Request for Amendment 5
for the Biglow Canyon Wind Farm

Exhibit L. Public Services

Submitted to
Oregon Energy Facility Siting Council

Prepared for

Portland General Electric Company

Prepared by

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Acronyms and Abbreviations

Acronym/Abbreviation	Definition
AADT	average annual daily traffic
AC	alternating current
BCWF or Facility	Biglow Canyon Wind Farm
BESS	Battery energy storage system
BIGL 2 or Project Developer	BIGL 2, LLC
Certificate Holder or PGE	Portland General Electric Company
CFR	Code of Federal Regulations
Council or EFSC	Oregon Energy Facility Siting Council
FAA	Federal Aviation Administration
I-84	Interstate 84
MW	megawatt
MWh	megawatt-hour
O&M	operations and maintenance
OAR	Oregon Administrative Rules
ODA	Oregon Department of Aviation
ODOE	Oregon Department of Energy
ODOT	Oregon Department of Transportation
OR-206	Oregon Route 206
ORS	Oregon Revised Statutes
RFA	Request for Amendment
RV	recreational vehicle
Site Certificate	Site Certificate on Amendment 4
Solar Facility	solar energy generation and battery storage components
US-97	United States Highway 97

1.0 Introduction

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

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

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

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

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

Exhibit L provides the information required by Oregon Administrative Rules (OAR) 345-021-0010(1)(u) in support of RFA 5. The information summarized in this exhibit and described in RFA 5 demonstrate that the Facility, as proposed, can be designed, engineered, constructed, operated, and retired in a manner that satisfies the applicable Council standards. The proposed changes in RFA 5 do not alter the Certificate Holder's ability to comply with applicable Site Certificate Conditions and the approval standard in OAR 345-022-0080.

The information contained herein supports demonstration of compliance with the Public Services approval standard for OAR 345-022-0110.

2.0 Impacts to Public Services – OAR 345-022-0110(4)(a)

> *(4) To assist the Council in determining whether the standard outlined in (1) through (3) has been met, the Applicant must submit:*
>
> > *(a) Information about significant potential adverse impacts of construction and operation of the proposed facility on the ability of public and private providers in the analysis area to provide the services listed in OAR 345-022-0110, providing evidence to support a finding by the Council as required by OAR 345-022-0110. The applicant must include:*

To demonstrate compliance with this standard, Exhibit L must include information about significant potential adverse impacts resulting from the construction and operation of the Solar Components on the ability of public and private providers in the analysis area to provide the services listed in the standard. Exhibit L demonstrates that the Council may conclude that the construction and operation of the RFA 5 Solar Facility, considering proposed mitigation, is not likely to result in significant adverse impacts to the provision of the public services listed in OAR 345-022-0110.

2.1 Analysis Area

Consistent with OAR 345-027-0360(3), ODOE concurred with the Certificate Holder's use of a defined portion of the approved BCWF site boundary and the proposed expanded site boundary (i.e., RFA 5 Site Boundary) to establish study area boundaries for RFA 5 under OAR 345-001-0010(35). The RFA 5 Site Boundary reflects the extent of all construction, operation, and decommissioning activities associated with the RFA 5 Solar Facility, and all study areas within the meaning of ORS 345-001-0010(35) are measured from the RFA 5 Site Boundary. In accordance with OAR 345-001-0010(35)(b), the analysis area for public services is the area within and extending 10 miles from the RFA 5 Site Boundary (Figure L-1).

2.2 Methods

The following analysis incorporates information, analysis, and data from federal, state, and local government agencies, as well as updated information wherever available. Local public service providers were also contacted directly for data on potentially affected public services. The potential effects of the RFA 5 Solar Facility were evaluated with respect to the ability of public and private

providers within the analysis area to provide sewers and sewage treatment, water, stormwater drainage, solid waste management, housing, traffic safety, police and fire protection, health care, and schools.

2.3 Assumptions Used to Evaluate Potential Impacts – OAR 345-022-0110(4)(a)(A)

(A) The important assumptions the applicant used to evaluate potential impacts;

Exhibit L provides key assumptions and information used to evaluate potential impacts of the RFA 5 Solar Facility on public and private providers.

Potential impacts were evaluated based on assumptions for the number of employees needed to construct and operate the RFA 5 Solar Facility and use of transportation routes, as described in the following sections.

The analysis area includes Sherman County, a small portion of northwest Gilliam County in Oregon, and parts of southern Klickitat County in Washington (Figure L-1). Due to the location of the Solar Components, the Certificate Holder expects that most personnel will use public and private service providers in Sherman County (i.e., in Wasco or Moro). PGE expects some personnel to also use providers beyond the analysis area, including those in Klickitat County, Washington, and Gilliam, Wasco, and Hood River Counties, Oregon (e.g., housing in The Dalles or Hood River). This assumption is incorporated as applicable into the various public service provider analyses.

2.3.1 Construction

Construction of the Solar Siting Area is expected to begin in Q3 of 2027 and continue through Q4 of 2028 for a duration of approximately 18 months. Additional engineering and geotechnical investigations may occur prior to issuance of the Amended Site Certificate. During construction, PGE expects a monthly average of 200 workers on-site during the 18-month construction period, with a peak number of 550 workers while multiple disciplines of contractors complete their work simultaneously during periods of the highest activity (approximately 6 to 9 months during construction). Most construction workers will be employees of construction and equipment manufacturing companies under contract to the Project Developer or their contractors.

PGE anticipates that approximately 30 percent of the construction workforce will be local residents who normally reside within a 1-hour commuting distance/duration to the Solar Components. Very few, if any, of the non-local workers employed during the construction phase of the Facility will be expected to permanently relocate to the area. The percentage of the construction workforce hired locally will depend on the availability of workers with appropriate skills. 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.

Workers in some positions, such as construction foremen and inspectors, will be employed for the entire duration of construction, but many workers will be employed for 4 to 9 months and

therefore will not be expected to bring families with them. The Certificate Holder assumes very few workers will relocate their families.

Because most construction workers will not be in the area for more than 4 to 9 months, the Certificate Holder assumes that housing for most construction workers will primarily be provided by hotels, motels, temporary housing, and recreational vehicle (RV) parks within a commutable distance to the Solar Components (1-hour duration).

2.3.2 Operation

The Certificate Holder expects that the Solar Components will require up to four 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. A household size of 3.0 is conservatively assumed per employee; thus, a total of 12 new permanent residents could be added to the local population. It is assumed that these workers will live locally. The Certificate Holder may also rely on O&M staff from its operating portion of the BCWF Facility and the RFA 4 Solar Facility (currently under construction) to provide operational support for the RFA 5 Solar Facility if additional staff are needed onsite during operations.

2.3.3 Decommissioning

Decommissioning employment will be temporary and similar to the construction of the Solar Components. Decommissioning is estimated to require a similar duration as construction, i.e., 18 months.

2.4 Affected Public and Private Providers – OAR 345-022-0110(4)(a)(B)

> *(B) Identification of the public and private providers in the analysis area that would likely be affected;*

2.4.1 Population

Table L-1 presents historical population estimates for communities in Sherman, Gilliam, and Klickitat Counties within the analysis area. Communities within 10 miles of the Solar Components were analyzed. The nearest city to the Solar Components, Wasco, Oregon, approximately 2.3 miles from the RFA 5 Site Boundary, had a total estimated population of 457 people in 2025, approximately 22 percent of Sherman County's total population.

Table L-1. Historical Population of Counties and Communities within the Analysis Area

Location	Population[1/]			2010 -2025	
	2010	2020	2025	Absolute Change	Percent Change
OREGON	3,831,074	4,237,256	4,273,586	442,512	11.6%
Sherman County	**1,765**	**1,870**	**2,051**	**286**	**16.2%**
Wasco	410	417	457	47	11.5%
Moro	324	367	403	79	24.4%
Rufus	249	268	292	43	17.3%
Gilliam County	**1871**	**1,995**	**1,971**	**100**	**5.3%**
WASHINGTON	6,724540	7,705,281	8,001,020	1,276,480	19.0%
Klickitat County	**20,318**	**22,735**	**24,331**	**4,013**	**19.8%**

Note:
1. Population figures for 2010 and 2020 are decennial census counts. Figures for 2025 are census estimates.
Source: U.S. Census Bureau 2010, 2020a 2026a, 2026b, 2026c

All communities within a commutable distance (1-hour duration) are considered in the housing analysis (see Section 2.4.6). According to the most recent available U.S. Census Bureau (2020b) residence to workplace data for 2016 to 2020, nearly 74 percent of Sherman County resident commuters work within Sherman County (562 commuters per day). From within Oregon, Sherman County receives 12 commuters per day from Hood River County, 11 from Morrow County, and 160 from Wasco County. From Washington, Sherman County receives 68 commuters per day from Klickitat County and 4 commuters from Whitman County.

2.4.2 Public and Private Service Providers

Table L-2 identifies the public and private service providers in and near the analysis area that may be affected by construction of the Solar Components. The analysis area includes Sherman County, a small portion of Gilliam County in Oregon, and parts of southern Klickitat County in Washington. PGE does not expect any providers in the Gilliam County portion of the analysis area to be affected. PGE does expect that some providers in Wasco County in Oregon (outside of the analysis area) may be affected. An analysis of different services and providers necessary for construction and operation of the Solar Components are identified in the following sections.

Table L-2. Public and Private Service Providers

Service	Service Provider Detail	Location
Sewers and Sewage Treatment	Various licensed providers: portable toilets and sewage disposal	Sherman County, Wasco County, Gilliam County, Oregon
Water	City of Wasco	Wasco, Oregon
Stormwater Drainage	No service provider is required	N/A
Solid Waste Management	The Dalles Disposal	Sherman County, Oregon

Service	Service Provider Detail	Location
	Wasco County Landfill: non-hazardous and some hazardous waste	The Dalles, Oregon
	Columbia Ridge Landfill: non-hazardous and some hazardous waste	Arlington, Oregon
Housing	Temporary accommodation available in hotels/motels, short-term rentals, and RV parks.	Gilliam County, Hood River County, Morrow County, Sherman County, Wasco County, Oregon; Benton County, Klickitat County, Washington
Traffic	Oregon Department of Transportation	Salem, Oregon
	Sherman County Planning and Road Departments	Moro, Oregon
Police and Fire Protection	Sherman County Sheriff's Office (primary law enforcement provider for the Facility location)	Moro, Oregon
	Oregon State Police (secondary law enforcement provider for the Facility location)	The Dalles, Heppner, Hermiston, Oregon
	City of The Dalles Police Department, Gilliam County Sheriff's Office (backup law enforcement providers)	The Dalles, Condon, Oregon
	North Sherman County Rural Fire Protection District	Wasco, Oregon
Health Care	Sherman County Medical Clinic (not Trauma rated)	Moro, Oregon
	Adventist Health Columbia Gorge Hospital (Level III Trauma Center)	The Dalles, Oregon
	Good Shepherd Medical Center (Level III Trauma Center)	Hermiston, Oregon
	Legacy Emanuel Medical Center (Level I Trauma Center)	Portland, Oregon
	Oregon Health and Science University Hospital (Level I Trauma Center)	Portland, Oregon
	Sherman County Ambulance (Emergency medical transport)	Moro, Oregon
Schools	Sherman County High School	Moro, Oregon
	Sherman Grade School	Moro, Oregon

2.4.3 Sewer and Water Services

In the rural area surrounding the Solar Components, no developed sewer systems will be impacted by construction or operation of the Solar Components. The nearest developed sewer systems are located approximately 2.3 miles away from the RFA 5 Site Boundary in the town of Wasco, Oregon;

other cities' sewer systems are farther away. As explained in Exhibit N, portable toilets will be used during construction; these will be provided and serviced (including off-site disposal of waste) by a private sanitation service provider. During operation of the Solar Components, staff will make use of sanitary facilities at the proposed O&M buildings, which will drain into a new county-approved on-site septic system; sanitary facilities will also be available at the O&M buildings/septic systems at the existing BCWF Facility and Solar Facility approved under RFA 4. During operations, if there are numerous workers at the Solar Components for multiple days in a row, a portable toilet may be temporarily installed.

