8.1.2 Minimal Impacts to Resources Protected by Council Standards.

The Council has recently found "minimal impacts to resources protected by Council standards" or "minimal impacts to other environmental resources" as one of the "reasons" that cumulatively justify taking an exception to Goal 3 in five prior Final Orders: Madras Solar (ODOE 2021b), West End Solar (ODOE 2023b), Nolin Hills (ODOE 2023c), Wagon Trail Solar (ODOE 2024a), and Sunstone Solar (ODOE 2024b).

The Solar Micrositing Area is sited to avoid sensitive environmental features, including Washington ground squirrel (*Urocitellus washingtoni*) occupied habitat, FEMA 100-year floodplains, U.S. Fish and Wildlife Service-designated critical habitat, ODFW-designated big game winter ranges, and wetlands and waters. The Solar Components' environmental consequences are discussed primarily in Exhibit I (Soil Conditions), Exhibit J (Wetlands and Other Jurisdictional Waters), Exhibit L (Protected Areas), Exhibit P (Fish and Wildlife Habitats and Species), Exhibit Q (Threatened and Endangered Species), Exhibit R (Scenic Resources), and Exhibit S (Historic, Cultural, and Archaeological Resources). These exhibits demonstrate that the Solar Components will avoid and minimize impacts to environmental resources.

8.1.2.1 Wildlife Habitat, Waters and Wetlands, Floodplains

No ODFW-designated big game winter ranges or FEMA 100-year floodplains are present within the Solar Micrositing Area. All of the seven wetlands identified through desktop review and on-site survey as reported in Exhibit J, will be avoided through the use of a minimum of 50-foot buffers by all construction activities and permanent impacts. The Solar Components avoid almost all impacts to ODFW wildlife habitats (Category 1-Category 5), with only 1.6 percent (23.7 acres) of the approximately 1,445 acres of permanent impact area impacting ODFW classified wildlife habitats.[19]

[19] The 43.5 acres include habitat categories 2 through 5 only, no category 1 habitats exist within the RFA 4 site boundary.

The remaining 98.4 percent, or 1,420.9 acres, are considered ODFW Category 6 habitat, which is either developed or agriculture land that has little habitat value (see Exhibit P, Table P-6).

Surveys of the Solar Micrositing Area did not observe threatened, endangered, proposed, or candidate vascular plant species or nesting state sensitive species (see Exhibits P and Q). The botanist observed that vegetation within much of the Solar Micrositing Area has been modified due to historic and current agricultural activity, historic and current grazing activity, and construction and management of BCWF. A desktop review determined that no state-listed fish or wildlife species have the potential to occur within the Solar Micrositing Area. Because threatened, endangered, proposed, or candidate species and state sensitive species are not present within the Solar Micrositing Area, construction, operation, and maintenance of the Solar Components are not expected to result in a significant reduction in the likelihood of survival or recovery of them.

For the approximately 23.7 acres of land within the Solar Micrositing Area classified as ODFW wildlife habitat categories 2 through 4, permanent habitat loss will be mitigated for according to ODFW Habitat Mitigation Policy goals and standards, as described in the Solar Micrositing Area HMP (see Attachment P-2 to Exhibit P). The monitoring identified in the HMP (see Attachment P-2 to Exhibit P) will inform the need and type of mitigation required. If ODOE determines that mitigation is needed, the Certificate Holder shall propose appropriate mitigation actions to ODOE and shall carry out mitigation actions approved by ODOE, subject to review by the Council. The monitoring and mitigation will be in place for the duration of the Solar Components (see Exhibit P).

8.1.2.2 Protected Areas and Scenic Resource Values

The Solar Components have a low profile on the landscape compared to BCWF. As detailed in Exhibit R, RFA 4 will continue to comply with Site Certificate Condition 50, which includes painting facility buildings and structures in low-reflectivity neutral colors to blend with the surrounding landscape, limiting nighttime lighting, and implementing measures to reduce potential visual impacts from construction equipment. RFA 4 does not change the ability of the Certificate Holder to comply with the existing Site Certificate conditions imposed to reduce potential visual impacts.

Soils

Current soil impacts within RFA 4 primarily occur to land used for dryland wheat farming, in addition to some smaller areas used for irrigated farming and development. The farming activities within the Solar Micrositing Area involve tilling or herbicide use in between crop cycles and the use of heavy equipment to plant, manage and harvest the crops. These activities have the potential to cause erosion, soil compaction or add chemicals into the soils. As described previously, the placement of the Solar Components has been concentrated (approximately 98.4 percent of the Solar Micrositing Area) on land currently in farm use or that is already developed (see Exhibit P, Table P-6). This prevents impacts to undeveloped or sensitive soils and will reduce the need for vegetation clearing and grading, due to the land already being cleared of vegetation and being generally flat for farming. Further, as described in Exhibit I, potential soil impacts from RFA 4 construction, operation and decommissioning will be prevented through the use of BMPs and adherence to the Draft ESCP (Attachment I-1). Some BMP examples include stabilized construction entrances/exits,

silt fencing, preserving existing vegetation, revegetation and stabilization matting. Additionally, the Certificate Holder will continue to implement a monitoring program in compliance with Condition 30 in the Third Amended Site Certificate, which requires the Certificate Holder to inspect and maintain all Existing Facility components routinely, and, as necessary, maintain or repair erosion and sediment control measures (Council 2008).

8.1.2.3 Historic, Cultural and Archaeological

To satisfy Site Conditions 69 through 73, a monitoring plan will be established in consultation with the Council and Tribes. Disturbance will not occur within 20 meters of any NRHP-eligible, -listed, or unevaluated cultural resources. If disturbance is planned within an avoidance buffer, the Certificate Holder will consult with the Council and Tribes, and an archaeological or Tribal monitor must be present. All impacts to significant cultural resources will be avoided through Solar Components design.

In sum, as evidenced by each of the paragraphs above, the Certificate Holder has carefully chosen a Solar Micrositing Area that limits impacts to sensitive environmental features by using land that is already disturbed and considered as having little habitat value. Choosing land in farm use allows for the preservation of undeveloped habitats, sensitive lands and waterways in other parts of the county. The Solar Components, as proposed, are not anticipated to have any significant adverse impacts to soils, wetlands, protected areas, water resources, fish and wildlife habitat and species, threatened and endangered species, scenic and aesthetic resources, and historic, cultural, and archaeological resources.

8.1.3 Rural Local Economic Development Benefits:

As detailed in Appendix K-2, the Solar Components would generate significant economic benefits for Sherman County. As noted in the ODOE memorandum dated October 5, 2021, local economic benefits associated with a proposed solar facility typically include lease payments to underlying landowners, direct economic benefits to local governments, and various other direct and indirect benefits to the local economy (ODOE 2021a). In the following sections, the Certificate Holder outlines how the Solar Components will bring rural local economic benefit to Sherman County by 1) creating jobs as well as direct and indirect local economic benefits during construction and operation; 2) by adding to the local tax base which directly benefits the agricultural community; 3) by creating a CIP; and 4) through landowner lease payments.

Understanding Sherman County's rural economic profile is an important context when considering the economic impacts and benefits of renewable energy facilities in this community. As noted in Attachment K-2 (Agricultural and Fiscal Impact Analysis), Sherman County is a rural county with a predominately agricultural-based economy. Sherman County had a total estimated population of 1,917 in 2023, ranking 35 out of the 36 counties in Oregon in terms of population (Portland State University 2024). The agricultural sector accounted for 21 percent of local jobs in 2023 in Sherman County compared to 2.2 percent statewide (see Table 3 in Attachment K-2). Furthermore, of the top 20 industries listed for Sherman County by IMPLAN, "grain farming" was listed as the largest sector

by employment, accounting for 188 jobs, or 60 percent of total agricultural employment and 13 percent of all employment in the County.

As noted in Attachment K-2, total tax payments to Sherman County through the Strategic Investment Program (SIP) from the four renewable energy projects identified in the analysis (BCWF and three wind farms owned by Avangrid) far exceeded the total annual property tax revenues collected in Sherman County each year from 2018 to 2023 (see Figure 3 in Attachment K-2). Property taxes are one of the most important sources of revenue for the public sector in Oregon, helping to support police, fire protection, education, and other services provided by local taxing districts. Review of the Sherman County Adopted Budget report for fiscal year 2022 to 2023 indicates that SIP funds received in Sherman County were allocated to the Sherman County School District, local cities, the Resident Incentive Program, Sherman County Museum, and scholarship committees (Sherman County 2022). There is no doubt that tax payments from renewable energy projects have increased tax revenue in Sherman County. What is important to note is that support of public sector programs such as police, fire protection, roads, weed control, schools, and others in turn supports the agricultural sector in Sherman County as the farms that make up the majority of the County's land base, the farmers who own and operate the farms, and farm workers and other county residents who work within the local farm economy (i.e., truck drivers, mechanics, suppliers) benefit from these tax-funded programs.

PGE's BCWF is a known supporter of the local community not only through the annual payments in property tax, but also through its charitable donations and local spending for operations. For example, in 2023, BCWF donated funding to the Sherman County 4H, Sherman County Athletic Foundation, Sherman County Education Foundation, Rufus Food Pantry, Sherman County Senior Center, and Mid-Columbia Community Action Council. Furthermore, the BCWF spends significant amounts of money annually with the county for weed control and with a local contractor out of Wasco for road grading, gravel replacement, and snow removal.

The positive economic impact energy projects have had in Sherman County is evident through the public infrastructure and programs the County has been able to fund in part or wholly through SIP agreements and through the creation of "a significant job market for high-tech maintenance people and thus a significant impact on the small communities, in terms of job creation and housing to serve the new technicians" (Sherman County 2007). The construction and operation of the Solar Components will continue to contribute to these local economic benefits through job creation, direct and indirect economic spending during construction and operations, and through property tax payments. Furthermore, as evidenced in Section 8.1.3.3 below, the Certificate Holder proposes to provide a CIP that will further ensure any negative economic impacts that could result from the decrease in total acres of wheat production in the county will be offset by investments in the local agricultural community. Finally, as further evidenced in Section 8.1.3.4, the landowner who would receive solar lease payments through the operational period of the Solar Components plans to continue to farm lands outside the solar lease area. Lease payments are a key mechanism for these farmers to diversify their income streams allowing them to invest in their farming operations and further protect their family farms from global economic pressures in the winter wheat market and

from further farm consolidation that has reduced the number of small to medium sized family wheat farms in the country (USDA 2022b, USDA 2024).

8.1.3.1 Job creation and direct and indirect local economic benefits during construction and operation

During the Solar Micrositing Area construction, Certificate Holder expects a daily average of 165 workers on-site during the 17- to 19-month construction period, with a peak number of 350 workers while multiple disciplines of contractors complete their work simultaneously during periods of the highest activity (approximately 4 to 6 months during construction). Certificate Holder anticipates that approximately 30 percent of the construction workforce will be local residents within a 1-hour commuting distance/duration to the Solar Components. The size of the skilled local workforce is continually growing as more solar farms are built in eastern Oregon, so the percentage of local construction workers may be higher than estimated.

The Certificate Holder expects that the Solar Components will require up to three personnel for daily maintenance activities during operations over its 40-year lifespan. The O&M staff will be hired locally, to the extent that skilled workers are available. The Certificate Holder currently contracts with the Sherman County Weed Control District to inspect and treat weeds at BCWF and will continue to use their staff's services to treat the Solar Micrositing Area.

8.1.3.2 Property tax payments directly support the agricultural community

The Council has recently not accepted evidence related to the economic benefits from property tax payments as a justifiable reason for a Goal 3 exception. The reasoning being that any development will result in some level of tax revenue which is a general local economic benefit, and therefore does not justify a reason for an exception to Goal 3.[20] [21] PGE maintains that, notwithstanding the Council's prior consideration of this reason, economic benefits from property tax payments justify the requested Goal 3 exception because of the very nature of Sherman County's rural economic profile.

It is critical to understand Sherman County's rural economic profile when considering the economic impacts and benefits of tax revenue produced by renewable energy facilities in this community. Public sector programs funded through tax revenue such as police, fire protection, roads, weed control, schools, and so on all support the agricultural sector in Sherman County as the farms that make up the majority of the County's land base and the largest sector of the County's economy and the farmers who own and operate the farms, as well as farm workers and other county residents who work within the local farm economy (i.e., truck drivers, mechanics, suppliers), benefit from

[20] Wagon Trail Solar Project – Final Order on Application for Site Certificate – September 20, 2024, Page 108. https://www.oregon.gov/energy/facilities-safety/facilities/Facilities%20library/2024-09-26-WTSAPP-SIGNED-Final-Order.pdf

[21] Sunston Solar Project – Final Order on Application for Site Certificate – November 18, 2024, page 120. https://www.oregon.gov/energy/facilities-safety/facilities/Facilities%20library/2024-11-18-SSPAPP-Final-Order.pdf

these tax-funded programs. For example, County-funded improvements and maintenance to county roads is critical for farmers to haul their wheat harvest to Mid-Columbia Producers' facilities in Wasco and Biggs Junction. Another example is County-funded equipment for rural fire fighting and fire prevention that is critical to keeping farmland protected from wildfire that can be catastrophic to a wheat crop and/or critical farm infrastructure (e.g., equipment, structures, etc.). Given that agriculture is the leading economic output for Sherman County and 21 percent of the population is employed in the agricultural sector (the largest economic sector in Sherman County followed by warehousing and storage and federal government sectors; see Attachment K-2, Tables 3 and 10) improvements specifically to roads and transportation infrastructure, fire response, local schools, and community buildings funded by tax payments and community service fees from renewable energy projects in Sherman County do directly benefit the agricultural community and economy.

The Solar Components would result in the permanent disturbance of 1,445 acres of agricultural land located in one tract. The 1,924-acre Solar Micrositing Area/RFA 4 Site Boundary includes a second tract, a 12.9-acre tract owned by Certificate Holder, which is the site of the existing Biglow Canyon Substation. This tract is not part of the Solar Area. There are nine tax code areas in Sherman County. The two tracts in the RFA 4 Site Boundary are located in Tax Code Area 7-2, Rural Wasco, Rufus. Tax Code Area 7-2 includes six taxing districts with a combined levy or millage rate of 15.7369 in 2024-2025 (Table K-12).

Table K-12. Taxing Districts and Mill Rates for Sherman County Tax Code Area 7-2, 2024-2025

Taxing District	Mills
Sherman County	8.7141
Sherman Soil and Water Conservation District	0.2600
North Central ESD	2.0193
North Central Rural Fire Protection District	0.8452
Sherman County School District	3.4203
Sherman Health District	0.4780
Total	**15.7369**
Source: Sherman County 2024	

In particular, taxes received by Sherman County, the Sherman County Soil and Water Conservation District (SCSWCD), and North Central Rural Fire Protection District have all resulted in investment back into the local agricultural economy. Sherman County is responsible for road maintenance and improvements, which farmers rely on to move their equipment on throughout the lifecycle of their crops and especially for moving their crops to their end destinations for sale. SCSWCD manages the Noxious Weed List and the County Cost Share program providing reimbursement to farmers for

implementing conservation practices[22] and other practices, such as herbaceous weed control and pasture/range planting (SCSWCD 2024). For example, projects submitted to SCSWCD of up to $20,000 costs have a 75 percent cost share rate (SCSWCD 2024).

The 2018-19 Sherman County Budget Committee Minutes state that SIP funding was provided to local fire departments, specifically to the North Sherman Fire District for their new fire hall, which was estimated to cost $1.8 million. "Between tax payments and SIP payments last fiscal year, North Sherman Fire District received $280,399, Moro Rural Fire received $118,486, and South Sherman Fire & Rescue received $49,116." Sherman County SWCD 2022-2023 budget showed $41,000 from SIP & Community Service Fee – *Wind Tower Money (this will probably be more but County didn't know how much yet)*[23], while the 2024-2025 Budget Notes showed SIP & Community Service Fee – Wind tower money at $30,000.[24]

PGE has not entered into any tax arrangements with Sherman County at this time but anticipates entering into a Fee in Lieu of Property Taxes for solar projects program(referred to as the Solar Payment in Lieu of Taxes [Solar PILOT] in the following discussion) (see Attachment K-2). The fiscal impact analysis presented in Attachment K-2 estimates potential property tax payments for the Solar PILOT assuming a 40-year operating life of the Solar Components. Total estimated payments to Sherman County would be approximately $40.1 million (Solar PILOT). This estimate represent the minimum potential payments under the program (see Attachment K-2).

Payments under the Solar PILOT scenario would extend over 20 years and be a fixed amount per MW over this period. Payments under a Solar PILOT would be made to the taxing districts that comprise Tax Code Area 7-2 in accordance with their established levies (which combined make up the Area 7-2 millage rate) (see Table K-12).

Table K-13 shows the anticipated distribution of the Project-related property tax revenues by scenario and taxing district based on the established levies for Tax Code Area 7-2. Sherman County would receive the largest share (55 percent) of the increased government revenues generated by the Project. Activities that are financed by general fund revenues in Sherman County include roads, law enforcement, public health, weed control, land use planning, assessment and taxation, district attorney, juvenile services, and general administration.

[22] Some examples: Herbaceous Weed Control, Range Planting, Critical Area Planting, Cover Crop, Prescribed Grazing, Obstruction Removal, Riparian Forest Buffer, Riparian Herbaceous Cover, and Spring Developments. https://www.shermancountyswcd.com/county-cost-share
[23] https://www.shermancountyswcd.com/files/7efb63873/22-23_budget_notes.pdf
[24] https://www.shermancountyswcd.com/budget

Table K-13. Estimated Property Tax Revenues by Taxing District

Taxing District	Mills[2]	First Full Year of Operation (Year 2)[1]	40-Year Operating Life[1]
		Solar PILOT	Solar PILOT
Sherman County	8.7141	0.4	22.2
Sherman Soil and Water Conservation District	0.2600	0.0	0.7
North Central Education Special District	2.0193	0.1	5.2
North Central Rural Fire Protection District	0.8452	0.0	2.2
Sherman County School District	3.4203	0.1	8.7
Sherman Health District	0.4780	0.0	1.2
Total	**15.7369**	**0.7**	**40.1**

Notes:
1. Estimates are in millions of dollars.
2. Mills are the millage rates for the taxing districts in Tax Code Area 7-2 for 2024-25 (Sherman County 2024).

Other government units that would receive Solar Components-related property tax revenues include the North Central Sherman Rural Fire Protection District, the Sherman County Soil and Water Conservation District, and the Sherman County Health District. Increased funding for the North Central Sherman Rural Fire Protection District could indirectly benefit agricultural activities through the provision of additional funds for wildland firefighting. Similarly, increased funding to the Sherman County Soil and Water Conservation District would help with conservation of natural resources and potentially benefit agricultural activities.

In all cases, Solar Components-related property tax revenues would represent an important new source of funds that would otherwise not be available to these government units.

8.1.3.3 Creation of a Community Investment Plan

As noted in Section 3.4.2, the Certificate Holder assessed the potential economic impacts of removing 1,445 acres of arable land from agricultural production. The Agricultural and Fiscal Impact Analysis (Attachment K-2) modeled the economic impact of the anticipated wheat production loss from the Solar Micrositing Area. The modeled indirect economic impacts are anticipated to be the best measurement of potential economic effects to the local economy from the removal of land from cultivation and represent a reduction in local spending on inputs for dryland wheat farming. For example, the farmers currently purchase fuel, seed, and fertilizer and chemicals from local suppliers including Mid-Columbia Producers, Morrow County Grain Growers, McGregor Company, and Ed Staub & Sons. Some of this annual spending by the wheat farmers would be replaced or exceeded by PGE's anticipated operational spending on maintaining the Solar Components area such as expenditures on weed control services and road maintenance.

The Certificate Holder anticipates it will continue to use Sherman County Weed Control District services to treat the Solar Micrositing Area, contingent upon the District's capacity to perform the

work. If the District is unable to provide these services, the Certificate Holder will collaborate with other agricultural community organizations to implement BMPs to prevent the spread of existing noxious weeds. For this reason, PGE anticipates no reduction in spending on chemical inputs for weed control within the local agricultural economy and in fact, anticipates increased spending as the number of acres PGE will be managing in Sherman County will increase with the construction of the Solar Components.

Despite the fact that operation of the Solar Components would include spending on agricultural inputs (i.e., chemicals for weed control) in the local economy, the Agricultural and Fiscal Impact Analysis (Attachment K-2) conservatively modeled the economic impacts for Sherman County without factoring in annual spending by PGE on operation of the Solar Components to offset the modeled indirect impacts.

Using a worst-case scenario impact analysis of a full build out resulting in the loss of 1,445 acres of dryland wheat over 40 years, PGE estimates that the Solar Components may result in a loss of annual indirect economic output of $100,000 over the life of the BCWF, as amended. This loss of indirect economic output represents decreases in spending on wheat farming inputs like seeds, fertilizer, and fuel and contract services. The annual indirect impacts were modeled from the estimated annual value of agricultural production of $281,300 which supports less than 1 indirect FTE jobs in indirect labor, a de minimis job loss in the County's agriculture and forestry sector.

Although spending in the local agricultural economy from wheat farming is anticipated to be partially or mostly replaced with operational spending for facility maintenance, PGE and the Project Developer have developed the CIP to ensure that any potential adverse impacts from the Solar Components are offset to a level acceptable to Sherman County and the community. Under the CIP, PGE and the Project Developer will partner with Sherman County and the MCEDD to establish and manage a mitigation fund that will distribute dollars for projects having a benefit to the Sherman County agricultural economy.

PGE will contribute $1,600 per acre into the mitigation fund for each acre the Solar Components remove from agricultural production.[25] The total number of acres removed will be determined based on the final layout confirmed during the ODOE pre-construction compliance review. The CIP (Attachment K-4) provides details of the establishment and administration of the mitigation fund. As discussed further below, PGE, the Project Developer, Sherman County, and MCEDD are negotiating a Memorandum of Understanding to document their working relationships and the procedures that will govern implementation of the CIP and allocation of dollars from the mitigation fund for selected projects.

To help inform the development of the CIP and to identify example projects that could be funded through the mitigation fund, PGE and the Project Developer spent considerable time and effort coordinating with the local agricultural community to understand what potential projects/investments would be most beneficial to support the local agricultural economy. Meetings

[25] Calculated over a period of 40 years of operation, and adjusting for inflation, the estimated indirect output would be up to $2,315,218 or $1,600 per acre of farmland taken out of production.

were held with local wheat farmers, the Oregon Watershed Enhancement Board, Oregon State University including its extension service in Sherman County and the College of Agricultural Sciences, the Oregon Wheat Commission, the Sherman County Fire District, Sherman County Emergency Services, the Rural Sherman County Fire Board, the Weed Master, the Road Master, the County Planning office, and County Judge. The Project Developer also contacted the SCSWCD to discuss the Project and potential mitigation projects, and looks forward to an opportunity to meet with the SCSWCD.

