

Large Generator Interconnection
Facilities Study Report

FINAL

Completed for

("Interconnection Customer")
C1-23

Proposed Point of Interconnection
Chiloquin-LaPine 230 kV Transmission Line

April 10, 2023

TABLE OF CONTENTS

1.0	DESCRIPTION OF THE PROJECT	1
2.0	STUDY SCOPE AND OBJECTIVES.....	1
3.0	STUDY ASSUMPTIONS	1
4.0	TYPE OF INTERCONNECTION SERVICE	2
5.0	PROPOSED POINT OF INTERCONNECTION	2
6.0	SCOPE OF WORK	4
6.1	Generating Facility Requirements.....	4
6.1.1	INTERCONNECTION CUSTOMER TO BE RESPONSIBLE FOR.....	4
6.1.2	TRANSMISSION PROVIDER TO BE RESPONSIBLE FOR	7
6.2	Tie Line Requirements	9
6.2.1	INTERCONNECTION CUSTOMER TO BE RESPONSIBLE FOR.....	9
6.2.2	TRANSMISSION PROVIDER TO BE RESPONSIBLE FOR	9
6.3	Point of Interconnection	9
6.3.1	INTERCONNECTION CUSTOMER TO BE RESPONSIBLE FOR.....	10
6.3.2	TRANSMISSION PROVIDER TO BE RESPONSIBLE FOR	10
6.4	Other.....	11
6.4.1	INTERCONNECTION CUSTOMER TO BE RESPONSIBLE FOR.....	11
6.4.2	TRANSMISSION PROVIDER TO BE RESPONSIBLE FOR	11
7.0	COST ESTIMATE (+/- 20%)	13
8.0	Milestone Schedule.....	14
9.0	PARTICIPATION BY AFFECTED SYSTEMS	15
10.0	APPENDICES.....	16
10.1	APPENDIX 1: HIGHER PRIORITY REQUESTS	17
10.2	Appendix 2: Contingent Facilities.....	18
10.3	APPENDIX 2: PROPERTY REQUIREMENTS.....	19

1.0 DESCRIPTION OF THE PROJECT

The Interconnection Customer has proposed to interconnect 300 megawatts (“MW”) of new solar and battery storage generation to PacifiCorp’s (“Transmission Provider”) Chiloquin-LaPine 230 kV transmission line located in Klamath County, Oregon. The Interconnection Request is proposed to consist of ninety-six (96) Sungrow SG3600UM-MV, 3.6 MVA solar inverters for a total output of 300 MW at the POI. The Interconnection Request also consists of forty-eight (48) Sungrow SG3600UM-MV, 3.6 MVA battery storage inverters. The requested commercial operation date is December 1, 2025.

Interconnection Customer will NOT operate this generator as a Qualified Facility as defined by the Public Utility Regulatory Policies Act of 1978 (PURPA).

The Transmission Provider has assigned the Project “C1-23.”

2.0 STUDY SCOPE AND OBJECTIVES

The objective of the facilities study is to:

- complete a facilities analysis, which shall specify and estimate the cost of equipment, engineering, procurement, and construction required to address issues as outlined in the system impact study, and
- provide a scope of work and an estimated cost and schedule for completing the scope of work.

The information contained in this study report is based on preliminary information and not to be used for construction.

3.0 STUDY ASSUMPTIONS

- All active higher priority transmission service and/or generator interconnection requests will be considered in this study and are listed in Appendix 1. If any of these requests are withdrawn, the Transmission Provider reserves the right to restudy this request, as the results and conclusions contained within this study could significantly change.
- For study purposes there are two separate queues:
 - Transmission Service Queue: to the extent practical, all network upgrades that are required to accommodate active transmission service requests will be modeled in this study.
 - Generation Interconnection Queue: Interconnection Facilities associated with higher queue interconnection requests will be modeled in this study.
- The Interconnection Customer’s request for energy or network resource interconnection service in and of itself does not convey transmission service. Only a Network Customer may make a request to designate a generating resource as a Network Resource. Because the queue of higher priority transmission service requests may be different when a Network Customer requests network resource designation for this Generating Facility, the available capacity or transmission modifications, if any, necessary to provide network resource interconnection service may be significantly