Water used during construction is anticipated to be obtained from an existing municipal water source with existing water rights, i.e., the City of Wasco. In the rural area surrounding the RFA 5 Site Boundary, no other developed water systems will be impacted by construction or operation of the Solar Components.

Approximately 26 million gallons (up to 28,390 gallons per day) of water will be required for construction of the Solar Components. For the Solar Area, as discussed in Exhibit O2, all non-potable water used for construction and operations is anticipated to be sourced from the City of Wasco (or other permitted source(s)), including 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. Potable water during construction may also be sourced from the Facility's existing well or bottled water.

During operation, the Certificate Holder and its contractors shall obtain all water required for solar panel-washing activities from off-site sources previously permitted for such uses or from a new or existing on-site well, provided such use of well water would not cause the rate of extraction to exceed 5,000 gallons in any one-day period. PGE has provided a record of correspondence in Attachment L-1.

There is one irrigation water right within the Solar Micrositing Area for the Solar Facility approved under RFA 4 (Oregon Certificate 57620; Scharf Water Right). The Certificate Holder is working with a landowner participating in the RFA 4 Solar Facility and exploring transferring the Scharf Water Right to industrial use for the life of the Solar Components. If successful, the transfer would allow Certificate Holder to use the available water for construction and operation activities, including fire suppression and panel washing, which would lower the need for water from the City of Wasco. For more information about water rights, water rights information and other details, see Exhibit O2 of this RFA.

2.4.4 Stormwater Drainage

In the rural area surrounding the RFA 5 Site Boundary, stormwater infrastructure is limited to minimal facilities associated with public roads maintained by Sherman County. Stormwater drainage basins will be incorporated into the Facility design and will be within the facility fence line. The nearest external developed stormwater drainage facilities in the vicinity of the Solar

Components are located within the Wasco city limits; however, the RFA 5 Site Boundary is approximately 2.3 miles northeast from Wasco and the Solar Components will not connect to or otherwise impact the city's stormwater system.

2.4.5 Solid Waste Management

Sherman County provides solid waste disposal services through agreements with a private provider, The Dalles Disposal. It is assumed that solid waste developed during construction, operation, and decommissioning of the Solar Components will be transported to landfills through agreements with local private disposal services. The closest landfills to the Solar Components are the Columbia Ridge Landfill (19 miles east of the RFA 5 Site Boundary) and the Wasco County Landfill (23 miles west of the RFA 5 Site Boundary; the Certificate Holder will provide a record of correspondence in Attachment L-1 prior to the final RFA 5 being deemed complete). The Dalles Disposal manages the Sherman County Transfer Station on Welk Road near Biggs Junction, where non-hazardous municipal solid waste and recycling is unloaded from collection vehicles and briefly held while it is reloaded onto larger long-distance transport vehicles for shipment to landfills.

2.4.6 Housing

Construction of the Solar Components is anticipated to last approximately 18 months. Based on the Certificate Holder's experience during construction of other energy projects in the area, PGE anticipates that much of the construction personnel will be permanent residents or temporary residents who commute from within Sherman County, from Wasco County into Sherman County, or from Klickitat County, Washington into Sherman County. Temporary housing is assumed to be required for 70 percent of the workforce, with an average of 140 workers and a monthly peak of 385 workers temporarily relocating to the area during construction. Additionally, permanent housing for up to four new households, including workers and their families, may be required during operations.

Various housing options are provided in incorporated and unincorporated communities within the analysis area, and within a commutable distance from the RFA 5 Site Boundary (1-hour duration). Typical housing options for temporary workers include hotels/motels, short-term rental housing, RV parks, and public or private campgrounds. Note that no RV usage is proposed at the RFA 5 Site Boundary.

The Certificate Holder assumes that most construction workers will be in the area for approximately 4 to 9 months, and that the housing for those workers will primarily be provided by hotels/motels, short-term rentals, and RV parks.

Rental Housing

Table L-3 summarizes the rental housing stock for the reasonable commuting area (1-hour duration) for the Facility. The data in this table are drawn from the U.S. Census Bureau survey data. These survey data may have high margins of error, particularly in small communities, and may not accurately reflect actual availability at the time of the survey or precisely reflect current availability.

Viewed by county, rental vacancy rates ranged from 2.5 percent in Wasco County to 12.7 percent in Gilliam County, with an estimated vacancy rate of 4.2 percent in Sherman County (Table L-3). Additional units classified for seasonal, recreational, or occasional use may also be available for rent (see Table L-3).

Table L-3. Housing Supply in Counties and Communities within Commuting Distance/Duration

Geographic Area	Total Housing Units[1]	Rental Vacancy Rate (Percent)[1]	Units Available for Rent[1]	Units for Seasonal, Recreational, or Occasional Use, [2]
OREGON	***1,857,992***	***4.2***	***27,625***	***55,317***
Gilliam County	**1.138**	**12.7**	**33**	**88**
Arlington	285	0.0	0	0
Condon	470	28.8	21	43
Lonerock	26	-	0	4
Hood River County	**10,290**	**4.7**	**136**	**417**
Cascade Locks	686	9.0	12	24
Hood River	4,147	5.9	105	153
Morrow County	**4,912**	**11.6**	**161**	**144**
Boardman	1,437	22.6	152	15
Sherman County	**969**	**4.2**	**12**	**13**
Biggs Junction	0	-	0	0
Grass Valley	142	20.0	10	0
Moro	170	0.0	0	0
Wasco	222	0.0	0	7
Wasco County	**12,198**	**2.5**	**93**	**683**
Antelope	41	0.0	0	3
Dufur	381	0.0	0	5
Maupin	344	0.0	0	58
Shaniko	18	0.0	0	7
The Dalles	6,964	1.1	28	46
Tygh Valley	88	0.0	0	0
WASHINGTON	***3,306,620***	***4.5***	***53,380***	***83,828***
Benton County	**83,101**	**5.0**	**1,350**	**601**
Klickitat County	**10,945**	**4.8**	**119**	**487**
Bickleton	44	0.0	0	8
Goldendale	1,911	7.1	64	0

Notes:
1. All data are annual estimates from the American Community Survey 5-year estimates for 2020-2024.
2. Housing units for seasonal, recreational, or occasional use are generally considered to be vacation homes. They are not included in the estimated number of housing units shown here as available for rent.
Source: U.S. Census Bureau 2025a, 2025b

Rental housing options for non-local construction workers may also include other special living situations, such as Airbnb units and spare bedrooms in homes that residents would be willing to rent to construction workers. These types of potential housing opportunities are not included in the data presented in Table L-3.

Hotels/Motels

There are 44 hotels/motels within a 1-hour commute, with a combined total of 1,891 rooms (Tables L-4 and L-5). Establishments are concentrated in The Dalles, Oregon (11 hotels) and in Boardman, Oregon (5 hotels/motels), ranging from 7 to 61 miles away from the Facility, with a further 10 hotels located in Hood River.

Table L-4. Regional Hotel/Motels by City and County Within Commutable Distance/Duration

Location[1]	Total Hotel/Motels	Total Hotel Rooms	Percent of Total Hotel Rooms	Vacant Rooms at Peak Occupancy[2]
Gilliam County, OR	**3**	**69**	**4%**	**13**
Arlington	1	33	–	–
Condon	2	36	–	–
Hood River County, OR	**11**	**573**	**30%**	**107**
Hood River	10	557	–	–
Mount Hood Parkdale	1	16	–	–
Morrow County, OR	**5**	**234**	**12%**	**44**
Boardman	5	234	–	–
Sherman County, OR	**5**	**114**	**6%**	**21**
Moro	1	11	–	–
Rufus	1	20	–	–
Wasco	3	83	–	–
Wasco County, OR	**15**	**787**	**42%**	**147**
Dufur	1	20	–	–
Maupin	3	48	–	–
The Dalles	11	719	–	–
Klickitat County, WA	**5**	**114**	**6%**	**21**
Bingen	1	12	–	–
Lyle	1	10	–	–
White Salmon	1	16	–	–
Goldendale	2	76	–	–
Total	**44**	**1,891**	**100%**	**352**

Source: STR 2024
Notes:
1. Numbers may not sum due to rounding.
2. Peak occupancy is based on the average peak monthly occupancy from 2016 to 2024 (81.4 percent in July) (see Table L-6).

Table L-5. Summary of Regional Hotels/Motels by Commuting by Duration

Drive Time to Facility	Number of Establishments	Number of Rooms
0 to 30 minutes	5	114
30 to 60 minutes	39	1,204
Total	**44**	**1,891**
Source: STR 2024, Google Earth 2024		

Review of average monthly hotel/motel occupancy rates for 2016-2023 indicates lower demand in the winter months and higher demand in the summer months (Table L-6). In the calendar year from January to December 2023, the lowest occupancy was 41.5 percent in December and the high was 79.6 percent in August, with an average annual vacancy rate of 37.2 percent (STR 2024). Average monthly vacancy rates from 2016 to 2024 ranged from 44.1 percent in January to 81.4 percent in July (Table L-6). During peak occupancy (July), an estimated 352 rooms are normally vacant and available for rent within a 1-hour commute of the Solar Components (Table L-4).

Table L-6. Monthly Hotel/Motel Occupancy Rates (percent)

Month	2023 Occupancy	2016-2024 Average Occupancy
January	45.6	44.1
February	52.0	52.6
March	57.7	57.8
April	64.9	63.4
May	69.8	67.0
June	78.4	77.7
July	79.6	81.4
August	75.2	80.3
September	75.2	75.1
October	63.2	66.7
November	50.5	52.1
December	41.5	44.4
Source: STR 2024		

RV Parks

In addition, at least 21 RV parks with an estimated 976 sites are located within a commutable distance (1-hour duration) of the RFA 5 Site Boundary (Tables L-7 and L-8). A review of online sources identified five RV parks in Sherman County with an estimated total of 188 sites: 80 in Rufus, 32 in Moro, 63 in Wasco, and 13 in Grass Valley. The RV parks located closest to the Facility (i.e., within 0 to 30 minutes' drive) have a higher percent of hookups than those farther away (30 to 60 minutes). Approximately 43 percent of all RV sites in the region offer a full hookup (Table L-8).

Table L-7. Regional RV Park and RV Sites Within Commutable Duration

Location	Total RV Parks	Total RV Sites
Gilliam County, OR	**1**	**11**
Arlington	1	11
Hood River County, OR	**4**	**221**
Cascade Locks	1	13
Hood River	2	144
Mount Hood	1	64
Sherman County, OR	**5**	**188**
Grass Valley	1	13
Moro	1	32
Rufus	2	80
Wasco	1	63
Wasco County, OR	**4**	**221**
Maupin	1	25
The Dalles	1	43
Tygh Valley	2	153
Klickitat County, WA	**7**	**335**
Dallesport	2	60
Goldendale	4	240
White Salmon	1	35
Total	**21**	**976**

Source: Good Sam 2024, RV Life Campgrounds 2024
Note: Numbers may not sum due to rounding.

Table L-8. Regional RV Park Capacity and Amenities

Drive Time to Facility	Number of Sites	Percent of Sites with Full Hookups	Percent of Sites with Water and Electric Only
0 to 30 minutes	422	61	13
30 to 60 minutes	554	29	40
Total	**976**	**43**	**28**

Source: Good Sam 2024, RV Life Campgrounds 2024

2.4.7 Traffic Safety and Operations

For this RFA 5, the primary and secondary transportation routes will be the same as previously approved for the BCWF Facility and RFA 4 Solar Facility. These routes will be used to bring in equipment, materials, and workers from outside of the analysis area to the Solar Components site and will include state, county, and private roadways. Roads within the primary transportation route

are serviced by the Oregon Department of Transportation (ODOT; Interstate 84 [I-84], United States Highway 97 [US-97]) and the Sherman County Road Department.