Several key themes for possible agricultural mitigation investments emerged from this coordination:

1. Investments in minimizing wildland fire risk to agricultural crops, properties, and infrastructure and minimizing risk of liability to farmers from farm activities igniting fires and impacting non-farm uses in the agricultural district.
2. Research into agrivoltaics techniques in the context of dryland farming in central and eastern Oregon.
3. Research into long-term effects to soils that have been removed from cultivation and placed in long-term vegetation management programs within solar array areas.
4. Maintaining and/or improving weed control county-wide on agricultural lands and minimizing costs for weed control.
5. Technical assistance training for heavy equipment operation and repairs for farmers and laborers in the County to provide uplift in firefighting support, construction, and farming.
6. Providing funding for 4H, National Future Farmers of America Organization, or other youth programs.
7. Providing additional funds to supplement NRCS and SCSWCD cost share programs for technical assistance programs such as improving haul routes, weed control, establishing fire breaks, etc.

Dryland wheat farmers also shared that the primary challenge facing dryland wheat farming is the continued increase in the cost of farming inputs and the continued low market price of wheat. As noted in Attachment K-2, the 10-year average price per bushel of wheat of $6.28 is less than the price per bushel of wheat in 2014 ($6.72). Although prices went up temporarily in 2021 and 2022 due to global supply shortages related to the war in Ukraine, the price of wheat continues to stay stagnant and at times decline or at the very least, has not increased at the same rate as the costs of essential farm inputs such as chemicals, fuel, and equipment.[26] The stagnation of the price of wheat is related to the global market and, as the majority of dryland winter wheat produced in Oregon is

[26] See: As the wheat harvest progresses, prices are 'stubbornly low' | Capital Press and U.S. wheat export price near lowest on global market | Capital Press and statements from Oregon Wheat Commission CEO Amanda Huey here: OREGON WHEAT: A Case Study in Gratitude - Progress: Advancing the future of agriculture and natural resources

exported to international markets,[27] Oregon wheat farmers must compete with foreign produced wheat at lower costs. Consequently, producers have continued to look at methods to drive down the cost per bushel to remain competitive in the global market and this trend has resulted in the consolidation of smaller and medium-sized farms (USDA 2022b, USDA 2024) as well as dependencies on government subsidies for insurance and market development to remain competitive. Throughout the country there has been a decline in wheat production and, per the USDA, this is attributed to the fact that many wheat farmers in the U.S. have moved wheat into a rotational crop to use the same fields for more profitable crops such as corn or soybeans (USDA 2024). According to the USDA Economic Research Service's commodity cost and returns estimates, the value of production less operating cost for wheat, which is a measure of profitability, has grown from $101.72 per acre in 2017 to $185.26 per acre in 2022. The same measure of profitability for corn has more than doubled from $273.77 per acre to $654.46 per acre, more than 3 times that of wheat. The value of production less operating costs for soybeans has also grown from $296.64 per acre in 2017 to $441.53 per acre in 2022 (USDA 2024). Wheat farmers in other parts of the country that have more rainfall or access to irrigation have options to diversify their crop types to increase profitability of their agricultural crops. Dryland farmers in central and eastern Oregon do not have the option to rotate crops with corn or soybeans due to the limitations on rainfall and no access to irrigation water. Based on discussions with landowners, there may be interest in exploring alternative dryland crops that may yield better profits, but until more research is done on these alternatives, they are reluctant to take on this risk.

The fiscal challenges wheat farmers are facing in Oregon and in the Columbia Basin have not been caused by renewable energy development. In contrast, farmers in Sherman County have pointed to the wind farm leases as helping them diversify their income streams, thus allowing them to make critical investments in their wheat farming operations and equipment allowing them to strengthen the resilience of their farms in the face of the ongoing global wheat market challenges. These farmers expressed interest in solar projects that offer similar financial support to their farm operations and give them the flexibility to evaluate new agribusiness models such as agrivoltaics, new crops/markets, and/or agritourism. Diversified revenue from renewable energy development helps offset risks of new agribusiness models. For example, farmers expressed interest around the potential for developing agrivoltaics with dryland crops.

Based on information provided by Oregon State University (OSU) Associate Professor Chad Higgins (the preeminent researcher of agrivoltaics in the United States), partial shading from solar panels has shown increase in crop production while using less water in western Oregon (Hassanpour Adeh et al. 2018). Professor Higgins and his team of researchers and students are researching agrivoltaics at OSU's Nexus of Energy, Water, and Agriculture Laboratory and are looking for funding to explore further research within the context of central and eastern Oregon. Based on the models OSU has developed from their current research, Professor Higgins anticipates that there is

[27] More than 80 percent of Oregon produced wheat is exported from the Port of Portland to global markets see: OREGON WHEAT: A Case Study in Gratitude - Progress: Advancing the future of agriculture and natural resources and Wheat of the World in Oregon - Farm Flavor

significant potential for increasing yields for dryland wheat (as well as other dryland crops) when grown in partial shade of solar panels, and he has outlined how cropping systems can be integrated into utility-scale solar projects with minimal change to solar project design. However, additional research within the context of dryland farming in the central and eastern Oregon context is needed to further the potential feasibility of agrivoltaics with not only dryland wheat but other possible dryland crops. This is an exciting opportunity for the state of Oregon given the need to find a balance between renewable energy development and agricultural land use. Several farmers expressed interest in potentially collaborating on future demonstration projects to further the research for applying agrivoltaics in the arid dryland cropping context of Sherman County and eastern Oregon and welcome the idea of mitigation money to support these research efforts.

Under the CIP, the Sherman County Court will select what projects would be funded and/or what organizations would be awarded mitigation funds. The CIP identifies selection criteria unique to the Sherman County agricultural community and its specific needs that will be applied to proposed mitigation projects. These selection criteria ensure that selected projects will bring economic benefit to the County's agricultural community, which is primarily composed of dryland wheat farmland and revolves around dryland wheat farming. MCEDD will administer the mitigation fund pursuant to an Administration Agreement described in the in the Memorandum of Understanding (Attachment K-4).

The CIP contemplates five projects that are considered "pre-screened" as meeting, on balance, the selection criteria for a qualified mitigation project. A project proponent for one of these pre-screened projects would need to apply to MCEDD for funding through the CIP, but these projects will not need to be evaluated by the Selection Committee. Upon receipt of a complete application for a pre-screened project, MCEDD will package the application materials for the Sherman County Commission's consideration whether to fund at the requested amount. A five-person advisory committee (Selection Committee) coordinated by MCEDD will review applications for projects that are not on the pre-screened list and make recommendations to Sherman County Court on funding. The County Court will ultimately determine what projects to fund with the CIP mitigation fund and will either approve projects that meet the pre-screen project list or approve new projects recommended by the Selection Committee. In total, up to $2,315,218 of mitigation funds may be awarded under the CIP, depending on the final project impact footprint.

The Certificate Holder maintains that the CIP provides sufficient information to guide Sherman County's selection of mitigation projects to be a) responsive to the community's needs; b) beneficial to the dryland wheat community; and c) more than sufficient to counter any indirect economic impacts from the Solar Components.

The CIP ensures that the rural local economic benefits will offset potential adverse impacts to Sherman County's agricultural economy.

8.1.3.4 Landowner Lease Payments

ODOE issued a letter on November 27, 2024, outlining guidance on acceptable Goal 3 exception request reasons.[28] Reason #2 *Local Economic Benefits / Benefits to the Local Agricultural Economy*, includes a demonstration that economic benefits resulting from the establishment of the facility on farmland will benefit the local agricultural economy. Landowner lease payments have been found to justify, in part, an exception from Goal 3 if sufficient evidence is presented (including oral and written testimony from participating landowners) that lease payments would be used to support agricultural operations.

The landowner involved in RFA 4 has a lease agreement for the Solar Components. As stated previously, the landowner has stated that they will be able to continue farming on their remaining lands and no jobs will be lost. The Tract 1 owner anticipates spending more per acre on their remaining farm due to the increase in income.

As noted in Section 8.1.3.3, many of the farmers contacted during the outreach on the Solar Area and the CIP pointed to the wind farm leases as helping them diversify their income streams thus allowing them to make critical investments in their wheat farming operations and equipment allowing them to strengthen the resilience of their farms in the face of the ongoing global wheat market challenges. Farmers have indicated that adding solar leases to their existing farming operations would provide further flexibility to look at new agribusiness models such as agrivoltaics, new crops/markets, and/or agritourism. Farmers also expressed interest around the potential for developing agrivoltaics with dryland crops. Landowner lease payments provide this diversified income stream to allow landowners to take more risks in investing in new technologies, new cropping systems, and agrivoltaics. This diversification is critical to help wheat farmers continue to be competitive in an increasingly challenging global wheat market.

8.1.4 Consistency with Oregon's Policies and Goals Requiring the State to Address the Climate Crisis

As stated in the Final Order for the Wagon Trail Solar Project (ODOE 2024a), the Council notes that Oregon is taking measures to combat climate change including Statewide Planning Goal 13 and House Bill 2021, which aim to reduce the emissions of greenhouse gases and/or encourage the development of renewable energy sources. The Certificate Holder agrees with the Council's determination in the Wagon Trail Final Order that these goals and policies do not address *where* renewable energy facilities should be located or suggest such facilities may be placed on agricultural lands as an exception to Goal 3. However, as outlined below, the Certificate Holder respectfully submits that previous LUBA decisions do not prohibit Council from considering Oregon's goals and policies that relate to the acceleration of Oregon's clean energy transition in a justification as to why the state policy embodied in Goal 3 should not apply. Furthermore, as discussed earlier in Section 8.1, the Council has the discretion and power to balance the policies

[28] *Agenda Item C (Information Item): Land Use Standard (OAR 345-022-0030) – Goal 3 Exceptions (Part I) for the December 13, 2024 EFSC Meeting*, Sarah Esterson, Oregon Department of Energy.

that are embedded in the goal for which an exception is sought with its policy directive in ORS 469.010. The legislature granted the Council such discretion when it adopted a different goal exception test in ORS 469.504 than the ORS 197 test.

Summary of State Policies and Goals Requiring the State to Address the Climate Crisis

In 2021, Governor Kate Brown signed House Bill 2021 to address the climate crisis by accelerating the clean energy transition in Oregon and moving to eliminate greenhouse gas emissions from retail electricity by 2040. In ODOE's 2022 *Biennial Energy Report* (ODOE 2022), the department reviewed several studies of what a clean energy future in Oregon might mean. The report cited the *Oregon Clean Energy Pathways* report (Evolved Energy Research 2021), which estimated that Oregon would need to increase the solar resources in Oregon from 500 MW in 2020 to 10,550 MW in 2050 if the state hoped to achieve its policy objectives. Using the 6 acres per megawatt of utility-scale solar estimate found elsewhere in ODOE's report, that would mean about 63,300 acres in Oregon would need to be utilized for solar development. Although Council has concluded that Goal 13 and HB 2021 do not address where renewable energy facilities should be sited, they clearly need to be sited somewhere in the state.

Where should solar projects be sited?

The Certificate Holder acknowledges in addition to state policies and goals addressing the climate crisis and the need to transition the state to renewable energy, it is also a goal of the state to protect agricultural lands, as stated under Statewide Planning Goal 3. However, based on the acreage of land required to build the solar resources envisioned by ODOE's 2022 *Biennial Energy Report* (ODOE 2022), it is clear that some of Oregon's land use goals are not always in agreement with each other. Therefore, it falls to the Council and the counties to determine how best to reconcile the mandates under Goal 13 and HB 2021 with other state land use goals such as Goal 3. This determination is granted to the Council under ORS 469.504(2)(c)(A) and OAR 345-022-0030(4)(c)(A). The Council is in a position to determine how solar generation should be developed on approximately 60,000 acres of Oregon land in a manner that is most consistent with the state's other land use goals and policies. Given that the EFU zones included 15.5 million acres and account for 55 percent of private land in Oregon and approximately 25 percent of Oregon's land base (Oregon Legislative Committee Services 2012), it is reasonable to conclude that some of the 60,000 acres of solar development required for Oregon's clean energy future would need to be sited on EFU land.

In making a goal exception determination, the Council reviews all evidence in the record. The Certificate Holder requests that the Council consider all State goals and policies, including those related to decarbonization and transitioning the state to renewable energy, in making their determination. While that is a decision for the Council, the Certificate Holder respectfully submits that locating solar development in the Solar Micrositing Area helps achieve Oregon's clean energy goals while also taking advantage of the efficiencies of the existing electrical infrastructure in the RFA 4 Site Boundary, minimizing impacts to other state protected resources such as habitat and cultural resources, and while offering economic benefits to the rural community in Sherman County through the tax payments and community benefit program.

8.2 Evidence that Environmental, Socioeconomic, and Energy Consequences Favor the Exception

ORS 469.504(2)(c)(B); OAR 345-t022-0030(4)(c)(B) The significant environmental, economic, social and energy consequences anticipated as a result of the proposed facility have been identified and adverse impacts will be mitigated in accordance with rules of the Council applicable to the siting of the proposed facility;

This section addresses the environmental, economic, social, and energy-related consequences anticipated as a result of the construction and operation of the Solar Components.

- **Environmental**
    - Solar energy is considered a non-polluting industry and is an internationally recognized clean, renewable source of energy. Operation of the Solar Components will not result in any air pollutant emissions.
    - Implementation of the Solar Components' NPDES Construction Stormwater Discharge General Permit 1200-C will cause the Solar Components to avoid and minimize potential impacts to the area's water quality.
    - Wind erosion is influenced by wind intensity, vegetative cover, soil texture, soil moisture, the grain size of the unprotected soil surface, topography, and the frequency of soil disturbance. Control measures will be implemented to mitigate wind erosion potential as identified in Exhibit I.
    - The Solar Components prevents disturbance to natural habitats and wildlife, by being sited primarily on agricultural lands, which are considered already disturbed. High-value farmlands and lands dedicated to agricultural use are found throughout the Solar Micrositing Area and the surrounding vicinity, such that any chosen location in the general area will be likely to encompass similar proportions of both high-value farmland and agricultural lands.
    - The region has warmed nearly 2 degrees Fahrenheit since 1900 because of increased greenhouse gas emissions (Dalton et al. 2017). This warming includes warmer waters that affect both river and coastal ecosystems, threatening salmon runs and other important marine and freshwater species. Additionally, in eastern Oregon, large mountain areas have suffered mountain pine beetle infestations, wildfires, or both, causing widespread shifts in forest ecosystems (Dalton et al. 2017). As stated above, recent legislation aims to address the climate crisis by accelerating the clean energy transition in Oregon. One of the measures identified to accomplish this is through supporting renewable energy development such as solar facilities. Therefore, the Solar Components contributes to the reduction of greenhouse gas emissions, which may result in a beneficial environmental impact.
    - At the conclusion of the Solar Components' life, the facility will be decommissioned and the land returned to its pre-construction state, and will thus present only a

temporary change to the land use that is not irrevocably committed to a new urbanized use. Per the terms of the lease and consistent with a Retirement Plan to be approved by applicable agencies (see Exhibit X), the land would be restored for future agricultural use. For these reasons, the solar facility will only be a temporary removal of farmland. See Exhibit M for evidence that the Certificate Holder has a reasonable likelihood of obtaining a bond or letter of credit in the amount estimated to be required to restore the site. Additionally, as described earlier and in Exhibit I, the Solar Components will be compatible with future farmland uses as it will safeguard soil health by protecting soils from wind and soil erosion and minimizing construction impacts and vegetation under solar panels.

- The Solar Components' environmental consequences are discussed primarily in Exhibit I (Soil Conditions), Exhibit J (Wetlands and Other Jurisdictional Waters), Exhibit L (Protected Areas), Exhibit P (Fish and Wildlife Habitats and Species), Exhibit Q (Threatened and Endangered Species), Exhibit R (Scenic Resources), and Exhibit S (Historic, Cultural, and Archaeological Resources). These exhibits demonstrate that the Solar Components will not cause significant adverse environmental consequences. Overall, the proposed changes will avoid impacts to such resources altogether. The Certificate Holder will mitigate for unavoidable impacts to wildlife habitat (see Exhibit P). The Solar Components, as proposed, are not anticipated to have any significant adverse impacts to soils, wetlands, protected areas, water resources, fish and wildlife habitat and species, threatened and endangered species, scenic and aesthetic resources, and historic, cultural, and archaeological resources.

- **Socioeconomic**
  - The Solar Components will not have significant adverse socioeconomic impacts on scenic, cultural, historical, archeological, or recreational resources. Exhibit U (Public Services) demonstrates that the Solar Components will not have significant impacts on community services such as housing, sewer, water supply, waste disposal, health care, education, and transportation. The remote location of the Solar Components renders insignificant any other adverse social consequences, such as noise or visual impacts as discussed in Exhibit Y and Exhibit R, respectively).
  - The Solar Components will provide job opportunities both during construction and operations thus contributing labor wages in the local economy. This is further discussed in Section 8.1.3.1. The Certificate Holder expects that the Solar Components will require up to three personnel for daily maintenance activities during operations over its 40-year lifespan. The O&M staff will be hired locally, to the extent that skilled workers are available.
  - As discussed above, high-value farmland and lands dedicated to agricultural use are found throughout this exhibit's analysis area and are distributed such that any chosen location in the general area will be likely to encompass similar proportions

of both high-value farmland and agricultural lands. However, in acknowledgement of the Solar Components' potential impacts to Sherman County's agricultural economy due to the removal of up to 1,445 acres of dryland winter wheat farmland (see Section 3.4.2), the Certificate Holder plans to mitigate these impacts by making meaningful investments in the local agricultural economy. These investments will be implemented through an agricultural mitigation fund that will be described in the Biglow Solar Community Investment Plan, which will provide the details of how the Solar Components will mitigate negative economic impacts to the local agricultural economy, thereby making the agricultural economy whole in addition to the broader economic benefits offered by construction and operation of the Solar Components.

- As provided by landowner testimony, the Solar Components will have no direct impact on jobs; no jobs associated with landowner farm operations will be lost. Most of the indirect jobs (0.7 FTEs) associated with the agricultural activities located in the RFA 4 Site Boundary are related to support activities for agriculture and forestry and grain farming and represent a potential reduction of less than 1 percent of existing employment in those sectors (Attachment K-2). The Sherman County community will benefit from the diversification of the job market and the continued support of renewable energy-focused careers as discussed in the Economics Section XIV of the Sherman County Comprehensive Plan. Further, as provided by Section 3.4.2 above, general household spending by landowners involved in RFA 4 will remain steady due to no net loss in income as a result of the RFA 4 lease payments.
- For the foregoing reasons, including the mitigation of potential economic impacts to the Sherman County agricultural economy through the Biglow Solar Community Investment Plan, the Solar Components do not impose significant adverse economic consequences but rather would provide net economic benefits to the county.

- **Energy**
  - As discussed above, the Solar Components will support the generation of reliable renewable energy for sale to the public and, while doing so, promote the goals of Sherman County, as well as Oregon's Renewable Portfolio Standard and Clean Energy Targets bill (House Bill 2021). This bill imposes additional requirements for certain electricity providers serving electricity in Oregon to reduce the greenhouse gas emissions associated with the electricity they provide.
  - The Solar Components makes a strong investment and commitment to rural economic development. As proposed, the Solar Components will provide a reliable source of electricity with no fuel cost and no associated emissions for at least 40 years.
  - In addition to Oregon's Renewable Portfolio Standard and clean energy goals, private companies have their own renewable energy procurement policies, which increase the demand for renewable energy in Oregon. These public and private

policies are intended to reduce greenhouse gas emissions, mitigate climate impact, and reduce reliance on carbon-based fuels. Solar power generation, like that proposed with the Solar Components, helps further these public and private policies and outweighs removing approximately 1,445 acres of agricultural land (1,006 acres of which is considered high-value farmland) for the life of the Solar Components.

8.3 Compatibility with Adjacent Land Uses

ORS 469.504(2)(c)(C); OAR 345-022-0030(4)(c)(C) The proposed facility is compatible with other adjacent uses or will be made compatible through measures designed to reduce adverse impacts.

Response: Uses adjacent to the Solar Components consist of a mixture of agricultural production and renewable energy facilities. As shown on Figures K-3 and K-4, there are multiple operating renewable energy facilities intermingled with land in active crop cultivation. As discussed in Section6.2, the Solar Components construction and operation will not limit or negatively impact current or future farm activities and accepted farming practices on the adjacent properties nor will it significantly increase the costs of such practices. Further, the landowner involved in the project who also has adjacent farmland in agricultural production has not expressed concerns about farming alongside the Solar Components during its lifetime.

As provided by Exhibit U, traffic impacts during construction will be mitigated through a construction traffic management plan and impacts during operation will be minimal due to the limited number of operational personnel. The Certificate Holder will communicate with adjacent landowners to minimize and mitigate any traffic impacts to their farming practices during the temporary construction period. The Certificate Holder shall control the introduction and spread of noxious weeds in accordance with the methods, monitoring procedures and success criteria set forth in the Comprehensive Solar Revegetation and Soil Management Plan (Exhibit I, Attachment I-2). The plan will be finalized in consultation with the Sherman County Weed Department and will likely include BMPs to prevent the spread of existing noxious weeds and ensure that new populations of species are not accidentally introduced. These BMPs include flagging and treating areas of noxious weed infestations prior to construction, cleaning vehicles and equipment prior to ground disturbance, strategic use of herbicide, mechanical removal and revegetation of disturbed soils. Additional steps may include monitoring areas of disturbance for noxious weeds after construction, training construction and operations staff and limiting vehicle traffic in noxious weed-infested areas. The use of these BMPs during construction and operation will reduce the risk of weed infestation in cultivated land and the associated cost to the farmer for weed control (see Exhibit I, Attachment I-2). The Certificate Holder will also minimize dust during construction through application of water and other dust control measures as discussed in Exhibit I. Since the Solar Components are not an urbanized use, they do not have urban use characteristics such as traffic, noise, and emissions and will not require urban infrastructure such as water and sewer. Therefore, the Solar Components are compatible with the adjacent land uses.