- different. Therefore, the Interconnection Customer should regard the results of this study as informational rather than final.
- This study assumes the Project will be integrated into Transmission Provider's system at the agreed upon and/or proposed point of interconnection.
 - The Interconnection Customer will construct and own any facilities required between the Point of Interconnection and the Project.
 - Line reconductor or fiber underbuild required on existing poles will be assumed to follow the most direct path on the Transmission Provider's system. If during detailed design the path must be modified it may result in additional cost and timing delays for the Interconnection Customer's Project.
 - Generator tripping may be required for certain outages.
 - All facilities will meet or exceed the minimum Western Electricity Coordinating Council ("WECC"), North American Electric Reliability Corporation ("NERC"), and Transmission Provider performance and design standards.
 - The Transmission Provider assumes the Interconnection Customer has ownership of property near its proposed Point of Interconnection on which the Transmission Provider would be able to construct a new substation. However, the ultimate location of the new POI substation will be determined during detailed design.
 - This report is based on information available at the time of the study. It is the Interconnection Customer's responsibility to check the Transmission Provider's web site regularly for Transmission system updates at (<https://www.oasis.oati.com/ppw>)

4.0 TYPE OF INTERCONNECTION SERVICE

The Interconnection Customer has selected Energy Resource Interconnection Service (ERIS).

5.0 PROPOSED POINT OF INTERCONNECTION

The Interconnection Customer's proposed Generating Facility is to be interconnected to the Transmission Provider's Chiloquin-LaPine 230 kV transmission line via a new Point of Interconnection substation. Figure 1 below, is a one-line diagram that illustrates the interconnection of the proposed Generating Facility to the Transmission Provider's system.