2.4.7.1 Primary Transportation Route

The primary transportation route used for construction of the Solar Components will be the same as what was previously evaluated for the BCWF and RFA 4 Solar Facility (Figure L-2). This route will carry all construction-related, heavy-duty, and light-duty delivery vehicles, as well as some workforce traffic. The route will start from either the west or east on I-84 to south on US-97 (from Biggs, Oregon) to Wasco, then southeast on Oregon Route 206 (OR-206), east on either Klondike Road or the Old Wasco Heppner Highway, and then onto various County roads.

2.4.7.2 Secondary Transportation Route

The secondary transportation route previously approved strictly for construction-related commuter traffic would route traffic originating from either east or west on I-84 to travel south on Scott Canyon Road to either Herin Lane or Medler Lane. Due to the physical terrain around Scott Canyon Road being unsuitable for large oversize or overweight trucks, this route is not suitable for any construction-related material or equipment deliveries. All truck traffic will be directed to use the primary transportation route.

2.4.7.3 Traffic Volumes

Table L-9 provides traffic volumes for the expected transportation routes to the Solar Components. State highway volumes were published in the 2021 through 2024 Traffic Volume Tables (ODOT 2021, 2022, 2023, 2024a). Table L-9 shows the average annual daily traffic (AADT) volumes for the most recent 4 years of data available at various milepost locations along the transportation routes.

Table L-9. Transportation Route Average Annual Daily Traffic Volumes

Highway[1]	Location	Milepost	2021	2022	2023	2024	Average Percent Change 2021-2024
I-84							
I-84 (No. 2)	0.50 miles east of Rowena Interchange	77.15	25,518	24,970	25,160	24,747	-3%
I-84 (No. 2)	At Hostetler Way Overcrossing	82.62	23,660	23,112	23,419	23,073	-2%
I-84 (No. 2)	At Webber Street Undercrossing	83.68	23,524	23,004	24,050	23,822	1%
I-84 (No. 2)	0.24 miles west of Brewery Grade Interchange	85.27	25,239	24,749	25,797	25,603	1%
I-84 (No. 2)	0.30 miles east of Brewery Grade Interchange	85.81	24,421	23,944	24,696	24,560	1%

Highway[1]	Location	Milepost	2021	2022	2023	2024	Average Percent Change 2021-2024
I-84 (No. 2)	0.30 miles east of The Dalles-California Highway (US197)	87.31	18,067	17,608	18,202	18,113	0%
I-84 (No. 2)	0.30 miles east of The Dalles Dam Interchange	89.13	17,772	17,317	17,966	17,884	1%
I-84 (No. 2)	0.30 miles east of Celilo-Wasco Highway (OR206)	97.44	16,904	16,485	17,124	17,061	1%
I-84 (No. 2)	0.44 miles southwest of Rufus/John Day Dam Interchange	109.51	14,630	14,294	14,211	13,019	-11%
I-84 (No. 2)	0.30 miles east of Rufus Interchange	110.25	14,574	14,296	13,976	14,012	-4%
I-84 (No. 2)	0.32 miles east of West John Day Interchange, Sherman-Gilliam County Line	114.55	14,525	14,253	13,901	13,940	-4%
US-97							
US-97 (No. 42)	0.02 miles south of Celilo-Wasco Highway Spur	0.05	3,126	3,651	3,709	3,683	18%
US-97 (No. 42)	0.30 miles south of Wasco-Heppner Highway (OR206)	7.8	2,595	3,543	3,600	3,575	38%
US-97 (No. 42)	0.40 miles south of Celilo-Wasco Highway (OR206)	9.22	2,565	3,208	3,259	3,236	26%
US-97 (No. 42)	Wasco Automatic Traffic Recorder, Sta.28-001, 0.83 miles northeast of 1st Street	17.36	3,273	3,232	3,258	3,233	-1%
Celilo-Wasco Highway; OR-206 (No. 301)							
OR-206 (No. 301)	0.02 miles west of Van Gilder Road	12.45	498	578	587	583	17%
OR-206 (No. 301)	0.20 miles west of Sherman Highway (US-97)	14.53	316	312	317	315	0%
OR-206 (No. 301)	0.26 miles west of Church Street (west of Wasco city limits)	15.07	487	421	428	425	-13%
OR-206 (No. 301)	0.02 miles west of Wasco-Heppner Highway (OR-206)	15.55	523	465	472	469	-10%
Wasco-Heppner Highway; OR-206 (No. 300)							
OR-206 (No. 300)	East of Sherman Highway (US-97) (0.30 miles)	-1.67	501	483	491	435	-13%
OR-206 (No. 300)	West of Clark Street (0.02 miles)	-0.28	548	528	536	461	-16%
OR-206 (No. 300)	North of Celilo-Wasco Highway (OR-206) (0.02 miles)	-0.11	1,124	1,084	1,101	880	-22%

Highway[1]	Location	Milepost	2021	2022	2023	2024	Average Percent Change 2021-2024
OR-206 (No. 300)	South of Celilo-Wasco Highway (OR-206) (0.02 miles)	-0.07	1,433	1,381	1,403	1,214	-15%
OR-206 (No. 300)	East of Clark Street (0.02 miles)	0.02	765	737	749	611	-20%
OR-206 (No. 300)	At east city limits of Wasco	0.58	590	569	578	460	-22%
OR-206 (No. 300)	SE of Klondike Road (0.02 miles)	0.88	517	498	506	425	-18%
OR-206 (No. 300)	At Hay Canyon Bridge	6.63	435	419	426	419	-4%
OR-206 (No. 300)	West of Fairview Road (0.02 miles)	9.4	370	357	363	309	-16%
OR-206 (No. 300)	East of Fairview Road (0.02 miles)	9.44	370	357	363	334	-10%

The number in parenthesis is the internal ODOT number designation for each state highway.

Sources: ODOT 2021, 2022, 2023, 2024a

Table L-9 shows that, from 2021 to 2024, AADT volumes increased by approximately 1 percent on I-84 but decreased by up to 11 percent in other areas. On US-97, AADT volumes have dramatically increased by as much as 38 percent around the OR-206 junction. For OR-206, traffic volumes have had some decreases but have at most increased by 17 percent near Van Gilder Road.

Due to the rural nature of the analysis area, recent traffic counts for county roads that are proposed as transportation routes are not available. County roadway volumes are assumed to be minimal, with some increase during the summer and early fall for harvest of agricultural products in the area.

2.4.7.4 Pavement Conditions

Pavement conditions can influence traffic safety issues. Poor pavement with potholes might cause vehicles to swerve, resulting in unsafe vehicle operation. ODOT's 2024 Pavement Condition data were reviewed for state highway transportation routes (ODOT 2024b). The conditions for state highways anticipated to be used as part of the transportation routes to the Solar Components range from fair to good along the entire haul route (Table L-10).

Table L-10. 2024 Pavement Conditions within Analysis Area

Roadway	Approximate Milepost	Pavement Condition
I-84 (No. 2)	76.45 - 84.25	Good
I-84 (No. 2)	84.25 - 88.00	Good
I-84 (No. 2)	88.00 - 96.75	Good
I-84 (No. 2)	96.75 - 110.46	Good
I-84 (No. 2)	110.46 - 125.40	Fair
US-97 (No. 42)	-0.18 - 0.4	Good
US-97 (No. 42)	0.40 - 7.00	Fair
US-97 (No. 42)	7.00 - 13.01	Good
US-97 (No. 42)	13.27 - 18.03	Good
OR-206 (No. 301)	10.70 - 15.57	Good
OR-206 (No. 300)	-1.67 - 0.00	Good
OR-206 (No. 300)	0.00 - 5.51	Good
OR-206 (No. 300)	5.51 - 10.75	Good
Source: ODOT 2024b.		

The majority of the transportation routes adjacent to the RFA 5 Site Boundary are in good condition. There is a section of I-84 between the Rufus Interchange and Sherman-Gilliam County Line and a section of US-97 between the Celilo-Wasco Highway Spur and the Wasco-Heppner Highway that are in fair condition. A fair rating indicates minor or low severity pavement deficiencies that typically lead to treatment such as chip seal or light resurfacing (ODOT 2024b); however, fair conditions do not indicate a safety hazard. OR-206 is rated as good condition throughout the area being used by the RFA 5 Solar Facility (ODOT 2024b).

The surface quality of Scott Canyon Road, Klondike Road, and Old Wasco-Heppner Highway are not assessed by ODOT because they are local roadways. The Certificate Holder reviewed the ODOT 2024 Pavement Condition Report for the state highways within transportation routes to the RFA 5 Site Boundary, which describes each condition level used (Table L-11; ODOT 2024b). All three are two-lane asphalt roadways with striping. The vicinity of Klondike Road immediately south of the RFA 5 Site Boundary is a two-lane gravel road. In street level imagery dated 2024, the road surface of all three roads appeared to be in good condition (Google Earth 2024).

Table L-11. ODOT Condition Level Descriptions

Image	Condition	Description
	Very Good	Pavement structure is stable with no cracking, patching or deformation evident. Roadways in this category are usually new. Riding quality is excellent; nothing would improve the roadway at this time.
	Good	Stable, minor cracking, generally hairline and hard to detect. Minor patching and possible some minor deformation evident. Dry or light-colored appearance. Very good riding quality: rutting is less than ½ inch.
	Fair	Pavement structure is generally stable with minor areas of structural weakness evident. Cracking is easier to detect. The pavement may be patched, but not excessively. Although riding quality is good, deformation is more pronounced and easily noticed. Rutting is less than ¾ inch.
	Poor	Includes areas of instability, marked evidence of structural deficiency, large crack patterns or “alligatoring,” heavy and numerous patches. Deformation is very noticeable. Riding qualities range from acceptable to poor. Rutting is greater than ¾ inch.

Image	Condition	Description
	Very Poor	Pavement is extremely deteriorated. Numerous areas of instability are present. Majority of the section shows structural deficiency. Riding quality is unacceptable; drivers may slow down.
Source: ODOT 2024b.		

2.4.8 Air Transportation

There is one aviation facility within the analysis area, considering both public and private airports: Wasco State Airport (public; approximately 1 mile southwest of the RFA 5 Site Boundary). Due to being less than 3.8 miles from the RFA 5 Site Boundary, this airport meets the notice criteria based on the Federal Aviation Administration (FAA) identified impact areas, and therefore formal submission of a Form 7460-1 to the FAA under the Code of Federal Regulations (CFR) Title 14 Part 77.9 (Safe, Efficient Use and Preservation of the Navigable Airspace) is required. There are no military facilities within the analysis area.

2.4.9 Police and Fire Protection

Police service in the analysis area is primarily provided by county police departments; some of the cities in the analysis area have a city police department that operates within their respective cities but do not cover the Facility. The nearest Sherman County Sheriff's Office to the RFA 5 Site Boundary is located in Moro, Oregon, approximately 8.4 miles from the RFA 5 Site Boundary. PGE will provide a record of correspondence in Attachment L-1 prior to the final RFA 5 being deemed complete. Additional law enforcement service is available through the Oregon State Police, with offices in The Dalles, Heppner, and Hermiston. The number of temporary construction workers and additional permanent-resident employees is not anticipated to place significant new demands on law enforcement agencies in the area.

Fire protection service in the analysis area is provided by the North Sherman County Rural Fire Protection District. The Certificate Holder will provide the fire department with construction plans, and locational information for Solar Components infrastructure, including access. The Certificate Holder will provide a record of correspondence in Attachment L-1 prior to the final RFA 5 being deemed complete.