9.0 Federal Land Management Plans

9.1 Identification of Applicable Land Management Plans – OAR 345-021-0010 (1)(k)(D)(i)

OAR 345-021-0010 (1)(k)(D) If the proposed facility will be located on federal land:

(i) Identify the applicable land management plan adopted by the federal agency with jurisdiction over the federal land;

Response: There are no applicable federal management plans. Therefore, the standards of OAR 345-021-0010(1)(k)(D) do not apply.

10.0 Summary

The information provided in this Exhibit demonstrates the Solar Components' compliance with all applicable substantive criteria. Therefore, EFSC may find that the Solar Components complies with the land use standards set forth in OAR 345-022-0030.

11.0 References

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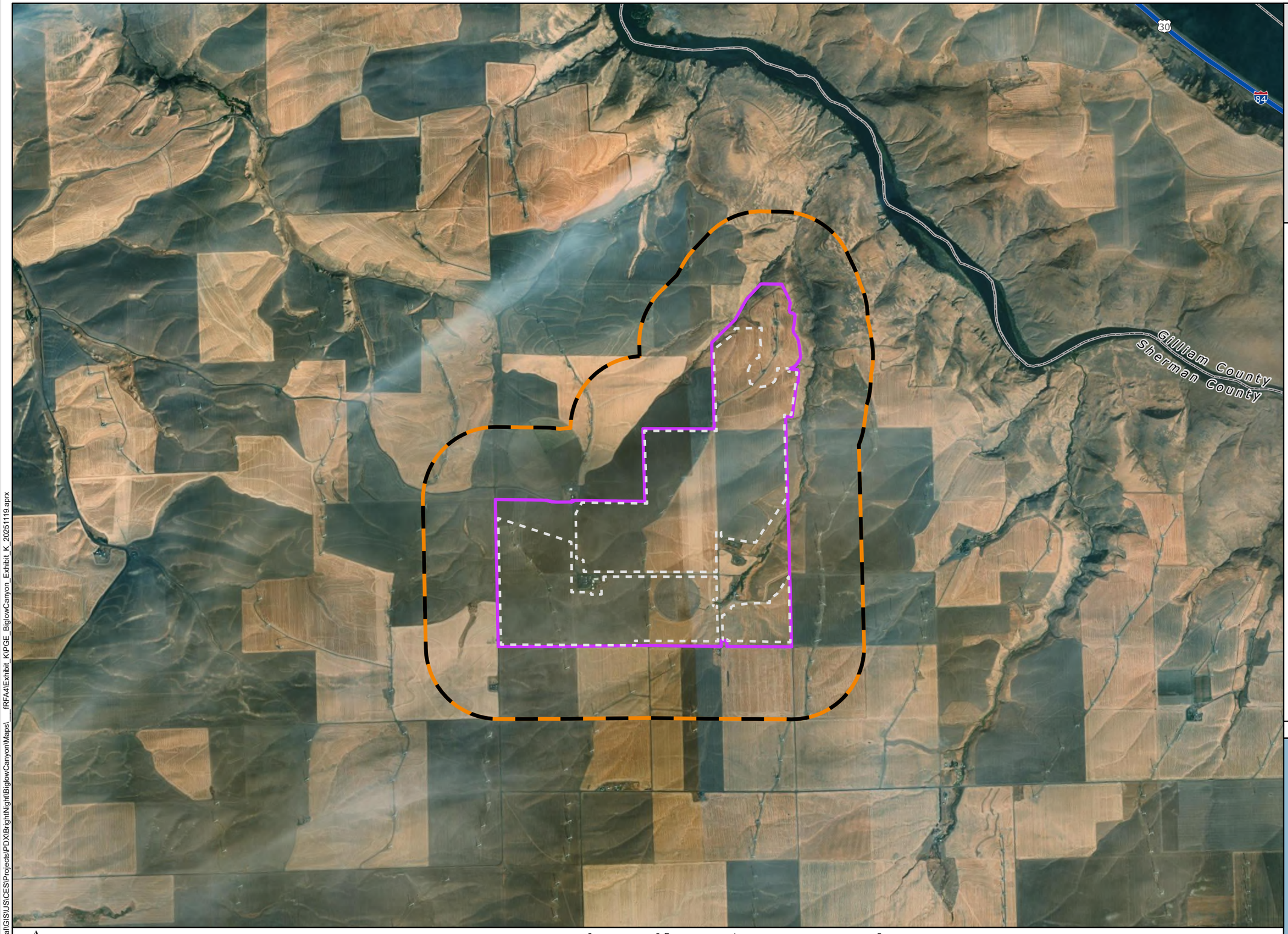
Figures

Biglow Canyon Wind Farm Request for Amendment #4

Figure K-1
Land Use Analysis Area

SHERMAN COUNTY, OR



- Solar Micrositing Area
- Analysis Area (0.5 mile Buffer)
- Solar Area
- State Boundary
- County Boundary
- City/Town
- Interstate Highway
- US Highway

TETRA TECH

PGE

Reference Map

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WGS 1984 UTM Zone 10N

0 0.5 1 2 Miles

NOT FOR CONSTRUCTION

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Biglow Canyon Wind Farm Request for Amendment #4

Figure K-2 Zoning and Comprehensive Plan Designations

SHERMAN COUNTY, OR

- Solar Micrositing Area
- Analysis Area (0.5 mile Buffer)
- Solar Area
- State Boundary
- County Boundary
- City/Town
- Interstate Highway
- US Highway
- Natural Hazards Combining

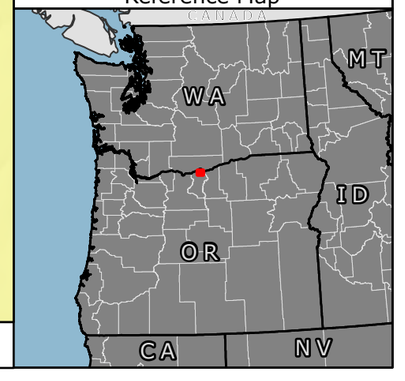
Sherman County Zoning

- Exclusive Farm Use

TETRA TECH

PGE

Reference Map



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WGS 1984 UTM Zone 10N

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Biglow Canyon Wind Farm Request for Amendment #4

Figure K-3 Tracts and Adjacent Facilities

SHERMAN COUNTY, OR

WASHINGTON
OREGON
Klickitat County
Sherman County
Klickitat County
Gilliam County
Gilliam County
Rufus
Wasco
14
30
84
97
206
1
2

- Solar Micrositing Area
- Analysis Area (0.5 mile Buffer)
- Solar Area
- Tract Boundary
- State Boundary
- County Boundary
- City/Town
- Interstate Highway
- US Highway
- State Highway

Existing Transmission Lines

- Under 100 kV
- 101 - 230 kV
- Greater than 230 kV

- Existing Biglow Canyon Substation
- Klondike Substation
- PuTu Substation
- Wyeast Solar Facility
- PaTu Wind Farm

Oregon Energy Facility Council Facilities

- Biglow Canyon Wind Farm, Operating
- Golden Hills Wind Project, Operating
- Klondike III Wind Project, Operating

TETRA TECH

PGE

Reference Map

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WGS 1984 UTM Zone 10N

0 0.5 1 2 Miles

NOT FOR CONSTRUCTION

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Biglow Canyon Wind Farm Request for Amendment #4

Figure K-4
Existing Land Use

SHERMAN COUNTY, OR

1

2

Gilliam County
Sherman County

30
84

- Solar Micrositing Area
- Analysis Area (0.5 mile Buffer)
- Solar Area
- Tract Boundary
- State Boundary
- County Boundary
- City/Town
- Interstate Highway
- US Highway

Existing Land Use

- Non-Cultivated
- Cultivated

TETRA TECH

PGE

Reference Map

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WGS 1984 UTM Zone 10N

0 0.5 1 2 Miles

NOT FOR CONSTRUCTION

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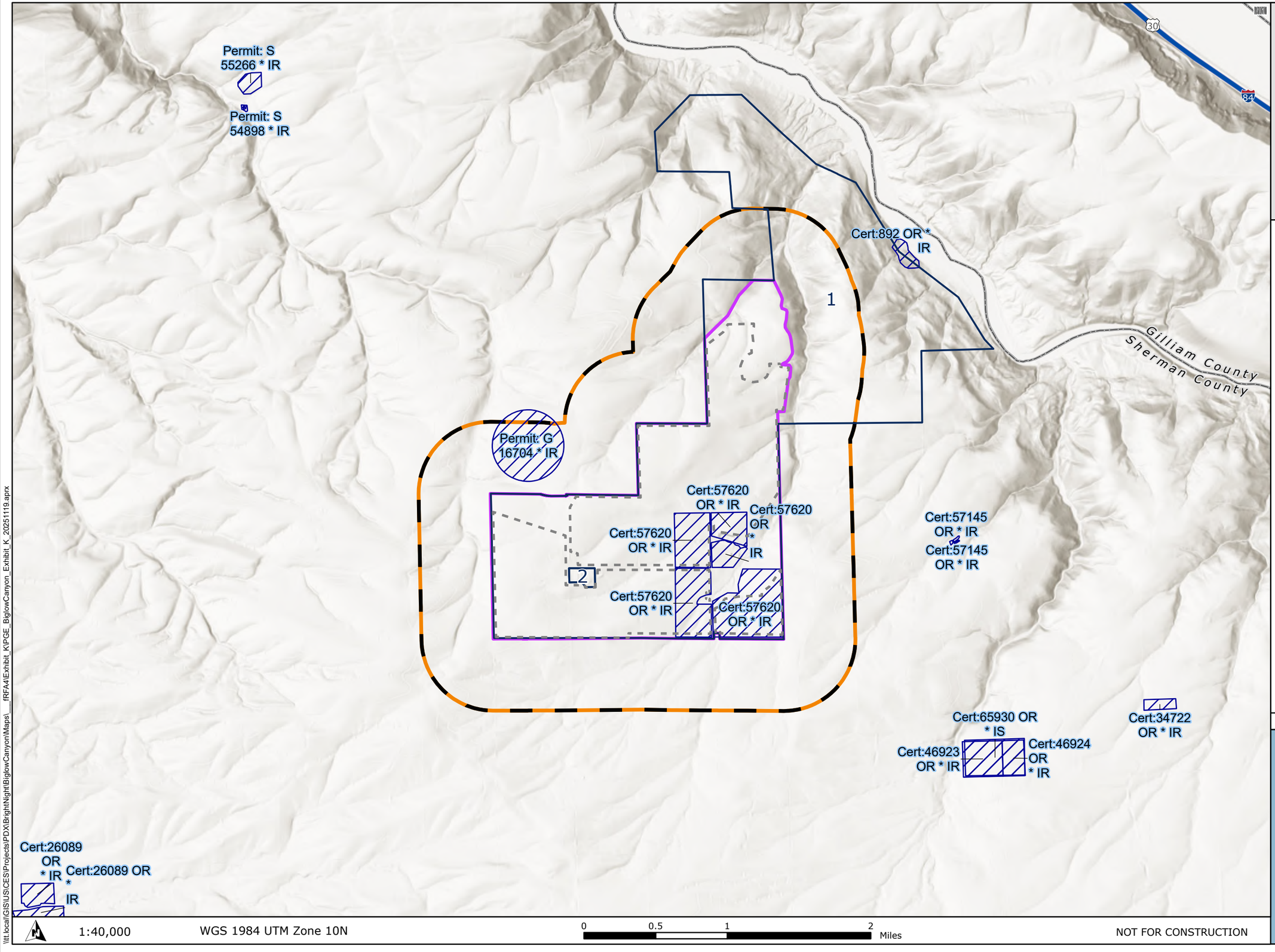
Biglow Canyon Wind Farm Request for Amendment #4

Figure K-5
Water Rights

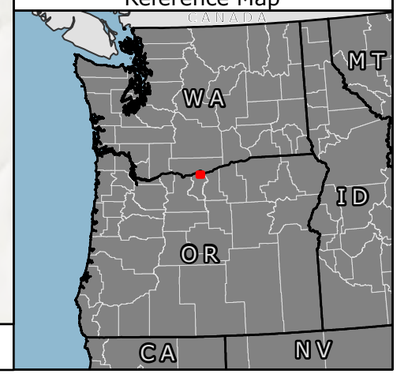
SHERMAN COUNTY, OR



- Solar Micrositing Area
- Analysis Area (0.5 mile Buffer)
- Solar Area
- State Boundary
- County Boundary
- City/Town
- Interstate Highway
- US Highway
- Irrigation Water Rights
- Tract Boundary

TETRA TECH PGE

Reference Map



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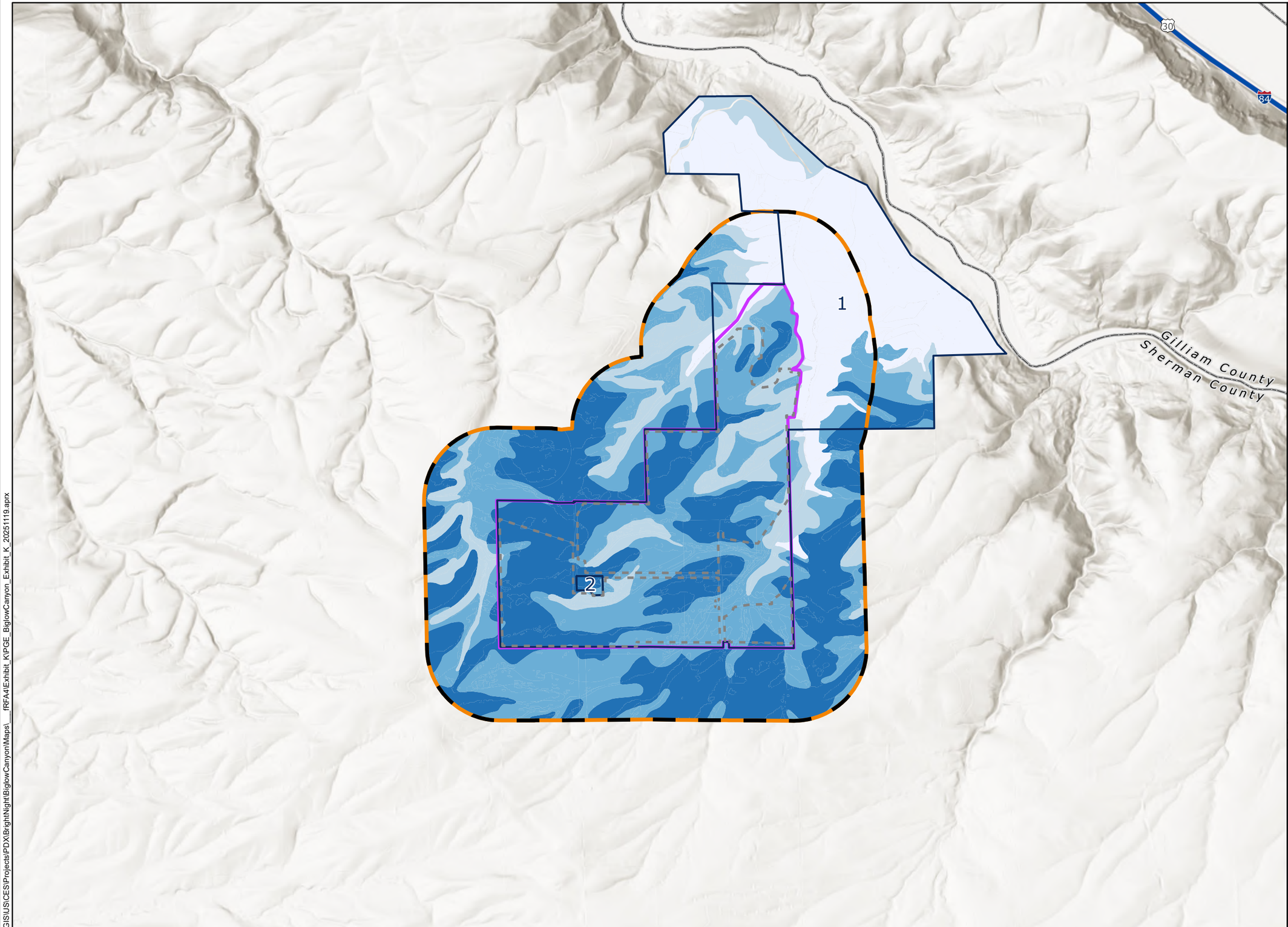
Biglow Canyon Wind Farm Request for Amendment #4

Figure K-6
NRCS Soil Capability Classifications

SHERMAN COUNTY, OR



- Solar Micrositing Area
- Analysis Area (0.5 mile Buffer)
- Solar Area
- Tract Boundary
- State Boundary
- County Boundary
- City/Town
- Interstate Highway
- US Highway

Soil Capability Class

- Class II
- Class III
- Class IV
- Class VII

TETRA TECH

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Reference Map

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WGS 1984 UTM Zone 10N

0 0.5 1 2 Miles

NOT FOR CONSTRUCTION

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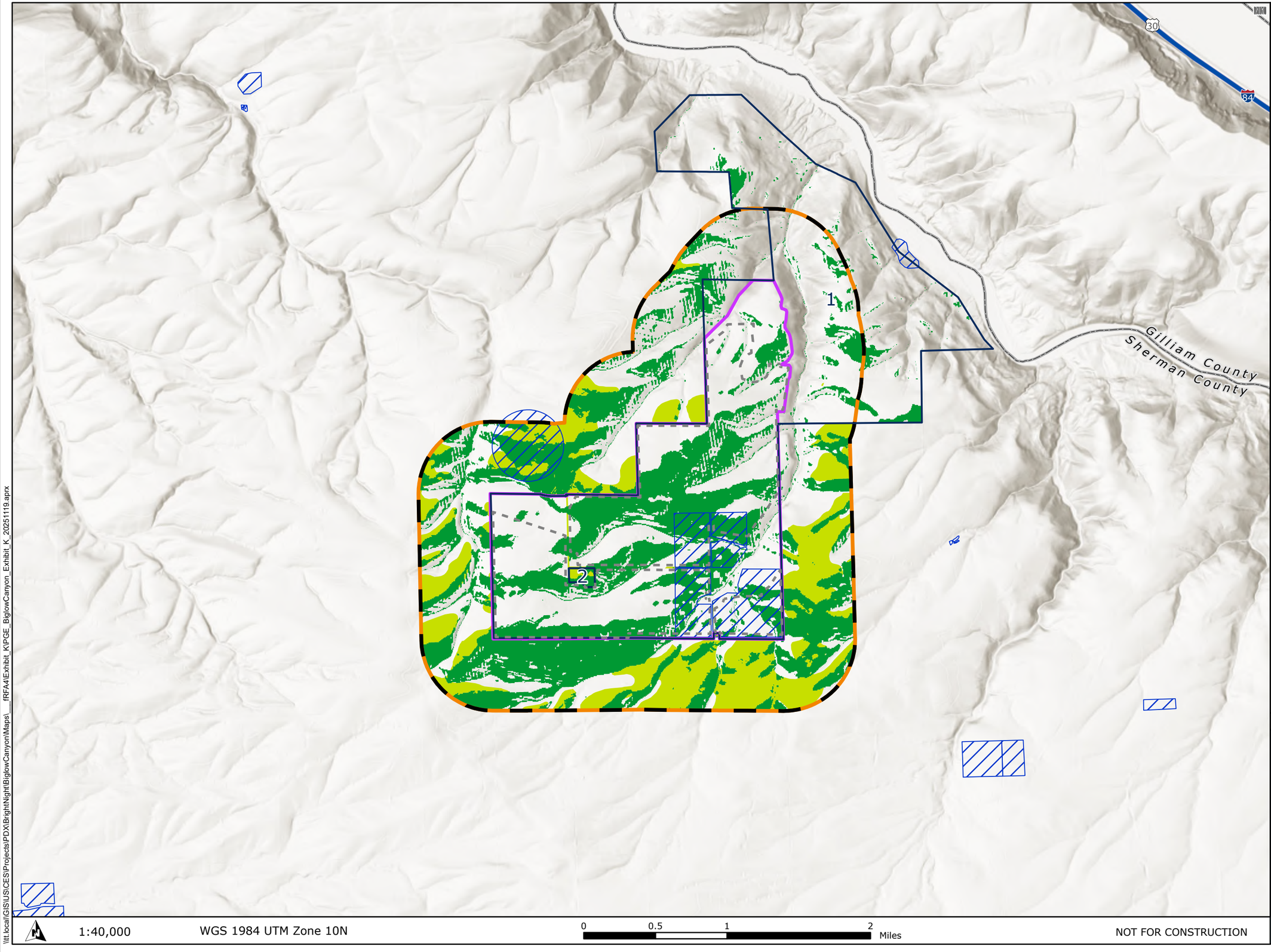
Biglow Canyon Wind Farm Request for Amendment #4

Figure K-7 High Value Farmland

SHERMAN COUNTY, OR



- Solar Micrositing Area
- Analysis Area (0.5 mile Buffer)
- Solar Area
- Tract Boundary
- State Boundary
- County Boundary
- City/Town
- Interstate Highway
- US Highway
- HVF per ORS 195.300(10)(c) – water rights
- HVF per ORS 195.300(10)(f) - AVA
- HVF per ORS 195.300(10)(a) - soils

TETRA TECH

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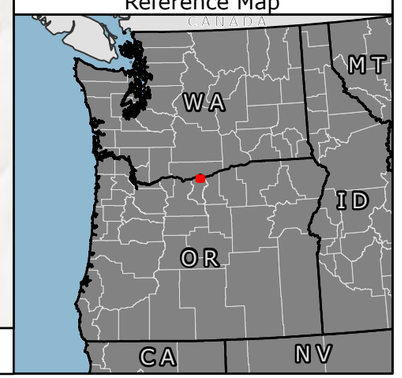
Reference Map