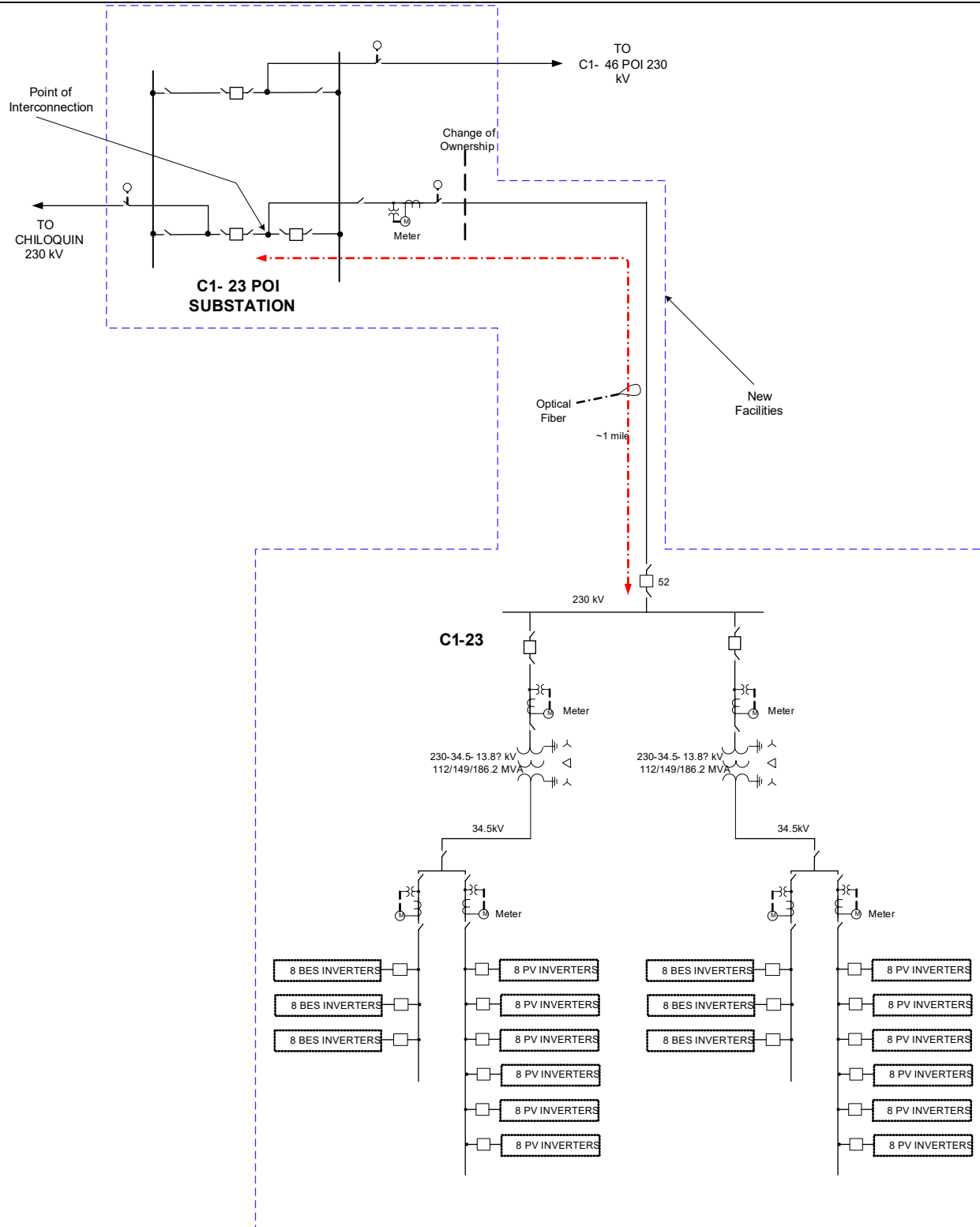


Figure 1: System One Line Diagram

6.0 SCOPE OF WORK

6.1 Generating Facility Requirements

The following outlines the design, procurement, construction, installation, and ownership of equipment at the Interconnection Customer's Generation Facility.

6.1.1 INTERCONNECTION CUSTOMER TO BE RESPONSIBLE FOR

- Procure all necessary permits, lands, rights of way and easements required for the construction and continued maintenance of the Interconnection Customer's Generating Facility and collector substation.
- Design, procure, construct, own and maintain the Interconnection Customer's Generating Facility and associated collector substation.
- Design the Generating Facility with reactive power capabilities necessary to operate within the full power factor range of 0.95 leading to 0.95 lagging as measured at the high side of the Interconnection Customer's GSU transformer. This power factor range shall be dynamic and can be met using a combination of the inherent dynamic reactive power capability of the generator or inverter, dynamic reactive power devices and static reactive power devices to make up for losses.
- Design the generating facility such that it can provide positive reactive support (i.e., supply reactive power to the system) immediately following the removal of a fault or other transient low voltage perturbations or install dynamic voltage support equipment. These additional dynamic reactive devices shall have correct protection settings such that the devices will remain on line and active during and immediately following a fault event.
- Operate the Generating Facility to the voltage set point to be provided by the Transmission Provider.
- Equip the Generating Facility with automatic voltage-control equipment and operate with the voltage regulation control mode enabled unless explicitly authorized to operate another control mode by the Transmission Provider.
- Install, maintain and operate a functioning governor or equivalent controls to ensure primary frequency capability as required under FERC Order 842.
- Install a Phasor Measurement Unit to collect data from the Project. The data must be collected, held for a minimum of 90 days and be able to stream to the Planning Coordinator for each of the Generator Facility's step-up transformers measured on the low side of the GSU at a sample rate of at least 60 samples per second and synchronized within +/- 2 milliseconds of the Coordinated Universal Time (UTC). Initially, the following data must be collected:
 - Three phase voltage and voltage angle (analog)
 - Three phase current (analog)

Data requirements are subject to change as deemed necessary to comply with local and federal regulations.

- Operate the Generating Facility so as to maintain the voltage at the Point of Interconnection, or other designated point as deemed appropriate by Transmission Provider, at a voltage schedule to be provided by the Transmission Provider following testing. Voltage will typically be required to operate between 1.00 and 1.04 per unit.
- Operate the Generating Facility with a voltage droop.
- Have any Transmission Provider required studies, such as a voltage coordination study, performed and provide results to Transmission Provider. Any additional requirements identified in these studies will be the responsibility of the Interconnection Customer.
 - A voltage coordination study with other existing and proposed wind facilities in this region will be required.
- Meet the Federal Energy Regulatory Commission (FERC) and WECC low voltage ride-through requirements as specified in the interconnection agreement.
- Provide test results to the Transmission Provider verifying that the inverters for this Project have been programmed to meet all PRC-024 requirements rather than manufacturer IEEE distribution standards.
- Provide the Transmission Provider the manufacturer Electromagnetic Transient Modeling (“EMT”) model a minimum of 180 days prior to Commercial Operation.
- Provide the Transmission Provider a standard model from the WECC Approved Dynamic Model Library.
- Provide the Transmission Provider documentation demonstrating registration with NERC as the Generator Owner (“GO”) and Generator Operator (“GOP”) for the Large Generating Facility. Confirmation that registration documentation has been submitted to NERC must be provided prior to initial synchronization. Confirmation of registration with NERC must be provided within 30 days of Commercial Operation and be maintained throughout the lifetime of the Interconnection Agreement of the Large Generating Facility will be disconnected.
- Design the Generating Facility control system such that it can receive an analog output from the Transmission Provider for setpoint control and provide an analog input back to the Transmission Provider on the status of the setpoint.
- Provide a separate graded, grounded and fenced area along the perimeter of the Interconnection Customer collector substation for the Transmission Provider to install a control building. The control building will share a fence and ground grid with the collector substation and have separate, unencumbered access for the Transmission Provider. Fencing, gates and road access shall meet Transmission Provider standards.