2.4.10 Health Care

Because population density in the analysis area is relatively low, hospitals and health care services tend to be regional. The Sherman County Medical Clinic provides family medicine, urgent care, and minor surgery services, and is located approximately 8.4 miles from the RFA 5 Site Boundary. There are two Level III Trauma centers within the vicinity of the RFA 5 Site Boundary: Good Shepherd Medical Center (in Hermiston, Oregon) and Adventist Health Columbia Gorge Hospital (in The Dalles, Oregon; Oregon Health Authority 2024). The closest Level I Trauma centers are the Legacy Emanuel Medical Center and Oregon Health and Science University Hospital, both located in Portland, Oregon. Sherman County has one Ambulance Service Area, which is served by Sherman County Ambulance (Sherman County 2024).

2.4.11 Schools

The analysis area is within the Sherman County School District. The nearest schools to the RFA 5 Site Boundary are located in the town of Moro, Oregon, and include Sherman Grade School and Sherman County High School (both approximately 8.4 miles from the RFA 5 Site Boundary). Although the analysis area (the area within 10 miles of the RFA 5 Site Boundary) includes small portions of Gilliam County, Oregon and Klickitat County, Washington, no schools other than those within Sherman County School District are within the analysis area.

2.5 Potential Impacts to Public and Private Providers – OAR 345-022-0110(4)(C)

> *(C) A description of any likely adverse impact to the ability of the providers identified in (B) to provide the services listed in OAR 345-022-0110;*

The RFA 5 Solar Facility is not expected to have any significant adverse impact on any public or private service providers in the analysis area during construction or operation. The Council previously found that the BCWF and the RFA 4 Solar Facility were not likely to result in significant adverse impacts to public services within the analysis area,[4] and the amendments in RFA 5 do not alter that conclusion. No amendments to relevant conditions listed in the Fourth Amended Site Certificate to the Biglow Canyon Wind Farm are proposed.

2.5.1 Sewer and Water Services

No adverse impacts to sewer services are expected as a result of construction, as sewage services during construction will be provided by portable toilets. During operations, staff will use the sanitary facilities at the proposed O&M buildings or the existing O&M buildings, which are not, and will not be, connected to public sewage infrastructure. The sanitary facilities used will drain into a new county-approved on-site septic system. Facility staff will follow Site Certificate Conditions CON-WM-02 and OPR-WM-01 related to portable toilets and sewage management (Council 2026).

The Certificate Holder does not expect adverse impacts to water services. During construction and operation, water will be sourced from City of Wasco municipal water (or other permitted

source[s]), from a new or existing on-site exempt well), or purchased bottled water. As noted in the service letter provided by the City of Wasco (Attachment L-1), the City has adequate water supplies to serve the Facility and is not expected to be adversely impacted by the Facility. No new water rights will be required (see Exhibit O.2). The Certificate Holder will follow Site Certificate Conditions CON-PS-01, OPR-WR-01, and OPR-PS-01 regarding water sourcing, and Site Certificate Conditions OPR-WM-01 and OPR-SP-01 regarding wastewater discharges.

2.5.2 Stormwater Drainage

The RFA 5 Solar Facility will not adversely impact public stormwater drainage facilities. Any construction-related stormwater will evaporate or infiltrate on site and no public stormwater facilities will be used. During construction, stormwater best management practices and monitoring will be implemented in accordance with the 1200-C National Pollutant Discharge Elimination System Storm Water Discharge General Permit and Erosion and Sediment Control Plan (see Exhibit C, Attachment C-1) (Site Certificate Condition PRE-SP-01). During construction of the Solar Components, the land will be graded in a manner to encourage stormwater to infiltrate the ground to minimize the need for collection in stormwater swales or retention basins. During operation, the Certificate Holder will monitor the area until soils are stabilized and evaluate whether construction-related impacts to soils are being adequately addressed by the mitigation procedures described in the draft Erosion and Sediment Control Plan and the Comprehensive Solar Revegetation and Soil Management Plan (Site Certificate Condition OPR-SP-04). Stormwater management infrastructure installed during construction will, as needed, be left in place to continue functioning during operation. Such features may include roadside ditches, infiltration swales, or retention basins. These facilities will be located on private land and will not affect the provision of stormwater management services by any public agency. The Certificate Holder will also follow wastewater discharge practices listed in Site Certificate Conditions OPR-WM-01 and OPR-SP-01.

2.5.3 Solid Waste Management

Construction and operation activities will not adversely impact solid waste management services. Solid waste will be disposed of through contracts with local waste disposal providers and will comply with all local, state, and federal laws and regulations (Site Certificate Condition GEN-SP-01). During construction and operation of the Solar Components, the Certificate Holder will implement a waste management plan, in accordance with Site Certificate Conditions PRE-WM-01 and OPR-WM-02. Exhibit N includes detailed information about types and quantities of solid waste and disposal.

The Certificate Holder will contract with a private disposal service to transport any solid waste that is not recycled to an approved landfill. Columbia Ridge Landfill (19 miles east of the RFA 5 Site Boundary) and the Wasco County Landfill (23 miles west of the RFA 5 Site Boundary) will be the most likely recipients for solid waste during construction and operation of the Solar Facility proposed under RFA 5. The Certificate Holder expects construction waste to be within the handling

capacities of the aforementioned landfills. The Certificate Holder will provide a record of correspondence in Attachment L-1 prior to the final RFA 5 being deemed complete.

2.5.4 Housing

The Certificate Holder does not expect adverse impacts to housing as a result of constructing or operating the RFA 5 Solar Facility. Potential impacts on housing could result if there were an inadequate supply of housing in relation to the demand from the new temporary and permanent residents associated with the RFA 5 Solar Facility; it is not yet known where the new temporary and permanent residents will settle and what type of housing they will select. However, based on the availability of housing options outlined in Section 2.4.6, adequate supply is available to accommodate the construction and operations employees.

The skilled local workforce is continuously growing as more renewable energy projects are built in eastern Oregon. An estimated 30 percent of the construction workforce is assumed to be local and commute daily from their normal place of residence to the RFA 5 Solar Facility, which will lessen impacts to housing associated with the in-migration of outside workers. Based on the projected construction employment for the Solar Components, temporary housing is assumed to be required for 70 percent of the workforce, with an average of 140 workers and a monthly peak of 385 workers temporarily relocating to the area during construction. Most construction workers will be in the area for approximately 4 to 9 months, as opposed to the full 18-month-long construction period. The actual number of temporary residents may be fewer if more locals are hired.

Workers temporarily relocating to the area during construction are likely to seek a range of temporary accommodations, including rental housing (houses, apartments, and mobile homes), hotel/motel rooms, and RV parks and campgrounds, as well as other special living situations such as Airbnb units and spare bedrooms. Housing demand by type is likely to be influenced by the type of housing available, the proximity of the housing to the Solar Facility proposed under RFA 5, duration of employment, and the project schedule, as well as worker preference.

As noted above, during peak construction, an estimated 385 non-local workers could seek temporary accommodation near the RFA 5 Solar Facility. Temporary accommodation would be available in the form of rental housing. Review of U.S. Census Bureau data indicates that while vacant rental housing is limited in Sherman County, numerous units are available in nearby counties (within 1-hour commute), including 93 units in Wasco County, 136 units in Hood River County, and 161 units in Morrow County (Table L-3). Rental housing options may also include other special living situations, such as vacation rental units and spare bedrooms in homes that residents would be willing to rent to construction workers. Temporary accommodation would also be available in the form of hotel/motel rooms and RV parks and campgrounds. An estimated 352 rooms within 1 hour would normally be vacant and available for rent during peak hotel occupancy (August), with additional rooms available at other times of the year (Table L-4). In addition, workers with trailers or RVs would likely seek accommodation at existing RV parks and campgrounds. At least 21 RV parks with an estimated 976 sites were identified within a 1-hour commute of the Solar Components (Table L-7). Consultation with cities will occur as necessary

regarding temporary housing options prior to construction. Note that no RV usage is proposed at the Solar Facility proposed under RFA 5 itself but rather at existing RV parks and campgrounds within a 1-hour commute distance/duration.

Even if all non-local construction workers sought temporary housing within the 1-hour commutable distance/duration analysis area, there will be enough supply to meet that demand. Although it cannot be assumed that housing facilities will have vacancies at any given time, the above review indicates that adequate supplies are available within a commutable distance/duration in relation to the number of temporary workers. Additionally, experience with energy facility construction, for example during the peak of wind power construction in 2009 and 2010 near the community of Arlington, Oregon, demonstrates that multiple energy facilities can be built in an area comparable to the analysis area without creating local housing issues. Therefore, no significant adverse housing impacts from construction of the RFA 5 Solar Facility are anticipated.

Permanent housing for up to 4 new households (with up to 3.0 people per household) may be required starting at the beginning of operations. This potential demand for housing is not expected to result in significant adverse impacts on the ability of communities to provide housing.

The Certificate Holder will develop a Construction Workforce Housing Plan in compliance with Site Certificate Condition PRE-PS-01 and will report on implementation of this plan in compliance with Site Certificate Condition CON-PS-02.

2.5.5 Traffic Safety and Operations

The Certificate Holder expects an average of up to 200 worker vehicles round trips generated per day during construction of the Solar Components, with a peak of 550 worker vehicle round trips per day; this peak would occur during construction of the Solar Components and is assumed to be the worst-case scenario. Construction is anticipated to begin in 2027 and end in 2028 for a total of 18 months. The maximum peak workforce is expected to occur in 2028. The Certificate Holder expects an average of 68 trucks per day or 136 one-way trips per day by small and large trucks to deliver materials and equipment. Thus, on average, construction of the Solar Components could generate approximately 636 one-way trips per day. During peak construction, it is possible that construction of the Solar Components could generate approximately 1,236 one-way trips per day. It is anticipated that up to 4 two-way vehicle trips per day will be required for maintenance personnel during operations. Transportation routes will be used to bring construction workers, equipment, and materials from outside of the analysis area to the RFA 5 Site Boundary and will include state and county roads. The primary and secondary transportation routes are depicted in Figure L-2.

To determine the Solar Components' construction impact on the state highways along the transportation route, the ADT for 2028 was estimated using the ODOT 2024 traffic data with a 2 percent growth rate (ODOT 2024a). The estimated Construction ADT value was then used to determine the percent increase due to construction of the Solar Components, which can be found in Table L-12.