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WGS 1984 UTM Zone 10N

0 0.5 1 2 Miles

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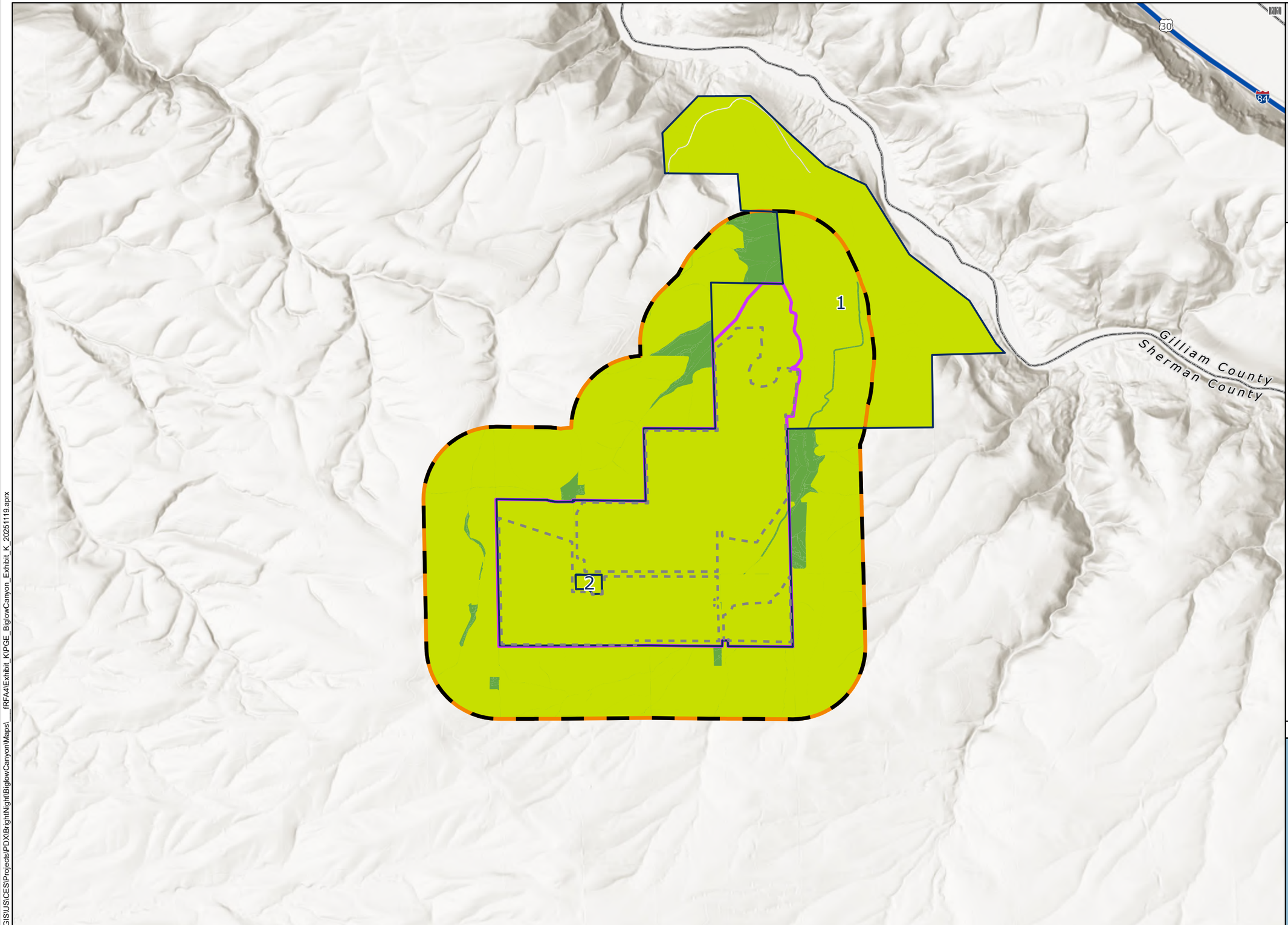
Biglow Canyon Wind Farm Request for Amendment #4

Figure K-8
Arable and Non-Arable Lands

SHERMAN COUNTY, OR



- Solar Micrositing Area
- Analysis Area (0.5 mile Buffer)
- Solar Area
- Tract Boundary
- State Boundary
- County Boundary
- City/Town
- Interstate Highway
- US Highway
- Arable Land
- Non-Arable Land

TETRA TECH

PGE

Reference Map

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WGS 1984 UTM Zone 10N

0 0.5 1 2 Miles

NOT FOR CONSTRUCTION

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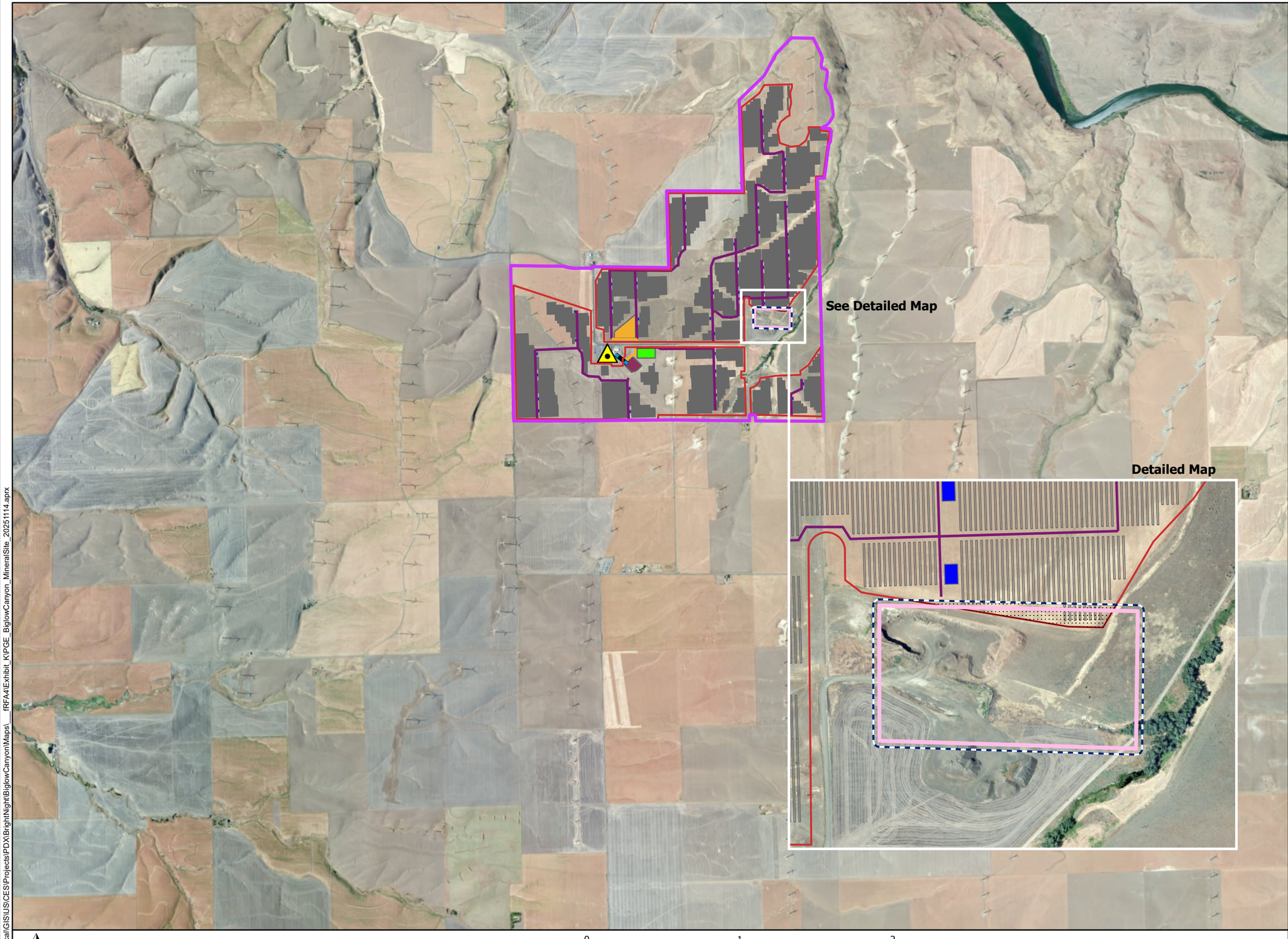
Biglow Canyon Wind Farm Request for Amendment #4

Figure K-9
Scharf Mineral and Aggregate Resource Site

SHERMAN COUNTY, OR

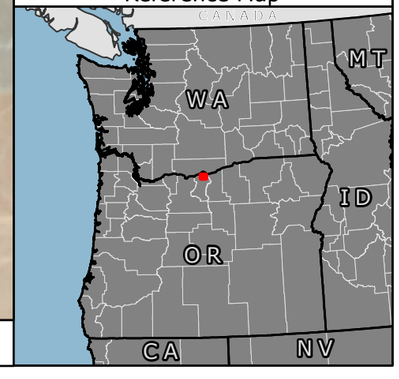


- Solar Micrositing Area
- Existing Biglow Canyon Substation
- Gen-Tie Line (230 kV)
- Substation Access Road
- Access Roads
- Fenceline
- Inverter
- BESS
- Laydown Yard
- O&M Building
- Substation
- Solar Tracker
- Avoidance Area
- Mineral Site Boundary
- 30-ft setback

TETRA TECH

PGE

Reference Map



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Biglow Canyon Wind Farm Request for Amendment #4

Figure K-10
One-Mile Study Area

SHERMAN COUNTY, OR

WASHINGTON
OREGON
Klickitat County
Sherman County
Klickitat County
Gilliam County
Gilliam County
Rufus
Wasco
14
30
84
97
206

- Solar Micrositing Area
- Analysis Area (0.5 mile Buffer)
- Solar Area
- Study Area (1-mile Buffer from center)
- State Boundary
- County Boundary
- City/Town
- Interstate Highway
- US Highway
- State Highway

Sherman County Zoning
- Exclusive Farm Use

Existing Transmission Lines
- Under 100 kV
- 101 - 230 kV
- Greater than 230 kV

- Existing Biglow Canyon Substation
- Klondike Substation
- PuTu Substation
- Wyeast Solar Facility
- PaTu Wind Farm

Oregon Energy Facility Council Facilities
- Biglow Canyon Wind Farm, Operating
- Golden Hills Wind Project, Operating
- Klondike III Wind Project, Operating

TETRA TECH
PGE

Reference Map

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WGS 1984 UTM Zone 10N
0 0.5 1 2
Miles
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Attachment K-1. Summary of Landowner Interview

Responses provided below were verified by landowner on January 17, 2025; no redactions requested.

SCHARF R & A LLC
7695 TUCKER RD
AMITY OR 97101

Tract 1 (tax lots: 02N18E00001600, 02N18E00001700, 02N18E00003800, 02N18E00003900, 02N18E00004000, 02N18E00004300, 02N18E00004400) – owns

Re: Biglow Solar Landowner Survey

Dear Mr. Scharf,

Thank you for your initial responses to this survey/questionnaire and responses to follow-up emails. The purpose of these questions is to understand the current agricultural practices on the Exclusive Farm Use (EFU) zoned lands within the Biglow Solar Project (Project) Site Boundary and the economic implications of removing those lands from agricultural use during the construction and operational period of the project. This information is needed to support the Project's permitting process under the Orego n Energy Facility Siting Council (EFSC), specifically the request for an exception to the agricultural land protections under Oregon's Statewide Planning Goal 3 – or what is known as a "Goal 3 exception." As more solar energy projects are proposed on EFU land in the state, EFSC has been reviewing Goal 3 exception requests in more detail and has required applicants provide information from the property owners/farmers to accurately assess the possible impacts of removing these lands from agricultural use.

In the below sections, your responses to the original survey plus follow-up questions have been captured in blue text. If you feel any of the information provided is confidential, please indicate what sections of the questionnaire you would like us to redact from public review.

We appreciate your assistance. Your perspective and knowledge of these lands is invaluable.

Current Farmland Practices

1. What is your name and how are you associated with (tax lots; 02N18E00001600, 02N18E00001700, 02N18E00003800, 02N18E00003900, 02N18E00004000, 02N18E00004300, 02N18E00004400)?

   Response: John Scharf manager and part owner.

2. How many acres of land do you farm within Sherman County (including lands within and outside of the leased Project area)?

   Response: 4,125 total acres, 1000 yearly fall wheat, 1000 yearly summer fallow, 2100 cattle range, 25 acres under circle for row crops.
   Portion of Tract 1 leased to solar facility is 1,885.76 acres (all leased to McCulloughs and McNabs for dryland wheat crops + 25 acre irrigated row crops).

3. Describe current crop and cultivation and/or ranching practices in the leased area and on your other Sherman County lands in agricultural production (i.e., total acres of land used for dryland crops, types of dryland crops, irrigated agriculture, cattle ranching, or other agricultural use):

   Response: All land rented out.

4. Please provide details about crop schedule within the leased area (i.e., when do you till, seed, fertilize, and/or spray, and when do you harvest?):

   Response: seed oct, fertilize oct, harvest July &Aug

5. What details can you provide regarding crop yields on your parcel(s) over the past 5-10 years (e.g., annual average yield per acre over past 5-10 years)?
   Response: 5 years 2023 48 bushel average, 2022 70, 2021 65, 2020 62 2019 65 62 average 10 years

6. What entity do you sell your wheat to? (i.e., Mid Columbia Producers, etc.)?

   Response: sold to mid Columbia

7. What are typical expenditures associated with the agricultural practices on your land (e.g., seed, fertilizer, chemicals, fuel, etc.)? Who do you purchase these materials from (e.g., Wasco Farm Store, etc.)? And can you provide annual estimates for each expenditure or average dollar per acre in expenses?
   Response: misc repairs and maintenance 20$/acre , fuel 10.5$, seed 33.30$ per acre, NA3 31.50$, wheat spray $25, chem fallow $17.00.

8. What details can you provide regarding historic agricultural revenues on your parcel(s) over the past 5-10 years (e.g., annual revenues from agricultural production)?
   Response: $455 per acre

9. How many direct jobs are currently supported by operations where the Project would be located, and would any be eliminated if the Project is built?
   Response: no elimination -

10. Would jobs for your agricultural operations elsewhere be impacted or supported by implementation of the project? If yes, how?
    Response: we will be positively impacted, a few drawbacks yet more positives than negative longterm, electricity is a crop, younger farmers will like the sheep grazing and the electricity. Any offset of grain sales will be made up in local spending.

11. To what extent, if any, do you anticipate reducing current spending on labor, supplies, and services for agricultural operations due to implementation of the Project?

    Response: Yes less spending as farming less acres

Compatibility With Adjacent Farmlands

12. Do you currently have Biglow Wind turbines on your land and if so, are you able to farm near the wind turbines?
    Response: Yes
    How has the construction activities or traffic from routine operations at the wind farm impacted your farming practices?
    Response: It hasn't as no one as been working on the turbines for 10 years. The turbine roads are really nice.

13. With the implementation of the Biglow Solar Project, would you continue to farm/ranch lands adjacent to the solar array areas or elsewhere throughout the local area? If yes, would the Project potentially impact farming practices outside of where solar facilities would be located? If yes, how?
    Response: Yes and no do not think it is a big deal or impact

14. Do you have suggestions for how the Biglow Solar Project can aid your continued agricultural production?
    Response: don't use the very best ground and take care of weeds. Sheep grazing within, don't leave landlocked farm ground

15. How would you expect your agricultural operations to be impacted by construction of the Biglow Solar Project (i.e., dust, traffic)?
    Response: Needs to be done with consideration and advice from the farming. Use local knowledge

16. Do you have any information regarding farm practices on neighboring properties and would you anticipate any impact to those practices due to implementation of the Project?

    Response: No

Soil and Water Rights

17. Based on your assessment, describe the soil conditions on your parcel(s):
    Response: Sandy

18. Does the leased land currently have water rights?

    Response: Yes, one 25-acre pivot, can be moved.

19. Is there any current consideration or attempt to cancel a water right or transfer a water right to or from the leased land proposed for Project use? **Response:** Depending on final locations of solar panels, will explore moving the use of existing water right to other locations on our land with OWRD. If needed, a new well could be drilled

20. In your estimation, how much water do you think you would need to be reasonably certain you could make more productive agricultural use of your land and justify the necessary capital investment in irrigation infrastructure? **Response:** A new well for water, spray dust and chemical, fire

Attachment K-2. Agricultural and Fiscal Impact Analysis

Agricultural and Fiscal Impact Analysis

Biglow Canyon Wind Farm
Request for Amendment 4
December 2025

Prepared for

Portland General Electric Company

Prepared by

TETRA TECH

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Acronyms and Abbreviations

BCWF or Existing Facility	Biglow Canyon Wind Farm
BEA	Bureau of Economic Analysis
BESS	battery energy storage system
BLS	Bureau of Labor Statistics
CBP	Census Bureau County Business Patterns
Certificate Holder or PGE	Portland General Electric Company
CEW	Census of Employment and Wages
Council or EFSC	Oregon Energy Facility Siting Council
CSF	community service fee
ESD	Education Special District
FTE	full-time equivalent
FY	fiscal year
MAV	maximum assessed value
MW	megawatt
MWh	megawatt hour
ODOE	Oregon Department of Energy
REA	Regional Economic Account
RFA	Request for Amendment
RMV	real market value
RRED	Rural Renewable Energy Development
SIP	Strategic Investment Program
SIZ	Strategic Investment Zone
Solar Components	photovoltaic solar energy generation and battery storage
Solar PILOT	Solar Payment in Lieu of Taxes
USDA	U.S. Department of Agriculture

Executive Summary

The Portland General Electric Company (PGE or Certificate Holder) is submitting a preliminary Request for Amendment 4 (RFA 4) to the existing Site Certificate for the Biglow Canyon Wind Farm (BCWF or Existing Facility) to add photovoltaic (PV) solar energy generation and battery storage (Solar Components). Located approximately 4.5 miles northeast of Wasco in Sherman County, Oregon, BCWF currently consists of 217 wind turbines, with a peak generating capacity of 450 megawatts (MW). In RFA 4, PGE proposes to add a 125-MW PV solar facility and a 500 megawatt-hour (MWh) battery energy storage system (BESS).

This report prepared on behalf of PGE assesses the fiscal and economic impacts of the Solar Components. The fiscal impact analysis estimates local tax revenues that would be expected to accrue over the operating life of the Solar Components. The economic impact analysis addresses the potential effects of the Solar Components on the local agricultural economy, with impacts assessed at the county level for Sherman County, Oregon. Impacts to the agricultural economy are assessed in terms of employment, labor income, and economic output using the IMPLAN economic modeling package.

Fiscal Impact Analysis

PGE has not entered into any tax arrangements with Sherman County for the Solar Components at this time, but anticipates entering into a Fee in Lieu of Property Taxes for solar projects program (Solar PILOT) agreement. As a result, the fiscal impact assessment presented in this report estimates potential tax revenues that could be generated under a Solar PILOT agreement.

The results of this assessment are summarized in Table ES-1, which shows estimated payments to Sherman County in 5-year increments for the assumed 40-year operating life of the Solar Components. Estimates are 5-year totals, not annual averages. Total estimated payments to Sherman County would be approximately $40.1 million (Solar PILOT) over the assumed 40-year operating life of the Solar Components (Table ES-1).

Table ES-1. Estimated Property Tax Revenues for a Solar PILOT Scenario ($ million)

Years[1]	Estimated Tax Revenues ($ million)[2]
1 to 5	3.4
6 to 10	3.4
11 to 15	3.4
16 to 20	3.4
21 to 25	8.1
26 to 30	6.1
31 to 35	6.1
36 to 40	6.1
Total	**40.1**

Notes:
1. Estimates are in millions of dollars and 5-year totals, not annual averages.
2. Solar PILOT estimates assume that the Solar Components would pay $5,500 per MW for 20 years. Per Oregon Senate Bill 154, payments could range from $5,500 to $7,000 per MW.

Agricultural Impact Analysis

The Solar Components would result in the permanent disturbance of up to 1,445 acres. For the purposes of analysis, the following assessment assumes that this land would otherwise be cultivated for dryland winter wheat, with half of this total (723 acres) planted and harvested each year, with the other half left fallow[1]. This total (723 acres) represents approximately 0.6 percent of annually harvested winter wheat acres in Sherman County (based on 10-year annual average values).

Removal of up to 1,445 acres of agricultural land would have impacts on the local agricultural economy due to the associated reduction in local spending. Table ES-2 shows the estimated local economic activity currently supported by agricultural operations on the affected lands. The numbers in Table ES-2 were calculated using IMPLAN to model the economic impacts for Sherman County based on an estimated reduction in annual output of $281,300 in the grain sector. This represents the high end of the range of estimated yield (bushels/acre) for the acreage within the permanent disturbance area and the estimated average annual price per bushel in Oregon for 2014 to 2023.

These are annual impacts and removal of the permanent disturbance area from production would result in a corresponding annual reduction in economic activity as follows:

- The direct impact represents the gross value of production that the landowners would no longer receive from producing wheat (see "output" value in Table ES-2), as well as the associated employment and labor income of the affected farmers and their employees. The direct employment number shown in Table ES-2 was estimated by IMPLAN based on county-specific ratios. However, interviews with the participating landowner and farmer

[1] This assumption accounts for the two-year harvest cycle for dryland wheat farming.

indicated that the affected farmer would continue to farm elsewhere in the county, with no net loss in direct agricultural employment anticipated.

- The indirect impact represents economic activity supported elsewhere in the local economy by agricultural production in the permanent disturbance area. This includes spending on inputs like seeds, fertilizer, and fuel and contract services. The assessment assumes that this spending would no longer occur when agricultural production stops in the permanent disturbance area, resulting in a potential loss of the indirect impacts shown in Table ES-2, which may or may not translate into reductions in individual employment positions (jobs).
- The estimated induced impacts presented in Table ES-2 are supported by the spending of households associated either directly or indirectly with the existing agricultural operations. The assessment assumes that this spending would no longer occur when agricultural production stops in the permanent disturbance area, resulting in a potential loss of the induced impacts shown in Table ES-2.

Table ES-2. Economic Impacts of Current Agricultural Activities

Impact	Employment (FTE)[1]	Labor Income ($000)[2]	Output ($000)[2]
Direct	1.4	$80.3	$281.3
Indirect	0.7	$46.3	$100.0
Induced	0.1	$6.9	$25.1
Total	**2.1**	**$133.5**	**$406.5**

Notes:
1. Jobs are full-time equivalents (FTE) for a period of one year (1 FTE = 2,080 hours).
2. Labor income and economic output are expressed in thousands of Year 2025 dollars.
Source: IMPLAN 2024

1.0 Introduction

The Portland General Electric Company (PGE or Certificate Holder) is submitting a preliminary Request for Amendment 4 (RFA 4) to the existing Site Certificate for the Biglow Canyon Wind Farm (BCWF or Existing Facility) to add photovoltaic (PV) solar energy generation and battery storage (Solar Components). Located approximately 4.5 miles northeast of Wasco in Sherman County, Oregon, BCWF currently consists of 217 wind turbines, with a peak generating capacity of 450 megawatts (MW). In RFA 4, PGE proposes to add a 125-MW PV solar facility and a 500 megawatt-hour (MWh) battery energy storage system (BESS).