- Perform a CDEGS grounding analysis for the Transmission Provider control building site and provide the results to the Transmission Provider.
- Provide permanent AC power to the Transmission Provider's control building. Also, design and provide construction and backup retail service.
- Coordinate with the Transmission Provider on the Transmission Provider's protective relay settings.
- Design, provide and install control cabling (number and size TBD) and hard wire the Interconnection Customer's source devices to the Transmission Provider's RTU. Replicated values are not acceptable.
- Provide the following data points from the collector substation to the RTU. Please note that these points are based on the most recent design information provided by the Interconnection Customer and could change based on final design:

Analogs:

- 230 kV A phase voltage tie line
- 230 kV B phase voltage tie line
- 230 kV C phase voltage tie line
- 230kV Tie line circuit breaker 52 real power MW
- 230kV Tie line circuit breaker 52 reactive power MVAR
- 34.5kV Inverter circuit breakers real power MW (18 breakers)
- 34.5kV Inverter circuit breakers reactive power MVAR (18 breakers)
- Global Horizontal Irradiance (GHI)
- Average Plant Atmospheric Pressure (Bar)
- Average Plant Temperature (Celsius)
- Max Generator Limit MW (one set point control and feedback)
- Potential Power MW
- BESS current energy capacity (MWh)
- BESS current energy capacity (%)
- BESS current max power output capability (MW)
- BESS cycles or health (cycle count or % health)
- 34.5 kV A phase voltage
- 34.5 kV B phase voltage
- 34.5 kV C phase voltage
- Real Power MW
- Reactive Power MVAR
- Energy Register MWH
- 230 kV A phase voltage
- 230 kV B phase voltage
- 230 kV C phase voltage
- Real Power MW
- Reactive Power MVAR
- Energy Register MWH

Status:

- 230 kV Tie line circuit breaker
 - 230 kV Tie line circuit breaker relaying alarm
 - 230 kV Transformer circuit breakers (2 breakers)
 - 34.5 kV Inverter string circuit breakers (18 breakers)
- Procure and install Transmission Provider approved H-Frame structures for the Transmission Provider's 230 kV and 34.5 kV instrument transformers. The installation location shall be coordinated with the Transmission Provider.
- Install the Transmission Provider's instrument transformers.
- Install complete conduit and control cable provided by the Transmission Provider from the Transmission Provider's instrument transformers to the Transmission Provider's collector substation control building.
- Provide the Transmission Provider control cable in sufficient quantity to allow the Transmission Provider to terminate the control cable in the Transmission Provider's collector substation control building.
- Procure and install disconnect switches on both sides of all Transmission Provider instrument transformers.
- Provide Transmission Provider unfettered and maintained access to the Transmission Provider's instrument transformers.
- Provide the Transmission Provider easements for all Transmission Provider Interconnection Facilities located on the Interconnection Customer side of the Point of Interconnection.
- Establish permanent retail service with the utility holding retail service rights in this area for power that will flow from the Transmission Provider's system when the Project is not generating. This arrangement must be in place prior to backfeed.
- Provide any construction or backup retail service necessary for the Project.
- Provide a professional engineer ("PE") stamped maintenance plan package for all Interconnection Customer protective equipment prior to energization

6.1.2 TRANSMISSION PROVIDER TO BE RESPONSIBLE FOR

- Provide the Interconnection Customer the designated point at which the voltage is to be maintained and the associated voltage schedule.
- Identify any necessary studies that the Interconnection Customer must have performed.
 - Coordinate with the Interconnection Customer on the required voltage coordination study.
- Provide the Interconnection Customer the specific data to be collected in the PMU.
- Procure and install a control building on the property prepared by the Interconnection Customer adjacent to the Interconnection Customer's collector substation.