Table L-12. Anticipated Facility Impact to Transportation Route

Highway[1]	Location	Milepost	2024 ADT	2028 Expected ADT	Construction ADT	Percent Change from Construction
I-84						
I-84 (No. 2)	0.50 mile east of Rowena Interchange	77.15	24,747	26,787	27,723	3%
I-84 (No. 2)	At Hostetler Way Overcrossing	82.62	23,073	24,975	25,911	4%
I-84 (No. 2)	At Webber Street Undercrossing	83.68	23,822	25,786	26,722	4%
I-84 (No. 2)	0.24 mile west of Brewery Grade Interchange	85.27	25,603	27,714	28,650	3%
I-84 (No. 2)	0.30 mile east of Brewery Grade Interchange	85.81	24,560	26,585	27,521	4%
I-84 (No. 2)	0.30 mile east of The Dalles-California Highway (US197)	87.31	18,113	19,606	20,542	5%
I-84 (No. 2)	0.30 mile east of The Dalles Dam Interchange	89.13	17,884	19,358	20,294	5%
I-84 (No. 2)	0.30 mile east of Celilo-Wasco Highway (OR206)	97.44	17,061	18,467	19,403	5%
I-84 (No. 2)	0.44 mile southwest of Rufus/John Day Dam Interchange	109.51	13,019	14,092	15,028	7%
I-84 (No. 2)	0.30 mile east of Rufus Interchange	110.25	14,012	15,167	16,103	6%
I-84 (No. 2)	0.32 mile east of West John Day Interchange, Sherman-Gilliam County Line	114.55	13,940	15,089	16,025	6%
US-97						
US-97 (No. 42)	0.02 mile south of Celilo-Wasco Highway Spur	0.05	3,683	3,987	4,923	23%
US-97 (No. 42)	0.30 mile south of Wasco-Heppner Highway (OR206)	7.8	3,575	3,870	4,806	24%
US-97 (No. 42)	0.40 mile south of Celilo-Wasco Highway (OR206)	9.22	3,236	3,503	4,439	27%
US-97 (No. 42)	Wasco Automatic Traffic Recorder, Sta.28-001, 0.83 mile northeast of 1st Street	17.36	3,233	3,500	4,436	27%

Highway[1]	Location	Milepost	2024 ADT	2028 Expected ADT	Construction ADT	Percent Change from Construction
Celilo-Wasco Highway; OR-206 (No. 301)						
OR-206 (No. 301)	0.02 mile west of Van Gilder Road	12.45	583	631	1,567	148%
OR-206 (No. 301)	0.20 mile west of Sherman Highway (US-97)	14.53	315	341	1,277	275%
OR-206 (No. 301)	0.26 mile west of Church Street (west of Wasco city limits)	15.07	425	460	1,396	203%
OR-206 (No. 301)	0.02 mile west of Wasco-Heppner Highway (OR-206)	15.55	469	508	1,444	184%
Wasco-Heppner Highway; OR-206 (No. 300)						
OR-206 (No. 300)	East of Sherman Highway (US-97) (0.30 miles)	-1.67	435	471	1,407	199%
OR-206 (No. 300)	West of Clark Street (0.02 mile)	-0.28	461	499	1,435	188%
OR-206 (No. 300)	North of Celilo-Wasco Highway (OR-206) (0.02 mile)	-0.11	880	953	1,889	98%
OR-206 (No. 300)	South of Celilo-Wasco Highway (OR-206) (0.02 mile)	-0.07	1,214	1,314	2,250	71%
OR-206 (No. 300)	East of Clark Street (0.02 mile)	0.02	611	661	1,597	142%
OR-206 (No. 300)	At east city limits of Wasco	0.58	460	498	1,434	188%
OR-206 (No. 300)	SE of Klondike Road (0.02 mile)	0.88	425	460	1,396	203%
OR-206 (No. 300)	At Hay Canyon Bridge	6.63	419	454	1,390	206%
OR-206 (No. 300)	West of Fairview Road (0.02 mile)	9.4	309	334	1,270	280%
OR-206 (No. 300)	East of Fairview Road (0.02 mile)	9.44	334	362	1,298	259%

The number in parenthesis is the internal ODOT number designation for each state highway.
Sources: ODOT 2024a

As described in Section 2.4.7, I-84 carried an AADT volume of approximately 19,621 vehicles in 2024 on the road segments located east and west of US-97. The projected AADT volume in 2028 based on a 2 percent growth rate is approximately 21,239 vehicles. Based on the above AADT

estimates for the construction period, construction vehicles could cause an increase to 22,175 if 100 percent of the average construction traffic uses this route, which is a total increase of about 4 percent from expected 2028 volumes. This increase is expected to be inconsequential.

Along US-97, just south of I-84, the 2024 AADT was found to be 3,432 in the vicinity of the Solar Components. The projected AADT volume in 2028 based on a 2 percent growth rate is approximately 3,715 vehicles. With the addition of 100 percent of the average construction traffic, this will increase the anticipated vehicles per day from 2028 volumes to 4,651. This equates to a total increase in traffic of 25 percent. This increase may cause some additional traffic delay, particularly during the AM and PM Peak Hour, but it is unlikely to cause significant disruption.

In the vicinity of the RFA 5 Site Boundary, OR-206 carried an AADT volume of approximately 524 vehicles in 2024. The projected AADT volume in 2028 based on a 2 percent growth rate is approximately 568 vehicles. With the addition of 100 percent of the average construction traffic, this will increase the anticipated vehicles per day to 1,504. This equates to a total increase in traffic of 165 percent from the anticipated 2028 volume, which represents a significant increase in traffic volume. Most of the construction traffic is estimated to be from workers commuting to the RFA 5 Site Boundary. The high number of slowing and left-turning vehicles could increase the potential for rear-end collisions. Traffic impacts are anticipated to be temporary, intermittent, and minimal due to most construction traffic occurring during non-peak recreational hours (i.e., weekend) and a secondary transportation route being available for commuting workers. Private vehicle traffic will also generally occur at different times than construction truck traffic, as the workers report earlier and leave later than most of the truck traffic. Mitigation of any safety issues presented by any delays related to construction will be accomplished with appropriate signage and traffic control measures. The Certificate Holder will encourage carpooling for construction workers and include traffic safety as part of its safety training program. Additional mitigation efforts are discussed further in this section.

While construction-related traffic may cause short-term traffic delays (because of large, slow-moving delivery trucks and increased congestion), the delays will be temporary and can be minimized by implementing the following measures as necessary:

- The Certificate Holder's contractor will provide advance notification to adjacent landowners and farmers through mailing, informal meeting, open house or other similar methods when construction takes place in the vicinity of their homes and farms to help minimize access disruptions. The Certificate Holder's contractor will specify timing of deliveries of heavy equipment and building materials to the extent feasible.
- The Certificate Holder will coordinate with the Sherman County Road Department to determine appropriate signage and warnings such as "Equipment on Road," "Truck Access," or "Road Crossings."
- The Certificate Holder will coordinate with the Sherman County Road Department to determine appropriate implementation of traffic-diversion equipment (such as advance signage and pilot cars) if needed when slow or oversize loads are being hauled.

- The Certificate Holder's contractor will employ flag persons as necessary to direct traffic when large equipment is exiting or entering public roads to minimize risk of accidents. Flag persons may facilitate two-way traffic on one lane by alternately restricting travel directions. This method will not require full lane closures, detours, or reroutes. Flag persons will also monitor through-traffic on public roadways as necessary so that they are not in conflict with construction vehicles.
- The Certificate Holder's contractor will maintain at least one travel lane so that roadways will not be closed to traffic due to construction vehicles entering or exiting public roads. If lane closures must occur, adequate signage for potential detours or delays will be posted.
- The Certificate Holder and their contractor will be responsible for damage to County roads directly caused by construction of the Solar Components. The road(s) will be repaired in adherence with terms of a Road Use Agreement with the County of the affected road.
- The Solar Components' construction traffic will be routed to minimize impacts on OR-206, where the largest impact is expected, and County roads, as needed.
- The Certificate Holder will conduct awareness training for construction workforce drivers, including appropriate techniques for sharing roads with recreation users, especially cyclists.

In addition, the Certificate Holder will coordinate with ODOT and Sherman County on any potential road closures, impacts, and permits needed for construction or movement of equipment and materials. The Applicant will implement all traffic-related Site Certificate Conditions (Conditions GEN-LU-02, PRE-PS-02, and CON-PS-04; Council 2026), including those related to oversize/overweight delivery timing, parking, road wear and repair, and signage. A Construction Traffic Management Plan will be developed prior to construction, in accordance with Site Certificate Condition PRE-PS-02, that will include traffic minimization measures at transportation route roads, which would be implemented as needed and could include adjusting the timing of construction traffic, 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 construction of the Solar Components is repaired, and that roads are restored to pre-construction condition or better.

2.5.5.1 Traffic and Design Standards

Traffic Standards

State highways are designed and constructed to handle legal loads of 80,000 pounds without a permit. During construction, it may be necessary for trucks exceeding the legal load limit to access the site via state highways. These trucks will potentially be used to deliver the substation transformers or heavy construction equipment. Before construction, the transportation contractor will consult with the Sherman County Road Department and ODOT to determine whether any segments of roadways or bridges are restricted for travel, and to obtain any oversize/overweight permits required to allow transport of these loads (Site Certificate Condition GEN-OE-03). There are no permanent restrictions on state highways proposed for transportation routes. Because the

state highways are built to accommodate overweight vehicles with permits, impacts to safety or roadway pavement conditions are not expected. Vehicles up to 75 feet in length are allowed without special permitting on the construction transportation routes. There are requirements imposed by Sherman County and ODOT, such as the previously referenced Construction Traffic Management Plan (Site Certificate Condition PRE-PS-02), to promote traffic safety and prevent cumulative damage to the pavement along the primary transportation routes identified in this exhibit.

Design Standards

County and local roadways are expected to safely accommodate Solar Components construction traffic. No county or local roadways are anticipated to require improvement prior to construction. However, road conditions could change, and the Construction Traffic Management Plan will reflect what is actually needed at the time of preconstruction compliance for the Solar Components (Site Certificate Conditions GEN-LU-02 and PRE-PS-02). To ensure the integrity of local roads, the Certificate Holder will coordinate with local transportation officials to make improvements where necessary to accommodate Solar Components construction traffic, and improvements will be restricted to areas within the respective rights-of-way per Site Certificate Condition GEN-LU-02.

The Certificate Holder will work with ODOT and the Sherman County Road Department to ensure that any unusual damage or wear to state or county roads caused by Solar Components construction is monitored and repaired by the Certificate Holder as consistent with Site Certificate Conditions PRE-PS-02 and CON-PS-04. All county roads on the primary transportation route will be evaluated prior to and after construction of the Solar Components to determine what, if any, degradation has occurred. Inspections will include monitoring of roadway conditions after the completion of construction activities. Monitoring may include the use of video footage, photographs, and engineer field notes to document road conditions. During construction of the Solar Components, the contractor will obtain authorization from ODOT and Sherman County before proceeding with overweight loads on state- or county-maintained roadways. The Certificate Holder will strictly abide to travel conditions and transportation equipment requirements enforced by either ODOT or Sherman County. Upon completion of construction, the Certificate Holder will restore county roads to their pre-construction condition or better, to the satisfaction of the County Road Department. Regardless of existing pavement conditions, roadway segments will be reviewed prior to any added construction traffic, and a system for monitoring safety or degradation to pavement will be developed for the necessary roadways prior to construction (Site Certificate Condition PRE-PS-02). The Certificate Holder will ensure that the construction and operation of the Solar Components will maintain ODOT's and Sherman County's Road systems in as good or better quality than prior to the Solar Components' construction.

2.5.5.2 Air Transportation

There is one aviation facility within the analysis area, Wasco State Airport (35S), located approximately 1 mile southwest of the RFA 5 Site Boundary (458 meters or 1,503 feet above sea level); this airport meets the notice criteria based on FAA-identified impact areas (i.e., 3.8 miles or

less from the RFA 5 Site Boundary), and therefore formal submission of a Form 7460-1 to the FAA under Code of Federal Regulations (CFR) Title 14 Part 77.9 (Safe, Efficient Use, and Preservation of the Navigable Airspace) is anticipated. To confirm that a formal FAA notification was required for the Solar Facility proposed under RFA 5, the Certificate Holder used the FAA Notice Criteria Tool, which identified requirements by CFR Title 14 77.9(b) by 31 feet; the nearest airport is 35S, and the nearest runway is 7F/25F (FAA 2024). The FAA Notice Criterial Tool indicated that notice is required for the RFA 5 Site Boundary, through Form 7460-1. Potential impacts to air navigation and the need for any mitigation will be assessed prior to construction of the Solar Components within the RFA 5 Site Boundary.

2.5.5.3 Glare Impacts

No glare was predicted for the modeled 27 Observation Points (OPs) or road receptors in Analysis 1 or 2, but Analysis 3 predicted minor green and yellow glare for the two 2-mile final approach paths for the Wasco State Airport. No instances of red glare are predicted for any OP or route segments. A total of 12.7 annual hours of green glare and 13.8 annual hours of yellow glare were predicted from PV Arrays 1 and 2. Based on 12 hours of daylight, this equates to approximately 0.3 percent of the time. This amount of green and yellow glare is considered insignificant.