The Solar Micrositing Area identified as part of RFA 4 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 disturbance footprint. The permanent disturbance area impacted by the Solar Components is 1,445 acres.[2] While the Certificate Holder is requesting maximum flexibility of site design within the permanent impact area, the actual footprint of the Solar Components will likely be less than the permanent impact area. However, the Goal 3 exception analysis assumes the removal of up to 1,445 acres of cultivated wheat land from Goal 3 protection. Figure 1 shows the location of the Solar Components and the 1,924-acre Solar Micrositing Area.

This report prepared on behalf of PGE assesses the fiscal and economic impacts of the Solar Components. The fiscal impact analysis estimates local tax revenues that would be expected to accrue over the operating life of the Solar Components. The economic impact analysis addresses the potential effects of the Solar Components on the local agricultural economy, with impacts assessed at the county level for Sherman County, Oregon. Impacts to the agricultural economy are assessed in terms of employment, labor income, and economic output using the IMPLAN economic modeling package.

2.0 Regional Demographic and Economic Overview

2.1 Population

Located in northcentral Oregon, Sherman County is bordered to the north by the Columbia River and the State of Washington (Figure 1). Approximately 824 square miles in size, slightly more than three-quarters (76 percent) of the county is agricultural land (U.S. Census Bureau 2024, U.S. Department of Agriculture [USDA] 2022). Sherman County had a total estimated population of 1,917 in 2023, ranking 35 out of the 36 counties in Oregon in terms of population (Portland State University 2024). The county is sparsely populated with a 2023 population density of 2.3 people

[2] Permanent disturbance includes areas and infrastructure (trackers, inverters, internal roads, buildings, stormwater basins, and parking) inside the perimeter fence for the Solar Micrositing Area.

per square mile, well below the corresponding state and national averages, which were 44.1 and 94.8 people per square mile, respectively (U.S. Census Bureau 2024).

There are four incorporated communities in Sherman County (Grass Valley, Moro, Rufus, and Wasco), which together account for almost two-thirds (63 percent) of the population (Table 1). The overall county population has increased over the past decade, with most of the growth occurring in Moro, Rufus, and unincorporated parts of the county.

Table 1. Population

Geographic Area	2023		Change 2010 to 2023	
	Estimated Population	Percent of Total	Net Change	Percent Change
Sherman County	1,917	100%	152	8.6%
Grass Valley city	155	8%	-9	-5.5%
Moro city	369	19%	45	13.9%
Rufus city	272	14%	23	9.2%
Wasco city	417	22%	7	1.7%
Unincorporated	704	37%	86	13.9%
Source: Portland State University 2024				

2.2 Employment and the Economy

The local economy in Sherman County has traditionally been dominated by agriculture, which accounted for 17.7 percent of local jobs in 2022 compared to 2.2 percent statewide (Table 2). Government is the single largest sector in terms of employment, accounting for 19.4 percent of local jobs, followed by agriculture (17.7 percent, as noted above), transportation and warehousing (13.1 percent), and retail trade (10.1 percent) (Table 2).

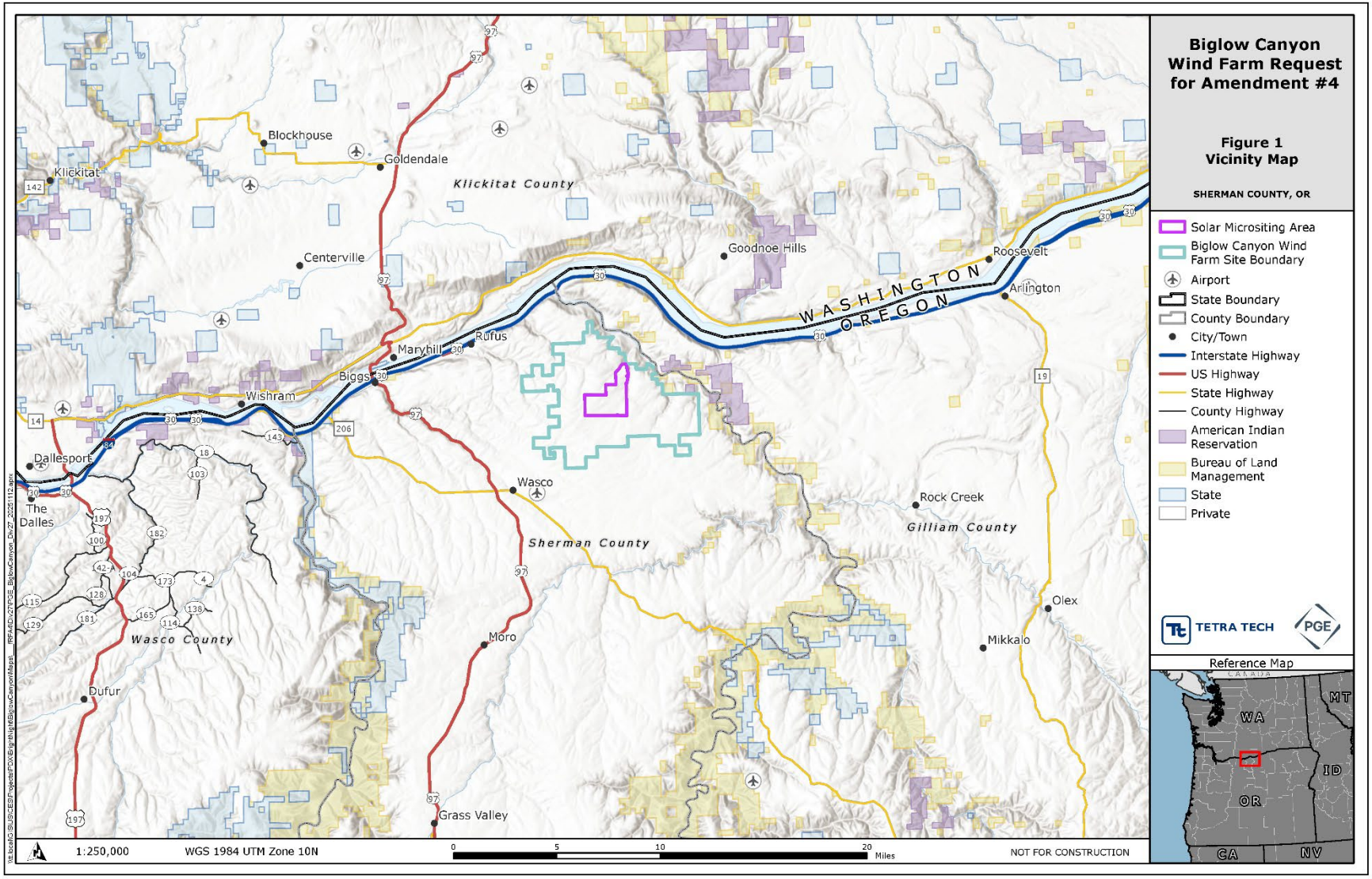

Biglow Canyon Wind Farm Request for Amendment #4
Figure 1
Vicinity Map
SHERMAN COUNTY, OR
Solar Micrositing Area
Biglow Canyon Wind Farm Site Boundary
Airport
State Boundary
County Boundary
City/Town
Interstate Highway
US Highway
State Highway
County Highway
American Indian Reservation
Bureau of Land Management
State
Private
TETRA TECH
PGE
Reference Map
Blockhouse
Goldendale
Klickitat
Klickitat County
Centerville
Goodnoe Hills
Roosevelt
Arlington
WASHINGTON
OREGON
Maryhill
Rufus
Biggs
Wishram
Dallesport
The Dalles
Wasco
Sherman County
Rock Creek
Gilliam County
Olex
Mikkalo
Moro
Wasco County
Dufur
Grass Valley
1:250,000
WGS 1984 UTM Zone 10N
0 5 10 20 Miles
NOT FOR CONSTRUCTION

Table 2. Employment by Economic Sector, 2022

Economic Sector[1]	Sherman County		Oregon	
	Employment	Percent of Total	Employment	Percent of Total
Agriculture	267	17.7%	57,344	2.2%
Mining	19	1.3%	4,621	0.2%
Construction	75	5.0%	153,517	5.8%
Retail trade	152	10.1%	264,677	10.0%
Transportation and warehousing	197	13.1%	132,623	5.0%
Educational services	6	0.4%	50,885	1.9%
Health care and social assistance	26	1.7%	312,843	11.8%
Other services	49	3.3%	129,476	4.9%
Government	293	19.4%	292,132	11.0%
Other sectors[2]	423	28.1%	1,260,167	47.4%
Total employment	**1,507**	**100.0%**	**2,658,285**	**100.0%**

Notes:

1. Employment estimates include self-employed individuals. Employment data are by place of work, not place of residence, and, therefore, include people who work in the area but do not live there. Employment is measured as the average annual number of jobs, both full- and part-time, with each job counted at full weight.

2. The other sectors category consists of 12 sectors where data are not shown for Sherman County to avoid disclosure of confidential information. These sectors are: forestry, fishing, and related activities; utilities; manufacturing; wholesale trade; information; professional, scientific, and technical services; management of companies and enterprises; administration and waste services; arts, entertainment, and recreation; and accommodation and food services.

Source: U.S. Bureau of Economic Analysis 2023

This report uses IMPLAN input-output software to assess the effects of the Solar Components on the local agricultural economy. Using data compiled from various sources, including the Bureau of Labor Statistics (BLS) Census of Employment and Wages (CEW), Census Bureau County Business Patterns (CBP), and Bureau of Economic Analysis (BEA) Regional Economic Accounts (REA), the IMPLAN model divides the economy into 528 sectors including government, households, farms, and other industries. Detailed estimates are provided for a series of measures including employment, labor income, output, and value added for each sector. The IMPLAN model is described in more detail in Section 4.1, below.

Table 3 lists the top 20 industries (IMPLAN sectors) in terms of their employment contribution to the Sherman County economy. Labor income and output estimates are also provided by sector in Table 3. Output is a measure of the total goods and services a given industry uses and produces and is closely related to sales. Grain farming, the largest sector by employment, accounted for 188 jobs, 13 percent of total employment, as estimated by IMPLAN. Warehousing and storage and federal

government were the next largest employers. Other agricultural and related manufacturing sectors in the top 20, include beef cattle ranching and farming and all other crop farming (Table 3).[3]

Table 3. Top 20 Industries by Employment in Sherman County, 2023

IMPLAN Sector	Description	Employ-ment[1]	Labor Income ($ Million)[2]	Output ($ Million)
2	Grain farming[3]	188	$9.3	$32.5
404	Warehousing and storage	156	$12.0	$17.9
528	Employment and payroll of federal govt, non-military	123	$19.8	$29.8
526	Employment and payroll of local govt, other services	83	$5.3	$6.4
391	Retail - Gasoline stores	67	$2.5	$8.0
492	Limited-service restaurants	57	$2.0	$6.5
11	Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	46	$3.5	$3.0
19	Support activities for agriculture and forestry[4]	44	$2.3	$2.6
491	Full-service restaurants	40	$1.7	$4.2
10	All other crop farming[5]	34	$0.9	$0.9
389	Retail - Food and beverage stores	33	$1.1	$2.7
524	Employment and payroll of local govt, education	30	$2.0	$2.3
400	Transit and ground passenger transportation	26	$1.9	$3.0
503	Religious organizations	22	$1.5	$1.4
439	Architectural, engineering, and related services	21	$0.4	$1.9
523	Employment and payroll of state govt, other services	21	$2.1	$2.5
52	Construction of new single-family residential structures	20	$1.8	$3.8
497	Commercial and industrial machinery and equipment repair and maintenance	19	$2.0	$3.0
450	All other miscellaneous professional, scientific, and technical services	18	$0.3	$2.1
507	Private households	18	$0.2	$0.2
	Subtotal Top 20 Sectors	***1,065***	***$72.5***	***$134.8***
	Other Sectors	***388***	***$30.2***	***$115.9***
	Grand Total	**1,453**	**$102.7**	**$250.7**

Notes:
1. IMPLAN jobs include all full-time, part time, and temporary positions. Employment totals include wage and salary and proprietor employment.
2. Labor income includes employee compensation and proprietor income.
3. IMPLAN Sector 2 – Grain farming includes wheat, corn, dry beans, and dry peas.
4. IMPLAN Sector 19 -- Support activities for agriculture and forestry includes a wide range of agricultural services, including crop dusting, crop spraying, cultivation services, machine harvesting of grain, hay mowing, and livestock breeding services, as well as forestry-related services, including timber cruising, forest thinning, and reforestation services.
5. IMPLAN Sector 10 – All other crop farming includes hay farming (e.g., alfalfa hay, clover hay, grass hay), hop, mint, and tea farming.
Source: IMPLAN 2024

[3] IMPLAN compiles employment estimates from several different sources and, as a result, IMPLAN job estimates are often larger than those reported by other sources (IMPLAN 2023). In this case, the total number of jobs estimated by IMPLAN (1,453) for 2023 is slightly lower than the corresponding total reported by the Bureau of Economic Analysis (1,507) for 2022 (see Table 2 and Table 3).

3.0 Fiscal Impact Analysis

The Solar Components would generate significant economic benefits for Sherman County. As noted in the Oregon Department of Energy's (ODOE) memorandum dated October 5, 2021, local economic benefits associated with a proposed solar facility typically include lease payments to underlying landowners, direct economic benefits to local governments, and various other direct and indirect benefits to the local economy (ODOE 2021a). The following assessment estimates the direct benefits to local governments that would be generated in the form of property tax revenues.

3.1 Overview of Oregon Property Taxes

Property taxes are one of the most important sources of revenue for the public sector in Oregon, helping to support police, fire protection, education, and other services provided by local taxing districts. More than 1,200 districts impose property taxes in Oregon, including K-12 Schools and Education Special Districts (ESDs), cities, counties, and community colleges, as well as other special districts, such as fire, road, library, hospital, and park special districts.

The total amount of property tax due is based on the assessed value of the property and the combined tax rates of the local taxing districts with taxing authority over the property. Property assessment involves identifying and assigning a value to taxable property. Most property is assessed by county assessors, but some types of property, including public utilities and large industrial properties, are assessed by the Oregon Department of Revenue. Local taxing districts combine to form Tax Code Areas, which represent unique combinations of overlapping taxing districts. The resulting combined levy or millage rate varies by tax code area. The levy or millage rate, which determines the amount an individual property owner owes, is expressed as a dollar amount per $1,000 assessed value. A jurisdiction with a levy rate of 10 mills, for example, imposes tax at the rate of $10 per $1,000 of property value.

In Oregon, a property's assessed value is the lower of its real market value (RMV) or maximum assessed value (MAV). RMV is typically the price a willing buyer would pay to a willing seller. First established in the 1997-98 tax year, MAV is a taxable value limit established for each property. Statewide Measure 50, passed in 1997, limits the rate of growth of property value subject to taxation based on the MAV, with the annual growth rate limited to 3 percent, unless there are changes to the property, such as the addition of a new structure, improvement to an existing structure, or subdivision or partition of the property (Oregon Department of Revenue 2024a).

The Oregon Constitution also limits the amount of property taxes that can be collected from each individual property. Measure 5, passed in 1990, divided taxes into education and general government categories, and limits the amounts that can be collected to $5 per $1,000 RMV for school taxes and $10 per $1,000 RMV for general government taxes. In cases where taxes in either category exceed the limit for a property, the taxes are reduced or "compressed" until the limit is reached (Oregon Department of Revenue 2020, 2024a).

Passage of Measures 5 and 50 caused a substantial change in Oregon's school funding system by limiting property taxes for schools, which caused a shift in funding from local property taxes to the state general fund (Oregon Legislative Revenue Office 2020). Following passage of Measure 5, the state legislature adopted a K-12 equalization formula that substantially reduced local control over school funding. The equalization formula is designed to ensure financial equity among school districts, with each school district receiving an allocation per student in combined state and local funds. This distribution formula requires that any increase in property tax revenues be offset by a decrease in state funding. As summarized by the Oregon Legislative Revenue Office (2020, p. 3):

> *In effect, the formula converts local school revenue resources into part of available statewide funds for all schools. It does not matter what a district receives in property taxes or other local revenues. The only revenue that matters is the statewide sum of state and local dollars. This statewide sum, minus statutorily listed expenditures from state fund, is commonly called the formula revenue available for distribution.*

3.1.1 Renewable Energy Incentives

PGE has not entered into any tax arrangements with Sherman County at this time but anticipates entering into a Fee in Lieu of Property Taxes for solar projects program agreement. The following section provides an overview of this program.[4]

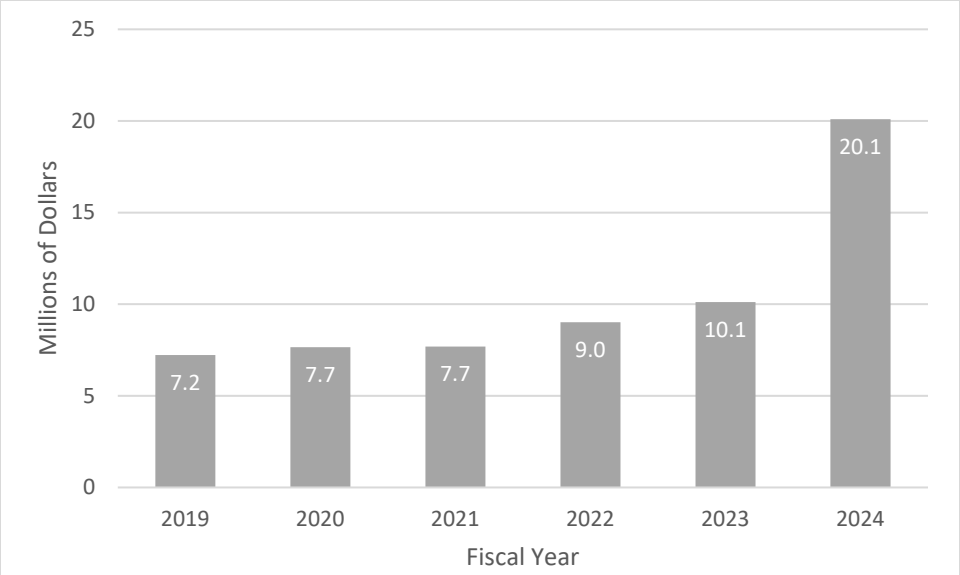
3.1.1.1 Fee in Lieu of Property Taxes for Solar Projects

In 2015, the Oregon legislature passed an act temporarily authorizing counties to enter into a Fee in Lieu of Property Taxes agreement with solar project owners. Under this type of agreement, a solar project may be exempt from property taxes for up to 20 years, contingent on the annual payment to the county of a flat fee of $7,000 per MW of nameplate capacity. Initially set to expire in January 2022, the passage of Oregon Senate Bill 154 (effective September 25, 2021) extended the expiration date to January 2028 and modified the fee amount from $7,000 per MW per year to a range of $5,500 to $7,000 per MW. The bill also clarified that the fees shall be apportioned and distributed among the taxing districts that have jurisdiction over the property (ODOE 2021b). This program is referred to as the Solar Payment in Lieu of Taxes (Solar PILOT) in the following sections.

3.2 Sherman County Property Tax Revenues

Total property tax revenues are summarized for Sherman County from 2019 to 2024 in Figure 2. There were 12 taxing districts in Sherman County in 2024, which together imposed $20.1 million in property taxes after "compression." Compression reduced total estimated revenues by approximately $895,000 in 2024, from approximately $21.0 million to $20.1 million (Oregon Department of Revenue 2024b).

[4] Two other types of incentive programs are available for renewable energy projects in Sherman County: the Strategic Investment Program (SIP), and the Rural Renewable Energy Development (RRED) Zone program. However, PGE does not anticipate using either of these programs and, as a result, they are not discussed further in this report.



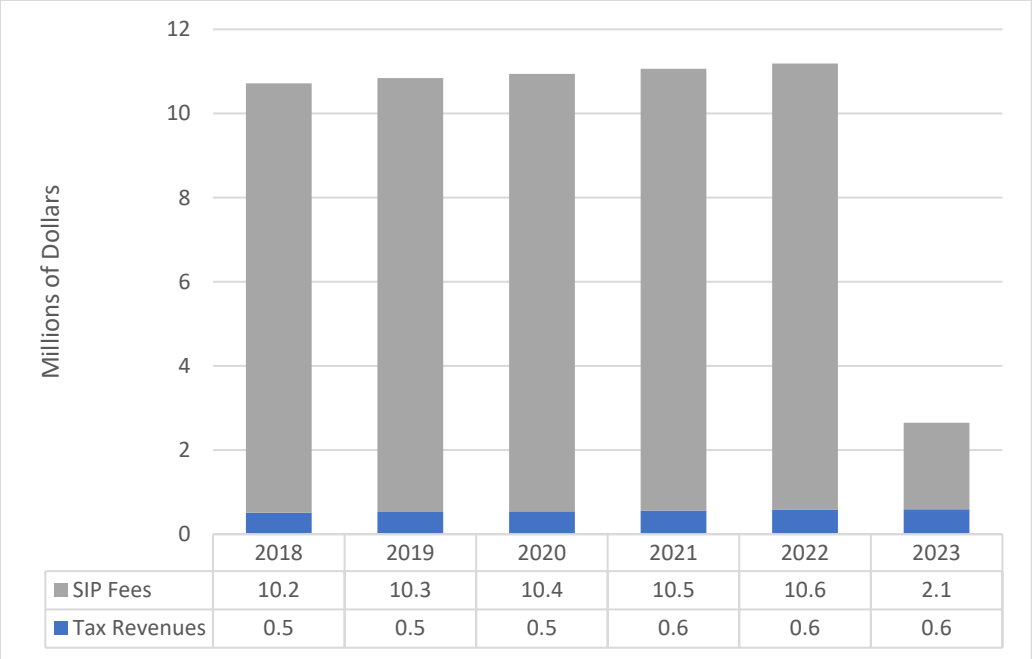
Note:
1/ Data are by fiscal year (FY) and are identified in the chart by the second year (e.g., 2019 = FY 2018-19).
Source: Oregon Department of Revenue various years

Figure 2. Total Property Tax Revenues in Sherman County, FY 2019 to 2024

According to Business Oregon (2024a), four renewable energy projects have entered into Strategic Investment Program (SIP) agreements with Sherman County.[5] These projects are the Klondike Wind Power III, the Hay Canyon & Star Point Wind Farms, and the Golden Hills Wind Farm, owned and operated by Avangrid, and the BCWF, owned and operated by PGE. Figure 3 shows the combined total taxes and SIP payments for these projects for 2018 to 2023.