- Procure and install a backup DC battery system for the Transmission Provider control building.
- Procure and install line relays compatible with those to be installed in POI substation for observation of the tie line between the facilities. Coordinate the settings of the relays with the Interconnection Customer.
- Procure and install a communications panel and associated communications equipment in the Transmission Provider's control building.
- Provide the Interconnection Customer the design specifications for the Transmission Provider instrument transformer structures.
- Coordinate with the Interconnection Customer on the location and installation of the Transmission Provider instrument transformer structures.
- Procure and provide the Interconnection Customer all 230 kV and 34.5 kV instrument transformers. Observe the Interconnection Customer's installation of the instrument transformers.
- Provide the Interconnection Customer the control cable to be installed from the Transmission Provider's instrument transformers to the Transmission Provider's collector substation control building.
- Coordinate with the Interconnection Customer on the installation of control cable from the Transmission Provider's instrument transformers to the Transmission Provider's collector substation control building.
- Install communications equipment to support protection and data acquisition requirements including a remote terminal unit.
- Terminate the control cable in the control building communications rack.
- Terminate the fiber optic cable running from the Interconnection Customer's tie line in the collector substation control building.
- Design, procure and install 230 kV revenue metering equipment on the high side of each of the two Interconnection Customer power transformers including a metering panel, disconnect switches, primary and secondary revenue quality meters, test switches, junction boxes and secondary metering wire.
- Design, procure and install 34.5 kV revenue metering equipment on each of the four Interconnection Customer collector system strings to separate generation from solar and storage including a metering panel, disconnect switches, primary and secondary revenue quality meters, test switches, junction boxes and secondary metering wire.
- Procure and install the required communications equipment to establish an Ethernet connection for retail sales and generation accounting via the MV-90 translation system.
- Review and provide acceptance of the Interconnection Customer's NERC registration.

6.2 Tie Line Requirements

The following outlines the design, procurement, construction, installation, and ownership of equipment associated with the radial line connecting the Interconnection Customer's Generating Facility to the Transmission Provider's Point of Interconnection substation.

6.2.1 INTERCONNECTION CUSTOMER TO BE RESPONSIBLE FOR

- Procure all necessary permits, property rights and/or the rights of way for the new transmission line between the Interconnection Customer's collector substation and the Point of Interconnection substation. Interconnection Customer will be responsible for all required regulatory or compliance reporting associated with its transmission tie-line facilities.
- Design, construct, own and maintain the 230 kV transmission line between the Interconnection Customer's collector substation and POI substation. The last Interconnection Customer transmission structure shall be constructed per Transmission Provider standards.
 - **The length of the tie line will be determined during detailed design once a location is finalized for the Transmission Provider's new POI substation.**
- Design, procure, install, own and maintain Transmission Provider standard fiber optic cable on the tie line between the collector and POI substations.
- Design, procure and install Transmission Provider standard fiber optic cable from the Transmission Provider's collector substation control building to a splice with the fiber installed on the tie line.
- Provide fiber optic cable in sufficient quantity to allow the Transmission Provider to terminate the cable in the Transmission Provider's collector substation control building.
- Leave sufficient conductor, shield wire, fiber and line hardware to allow the Transmission Provider to terminate the last span into the POI substation. The Transmission Provider shall own the final span into the POI substation.

6.2.2 TRANSMISSION PROVIDER TO BE RESPONSIBLE FOR

- Provide the Interconnection Customer standards for the final Interconnection Customer owned structure outside POI substation.
- Provide the Interconnection Customer standards for the fiber optic cable to be installed on the Interconnection Customer's tie line including clearance standards for the redundant runs.

6.3 Point of Interconnection

The following outlines the design, procurement, construction, installation, and ownership of equipment at the Point of Interconnection.

6.3.1 INTERCONNECTION CUSTOMER TO BE RESPONSIBLE FOR

- If the Interconnection Customer controls property on which it desires the Transmission Provider construct the Transmission Provider's Point of Interconnection substation, coordinate with the Transmission Provider on the necessary due diligence analysis of the location. If the property location is deemed acceptable by the Transmission Provider, coordinate with the Transmission Provider to provide ownership of the property to the Transmission Provider.
 - Please note that the Transmission Provider has received another Interconnection Request near the Interconnection Customer's proposed Point of Interconnection. The Transmission Provider may require both Interconnection Requests to interconnect at the same, new POI substation depending on where the specific property is obtained for the substation.
- Coordinate with the Transmission Provider to confirm functionality of the communications path between the collector substation and the POI substation.

6.3.2 TRANSMISSION PROVIDER TO BE RESPONSIBLE FOR

- If the Interconnection Customer controls property on which it desires the Transmission Provider construct the Transmission Provider's Point of Interconnection substation, coordinate with the Interconnection Customer on the necessary due diligence analysis of the location.
- Procure the necessary permits and property rights to allow for the construction of the new POI substation.
- Design, procure, construct, own and maintain a new 230 kV substation to serve as the Point of Interconnection for the Interconnection Customer's Generating Facility which will include the following major equipment:
 - (3) 230 kV Breaker
 - (6) 230 kV CCVT
 - (3) 230 kV CT/VT metering combo unit
 - (12) 230 kV Group-operated switches
 - (3) 125 VDC Motor Operators
 - 230 kV Station service voltage transformers
 - 30' x 28' Control Building
 - 125 VDC battery system and charger
- Design, procure and install a line current differential relay system for the connection to the Interconnection Customer's tie-line.
- Install a protective relay to monitor voltage and frequency.
- Design, procure and install a line current differential relay systems for the connection to the transmission lines to Chiloquin and LaPine substations.