For additional information regarding the glare analysis, please refer to Exhibit I Sections 4.1.2 and 4.2.2.

2.5.6 Police and Fire Protection

The number of new temporary and permanent residents is not expected to create significant new demands on the police or fire protection services for the area. Any impacts to police and fire services will be intermittent and temporary during construction, with construction anticipated to last 18 months.

During construction and operation of the Solar Components, the Certificate Holder will maintain good communications with the Sherman County Sheriff's Office. During operation, the Certificate Holder will ensure that appropriate law enforcement agency personnel have an up-to-date list of the names and telephone numbers of Solar Facility personnel available to respond on a 24-hour basis in case of an emergency on the site.

The Certificate Holder has previously consulted with the Sherman County Sheriff's Office and the North Sherman County Rural Fire Protection District to address potential impacts and committed to coordinating with them regarding appropriate traffic safety measures. The Certificate Holder will provide a record of correspondence specific to the Solar Facility proposed in RFA 5 in Attachment L-1 prior to the final RFA 5 being deemed complete. The Certificate Holder will also provide the North Sherman County Rural Fire Protection District with construction plans, schedules, and locations prior to the start of construction. The Construction and Operations Wildfire Management Plans, which will be finalized in coordination with these providers, will establish the framework for training, communications, and response protocols. These Plans will address structural, BESS, and

wildfire scenarios, and will include provider training on facility-specific hazards, established communication channels, site access, and firefighting resources. Ongoing coordination and refresher trainings will further ensure local providers are supported and prepared to respond safely and effectively.

Solar panels contain a number of safety features designed to provide increased fire protection. The BESS also introduces an element that could pose a fire hazard. Lithium-ion batteries must be kept in a temperature-controlled facility with individual battery modules isolated to prevent the spread of fire if it were to occur. The lithium-ion BESS will incorporate a fire response system as designed by the battery manufacturer. During the operational phase of the Solar Facility proposed under RFA 5, fire danger will be minimal.

The following measures would be implemented to minimize fire and safety risks:

- Relevant Site Certificate Conditions will be followed during construction and operation of the RFA 5 Solar Facility, including conditions related to implementing fire safety plans and health and safety plans, mitigating fire risk, and coordinating with the North Sherman County Rural Fire Protection District (Site Certificate Conditions OPRE-WF-01 and PRO-WF-01).
- All electrical equipment will meet National Electrical Code and Institute of Electrical and Electronics Engineers standards.
- Adequate firefighting equipment and water supplies will be maintained and made available during operations that carry a high fire risk (e.g., metal cutting, welding, parking in high, dry grass).
- The solar arrays will have shielded electrical cabling to prevent electrical fires.
- The collector system and substation will have redundant surge arrestors to deactivate the Solar Components during unusual operational events that could start fires.
- Solar Components infrastructure will be spaced sufficiently (fire breaks) to prevent the spread of fire.
- A non-flammable gravel base will be installed around the solar inverters, substation, and BESS.
- Smoke/fire detectors, including wildfire detection cameras and other systems included in the PGE 2026-2028 Wildfire Mitigation Plan (Exhibit M, Attachment M-1), will be placed around the site that will be tied to the supervisory control and data acquisition system and will contact local firefighting services.
- Vehicles and equipment will drive and park on maintained graveled areas and roads to the extent practicable in accordance with the Draft Construction Wildfire Mitigation Plan (Exhibit M, Attachment M-3); roads will be established before accessing the site to keep vehicles away from grass (Site Certificate Condition PRE-WF-01).

- Vehicles will avoid idling in grassy areas, and cutting torches and similar equipment will be kept away from grass (Site Certificate Condition PRE-WF-01).
- Diesel vehicles will be used whenever practicable to prevent potential ignition by catalytic converters.
- Roads will be sufficiently sized for emergency vehicle access.
- Fire prevention and response training will be administered annually to all on-site employees in compliance with the Construction Wildfire Mitigation Plan, which will be updated prior to construction of the RFA 5 Solar Facility (Site Certificate Condition PRE-WF-01). Operations staff will be trained in the use of fire extinguishers for responding to incipient stage fires on site in compliance with the Operations Wildfire Mitigation Plan, which will be updated prior to operation of the RFA 5 Solar Facility (Site Certificate Condition PRO-WF-01).
- A Solar Components site plan will be submitted to fire protection officials including, current contact information for personnel included in the Construction and Operations Wildfire Mitigation Plans (Site Certificate Conditions PRE-WF-01 and PRO-WF-01).
- Off-site, 24-hour monitoring of the BESS will be implemented and will include shutdown capabilities.
- The BESS will be stored in completely contained, leak-proof enclosures, and will be inspected regularly according to the manufacturer's recommendations.
- Transportation of lithium-ion batteries is subject to 49 CFR 173.185 – Department of Transportation Pipeline and Hazardous Material Administration. This regulation contains requirements for prevention of a dangerous evolution of heat; prevention of short circuits; prevention of damage to the terminals; and prevention of batteries coming into contact with other batteries or conductive materials. Adherence to the requirements and regulations, personnel training, safe interim storage, and segregation from other potential waste streams will minimize any public hazard related to transport, use, or disposal of batteries.
- Design of BESS will be in accordance with applicable Underwriters Laboratories (specifically, 1642, 1741, 1973, 9540A), National Electric Code, and National Fire Protection Association (specifically 855) standards, which require rigorous industry testing and certification related to fire safety and/or other regulatory requirements applicable to battery storage at the time of construction.
- The site will be mowed as needed for fire safety requirements and to keep vegetation from interfering with operation and maintenance activities, in accordance with the Operations Wildfire Mitigation Plan (Exhibit M, Attachment M-4).
- Cyclical and routine vegetation inspections and maintenance will be carried out in accordance with the Operation Wildfire Mitigation Plan (Exhibit M, Attachment M-4)to monitor for vegetation clearances, maintain fire breaks, as applicable, and monitor for wildfire hazards.

- The programs outlined in Exhibit M will be implemented to minimize fire risk during operations, including the Operations Wildfire Mitigation Plan (Exhibit M, Attachment M-4).

2.5.7 Health Care

PGE does not expect construction or operation of the Solar Components to have adverse impacts on local and regional emergency health service providers, hospitals, or health clinics, considering the relatively small number of personnel that will be added for construction and operation of the Solar Components. The potential need for healthcare services will be minimized through implementation of robust health and safety programs as outlined in Site Certificate Conditions GEN-OE-07, CON-PS-03, and OPR-PS-02.

The Solar Components will also comply with all emergency planning and notification requirements of the Emergency Planning and Community Right-to-Know Act and will notify ODOE and Sherman County within 72 hours of any event that threatens public health and safety or the environment (Site Certificate Condition GEN-OE-07).

In an emergency, Sherman County Ambulance will likely provide emergency medical transportation to the Adventist Health Columbia Gorge Hospital, a Level III Trauma Center, in The Dalles, Oregon, approximately 25.2 miles from the Solar Micrositing Area (Sherman County 2024). If more advanced treatment is needed, patients may be flown via helicopter or fixed-wing aircraft to Level I Trauma centers in Portland, Oregon. Construction workers are expected to adhere to contractor safety programs, which will prevent serious injuries and the need for ambulance or hospital services.

2.5.8 Schools

PGE does not expect construction or operation of the Solar Components to have adverse impacts on schools. No schools are located within the Solar Micrositing Area or will be directly affected by the Solar Components construction or operations. Few, if any, of the workers temporarily relocating to the area during construction are expected to be accompanied by family members. During operations, up to four new permanent households may require school services, which should not adversely impact school operations. Impacts on school services will depend on the housing choices of new residents with children, which cannot be predicted; however, given the number of schools in the locations in which new residents are likely to settle, and the small number of new school children expected, it is unlikely that any one school will receive more new students than it can accommodate. To the extent possible, PGE will coordinate the timing of oversized/overweight vehicles and equipment deliveries to avoid peak school traffic times and bus routes. Note that truck traffic (inclusive of large component or equipment deliveries) will generally not coincide with morning and evening peak hours; rather, truck traffic will be dispersed throughout the working day. School buses are anticipated to be operational in the mornings and evenings, before and after schools are in session, and thus are not anticipated to coincide with the timing of construction truck traffic.

2.6 Avoidance and Mitigation – OAR 345-022-0110(4)(D)

> *(D) Evidence that adverse impacts described in (C) are not likely to be significant, taking into account any measures the applicant proposes to avoid, reduce or otherwise mitigate the impacts; and*

Impacts described in Section 2.5 are not likely to be significant to public and private providers in the analysis area as they continue to provide services to the surrounding communities. Furthermore, coordination will occur between the Certificate Holder and providers to address any concerns that may arise. Specifically:

- **Sewer and Water Services (Site Certificate Conditions CON-PS-01, OPR-WR-01, OPR-PS-01, OPR-WM-01, and OPR-SP-01).** During construction and operation water will be sourced from City of Wasco municipal water, as they have identified capability to provide water without adverse impact. Additional water sources are being investigated and may be used to supplement the City of Wasco source.
- **Sanitary Facilities (Site Certificate Conditions CON-WM-01 and OPR-WM-01).** During construction, portable toilets will be utilized, thereby not impacting existing county infrastructure. During operations, PGE's staff will use the sanitary facilities at the proposed O&M buildings or the existing O&M buildings, which are not, and will not be, connected to public sewage infrastructure. The sanitary facilities used will drain into a new county-approved on-site septic system, thereby not impacting existing county infrastructure.
- **Stormwater Management (Site Certificate Conditions OPR-SP-04, OPR-WM-01, and OPR-SP-01).** During construction, stormwater best management practices and monitoring will be implemented in accordance with the 1200-C National Pollutant Discharge Elimination System Storm Water Discharge General Permit and draft Erosion and Sediment Control Plan.
- **Solid Waste (Site Certificate Condition GEN-SP-01).** Disposal will be through contracts with local waste disposal providers and will comply with all local, state, and federal laws and regulations.
- **Temporary Housing.** The availability of various temporary housing options (seasonal, recreational or occasional), including hotels/motels, short-term rental opportunities, and RV parks is sufficient to meet the needs of the expected workforce.
- **Traffic Volume (Site Certificate Conditions GEN-OE-03, GEN-LU-02, PRE-PS-02, and CON-PS-04).** Traffic will increase during construction of the Solar Components, however, much of this traffic will be at low-volume times, as construction workers generally travel to work prior to typical morning traffic and end their workday after typical late afternoon traffic. To the extent possible, PGE will coordinate the timing of oversized/overweight vehicles and equipment deliveries to avoid peak school traffic times and bus routes.
- **Road Closures (Site Certificate Condition PRE-PS-02).** The Certificate Holder will coordinate with ODOT and Sherman County on any potential road closures, impacts, and permits needed for construction or movement of equipment and materials. Additionally, a Construction Traffic Management Plan will be developed prior to construction.

- **Police Services.** Police services will not be significantly impacted, due to the relatively small number of personnel temporarily and permanently relocating to the area, the presence of Certificate Holder provided on-site security, and regular communication between the on-site security and the Sherman County Sheriff's Office.
- **Fire Protection (Site Certificate Conditions PRE-WF-01 and PRO-WF-01).** Fire protection will be addressed in part by providing the North Sherman County Rural Fire Protection District with construction plans, schedules, and locations prior to the start of construction. Additionally, the Construction and Operations Wildfire Management Plans, which will be finalized in coordination with fire protection providers, will establish the framework for training, communications, and response protocols.
- **Health Care (Site Certificate Conditions GEN-OE-07, CON-PS-03, and OPR-PS-02).** The relatively small number of personnel on-site should not have an impact on local and emergency health care providers as there will be implementation of robust health and safety programs.
- **School Enrollment.** Local school enrollment will not be measurably impacted due to the low expected number of permanent households expected from the Solar Facility.