From 2018 to 2022, these totals include three projects; Golden Hills Wind Farm appears for the first time in 2023. For 2018 to 2022, the annual SIP fees paid by these four projects exceeded the corresponding annual total property tax revenues in Sherman County, as indicated by the values in Figure 3 (SIP fees) and Figure 2 (total property tax revenues). Review of the Sherman County Adopted Budget report for fiscal year (FY) 2022 to 2023 indicates that SIP Funds received in Sherman County were allocated to the Sherman County School District, local cities, the Resident Incentive Program, Sherman County Museum, and scholarship committees (Sherman County 2022).

[5] The SIP is a state-administered program that offers a 15-year property tax exemption on a portion of large capital investments for projects that serve a "traded sector" industry. Renewable energy projects are an accepted industry for the SIP. Under a SIP, the project pays property tax on an initial taxable portion of the assessed value plus a community service fee equal to 25 percent of foregone tax, and may also make additional payments as negotiated with the county (Business Oregon 2024b).



	2018	2019	2020	2021	2022	2023
SIP Fees	10.2	10.3	10.4	10.5	10.6	2.1
Tax Revenues	0.5	0.5	0.5	0.6	0.6	0.6

Source: Business Oregon 2024a

Figure 3. Property Tax Revenues and SIP Fees for Renewable Energy Projects in Sherman County, 2018 to 2023

In 2023, two of the projects, Klondike Wind Power III and the BCWF, both reached the end of their 15-year exemption periods. This is reflected in the drop in SIP fees shown in Figure 3 and the increase in property tax revenues in 2024 shown in Figure 2. From FY 2023 to FY 2024, property taxes imposed in Sherman County almost doubled, increasing from $10.1 million to $20.1 million (Figure 2). This increase was due to an increase in the assessed value for utilities, which increased from $408.5 million in FY 2023 to $1,062.7 million in FY 2024, accounting for 81 percent of total assessed value for all properties in Sherman County (Oregon Department of Revenue 2023, 2024b).

3.3 Fiscal Impacts

The Solar Components would result in the permanent disturbance of 1,445 acres of agricultural land spread over one tract.[6] [7] There are nine tax code areas in Sherman County. The tract is located in Tax Code Area 7-2, Rural Wasco, Rufus. Tax Code Area 7-2 includes six taxing districts with a combined levy or millage rate of 15.7369 in 2024-2025 (Table 5).

[6] Per Oregon Administrative Rule 660-033-0020(14), "tract" means one or more contiguous lots or parcels under the same ownership.

[7] The 3,980-acre Solar Micrositing Area/RFA 4 Site Boundary includes a second tract, a 12.9-acre tract owned by PGE, which is the site of the existing Biglow Canyon Substation. This tract is not part of the solar components permanent disturbance area.

Table 4. Taxing Districts and Mill Rates for Sherman County Tax Code Area 7-2, 2024-2025

Taxing District	Mills
Sherman County	8.7141
Sherman Soil and Water Conservation District	0.2600
North Central ESD	2.0193
North Central Rural Fire Protection District	0.8452
Sherman County School District	3.4203
Sherman Health District	0.4780
Total	**15.7369**
Source: Sherman County 2024	

As noted above, PGE has not entered into any tax arrangements with Sherman County at this time, but anticipates entering into a Solar PILOT agreement (see Section 3.1.1 for further discussion of this program). The following assessment, which estimates potential tax revenues that could be generated under a Solar PILOT agreement, is based on the following assumptions:

- Construction of the Solar Components is expected to begin in Q4 of 2026 (mobilization) and continue through Q4 of 2027 for a duration of approximately 17 to 19 months. The Solar Components will consist of a 125-MW PV solar facility and 500-MWh BESS, with a total estimated cost of $385.7 million.
- Estimates are for a 40-year operating life. Assessed values are assumed to depreciate over this period, with the Solar Components assumed to depreciate to 20 percent of their original value by Year 25 following installation.
- The Solar Components are located in Sherman County Tax Code Area 7-2. Base case estimates are based on the 2024-25 millage rate for Tax Code Area 7-2, which is assumed to remain constant over the 40-year analysis period.[8]
- The Solar PILOT assessment assumes that the Solar Components would pay $5,500 per MW for 20 years and represents the lower range of potential payments under this program.

The results of this assessment are summarized in Table 6 and Figure 4, which show estimated payments to Sherman County in 5-year increments for the assumed 40-year operating life of the Solar Components. Estimates are 5-year totals, not annual averages. Total estimated payments to Sherman County would be approximately $40.1 million over the assumed 40-year operating life of the Solar Components (Table 6).

[8] Estimates are based on the full millage rate and do not account for the effects of compression, which would potentially reduce the amount of education funds paid to North Central ESD and the Sherman County School District.

Table 5. Estimated Property Tax Revenues for a Solar PILOT Scenario

Years[1]	Estimated Tax Revenues ($ million)[2]
1 to 5	3.4
6 to 10	3.4
11 to 15	3.4
16 to 20	3.4
21 to 25	8.1
26 to 30	6.1
31 to 35	6.1
36 to 40	6.1
Total	**40.1**

Notes:
1. Estimates are in millions of dollars and 5-year totals, not annual averages.
2. Solar PILOT estimates assume that the Solar Components would pay $5,500 per MW for 20 years. Per Oregon Senate Bill 154, payments could range from $5,500 to $7,000 per MW.

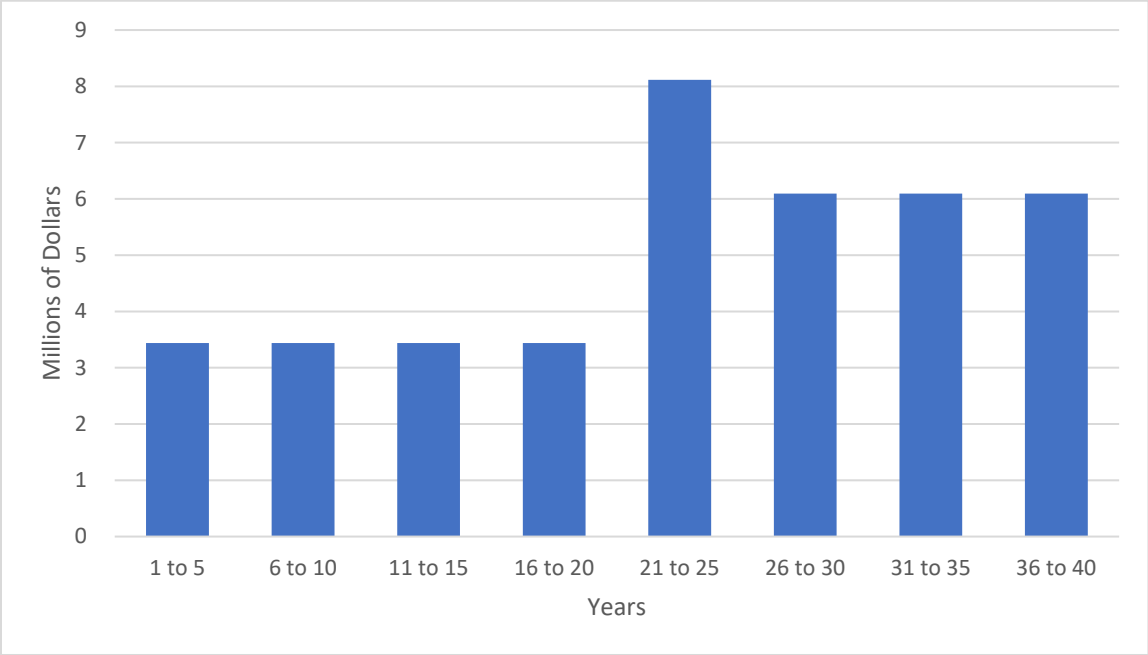


Figure 4. Estimated Property Tax Revenues for a Solar PILOT Scenario

Payments under the Solar PILOT would extend over 20 years and be a fixed amount per MW over this period and payments would be made to the taxing districts that comprise Tax Code Area 7-2 in accordance with their established levies (which combined make up the Area 7-2 millage rate) (see Table 5).

Table 7 shows the anticipated distribution of the Solar Components-related property tax revenues by scenario and taxing district based on the established levies for Tax Code Area 7-2. Sherman

County would receive the largest share (55 percent) of the increased government revenues generated by the Solar Components. Activities that are financed by general fund revenues in Sherman County include roads, law enforcement, public health, weed control, land use planning, assessment and taxation, district attorney, juvenile services, and general administration. In addition, more than one-third (35 percent) of revenues would be distributed to education via the North Central ESD (13 percent) and the Sherman County School District (22 percent).[9]

Table 6. Estimated Property Tax Revenues by Taxing District

Taxing District	Mills[2]	First Full Year of Operation[1]	40-Year Operating Life[1]
Sherman County	8.7141	0.4	22.2
Sherman Soil and Water Conservation District	0.2600	0.0	0.7
North Central Education Special District	2.0193	0.1	5.2
North Central Rural Fire Protection District	0.8452	0.0	2.2
Sherman County School District	3.4203	0.1	8.7
Sherman Health District	0.4780	0.0	1.2
Total	**15.7369**	**0.7**	**40.1**

Notes:
1. Estimates are in millions of dollars.
2. Mills are the millage rates for the taxing districts in Tax Code Area 7-2 for 2024-25 (Sherman County 2024).

Other government units that would receive Solar Components-related property tax revenues include the North Central Sherman Rural Fire Protection District, the Sherman County Soil and Water Conservation District, and the Sherman County Health District. Increased funding for the North Central Sherman Rural Fire Protection District could indirectly benefit agricultural activities through the provision of additional funds for wildland firefighting. Similarly, increased funding to the Sherman County Soil and Water Conservation District would help with conservation of natural resources and potentially benefit agricultural activities.

In all cases, Solar Components-related property tax revenues would represent an important new source of funds that would otherwise not be available to these government units.

4.0 Agricultural Impact Analysis

Construction and operation of the Solar Components would remove approximately 1,445 acres from agricultural production. This land is presently mostly used for dryland winter wheat production and farmed on rotation. The following assessment considers the conversion of the acres to solar development as a share of total harvested acres and agricultural sales and estimates the secondary (indirect and induced) impacts that a corresponding reduction in farm spending would

[9] As noted elsewhere in this report, estimates are based on the full millage rate and do not account for the effects of compression, which could potentially reduce the amount of education funds paid to the North Central ESD and Sherman County School District.

have on the local economy. Impacts to the local agricultural economy are estimated using the IMPLAN economic modeling package.

4.1 Economic Impact Model

IMPLAN is a regional input-output model widely used to assess the economic impacts of energy and many other types of projects. The IMPLAN model divides the economy into 528 sectors, including government, households, farms, and other industries, and models the linkages between the various sectors. The linkages are modeled through input-output tables that account for all dollar flows between different sectors of the economy. The economic relationships modeled by IMPLAN allow the user to estimate the overall change in the economy that would result from the displacement of agricultural land due to the Solar Components.

4.1.1 Impact Types

Economic multipliers derived from the model are used to estimate total economic impacts. Total economic impacts consist of three components: direct, indirect, and induced impacts.

- The *direct* impact component consists of expenditures made specifically for the proposed project, such as agricultural production. These direct impacts generate economic activity elsewhere in the local economy through the multiplier effect, as initial changes in demand "ripple" through the local economy and generate indirect and induced impacts.
- *Indirect* impacts are generated by expenditures on goods and services by suppliers who provide goods and services used for agricultural production. Indirect effects are often referred to as "supply-chain" impacts because they involve interactions among businesses.
- *Induced* impacts are generated by the spending of households associated either directly or indirectly with the agricultural production. Landowners farming the land, for example, use their income to purchase groceries and other household goods and services. Induced effects are also referred to as "consumption-driven" impacts.

4.1.2 Impact Measures

Impacts are assessed using the following measures that are reported by the IMPLAN model:

- *Jobs* – measured as the average number of employees engaged in full- or part-time work. Model outputs are adjusted to full-time equivalents (FTEs) using coefficients provided by IMPLAN.[10]
- *Personal income* (or labor income) – expressed as the sum of employee compensation and proprietary income.

[10] Each FTE job equates to one full-time job for one year or 2,080-hour units of labor. Part-time or temporary jobs constitute a fraction of a job. For example, if an engineer works just 3 months on a solar project, that would be considered one-quarter of an FTE job.

- Employee compensation (wages) includes workers' wages and salaries, as well as other benefits such as health, disability, and life insurance; retirement payments; and non-cash compensation; expressed as total cost to the employer.
- Proprietary income (business income) represents the payments received by small-business owners or self-employed workers.

- *Output* – the value of goods and services produced, which serves as a broad measure of economic activity.

4.2 State and Local Agricultural Overview

Most of the land in Sherman County is farmland. In 2022, the most recent available agricultural census identified 402,516 acres in farms in Sherman County, approximately 76 percent of the land in the county (USDA 2022, U.S. Census Bureau 2024). A total of 173 farms operated in the county in 2022, with an average farm size of 2,327 acres. Almost two-thirds (64 percent) of the farmland in Sherman County (257,887 acres) is cropland; 40 percent (102,408 acres) of this total was harvested in 2022 (Table 8). Eighty-six percent of farms in Sherman County were family-owned in 2022 (USDA 2022).

Table 7. Land in Farms and Selected Crops Harvested in Sherman County, 2022

Item	Number of Farms	Acres
Total Farms/Land in Farms	173	402,516
Total Cropland	158	257,887
Harvested cropland	97	102,408
Irrigated land	20	1,045
Selected crops harvested		
Wheat for grain, all	83	98,884
Winter wheat for grain	82	98,195
Other spring wheat for grain	5	689
Barley for grain	12	2,677
Forage	22	1,447
Source: USDA 2022		

The primary crop grown in Sherman County is wheat for grain, specifically winter wheat (Table 8). Winter wheat accounted for almost all (96 percent, 98,195 acres) of total harvested acres in 2022, followed by barley for grain (3 percent, 2,677 acres), and land used for forage (hay and haylage, grass silage, and greenchop) (1 percent, 1,447 acres; Table 8).

Less than 1 percent (0.3 percent, 1,045 acres) of the farmland in Sherman County is irrigated (Table 8). Almost all of this irrigated land (96 percent, 999 acres) was identified as harvested cropland in 2022. Most (88 percent, 879 acres) of the harvested irrigated cropland was forage, with the remaining acres cultivated for winter wheat (USDA 2022).

Sherman County ranked 35 out of 36 counties in Oregon in livestock sales in 2022, with 30 farms selling a combined total of 2,661 cattle and calves (USDA 2022).

4.2.1 Economic Output and Employment

Crops accounted for 96 percent of agricultural sales in Sherman County in 2022, with livestock, poultry, and products making up the remaining 4 percent (Table 9). Wheat, which made up 97 percent of harvested cropland in 2022, accounted for 93 percent of total agricultural sales. Cattle and calves accounted for almost all of the livestock sales and approximately 4 percent of total sales (Table 9).

Table 8. Sales by Commodity Group in Sherman County, 2022

Commodity Group	Sales ($ million)	Percent of Total Sales	Percent of Crop Sales
Crops	**$52.41**	**96%**	**100%**
Wheat	$50.72	93%	97%
Barley	$0.93	2%	2%
Other crops and hay	$0.76	1%	1%
Livestock, poultry, and products	**$2.42**	**4%**	**--**
Cattle and calves	$2.36	4%	--
Total sales	**$54.82**	**100%**	**--**
Source: USDA 2022			

Data compiled by IMPLAN provide additional perspective on the agricultural economy in Sherman County. In 2023, an estimated 311 people were employed in agriculture, with a combined total output of $39.0 million (Table 10). Grain farming, which includes wheat, was the largest sector by employment in Sherman County (see Table 3), accounting for 188 jobs in 2023, almost two-thirds (60 percent) of total agricultural employment (Table 10). Beef cattle ranching and farming, support activities for agriculture and forestry, and all other crop farming were the next largest agricultural employers, accounting for 46, 44, and 34 jobs, respectively (Table 10).

Table 9. Employment, Labor Income, and Economic Output by Agricultural Sector in Sherman County, 2023

IMPLAN Sector	Description	Employment[1]	Labor Income ($ Million)[2]	Output ($ Million)
2	Grain farming[3]	188	$9.3	$32.5
11	Beef cattle ranching and farming	46	$3.5	$3.0
19	Support activities for agriculture and forestry[4]	44	$2.3	$2.6
10	All other crop farming[5]	34	$0.9	$0.9
	Total	**311**	**$16.0**	**$39.0**

Notes:

1. IMPLAN jobs include all full-time, part time, and temporary positions. Employment totals include wage and salary and proprietor employment.

2. Labor income includes employee compensation and proprietor income.

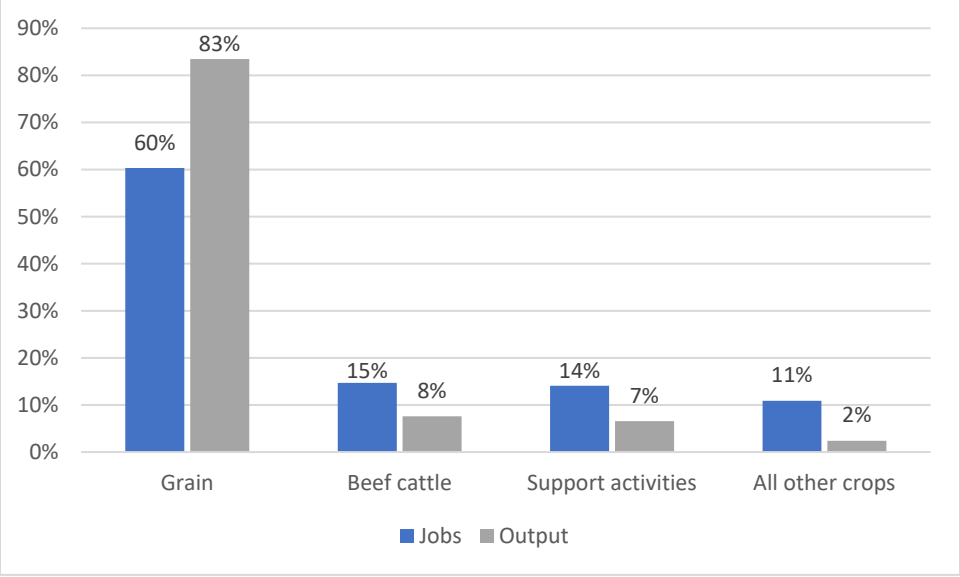
3. IMPLAN Sector 2 – Grain farming includes wheat, corn, dry beans, and dry peas.

4. IMPLAN Sector 19 – Support activities for agriculture and forestry includes a wide range of agricultural services, including crop dusting, crop spraying, cultivation services, machine harvesting of grain, hay mowing, and livestock breeding services, as well as forestry-related services, including timber cruising, forest thinning, and reforestation services.

5. IMPLAN Sector 10 – All other crop farming includes hay farming (e.g., alfalfa hay, clover hay, grass hay), hop, mint, and tea farming.

Source: IMPLAN 2024

Viewed in terms of economic output, grain farming accounted for 83 percent of total agricultural output in 2023, followed by beef cattle and support activities for agriculture and forestry, accounting for 8 percent and 7 percent of the total, respectively. Although accounting for 11 percent of agricultural jobs, all other crop farming made up just 2 percent of economic output. Figure 5 shows jobs and economic output by agricultural sector as a share of total agricultural employment and output.



Source: IMPLAN 2024

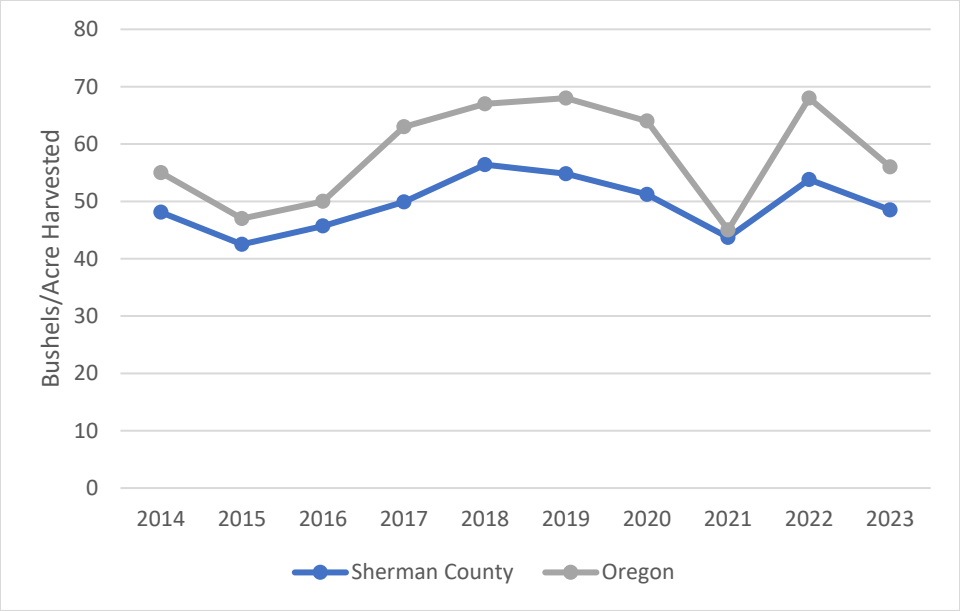
Figure 5. Agricultural Employment and Economic Output by Sector in Sherman County, 2023

4.2.2 Winter Wheat Production and Value

Winter wheat yields vary by location and from year-to-year. Average annual yields in bushels per acre (bushels/acre) over the last decade are shown for Sherman County and the State of Oregon in Table 11 and Figure 6. Yields in both areas have followed similar trends over the last decade, with yields in Sherman County consistently lower than the state average. Average annual yields from 2014 to 2023 were 49.5 bushels/acre in Sherman County and 58.3 bushels/acre in Oregon. Sherman County yields over this period were on average 8.8 bushels/acre lower than the state average. Average yields dropped sharply in both areas in 2021 due to poor growing conditions, but more than rebounded in 2022, before dropping again in 2023 (Table11, Figure 6).