- Terminate the last span of the Interconnection Customer's tie line into the POI substation dead end structure.
- Terminate the lines running from Chiloquin and LaPine substations into the substation.
- Install fiber optic cable from the substation control building to a splice with the fiber installed on the Chiloquin-LaPine transmission line.
- Install fiber optic cable from the substation control building to a splice with the fiber installed on the Interconnection Customer's tie line.
- Procure and install the necessary communications equipment to tie in the communications path from the Interconnection Customer's collector substation.
- Include the following data points into the substation RTU:
 - Analogs:
 - New Generation MW
 - Net Generator MVar
 - Energy Register kWh
- Observe the Interconnection Customer's test of the communications system running from the collector substation to the POI substation and provide acceptance of functionality.
- Design, procure and install revenue metering equipment for the Project including two (2) revenue quality meters, test switch, instrument transformers, metering panels, junction box and secondary metering wire.
- Develop an Ethernet connection for retail sales and generation accounting via the MV-90 translation system.

6.4 Other

The following outlines the design, procurement, construction, installation, and ownership of equipment past the Point of Interconnection.

6.4.1 INTERCONNECTION CUSTOMER TO BE RESPONSIBLE FOR

- Bonneville Power Administration Requirements
 - Execute any necessary agreements with Bonneville Power Administration ("BPA") to allow for upgrades to BPA's transmission system deemed necessary for this Interconnection Request. Provide copies of any agreements to the Transmission Provider.

6.4.2 TRANSMISSION PROVIDER TO BE RESPONSIBLE FOR

- Bonneville Power Administration Requirements
 - Execute a construction agreement with Bonneville Power Administration ("BPA") to allow for upgrades to BPA's transmission system deemed necessary for this Interconnection Request.

- Coordinate with BPA to rebuild the 230 kV transmission running from LaPine substation to Chiloquin substation up to the ownership change.
 - Terminate the new transmission line and fiber optic cable running from Chiloquin substation in LaPine substation.
 - Coordinate with BPA to upgrade the relays for the line to Chiloquin substation.
- Klamath Falls-Chiloquin-LaPine Transmission Line
 - Procure all permits and rights-of-way to allow for a rebuild of the transmission line.
 - Construct a new, approximately 60-mile 230 kV transmission line in parallel with the existing line from Klamath Falls substation to the ownership change. Remove the old line once the new line is energized.
 - Loop the new transmission line in/out of the POI substation.
 - Install fiber optic cable on the new transmission line. Loop the fiber in/out of the new POI substation.
 - If deemed necessary following the finalization of the new POI substation, move the existing interchange metering for the ownership change with BPA.
- Bullard Davis Creek Transmission Line
 - Procure all permits and rights-of-way to allow for a rebuild of the transmission line.
 - Construct a new, approximately 15-mile 115 kV transmission line in parallel with the existing line. Remove the old line once the new line is energized.
 - Install fiber optic cable on the new transmission line.
- Klamath Falls Substation
 - Construct a new line position for the termination of the new transmission line to the Chiloquin substation which will require the following major equipment:
 - (1) 230kV Breaker
 - (3) 230kV CCVT
 - (2) 230kV Group-operated switches
 - (1) 125 VDC Motor Operators
 - Replace the existing line relays for the lines to Chiloquin and JC Boyle substations.
- Chiloquin Substation
 - Replace the existing line relays for the lines to Klamath Falls and LaPine substations.
- System Operations Centers

- Update databases to include the Interconnection Customer's Generating Facility, all Interconnection Facilities and Network Upgrades.

7.0 COST ESTIMATE (+/- 20%)

The following estimate represents only scopes of work that will be performed by the Transmission Provider. Costs for any work being performed by the Interconnection Customer are not included.