2.7 Monitoring Program – OAR 345-022-0110(4)(E)

> *(E) The applicant's proposed monitoring program, if any, for impacts to the ability of the providers identified in (B) to provide the services listed in OAR 345-022-0110.*

Because PGE does not anticipate the construction and operation of the Solar Components to have long-term significant adverse impacts on the ability of service providers in the analysis area to provide services, PGE does not plan any monitoring programs other than the monitoring efforts required under the National Pollutant Discharge Elimination System and the Traffic Management Plan. PGE will continue to communicate with the Sherman County Planning Department and local service providers to keep them informed of major developments at the Solar Components that could potentially affect public services.

3.0 Materials Analysis – OAR 345-022-0110(4)(b)

> *(b) A materials analysis, including:*
>
> *(A) An inventory of substantial quantities of industrial materials flowing into and out of the proposed facility during construction and operation;*
>
> *(B) The applicant's plans to manage hazardous substances during construction and operation, including measures to prevent and contain spills; and*
>
> *(C) The applicant's plans to manage non-hazardous waste materials during construction and operation.*

The materials analysis for the RFA 5 Solar Facility can be found in Section 7.0 of Exhibit N.

4.0 Conclusion

The evidence provided in this exhibit demonstrates that the Solar Components will not result in a significant adverse impact on the ability of public and private entities in the analysis area to provide the following services: sewers and sewage treatment, water, stormwater drainage, solid waste management, housing, transportation and traffic safety, police protection, fire protection and emergency response, health care, and schools.

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6.0 Approval Standards and Submittal Requirements

Table L-13. Approval Standards and Submittal Requirements Matrix

Requirements	Location
OAR 345-022-0110 Public Services	–
Approval Standards	
(1) Except for facilities described in sections (2) and (3), to issue a site certificate, the Council must find that the construction and operation of the facility, taking into account mitigation, are not likely to result in significant adverse impact to the ability of public and private providers within the analysis area described in the project order to provide: sewers and sewage treatment, water, storm water drainage, solid waste management, housing, traffic safety, police and fire protection, health care and schools.	Section 2.5

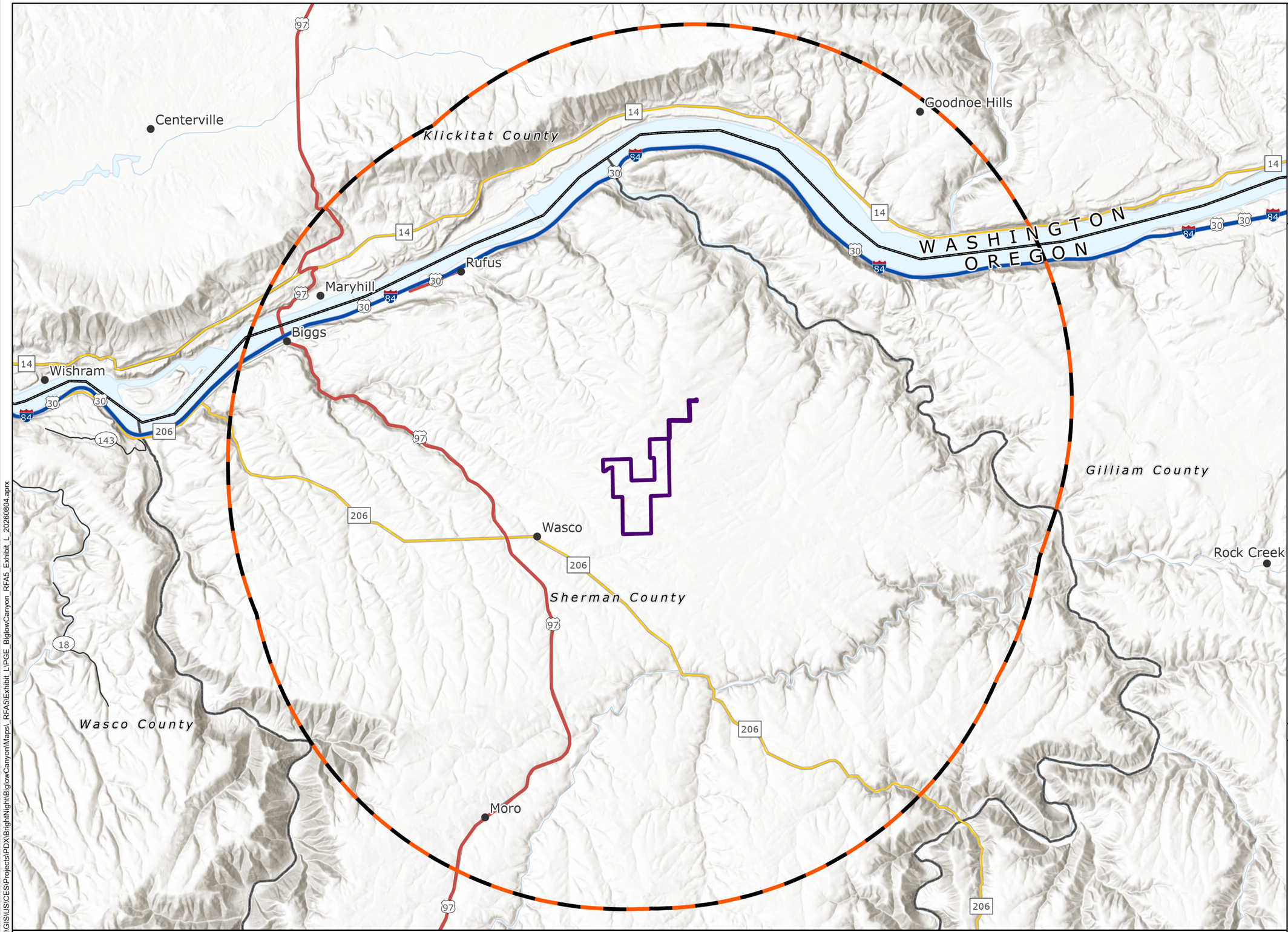
Requirements	Location
(2) The Council may issue a site certificate for a facility that would produce power from wind, solar or geothermal energy without making the findings described in section (1). However, the Council may apply the requirements of section (1) to impose conditions on a site certificate issued for such a facility.	–
(3) The Council may issue a site certificate for a special criteria facility under OAR 345-015-0310 without making the findings described in section (1). However, the Council may apply the requirements of section (1) to impose conditions on a site certificate issued for such a facility.	–
Submittal Requirements	
(4) To assist the Council in determining whether the standard outlined in (1) through (3) has been met, the Applicant must submit:	–
(a) Information about significant potential adverse impacts of construction and operation of the proposed facility on the ability of public and private providers in the analysis area to provide the services listed in OAR 345-022-0110, providing evidence to support a finding by the Council as required by OAR 345-022-0110. The applicant must include:	Section 2.0
(A) The important assumptions the applicant used to evaluate potential impacts;	Section 2.3
(B) Identification of the public and private providers in the analysis area that would likely be affected;	Section 2.4
(C) A description of any likely adverse impact to the ability of the providers identified in (B) to provide the services listed in OAR 345-022-0110;	Section 2.5
(D) Evidence that adverse impacts described in (C) are not likely to be significant, taking into account any measures the applicant proposes to avoid, reduce or otherwise mitigate the impacts; and	Section 2.6
(E) The applicant's proposed monitoring program, if any, for impacts to the ability of the providers identified in (B) to provide the services listed in OAR 345-022-0110.	Section 2.7
(b) A materials analysis, including:	Section 7.0 Exhibit N
(A) An inventory of substantial quantities of industrial materials flowing into and out of the proposed facility during construction and operation;	Section 7.1 Exhibit N
(B) The applicant's plans to manage hazardous substances during construction and operation, including measures to prevent and contain spills; and	Section 7.2 Exhibit N
(C) The applicant's plans to manage non-hazardous waste materials during construction and operation.	Section 7.3 Exhibit N

Figures

Biglow Canyon Wind Farm Request for Amendment #5

Figure L-1
Public Services Analysis Area

SHERMAN COUNTY, OR

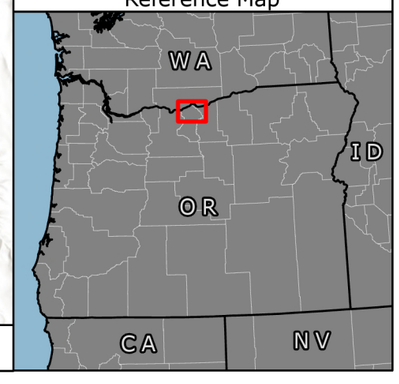


- RFA5 Site Boundary
- Analysis Area (10-mile Buffer)
- State Boundary
- County Boundary
- City/Town
- Interstate Highway
- US Highway
- State Highway
- County Highway

TETRA TECH

PGE

Reference Map



1:155,000

WGS 1984 UTM Zone 10N

0 2.5 5 10 Miles

NOT FOR CONSTRUCTION

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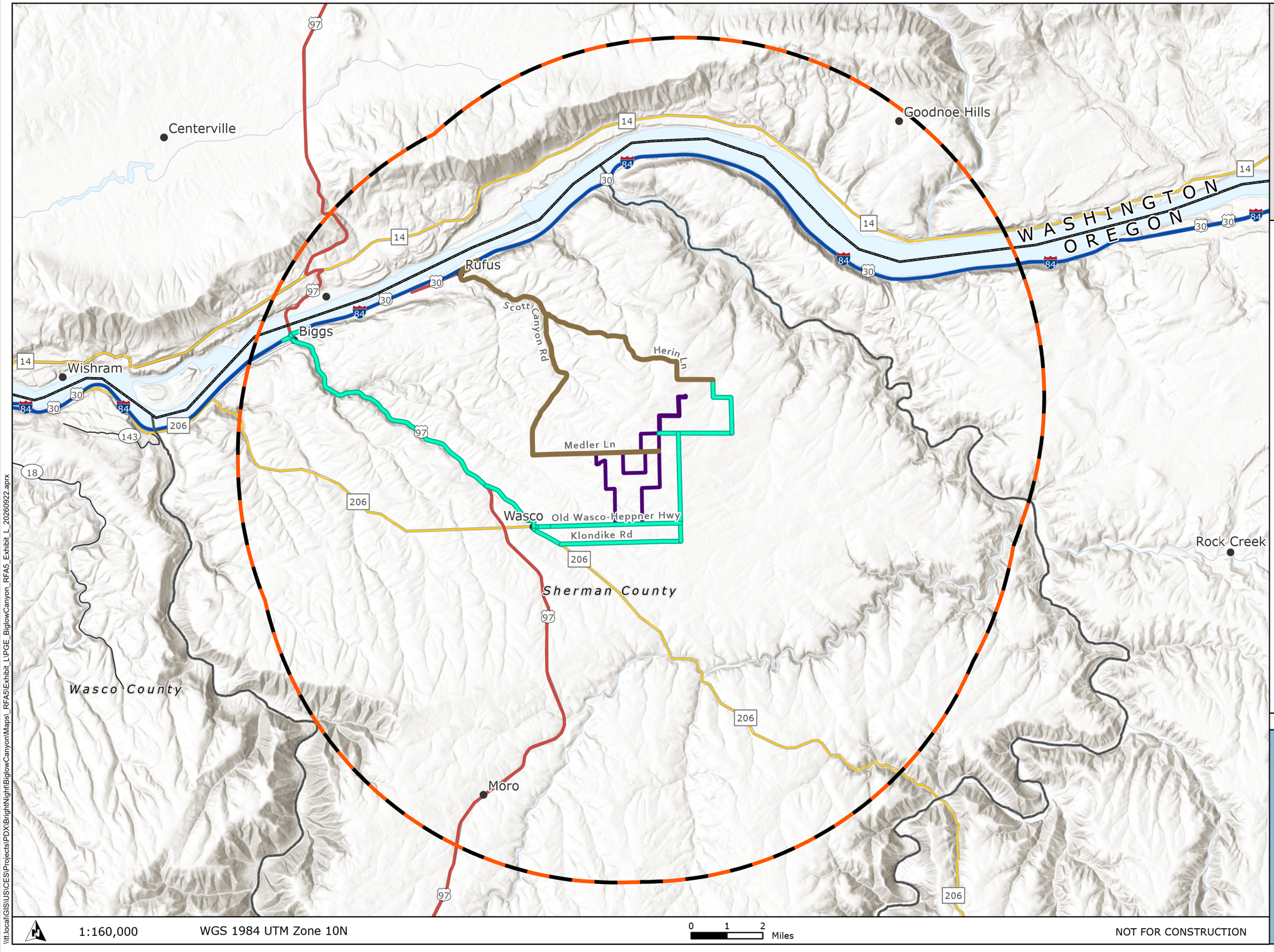
Biglow Canyon Wind Farm Request for Amendment #5