Table 10. Average Annual Yield for Winter Wheat (Bushels/Acre), 2014-2023

Year	Sherman County	Oregon	Sherman County Difference from Oregon
2014	48.1	55.0	-6.9
2015	42.5	47.0	-4.5
2016	45.7	50.0	-4.3
2017	49.9	63.0	-13.1
2018	56.4	67.0	-10.6
2019	54.8	68.0	-13.2
2020	51.2	64.0	-12.8
2021	43.7	45.0	-1.3
2022	53.8	68.0	-14.2
2023	48.5	56.0	-7.5
2014-2023 Average	**49.5**	**58.3**	**-8.8**
Source: USDA 2024a			



Source: USDA 2024a

Figure 6. Average Annual Yield for Winter Wheat (Bushels/Acre)

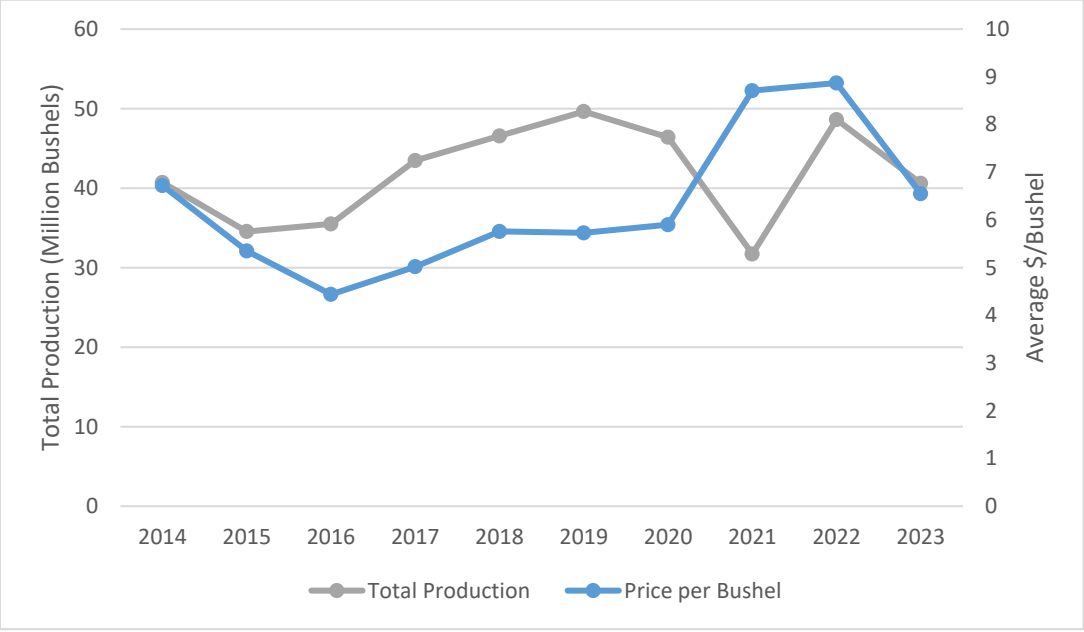
The average annual winter wheat yields discussed in this section include both irrigated and dryland harvested acres as the source data do not differentiate between the two. Irrigated land accounted for 9.7 percent of winter wheat acres harvested in Oregon in 2022. In Sherman County, irrigated land accounted for approximately 100 acres or 0.1 percent of the total 98,195 winter wheat acres harvested (Table 8). Therefore, the average yields discussed in Table 13 generally reflect non-irrigated winter wheat yields. According to the 2022 Agricultural Census, average winter wheat yields in Oregon for irrigated land were 111.4 bushels/acre compared to 61.9 bushels/acre for unirrigated land. These data are not available at the county level.

Average annual prices for winter wheat in Oregon are presented per bushel for 2014 to 2023 in Table 12. Table 12 also shows total statewide winter wheat acres harvested, production in bushels, and the total value of production. Winter wheat acres harvested ranged from 690,000 to 740,000 over this period, with an annual average of 716,000 acres. Values per bushel ranged from a low of $4.44 in 2016 to a high of $8.87 in 2022, with an annual average of $6.28 (Table 12, Figure 7). The total annual value of production averaged $263.4 million over the same period.

Table 11. Winter Wheat Acres Harvested, Total Production, Average Price per Bushel, and Total Value of Production in Oregon, 2014 to 2023

Year	Acres Harvested (1,000s)	Total Production (1,000 Bushels)	Average Price/Bushel ($)[1/]	Total Value of Production ($ million)[1/]
2014	740	40,700	6.72	273.5
2015	735	34,545	5.35	184.8
2016	710	35,500	4.44	157.6
2017	690	43,470	5.02	218.2
2018	695	46,565	5.76	268.2
2019	730	49,640	5.73	284.4
2020	725	46,400	5.90	273.8
2021	705	31,725	8.71	276.3
2022	715	48,620	8.87	431.3
2023	725	40,600	6.55	265.9
2014-2023 Average	**716**	**41,907**	**6.28**	**263.4**

Notes:
1. Dollars are not adjusted for inflation.
Source: USDA 2024a, 2024b



Source: USDA 2024a

Figure 7. Total Winter Wheat Production and Average Price per Bushel in Oregon, 2014 to 2023

Table 13 presents total winter wheat acres harvested, production in bushels, and the total value of production for Sherman County. Values are annual estimates for the last decade (2014 to 2023). Winter wheat acres harvested ranged from 110,000 to 117,300 over this period, with an annual average harvest of 114,300 acres. State average prices per bushel were used to estimate the total value of winter wheat production in Sherman County, which ranged from $23.0 million to $55.1 million, with an annual average of $35.5 million (Table13).

Table 12. Winter Wheat Acres Harvested, Total Production, and Total Value of Production in Sherman County, Oregon, 2014 to 2023

Year	Acres Harvested (1,000s)	Total Production (1,000 Bushels)	Total Value of Production ($ million)[1]
2014	113.7	5,465	36.7
2015	112.9	4,795	25.7
2016	113.5	5,190	23.0
2017	114.0	5,690	28.6
2018	110.0	6,200	35.7
2019	114.5	6,280	36.0
2020	115.3	5,903	34.8
2021	117.3	5,123	44.6
2022	115.5	6,214	55.1
2023	116.5	5,650	37.0
2014-2023 Average	**114.3**	**5,651**	**35.7**

Note:
1. Total value of production is estimated based on average annual prices per bushel in Oregon (see Table 12). Dollars are not adjusted for inflation.
Source: USDA 2024a

4.3 Solar Micrositing Area Overview

The Solar Components would result in the permanent disturbance of 1,445 acres of agricultural land. With the exception of 25 acres, which are irrigated by a center-pivot[11], all farmland within the permanent disturbance footprint is dedicated to dryland wheat (soft white winter wheat) production and farmed on rotation. The following assessment assumes that the Solar Components would disturb 1,445 acres cultivated for dryland wheat. Half of each tract is assumed to be planted and harvested in any given year, with the other half left in summer fallow.

[11] According to the landowner, the 25 acres of irrigated land is cultivated as row crops that rotate between garlic, carrot seed, mint, and wheat depending on the year. The removal of up to 25 acres of garlic, carrot seed, or mint crops from production is a de minimis loss of these crop types. The 25 acres was included in the economic impact assessment for dryland wheat.

4.3.1 Crop Yields

The affected lands are owned by Scharf, R&A LLC and contract farmed by the McCullough farm. In support of RFA 4, the project team surveyed the landowner and the contract farmer. As part of this survey, the landowner indicated that the affected lands had an average annual 10-year yield of 62 bushels/acre. This is higher than both the 10-year state and 10-year Sherman County averages, which were 58.3 bushels/acre and 49.5 bushels/acre, respectively (Table 11).

4.3.2 Local Expenditures

The affected landowner and farmer provided information on current local spending. Local purchases included seed, fertilizer, agricultural chemicals, fuel, and repairs. Identified suppliers included Mid Columbia Producers in Wasco (seed), Morrow County Grain Growers in Wasco (fertilizer, agricultural chemicals), the McGregor Company in Wasco (agricultural chemicals), and Ed Staub & Sons in Moro and other Sherman County locations (fuel). Viewed on a per acre basis, the surveyed farmer estimated average annual local expenditures of $137 per planted acre. For comparison, enterprise budget information developed by Oregon State University (2021) estimated costs of $300 per planted acre, which included fixed costs, including insurance; machinery, equipment, and vehicle depreciation and interest, and land interest charges, as well as the variable costs estimated by the participating landowner/farmer.

4.3.3 Employment

The affected lands are, as noted above, owned by Scharf, R&A LLC and contract farmed by the McCullough farm. The McCullough farm also farms additional land in the surrounding area, meaning that the land farmed within the site boundary is part of a larger farm operation that involves other nearby land. Based on interviews with the participating landowner and farmer, it is expected that the affected farmer would continue to farm elsewhere in the county, with no net loss in direct agricultural employment anticipated.

4.4 Agricultural Impacts

4.4.1 Agricultural Production and Value

The Solar Components would result in the permanent disturbance of 1,445 acres. For the purposes of analysis, the following assessment assumes that this land would otherwise be cultivated for dryland winter wheat, with half of this total (723 acres) planted and harvested each year, with the other half left fallow. For the average annual yield (bushels/acre), we use two sets of estimates. The first set of estimates uses the 10-year average annual yield for Sherman County (49.5 bushels/acre) (Table11). The second set of estimates uses the average yield value provided by the surveyed landowner/farmer (62 bushels/acre).

Using these average yields and the 10-year average annual price per bushel for Oregon ($6.28) results in estimated average values of $311 to $389 per acre. Applying these values to the 723 acres

assumed to be harvested each year results in total annual estimated values of $224,000 to $281,000 (Table 14). This range represents the value of the land that would be taken out of production as a result of the Solar Components.

Table 13. Estimated Value of Agricultural Production

Measure	Low[1]	High[1]
Acres Harvested	723	723
Average Bushel/Acre	49.5	62.0
Average Value/Acre[2]	$311	$389
Total Production (1,000s Bushels)	35.7	44.8
Total Production Value ($1,000)	$224	$281

Notes:
1. The low and high estimates use the 10-year average for Sherman County (low) and the 10-year average from the landowner survey (high).
2. Average value per acre is estimated using the average annual price per bushel for Oregon for 2014 to 2023.

From 2014 to 2023, an annual average of 114,320 acres of winter wheat was harvested in Sherman County, resulting in total estimated average annual revenues of $35.7 million (Table 13). Statewide, an annual average of 716,111 acres of winter wheat was harvested, with average annual revenues of $263.4 million (Table 12). Viewed as a share of these totals, the acres that would be removed from production represent 0.6 percent and 0.1 percent of the average annual acres of winter wheat harvested in Sherman County and Oregon, respectively. Viewed as a share of annual average revenue, the midpoint of the estimated value of production on the Solar Components site ($252,900) is equivalent to 0.7 percent and 0.1 percent of the estimated values in Sherman County and Oregon, respectively (Table 15). The high estimate ($281,300) is equivalent to 0.8 percent and 0.1 percent of the estimated values in Sherman County and Oregon, respectively (Table15).

Table 14. Affected Agricultural Production as a Share of County and State Winter Wheat Totals

Area	2014-2023			
	Average Acres Harvested	Value of Production ($000)		
		Low	High	Average
Sherman County	114,320	35,726	35,726	35,726
Oregon	716,111	263,408	263,408	263,408
Affected Values	723	224.4	281.3	252.9
As a Percent of Total				
Sherman County	0.6%	0.6%	0.8%	0.7%
Oregon	0.1%	0.1%	0.1%	0.1%

Note:
1. The low and high estimates use the 10-year average for Sherman County (low) and the 10-year average from the landowner survey (high). The average value represents the midpoint between the low and high values.

4.4.2 Economic Output and Employment

Removal of up to 1,445 acres of cultivated winter wheat land from production would have impacts to the local agricultural economy due to the associated reduction in local spending. Landowners currently purchase fuel, seed, and fertilizer and chemicals from local suppliers including Mid Columbia Producers, Morrow County Grain Growers, McGregor Company, and Ed Staub & Sons. Using IMPLAN, the following assessment modeled the economic impacts for Sherman County based on an estimated reduction in annual output of $281,300 in the grain sector. This represents the high end of the range of estimated values (see Table 15).

Table 16 shows the local economic activity supported by current agricultural operations based on estimated output of $281,300. These are annual impacts and removal of the permanent disturbance area from production would result in a corresponding annual reduction in economic activity as follows:

- The direct impact represents the gross value of production that the landowner would no longer receive from producing wheat, as well as the associated employment and labor income of the affected farmers and their employees. The direct employment number shown in Table 16 was estimated by IMPLAN based on county-specific ratios. However, interviews with the participating landowner and farmer indicated that the affected farmer would continue to farm elsewhere in the county, with no net loss in direct agricultural employment anticipated.
- The indirect impact represents economic activity supported elsewhere in the local economy by agricultural production in the permanent disturbance area. This includes spending on inputs like seeds, fertilizer, and fuel and contract services. This spending supports less than 1 indirect FTE job, $46,300 in indirect labor income, and $100,000 in indirect economic output (Table 16). This assessment assumes that this spending would no longer occur when

the Solar Components are built and this amount of employment, labor income, and output would be lost. This may or may not translate into reductions in individual employment positions (jobs).

- The estimated induced impacts presented in Table 16 are supported by the spending of households associated either directly or indirectly with the existing agricultural operations. The assessment assumes that this spending would no longer occur when agricultural production stops in the permanent disturbance area, resulting in a potential loss of the induced impacts shown in Table 16.

Table 15. Economic Impacts of Current Agricultural Activities

Impact	Employment (FTE)[1]	Labor Income ($000)[2]	Output ($000)[2]
Direct	1.4	$80.3	$281.3
Indirect	0.7	$46.3	$100.0
Induced	0.1	$6.9	$25.1
Total	**2.1**	**$133.5**	**$406.5**

Notes:
1. Jobs are full-time equivalents (FTE) for a period of one year (1 FTE = 2,080 hours).
2. Labor income and economic output are expressed in thousands of Year 2025 dollars.
Source: IMPLAN 2024

The estimated economic impacts shown in Table 16 represent the total annual economic activity attributable to the removal of up to 723 acres from winter wheat production within the RFA 4 site boundary.[12] The indirect impacts most closely reflect the likely impacts to the agricultural economy in Sherman County. Viewed by IMPLAN sector, most of the indirect employment supported by site-related expenditures is in IMPLAN Sector 19 – Support activities for agriculture and forestry and Sector 2 – Grain farming, with 0.3 FTE and 0.2 FTE supported in each sector, respectively. These sectors employed 44 and 188 workers, respectively, in 2023, as shown in Table 2. The estimated potential reductions in employment in these sectors, were they to occur, would be equivalent to 0.8 percent and 0.1 percent of existing employment, respectively. It should, however, be noted that this employment may not necessarily translate into a loss of individual positions. A reduction in demand could, for example, result in a reduction in hours worked or reduced overtime, without resulting in job loss. These potential impacts to the support activities for the agriculture and forestry sector[13] and grain farming sector[14] are minor given they represent less than 1 percent of existing employment in each case.

[12] 723 represents half of the acres within the permanent disturbance footprint of 1,445 acres as the analysis assumes that only half of the total acreage taken out of agricultural protection is harvested each year.
[13] IMPLAN Sector 19 – Support activities for agriculture and forestry
[14] IMPLAN Sector 2 – Grain farming

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Attachment K-3. Email Correspondence Scharf Mineral and Aggregate Resource Site Setbacks

Ziola, Kiana

To: Tamara Erickson; Todd Ellwood; Michael Binder
Cc: Albrich, Elaine; McLaneGodwin, Linsey; McClain, Leslie; Peters, Jessica; Kathleen Campanella; Jamin, Olivier
Subject: RE: Mineral Rights Question

From: Ziola, Kiana <KIANA.ZIOLA@tetratech.com>
Sent: Wednesday, July 9, 2025 5:25 PM
To: Tamara Erickson <tamara@brightnightpower.com>; Todd Ellwood <todd.ellwood@brightnightpower.com>; Michael Binder <michael.binder@brightnightpower.com>
Cc: Albrich, Elaine <elainealbrich@dwt.com>; McLaneGodwin, Linsey <LINSEY.MCLANEGODWIN@tetratech.com>; McClain, Leslie <Leslie.McClain@tetratech.com>; Peters, Jessica <JESSICA.PETERS@tetratech.com>; Kathleen Campanella <kathleen.campanella@brightnightpower.com>; Jamin, Olivier <olivierjamin@dwt.com>
Subject: FW: Mineral Rights Question

Team – please see Scharf's response to our request for confirmation of Mineral Rights for as Maribeth has outlined below. I understand that Maribeth prefaced the discussion with Scharf outlining the following background information:

Sherman County's zoning code has a specific provision that ensures "significant mineral or aggregate resource sites" (such as the mining site on your property) can impose setbacks on adjacent uses to avoid conflicts in land use.

For reference, the section of Sherman County Zoning Ordinance we are responding to is provided below:

SCZO Section 3.6(5)(c)(1): *A conflicting use listed under Subsection (6) of this Section within 1,320 feet from a significant mineral or aggregate resource site (active or potential) may be required to establish setbacks in excess of those required in the underlying primary zone. The required setback shall be determined by the County after consultation with the applicant and the owner/operator of the mineral resource land (or vice versus) to insure visual and sound screening between present and future resource uses and the conflicting use or activity. Such setbacks shall be no less than that set forth by the primary zone.*

As ensured by the Option to Lease Agreement, access to your mining site will remain unhindered by the solar project regardless of the setback distance.

As of now, the zoning of your property (Exclusive Farm Use) requires at least a 30-foot setback between your mining site boundary and the fence line of the Biglow Solar Project.

As part of the Biglow Solar Project permitting, we need to show compliance with this county zoning code provision.

Tetra Tech anticipates that the acknowledgements and responses from Sharf provided should address RAI response needs for LU-1:

RAI Item	Exhibit/Section	RAI	ODOE Comments
LU-1	Ex. K, S. 5.2.	Update Section to include evaluation of compliance with SCZO Section 3.6.	The County has indicated within the proposed Sola confirm whether these si 3.6, accordingly.

Kiana Ziola | Environmental Planner/Project Manager
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Tetra Tech | *Leading with Science®* | Environmental Services Division
3380 Americana Terrace, Suite 201 | Boise, ID 83706 | tetratech.com

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From: Maribeth Sawchuk <maribeth@enermatters.com>
Sent: Wednesday, July 9, 2025 4:10 PM
To: Ziola, Kiana <KIANA.ZIOLA@tetratech.com>
Subject: Fwd: Mineral Rights Question

Can you share this with the broader group?

---------- Forwarded message ---------
From: **John Scharf** <jscharf1948@gmail.com>
Date: Wed, Jul 9, 2025 at 11:40 AM
Subject: Re: Mineral Rights Question
To: Maribeth Sawchuk <maribeth@enermatters.com>

Yes

On Wed, Jul 9, 2025, 10:11 AM Maribeth Sawchuk <maribeth@enermatters.com> wrote:

> Hi John,
>
> It was great having a chance to meet you this week. Thanks for taking the time to confirm your lack of concern regarding the mineral rights access. The three questions we reviewed were:
>
> 1. Do you see the proposed solar project as a conflicting use with your mining site? If yes, please explain what conflicts you are concerned about. **You answered, "no."**
> 2. Do you agree that a 30-foot setback from your mining site to the Biglow Solar fence line is sufficient to avoid land use conflicts? **You responded that you, "agree."**
> 3. If not, please explain whether you think additional setback space is needed, what that spacing would be, and the reason for the additional setback. You responded that, **"no additional setback is needed."**
>
> If you could reply and just confirm that I've accurately recorded your responses above, that would be great.
>
> Thank you so much, talk soon.
> Maribeth

Attachment K-4. Community Investment Plan

Draft Community Investment Plan

Biglow Canyon Wind Farm
Request for Amendment 4
December 2025

Prepared for

Portland General Electric Company

Prepared by

TETRA TECH

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Acronyms and Abbreviations

AC	alternating current
BCWF or Existing Facility	Biglow Canyon Wind Farm
BESS	battery energy storage system
BIGL / Project Developer	BIGL bn, LLC
Biglow Solar Account	Biglow Community Investment Fund
CCS	County Cost Share
Certificate Holder / PGE	Portland General Electric Company
CIP	Community Investment Plan
Council / EFSC	Oregon Energy Facility Siting Council
CWPP	Community Wildfire Protection Plan
EESE	environmental, economic, social and energy
EFU	Exclusive Farm Use
gen-tie	generation tie
MCEDD	Mid-Columbia Economic Development District
MW	megawatt
OAR	Oregon Administrative Rule
ORS	Oregon Revised Statutes
OSU	Oregon State University
OWEB	Oregon Watershed Enhancement Board
POI	point of interconnection
PV	photovoltaic
RFA 4	Request for Amendment 4
SCZO	Sherman County Zoning Ordinance
Solar Components	photovoltaic solar energy generation and battery storage
Solar Micrositing Area	a portion of the existing site boundary and proposed expanded site boundary
SWCD	Soil and Water Conservation District

1.0 Introduction

The Portland General Electric Company (PGE or Certificate Holder) owns and operates the Biglow Canyon Wind Farm (BCWF or Existing Facility) under Site Certificate on Amendment 3, issued October 31, 2008 (Site Certificate). PGE has filed a Request for Amendment 4 (RFA 4) to add photovoltaic (PV) solar energy generation and battery storage (Solar Components[1]) to the Existing Facility.

BCWF currently consists of 217 wind turbines, with a peak generating capacity of 450 megawatts (MW). RFA 4 adds up to 125 MW alternating current (AC) generating capacity from PV solar arrays and 125 MW in battery storage capacity (Solar Components) in approximately 1,445 acres (Solar Area) sited within the existing BCWF site boundary Solar Micrositing Area (RFA 4 Site Boundary). The Solar Micrositing Area is approximately 1,924 acres and provides a conservative estimate of the maximum acreage needed for development, micrositing, and temporary disturbances from the Solar Components during construction, rather than the anticipated disturbance footprint. The permanent disturbance[2] area impacted by the Solar Components within the Solar Micrositing Area is up to 1,455 acres (Solar Area) and the final footprint will be confirmed during pre-construction compliance.

The Solar Micrositing Area is zoned entirely Exclusive Farm Use (EFU) by Sherman County and is currently cultivated for dryland wheat. Because the permanent disturbance area from the Solar Components will exceed 12 acres and 20 acres of high-value and arable farmland, respectively, RFA 4 requires an exception to Oregon Statewide Planning Goal 3 (Agricultural Lands).

This Community Investment Plan (CIP) supports PGE's Goal 3 exception request and helps justify why a Goal 3 exception is warranted for the BCWF, as amended. The CIP is a mitigation plan that, once implemented, will ensure that any potential adverse impacts to the local agricultural economy from the removal of cultivated wheat land are offset to a level acceptable to Sherman County and the community.