Direct Assigned

C1-23 Collector Substation	\$900,000
<i>Control house, relaying, communications, and metering equipment</i>	
C1-23 POI Substation	\$750,000
<i>Line termination and metering</i>	
Total:	\$1,650,000

Network Upgrades**Station Equipment**

C1-23 POI substation	\$7,270,000
<i>Construct new 230 kV three breaker substation</i>	
Chiloquin-LaPine Transmission Line	\$790,000
<i>Loop line in/out of new POI substation</i>	
Total:	\$8,060,000

Shared Network Upgrades

The following estimated costs are the Interconnection Customer's proportional share of the overall estimated costs for these upgrades for the entire cluster area in which this Interconnection Request resides.

Klamath Falls-Chiloquin-LaPine Transmission Line	\$42,195,000
<i>Rebuild TP portion (~65 miles) of the 230 kV transmission line, add fiber</i>	
Bullard – Davis Creek Transmission Line	\$10,226,000
<i>Rebuild ~15 miles of 115 kV line, add fiber</i>	
Klamath Falls substation	\$824,000
<i>New line position, terminate rebuilt line, upgrade relays</i>	
Chiloquin substation	\$253,000
<i>Terminate rebuilt line, upgrade relays</i>	
Network Upgrade Total:	\$53,498,000

*Any distribution line modifications identified in this report will require a field visit analysis in order to obtain a more thorough understanding of the specific requirements. The estimate provided above for this work could change substantially based on the results of this analysis. Until this field analysis is performed the Transmission Provider must develop the Project schedule using conservative assumptions. The Interconnection Customer may request that the Transmission Provider perform this field analysis, at the Interconnection Customer's expense, prior to the execution of an Interconnection Agreement in order to obtain more cost and schedule certainty.

This estimate is as accurate as possibly given the level of detailed study that has been completed to date and approximates the costs incurred by Transmission Provider to interconnect this Generator Facility to Transmission Provider's electrical distribution or transmission system. The Interconnection Customer will be responsible for all actual costs, regardless of the estimated costs communicated to or approved by the Interconnection Customer.

8.0 Milestone Schedule

Execute Interconnection Agreement	April 7, 2023
Provision of Financial Security	April 14, 2023
Interconnection Customer Approval for Transmission Provider to Commence Engineering and Procurement Activities	April 14, 2023
Transmission Provider Engineering & Procurement Commences	June 5, 2023
Interconnection Customer Executes BPA Agreement	September 1, 2023
*Interconnection Customer Initial Design Package Provided	May 5, 2028
Interconnection Customer Energy Imbalance Market Submittal	June 2, 2028
Interconnection Customer Approval for Transmission Provider to Commence Construction Activities	July 7, 2028
Transmission Provider Construction Commences	September 4, 2028
Contingent Facilities Complete	November 1, 2028
Interconnection Customer Property/Permits/ROW Procured	April 6, 2029
Transmission Provider Property/Permits/ROW Procured	May 4, 2029
*Interconnection Customer Final Design Package Provided	August 3, 2029
Transmission Provider Engineering Design Complete	October 5, 2029

Interconnection Customer Commences Voltage Coordination Study	October 5, 2029
Interconnection Customer Submits Request for Voltage Schedule	February 1, 2030
BPA Construction Complete	June 14, 2030
Interconnection Customer Maintenance and Commissioning Plans Provided	July 12, 2030
Interconnection Customer and Transmission Provider Construction Complete	August 30, 2030
Transmission Provider Commissioning Activities Complete	October 10, 2030
Transmission Provider Commissioning Document Review Complete	October 17, 2030
Interconnection Customer's Facilities Receive Backfeed Power	October 18, 2030
Interconnection Customer Submits NERC Registration Evidence	October 30, 2030
Initial Synchronization/Generation Testing	November 1, 2030
Commercial Operation	December 20, 2030
NERC Registration Provided	January 17, 2031

*Interconnection Customer initial design package shall include final generating facility location, inverter/turbine selection, basic protection package, tie line route and collector system locations and data as applicable. Interconnection Customer final design package shall include PE stamped issued for construction ("IFC") drawings for generating facility, collector substation, tie line as well as an updated PSS/e model and updated WECC approved model, electromagnetic transient ("EMT") model and a detailed short circuit model of its generation system using the ASPEN OneLine short circuit simulation program as applicable. The WECC model parameters must be adjusted to reflect the plant's actual anticipated performance. The plant controller must be included in the model. If there is to be coordination between facilities or a master VAR controller, this must be included in the detailed WECC dynamic model, as well as in the PSS/e user-written model.

Please note, the time required to perform the scope of work identified in this report does not support the Interconnection Customer's requested Commercial Operation date of December 1, 2025.

9.0 PARTICIPATION BY AFFECTED SYSTEMS

Transmission Provider has identified the following affected systems: Bonneville Power Administration and NV Energy

A copy of this report will be shared with each Affected System.