Figure L-2
Primary Construction Transportation Routes

SHERMAN COUNTY, OR



- RFA5 Site Boundary
- Analysis Area (10-mile Buffer)
- State Boundary
- County Boundary
- City/Town
- Interstate Highway
- US Highway
- State Highway
- County Highway

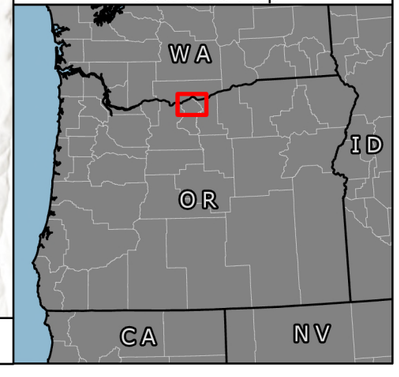
Route

- Primary
- Secondary

TETRA TECH

PGE

Reference Map



1:160,000 WGS 1984 UTM Zone 10N

0 1 2 Miles

NOT FOR CONSTRUCTION

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Attachment L-1. Letters from Service Providers

Outlook

Biglow Update

From Kathleen Campanella <Kathleen.Campanella@brightnightpower.com>
Date Fri 10/2/2026 12:26 PM
To Jacob Burbank <jacob.burbank@mcgregor.com>
Cc Laurie Williams <nscrfpd@gmail.com>

1 attachment (2 MB)
PGE_BiglowCanyon_RFA5_Figure04_RequestAmend5_11i17i_20260730.pdf;

Dear Chief Burbank,

I hope you are doing well. I want to thank you for your coordination with us on the Biglow Solar and BESS project and I also want to update you on Phase 2 of the project.

As you may recall, when we consulted with Sherman County Emergency Services and the Sherman County Rural Fire Protection District (RFPD) on fire protection last year, we discussed both phases of the Biglow project. The attached figure shows the location of both phases of the Biglow Solar Project co-located with the existing Biglow Canyon Wind Farm.

With Phase 1 (125 MW solar / 500 MWh BESS) now approved and under construction, we're moving ahead with permitting for Phase 2 (200 MW solar / 1,000 MWh BESS).

Biglow Solar 2 is a planned 200 megawatt (MW), 1,461-acre solar photovoltaic (PV) power generation facility with 1,000 megawatt-hours (MWh) of lithium-ion (Li-ion) battery energy storage in Sherman County, Oregon. The battery energy storage system (BESS) will consist of approximately 305 battery units with enclosure-integrated inverters and transformers. Each of the BESS enclosures will be approximately 28 feet 11 inches in length, 5 feet 5 inches in width, and 10 feet in height. The enclosures are rated for outdoor environments and holds the batteries and a battery management system. The Li-ion system includes a fire prevention system and cooling units within the enclosure. The BESS enclosures will be located near the project substation.

Tetra Tech is under contract to BrightNight, LLC, which is collaborating with PGE to complete the required amendment of the Biglow Canyon Wind Farm’s site certificate. The site certificate amendment request is reviewed by the Oregon Department of Energy (ODOE) and approved by the Energy Facility Siting Council (EFSC). As part of this process, we are required to provide ODOE with evidence of our consultation with local municipalities regarding fire protection for Biglow Solar and associated BESS, and that you can provide fire protection services, including any specific constraints.

I would greatly appreciate it if you could reconfirm the North Sherman County’s RFDP’s ability to provide fire protection services for Biglow 2, even with a simple reply to this email.

I will be in Sherman County on October 21st and 22nd and would be happy to meet with you to provide an update on Phase 1 and answer any questions you may have with regards to Phase 2. Please let me know if you have availability. Otherwise, feel free to reach out to me directly by phone or email.

I look forward to connecting again soon.

Warmly,

Kathleen

Kathleen Campanella
Senior Director, Development
E kathleen.campanella@brightnightpower.com
P + 850-714-3094

Outlook

Fw: Biglow Update

From Kathleen Campanella <Kathleen.Campanella@brightnightpower.com>
Date Fri 10/2/2026 12:53 PM
To Peters, Jessica <jessica.peters@tetratech.com>

1 attachment (2 MB)
PGE_BiglowCanyon_RFA5_Figure04_RequestAmend5_11i17i_20260730.pdf;

⚠ **CAUTION:** This email originated from an external sender. Verify the source before opening links or attachments. ⚠

And here is Sheriff!

Kathleen Campanella
Senior Director, Development
E kathleen.campanella@brightnightpower.com
P + 850-714-3094

From: Kathleen Campanella
Sent: Friday, October 2, 2026 12:52 PM
To: Jburgett@shermancounty.net <Jburgett@shermancounty.net>
Subject: Biglow Update

Dear Sheriff Burgett,

I hope you are doing well. I want to thank you for your coordination with us on the Biglow Solar and BESS project and I also want to update you on Phase 2 of the project.

As you may recall, when we consulted with Sherman County Sheriff's Office last year, we discussed both phases of the Biglow project. The attached figure shows the location of both phases of the Biglow Solar Project co-located with the existing Biglow Canyon Wind Farm.

With Phase 1 (125 MW solar / 500 MWh BESS) now approved and under construction, we're moving ahead with permitting for Phase 2 (200 MW solar / 1,000 MWh BESS).

Biglow Solar 2 is a planned 200 megawatt (MW), 1,461-acre solar photovoltaic (PV) power generation facility with 1,000 megawatt-hours (MWh) of lithium-ion (Li-ion) battery energy storage in Sherman County, Oregon. The battery energy storage system (BESS) will consist of approximately 305 battery units with enclosure-integrated inverters and 78 transformers. Each of the BESS enclosures will be approximately 28 feet 11 inches in length, 5 feet 5 inches in width, and 10 feet in height. The enclosures are rated for outdoor environments and holds the batteries and a battery management system. The Li-

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Tetra Tech is under contract to BrightNight, LLC, which is collaborating with PGE to complete the required amendment of the Biglow Canyon Wind Farm's site certificate. The site certificate amendment request is reviewed by the Oregon Department of Energy (ODOE) and approved by the Energy Facility Siting Council (EFSC). As part of this process, we are required to provide ODOE with evidence of consultation with local municipalities with whom we have been in contact regarding law enforcement for the construction of Phase 2 of the Biglow Solar Project and that you are able to provide law enforcement services, including any specific constraints you may have.

I would greatly appreciate it if you could reconfirm the Sherman County Sheriff's Office ability to provide law enforcement services for Biglow 2, even with a simple reply to this email.

I will be in Sherman County on October 21st and 22nd and would be happy to meet with you to provide an update on Phase 1 and answer any questions you may have with regards to Phase 2. Please let me know if you have availability. Otherwise, feel free to reach out to me directly by phone or email.

I look forward to connecting again soon.

Warmly,

Kathleen

BRIGHTNIGHT
Power when you need it

Kathleen Campanella
Senior Director, Development
E kathleen.campanella@brightnightpower.com
P + 850-714-3094

Outlook

Confirmation of ability to provide waste services - Biglow Solar 2

From Peters, Jessica <JESSICA.PETERS@tetratech.com>
Date Fri 9/25/2026 3:21 PM
To Jennifer.shearer@wasteconnections.com <Jennifer.shearer@wasteconnections.com>
Cc Lenna Cope <lenna.cope@pgn.com>; Kathleen Campanella <kathleen.campanella@brightnightpower.com>; Ziola, Kiana <KIANA.ZIOLA@tetratech.com>

1 attachment (2 MB)
PGE_BiglowCanyon_RFA5_Figure01_Vicinity_11i17i_20260730.pdf;

Hello,

I am writing to you regarding Phase 2 of Portland General Electric Company's (PGE's) proposed Biglow Solar Project (Biglow Solar 2). Biglow Solar 2 is a planned 200 megawatt (MW), 1,461-acre solar photovoltaic power generation facility with 1,000 megawatt-hours (MWh) of lithium-ion battery energy storage in Sherman County, Oregon. The first phase of the Biglow Solar Project was approved in March 2026 and is currently under construction. The attached figure shows the location of both phases of the Biglow Solar Project co-located with the existing Biglow Canyon Wind Farm. For more information on the Biglow Canyon Wind Farm, please visit the following link: https://www.oregon.gov/energy/facilities/Pages/bcw.aspx.

Our current conservative estimate of non-hazardous waste anticipated for the facility's construction for an up to 18-month period is 15,000 cubic yards, with approximately 2.5 cubic yards of waste monthly during operations. Tetra Tech is under contract to BrightNight, LLC, which is collaborating with PGE to complete the required amendment of the Biglow Canyon Wind Farm's site certificate. The site certificate amendment request is reviewed by the Oregon Department of Energy (ODOE) and approved by the Energy Facility Siting Council (EFSC). As part of this process, we will provide ODOE with evidence of consultation with local municipalities whom we have been in contact with regarding waste services for the construction of the Biglow Solar Facility and that you are able to provide waste services, including any specific constraints you may have (e.g., available capacity). Any letter from you on this matter will not constitute a contract, nor does it obligate you to provide these services.

We would greatly appreciate it if you could provide a letter confirming the ability of your facility to provide waste services for Biglow Solar at your earliest convenience. This letter can be on your official letterhead with your signature, or you may simply reply to this email. Additionally, if possible, please include information on when the landfill is projected to reach capacity, as the Biglow Solar Facility has an anticipated lifespan of up to 40 years, including the period for retirement and decommissioning waste disposal.

Thank you in advance for your assistance. Please do not hesitate to contact me if you have any questions or require further information.

Best,

Jessica Peters | Environmental Planner/Project Manager
Pronouns: she/her/hers
Direct **+1 (208) 489-2870** | jessica.peters@tetratech.com
Time Zone: Mountain Time

Improving the lives of 1 billion people by 2030

Tetra Tech | *Leading with Science®* | Environmental Services Division
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Outlook

Confirmation of ability to provide waste services - Biglow Solar 2

From Peters, Jessica <JESSICA.PETERS@tetratech.com>
Date Fri 9/25/2026 3:07 PM
To mkrening@wm.com <mkrening@wm.com>
Cc Lenna Cope <lenna.cope@pgn.com>; Kathleen Campanella <kathleen.campanella@brightnightpower.com>; Ziola, Kiana <KIANA.ZIOLA@tetratech.com>

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Best,

Jessica Peters | Environmental Planner/Project Manager
Pronouns: she/her/hers
Direct **+1 (208) 489-2870** | jessica.peters@tetratech.com
Time Zone: Mountain Time

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