PGE will own and operate the Solar Components as a part of the BCWF, which, to date, have been developed by BIGL bn, LLC (BIGL, or Project Developer). BIGL, in its capacity as the project developer, is supporting PGE in the RFA 4 and may construct and temporarily operate the Solar

[1] Solar Components will include solar arrays, inverters, and inverter step-up transformers. Related or supporting facilities include underground medium voltage collector lines, a collector substation, battery energy storage system (BESS) facilities and their subcomponents (i.e., inverters), approximately 600 feet of a new 230-kV generation tie transmission line, operations and maintenance 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 creating a permanent impact area of up to 1,445 acres (i.e., Solar Area).
[2] Permanent disturbance includes areas and infrastructure (trackers, inverters, internal roads, buildings, stormwater basins, and parking) inside the perimeter fence for the Solar Micrositing Area.

Components on behalf of PGE under a Build-Transfer Agreement and may implement components of the CIP including providing mitigation fund payments on behalf of PGE.

1.1 Project Layout and Construction Schedule

The proposed layout for the Solar Components includes a primary area of infrastructure improvements within the Solar Micrositing Area. The Solar Area will connect to the electrical grid through the existing point of interconnection (POI) at the Biglow Canyon Substation, which is situated within the Solar Micrositing Area.

Solar Micrositing Area: The Solar Micrositing Area is a continuous area of land that covers approximately 1,924 acres, fully within the approved BCWF site boundary, within which construction of the Solar Components may occur, subject to site certificate conditions. This area includes the Existing Facility's current POI and may be expanded to add a new 230-kilovolt (kV) line terminal, all Solar Components, and the fenced area for where such components will be located (1,445 acres; Solar Area).

Solar Area: This area falls within both the approved BCWF site boundary and the Solar Micrositing Area. It will host new solar arrays using tracking systems, a new BESS, a new collector substation, a new operations and maintenance building, a temporary laydown yard for construction, new access roads, perimeter fencing, the Existing Facility's current POI, approximately 600 feet of new 230-kV generation tie line, and other associated project components.

The Solar Components located within this area will add approximately 125 MW AC generating capacity on a total of up to 1,445 acres that would be fenced within the approved BCWF site boundary. All Solar Components will be set back at least 520 feet from the existing wind turbines per PGE requirements.

Construction is expected to begin in Q2 of 2026 and continue through Q4 of 2027 for a duration of approximately 17 to 19 months from mobilization to final completion.

1.2 Goal 3 Exception and Need for Mitigation Plan

Oregon Statewide Planning Goal 3 (Agricultural Lands) (Goal 3) requires counties to identify farmland on its comprehensive plan map, and zone those lands as EFU. An EFU zone places certain restrictions on developments to minimize uses that conflict with farming (DLCD 2023). Oregon Administrative Rule (OAR) Chapter 660, Division 33 and similar provisions under Sherman County Zoning Ordinance (SCZO) Article 3 regulate EFU lands and permitted uses on these lands. The SCZO has not been amended since 2003 and does not reflect the current list of uses and standards provided by OAR 660-033-0130. As a result, PGE directly applied OAR 660-033-0130(38)(g), which states that a PV solar power generation facility shall not use, occupy, or cover more than 12 acres of high-value farmland unless certain criteria under OAR 660-033-0130(38)(h) are met or an exception is taken pursuant to Oregon Revised Statutes (ORS) 194.732. Similarly, per OAR 660-033-0130(38)(i), a PV solar power generation facility shall not use, occupy, or cover more than 20 acres of arable lands unless certain criteria under OAR 660-033-0130(38)(i) are met or an exception is taken pursuant to ORS 194.732.

As the Solar Components will occupy more than 12 acres of high-value farmland and more than 20 acres of arable land, it does not meet the acreage standards under OAR 660-033-0130(38)(g) and (i) and requires a Goal 3 exception. The Energy Facility Siting Council (Council or EFSC) may approve an exception to Goal 3 for an energy facility that meets the criteria listed under ORS 469.504(2)(c) and OAR 345-022-0030(4)(c). These criteria include the following:

- Reasons justify why the state policy embodied in the applicable goal should not apply;
- The significant environmental, economic, social and energy (EESE) consequences anticipated as a result of the proposed facility have been identified and adverse impacts will be mitigated in accordance with rules of the Council applicable to the siting of the proposed facility (EESE consequences); and
- The proposed facility is compatible with other adjacent uses or will be made compatible through measures designed to reduce adverse impacts.

This CIP supports the approval of PGE's Goal 3 exception request by supporting the "reasons" to justify the Goal 3 exception and ensuring that potential adverse impacts under the EESE consequences are properly mitigated. Measures to address the Amended Facility's compatibility are outlined in RFA 4 Exhibit K, Sections 6.2 and 8.3.

PGE justifies a Goal 3 exception by demonstrating that reasons justify removing up to 1,445 acres of dryland wheat from agricultural production for 40 years. One of the reasons is that the Amended Facility will result in rural local economic development benefits. This CIP ensures that the rural local economic benefits will offset potential adverse impacts the Solar Components may have on Sherman County's agricultural economy. In addition, participating landowners—many of whom represent multigenerational farm families—have emphasized that solar development provides an opportunity to diversify income and strengthen long-term financial stability. This landowner perspective reinforces the rationale for a Goal 3 exception, as the Amended Facility not only contributes to rural economic development but also supports the continuity of agricultural operations across generations.

2.0 Development of the Plan

To help inform the development of the CIP and to identify example projects that could be funded through the mitigation fund (see Section 4.0), PGE and the Project Developer spent considerable time and effort coordinating with the local agricultural community to understand what potential projects/investments would be most beneficial to support the local agricultural economy. Meetings were held with local wheat farmers, the Oregon Watershed Enhancement Board (OWEB), Oregon State University (OSU) including its extension service in Sherman County and the College of Agricultural Sciences, the Oregon Wheat Commission, the Sherman County Fire District, Sherman County Emergency Services, the Rural Sherman County Fire Board, the Weed Master, the Road Master, the County Planning office, and County Judge

Engagement also included targeted discussions with project landowners and surrounding landowners, who underscored the importance of financial resilience in maintaining viable farm operations. While coordination with the Sherman County Soil and Water Conservation District (SWCD) has not yet occurred in person, the Project Developer remains committed to continued outreach.

Fire safety emerged consistently as the most pressing community concern—not only in relation to the Solar Components, but as a broader and growing threat to Sherman County's agricultural economy. In response, the Project Developer has prioritized coordination with local fire districts, including a presentation to the North Sherman Fire Board on August 12, 2025, and a follow-up meeting with Chief Burbank of the North Sherman County Fire District on September 9. These meetings provided an opportunity to review site layout and engineering plans, incorporate feedback, and identify opportunities to strengthen local fire response capacity.

Several key themes for possible agricultural mitigation investments emerged from this coordination:

1. Investments in minimizing wildland fire risk to agricultural crops, properties, and infrastructure and minimizing risk of liability to farmers from farm activities igniting fires and impacting non-farm uses in the agricultural district;
2. Research into agrivoltaics techniques in the context of dryland farming in central and eastern Oregon;
3. Research into long-term effects to soils that have been removed from cultivation and placed in long-term vegetation management programs within solar array areas;
4. Maintaining and/or improving weed control county-wide on agricultural lands and minimizing costs for weed control;
5. Technical assistance training for heavy equipment operation and repairs for farmers and laborers in the County to provide uplift in firefighting support, construction, and farming;
6. Providing funding for 4H, National Future Farmers of America Organization, or other youth programs; and
7. Providing additional funds to supplement Natural Resources Conservation Service and SWCD cost share programs for technical assistance programs such as improving haul routes, weed control, establishing fire breaks, etc.

As described further in Section 4.0, the final decision on what projects would be funded and/or what organizations would be awarded mitigation funds will be determined by the Sherman County Court. The mitigation projects identified in Section 5.0 and the selection criteria identified in Section 4.2.4 are unique to the Sherman County agricultural community and its specific needs. The projects identified in this plan are in direct response to community feedback and will bring economic benefit to the County's agricultural community, which is primarily composed of dryland wheat farmland.

3.0 Overview of Project Impacts on Agricultural Economy

PGE evaluated the potential adverse impacts to Sherman County's agricultural economy from removing up to 1,445 acres of dryland wheat from production for the life of the project. For details of this evaluation, see RFA 4 Exhibit K, Attachment K-1. The removal of 1,445 acres of winter wheat would have an estimated reduction in annual output of $281,300 in the grain sector. Putting this into context, $281,300 is equivalent to 0.8 percent of the Sherman County's average value of production of winter wheat and 0.1 percent of the State's average value of production of winter wheat. This highlights the small percent of the county and state's winter wheat production value impacted by the Solar Micrositing Area.

Using a worst-case scenario impact analysis of a full build out of the Solar Components resulting in the loss of 1,445 acres of dryland wheat over 40 years, PGE estimates that the Amended Facility may result in a loss of annual indirect economic output of $100,000 over the life of the Facility, as amended. This loss of indirect economic output represents decreases in spending on wheat farming inputs like seeds, fertilizer, and fuel and contract services.

Calculated over a period of 40 years of operation, and adjusting for inflation, the estimated indirect output would be $2,315,218 or $1,600 per acre of farmland taken out of production. The final mitigation payments will be based on the actual acres identified in the final design of the Solar Components, which may be less than the full 1,445 acres identified in the Goal 3 exception request.

4.0 Mitigation Fund

PGE and the Project Developer have partnered with Sherman County and the Mid-Columbia Economic Development District (MCEDD) to establish an agricultural mitigation fund that will administer and distribute dollars for projects having a benefit to the Sherman County agricultural economy. The fund will ensure that any potential adverse impacts from the Solar Components are offset to levels acceptable to Sherman County and the community. Maintaining local control over investment decisions was identified as an essential element of trust-building during stakeholder engagement. For this reason, all mitigation fund allocations will ultimately be directed by the Sherman County Court to ensure alignment with community priorities and accountability to local stakeholders.

4.1 Establishing the Biglow Community Investment Fund

MCEDD will administer the Biglow Community Investment Fund under an Administrative Agreement (as described in the Memorandum of Understanding among Sherman County, MCEDD, and PGE, dated [add]). Prior to construction, $1,600 per acre for each acre the Solar Components remove from agricultural production will be placed into the Biglow Solar Account that will then be used to fund mitigation projects under the CIP. The total number of acres removed will be determined based on the final layout confirmed during the Oregon Department of Energy pre-

construction compliance review. The mitigation payment may be provided by PGE or the Project Developer (or other entity) on behalf of PGE.

4.2 Administration of the Biglow Community Investment Fund

MCEDD will administer the Biglow Community Investment Fund, which will be funded prior to construction of each phase of the Solar Components. MCEDD will also oversee the following administrative steps.

4.2.1 Selection Committee

MCEDD will form and oversee a five-person advisory committee (Selection Committee) to review applications for funding and make recommendations to Sherman County BOC on funding projects. The Selection Committee will comprise the following individuals:

- One representative from Sherman County government;
- One representative from an academic institution engaged in agriculture research in Sherman County or an agricultural-related nonprofit entity located in Sherman County;
- One dryland farm producer in the County;
- One community member; and
- One representative with expertise in wildfire as it relates to agricultural lands.

Sherman County will have the ability to propose candidates for the Selection Committee in accordance with the aforementioned criteria, provided that the County proposes candidates within 30 calendar days of the formation of the committee. If the County elects not to propose candidates to the Selection Committee, MCEDD shall make any remaining necessary appointments.

4.2.2 Applications for Funding

MCEDD shall issue a notice of available funding for mitigation projects as provided by the administrative agreement and contemplated in the Memorandum of Understanding. The notice will identify the selection criteria for qualifying projects and include an application form. All applications for funding would need to be filed with MCEDD at a time determined by the parties, ahead of the Start of Construction (Application Deadline).

4.2.3 Awarding Funds

The Selection Committee will review applications, rank the projects against the selection criteria, and make recommendations to the Sherman County BOC within 3 months of the Application Deadline. The BOC will aim to make a decision on funding within 60 days of receipt of the Selection Committee's recommendation. MCEDD will award funds within 30 days of the County's decision.

4.2.4 Selection Criteria

The selection criteria for a qualified mitigation project are to ensure that projects provide uplift of the Sherman County agricultural economy and are responsive to community needs as described in Section 2.0 and as may be identified by the community in the future. These selection criteria were identified after significant community engagement and listening sessions.

Except as provided in Section 4.2.5 below, the Selection Committee will apply and balance the selection criteria when recommending projects for funding. The five selection criteria are as follows:

1. Improving resiliency and efficiency of Sherman County's agricultural economy;
2. Improving agricultural wildfire protection and risk management capacity;
3. Investing in research to further agrivoltaics for dryland wheat lands;
4. Investing in agricultural education for next-generation farmers; and
5. Subsidizing the price of wheat produced in Sherman County

4.2.5 Pre-Screened Projects

A preliminary list of pre-screened projects is included in Section 5.0. These projects have been identified by Sherman County and the community as having a direct benefit to the rural agricultural economy of Sherman County and are deemed to meet, on balance, the selection criteria. A project proponent of a pre-screened project must still apply for funding through MCEDD and provide a project plan to identify the project's fiscal contribution to the rural agricultural economy and confirm that the selection criteria will be satisfied. A pre-screened project application goes directly to the BOC for consideration and bypasses review by the Selection Committee.

4.3 Reporting Obligations

Award recipients shall provide an annual report to the County, MCEDD, and PGE, as further described in the MOU.

5.0 Pre-Screened Projects

The five pre-screened projects were developed based on extensive outreach and coordination with key stakeholders from the Sherman County agricultural community, as well as state-wide agricultural-related organizations (see Section 2.0). These projects have the support of both the County and the community, who agree they will provide meaningful benefits to Sherman County's agricultural economy. In particular, they include initiatives that support essential services such as wildfire mitigation. For Sherman County, wildfire mitigation is especially critical, as it helps protect wheat farms—the primary land use in the county—and their supporting infrastructure, including

roads, equipment, grain elevators and storage facilities, as well as urban areas tied to farm operations.

5.1 Project 1: Dryland Wheat Agrivoltaics Research in Sherman County

Project Sponsors: OSU Foundation, OSU Extension Office, OSU Nexus of Energy, Water, and Agriculture Lab

Project Description: This project would involve research into agrivoltaics techniques in the context of dryland farming in central and eastern Oregon. Research may include an agrivoltaics test project in Sherman County where different dryland crops, including wheat, are grown within a solar array and studied. Research may include investigation in panel layout/row dimension design to facilitate farm equipment, cropping trials, differences in crop yields based on panel shading, and effects on soils within different vegetation regiments within panel arrays. Research study will be further defined by the project sponsor.

Project Benefit: Researching achievable agrivoltaics strategies in eastern Oregon would generate valuable insights to guide project siting decisions and identify potential legislative or regulatory changes that could further incentivize compatible farming practices alongside solar power generation. Based on information provided by OSU Associate Professor Chad Higgins, partial shading from solar panels has shown increase in crop production while using less water (Hassanpour Adeh et al. 2018). Research on agrivoltaics in the context of central and eastern Oregon dryland farming could create opportunities for Sherman County farmers to diversify their operations. By capturing more soil moisture, solar panel shading may allow farmers to maintain current dryland crop yields, such as winter wheat, within a smaller footprint.

Proposed Budget: To be provided by project sponsor. Project budget is anticipated to range from $100,000 to $300,000 to fund a full-time research assistant and any necessary equipment.

5.2 Project 2: Agricultural Wildfire Risk Minimization and Capacity Building

Project Sponsors: North Sherman County Rural Fire Department

Project Description: Sherman County has experienced large-scale wildfires that have burned thousands of acres and have destroyed more than 1 million bushels of wheat in a single fire resulting in more than $5 million in damage (Sherman County 2024). In response to increased community support for fire mitigation and prevention efforts, Sherman County developed and adopted a Community Wildfire Protection Plan (CWPP) in 2024 to identify and mitigate wildfire risk and to develop a strategy to reduce those risks. The CWPP is also meant to assist the county, its communities, and fire districts by making them eligible for certain grants or other funding sources. Grants and funding sources may include National Fire Plan grants, U.S. Forest Service Community Wildfire Defense Grants, and other funding sources to treat hazard fuel situations and to better prepare residents for wildfires that may occur.

The CWPP[3] identifies several projects such as:

1. Upgrading, maintaining, or adding firefighting equipment for Sherman County's Rural Fire Protection Districts.
    a. See Project #7 in CWPP Section XIII.
    b. See Project #31 in CWPP Section XIII.
2. Upgrading and developing new facilities at Rufus Fire Hall, North Sherman Rural Fire Protection District Station, and/or South Sherman Rural Fire Protection District Station
    a. See Project #6 in CWPP Section XIII.
3. Training for volunteers
    a. See Project #13 in CWPP Section XIII.
4. Funding for additional staff
    a. See Project #2 in CWPP Section XIII – develop paid seasonal county firefighting positions.
    b. Fund administrative staff to support all projects identified in CWPP Section XIII.
5. Fund projects to develop fuel breaks, reduce wildfire hazards, provide firefighting water.
    a. See Projects #14, #15, #22 through #30 in CWPP Section XIII.

The County could allocate mitigation funding to support either partial or full implementation of the projects identified in the CWPP, as well as other initiatives aimed at supporting the County's agricultural community in wildfire mitigation and response.

Project Benefit: Section V.E. of the County's CWPP identifies the probability of wildfire in Sherman County as high, with significant vulnerability to grain fields, pastures, and utility infrastructure. As noted in the CWPP, previous fires in the county have burned one million bushels of wheat and caused over $5 million in damages. Any project that reduces the risk or extent of wildfire damage to dryland wheat crops and their supporting infrastructure would provide a direct economic benefit to the County's agricultural community. Stakeholder feedback reinforced that agricultural mitigation and wildfire mitigation are deeply interconnected in Sherman County. Farmers repeatedly emphasized that their livelihoods depend on the resilience of their land and crops, and that wildfire protection must be addressed alongside agricultural investments. Accordingly, the coordination on behalf of RFA4 with the North Sherman Fire District demonstrates a proactive approach to integrating agricultural and fire mitigation needs.

Proposed Budget: To be provided by project sponsor. Project budget is anticipated to range from $100,000 to $500,000.

5.3 Project 3: Funding matching for SWCD programs for wheat farmers

Project Sponsors: Sherman County SWCD

Project Description: Provide funding to supplement funding of SWCD County Cost Share (CCS) program. The Sherman County SWCD CCS program is funded from county tax dollars and includes projects such as improving farming haul roads with gravel, solar well developments, border

[3] See Section XII of the CWPP (Sherman County 2024) for a list of identified wildfire mitigation projects.

fencing, terrace and water and sediment control basin reshaping, weed control, pasture/range planting, and creation and maintenance of fire breaks (Sherman County SWCD 2025). As funding for this program is limited, mitigation funds could be directed to SWCD to supplement this program's funding and provide additional opportunities for Sherman County farmers to participate in this program.

Project Benefit: Benefits to farmers participating in the SWCD CCS program would depend on the project but would result in offsetting costs to farmers for soil conservation, weed control, fire mitigation, etc.

Proposed Budget: To be provided by project sponsor. The current annual budget for this program is $100,000 allocated at $25,000 quarterly. For conservation projects, landowners provide 25 percent of the cost while SWCD provides 75 percent of the cost share rate with projects up to $20,000.[4] Mitigation funds allocated to this program could increase the annual budget to provide capacity to fund more projects in the county depending on demand by Sherman County farmers.

5.4 Project 4: Next-Generation Farming Innovation and Technology Training Program

Project Sponsors: To be determined. Sponsors could be individual wheat farmers seeking funding for precision agricultural technology investments, school district seeking funding for heavy equipment training programs, or other community programs such as 4H or National Future Farmers of America Organization seeking funding for youth programs focused on wheat farming.

Project Description: A variety of projects could be included, such as:

- Grant program for county wheat farmers to invest in precision agricultural technology such as weed management equipment, remote sensing technology to assist with weed mapping or soil mapping, variable rate technology to collect data on soil variability to inform application of fertilizers, and other technologies.
    - The precision agricultural technology grant program is intended to increase Sherman County wheat farmer's access to this technology through a cost-sharing agreement between farmers and MCEDD.
    - The cost-share agreement would be determined by the County BOC but is assumed to be 50 percent of the total cost of the precision tech equipment and installation. A cost-share program ensures prospective recipients of the program are fully invested in the use and maintenance of the precision agricultural technology.
- Grant program to offset tuition costs for Sherman County residents to participate in heavy equipment training and receive large equipment operator certification.

Project Benefit:

[4] See CCS grant application: https://www.shermancountyswcd.com/files/a1235c3b6/CCS_Application_2024.pdf

- The cost-share grant program for precision agricultural technology is assumed to increase the number of farmers who otherwise would not have access to precision management technology due to the significant upfront cost barrier. Investments in this technology could help county wheat farmers decrease costs to expensive farming inputs such as chemicals, fertilizers, and fuel resulting in economic benefits to these farmers.
- The grant program for heavy equipment operation training would directly relate to increasing local capacity to operate farm equipment, firefighting equipment, and construction equipment. This increased capacity would economically benefit farmers in the County by providing additional labor capacity.

Proposed Budget: To be provided by project sponsor. Project budget is anticipated to range from $200,000 to $1,000,000 depending on the number of grants allocated.

5.5 Project 5: Capacity Building for Wheat Growers

Project Sponsor: Sherman County, individual wheat farmers.

Project Description: This project proposes a per-bushel support mechanism to strengthen the financial resilience of Sherman County's wheat growers. For every bushel of wheat produced in the County, an additional $0.05 would be paid directly to farmers on top of the prevailing market price. This payment is intended to help offset the rising costs of inputs such as seed, fertilizer, fuel, machinery, and labor.

Project Benefits: The benefit of this project is that it directly places funds into the hands of Sherman County wheat farmers at a time when input costs are rising and market prices remain unpredictable. More specifically, the project would:

- Support farm income by providing an additional payment linked to production levels.
- Help offset rising input costs such as seed, fertilizer, and fuel.
- Provide flexibility for reinvestment in farm operations, equipment, or practices that improve efficiency.
- Contribute to the local agricultural economy by supplementing the revenue available to wheat growers.
- Offer modest support for community stability, as additional farm income can help sustain agricultural operations in the County.

Proposed Budget: To be provided by project sponsor. At a rate of $0.05 per bushel, the project could cost up to approximately $282,550 in a single harvest season, assuming an annual production of 5.65 million bushels. The actual budget would vary depending on annual yield volumes and prevailing market conditions.

6.0 References

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