10.0 APPENDICES

Appendix 1: Higher Priority Requests

Appendix 2: Contingent Facilities

Appendix 3: Property Requirements

10.1 APPENDIX 1: HIGHER PRIORITY REQUESTS

All active higher priority Transmission Provider projects, and transmission service and/or generator interconnection requests will be considered in this study and are identified below. If any of these requests are withdrawn, the Transmission Provider reserves the right to restudy this request, as the results and conclusions contained within this study could significantly change.

Transmission/Generation Interconnection Queue Requests considered:

Queue	MW
687	415.8
721	60.9
741	40.0
829	50.00
849	100.0
905	50.0
906	80
907	80

10.2 Appendix 2: Contingent Facilities

The following Interconnection Facilities and/or upgrades to the Transmission Provider's system are Contingent Facilities for the Interconnection Customer's Interconnection Request and must be in service prior to the commencement of generation activities:

Transmission Provider Planned Projects

- Rebuild of the Klamath Falls-Copco2 230 kV transmission line (Q4 2027)
- Rebuild of the Copco2-Lone Pine 230 kV transmission line (Q4 2027)
- The Sams Valley system reinforcement project (Q4 2028)
 - Construction of the new 500-230 kV Sams Valley substation
 - Construction of new Grants Pass-Sams Valley #2 230 kV transmission line
 - Rebuild of the existing Sams Valley-Whetstone 230 kV transmission line

10.3 APPENDIX 2: PROPERTY REQUIREMENTS**Property Requirements for Point of Interconnection Substation****Requirements for rights of way easements**

Rights of way easements will be acquired by the Interconnection Customer in the Transmission Provider's name for the construction, reconstruction, operation, maintenance, repair, replacement and removal of Transmission Provider's Interconnection Facilities that will be owned and operated by PacifiCorp. Interconnection Customer will acquire all necessary permits for the Project and will obtain rights of way easements for the Project on Transmission Provider's easement form.

Real Property Requirements for Point of Interconnection Substation

Real property for a point of interconnection substation will be acquired by an Interconnection Customer to accommodate the Interconnection Customer's Project. The real property must be acceptable to Transmission Provider. Interconnection Customer will acquire fee ownership for interconnection substation unless Transmission Provider determines that other than fee ownership is acceptable; however, the form and instrument of such rights will be at Transmission Provider's sole discretion. Any land rights that Interconnection Customer is planning to retain as part of a fee property conveyance will be identified in advance to Transmission Provider and are subject to the Transmission Provider's approval.

The Interconnection Customer must obtain all permits required by all relevant jurisdictions for the planned use including but not limited to conditional use permits, Certificates of Public Convenience and Necessity, California Environmental Quality Act, as well as all construction permits for the Project.

Interconnection Customer will not be reimbursed through network upgrades for more than the market value of the property.

As a minimum, real property must be environmentally, physically, and operationally acceptable to Transmission Provider. The real property shall be a permitted or able to be permitted use in all zoning districts. The Interconnection Customer shall provide Transmission Provider with a title report and shall transfer property without any material defects of title or other encumbrances that are not acceptable to Transmission Provider. Property lines shall be surveyed and show all encumbrances, encroachments, and roads.

Examples of potentially unacceptable environmental, physical, or operational conditions could include but are not limited to:

1. Environmental: known contamination of site; evidence of environmental contamination by any dangerous, hazardous or toxic materials as defined by any governmental agency; violation of building, health, safety, environmental, fire, land use, zoning or other such regulation; violation of ordinances or statutes of any governmental entities having jurisdiction over the property; underground or above ground storage tanks in area; known remediation sites on property; ongoing mitigation activities or monitoring activities; asbestos; lead-based paint, etc. A

phase I environmental study is required for land being acquired in fee by the Transmission Provider unless waived by Transmission Provider.

2. Physical: inadequate site drainage; proximity to flood zone; erosion issues; wetland overlays; threatened and endangered species; archeological or culturally sensitive areas; inadequate sub-surface elements, etc. Transmission Provider may require Interconnection Customer to procure various studies and surveys as determined necessary by Transmission Provider.

Operational: inadequate access for Transmission Provider's equipment and vehicles; existing structures on land that require removal prior to building of substation; ongoing maintenance for landscaping or extensive landscape requirements; ongoing homeowner's or other requirements or restrictions (e.g., Covenants, Codes and Restrictions, deed restrictions, etc.) on property which are not acceptable to the Transmission Provider.