Small Generator Interconnection
Tier 4 Facilities Study Report

FINAL

Completed for

(“Applicant”)
TCS-52

Proposed Interconnection
On PacifiCorp’s
Ponderosa 115 kV substation

February 8, 2023

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1.0 DESCRIPTION OF THE PROJECT

The Applicant has proposed to interconnect 20 MW of new generation to the Public Utility's Ponderosa 115 kV substation located in Crook County, Oregon. The Interconnection Request is proposed to consist of eight (8) 2,500 KVA Sungrow SG2500 solar inverters for a total nameplate output of 20 MW at the POI. The requested commercial operation date is May 1, 2023.

Applicant will operate this generator as a Qualified Facility as defined by the Public Utility Regulatory Policies Act of 1978 (PURPA).

The Public Utility has assigned the project "TCS-52."

2.0 APPROVAL CRITERIA FOR TIER 4 INTERCONNECTION REVIEW

Pursuant to 860-082-0060(1), a public utility must use the Tier 4 interconnection review procedures for an application to interconnect a small generator facility that meets the following requirements:

(a) The small generator facility does not qualify for or failed to meet Tier 1, Tier 2, or Tier 3 interconnection review requirements; and
(b) The small generator facility must have a nameplate capacity of ten (10) megawatts or less.

3.0 SCOPE OF THE STUDY

Pursuant to 860-082-0060(8) the Facilities Study Report shall consist of:

(a) A detailed scope identifying the interconnection facilities and system upgrades required to safely interconnect the small generator facility including the electrical switching configuration of the equipment, including the transformer, switchgear, meters, and other station equipment as applicable;
(b) A reasonable schedule for completion of the study;
(c) A good-faith, non-binding estimate of the costs for the facilities and upgrades, including equipment, engineering, procurement, and construction costs, and;
(d) A detailed estimate of the time required to procure, construct, and install the required interconnection facilities and system upgrades.

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

4.0 PROPOSED POINT OF INTERCONNECTION

The Applicant's proposed Small Generator Facility is to be interconnected to. Figure 1 below is a one-line diagram that that illustrates the interconnection of the proposed generating facility to the Public Utility's system.

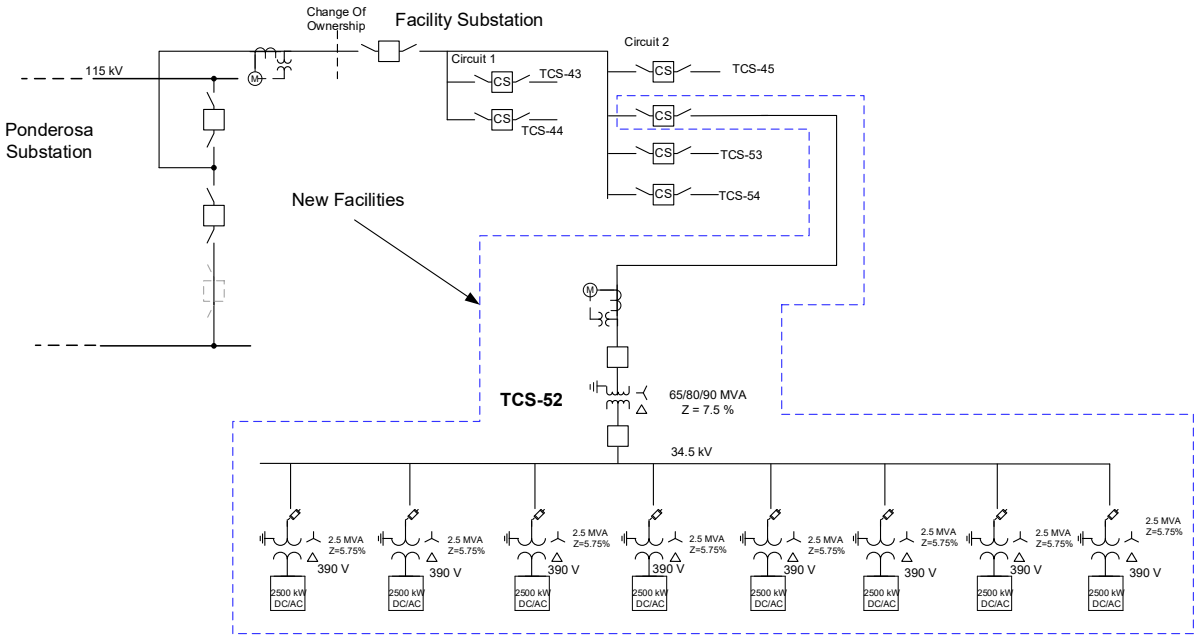

Figure 1: System One Line Diagram

5.0 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 Public Utility 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 and are expected to be in-service on or after the Applicant's requested in-service date for the Project will be modeled in this study.
  - Generation Interconnection Queue: when relevant, interconnection facilities associated with higher queue interconnection requests will be modeled in this study. However, no generation will be simulated from any higher queued project unless a commitment has been made to obtain transmission service.
- The Applicant's request for interconnection service in and of itself does not convey transmission service.
- This study assumes the Project will be integrated into Public Utility's system at the agreed upon and/or proposed point of interconnection.
- The Applicant will construct and own the facilities required between the point of interconnection and the Project.
- Generator tripping may be required for certain outages.
- All facilities will meet or exceed the minimum WECC, NERC, and Public Utility performance and design standards.
- This study assumes that a Public Utility planned project to construct a new 115 kV transmission line between Houston Lake and Ponderosa substations is in service. (Q4 2023)

- The Public Utility assumes that Bonneville Power Administration ("BPA") will require upgrades on its system to facilitate the Applicant's Interconnection Request. At the time of the production of this report BPA has not yet completed an Affected Systems Study therefore the Public Utility has made assumptions as to the timing of any potential requirements from BPA and its associated timing impact for the Applicant's Commercial Operation Date. Should BPA's schedule for any system improvements take longer than assumed in this report, the Commercial Operation Date will need to be adjusted accordingly.
- Because each of the six Interconnection Requests within this Cluster Area are proposing to interconnect via shared Applicant Interconnection Facilities at a single Point of Interconnection the Public Utility assumes all six Interconnection Requests will proceed at the same time. If that assumption is not accurate it will likely result in a significant schedule delay due to the Public Utility needing to potentially stagger design, procurement and construction activities.
- This report is based on information available at the time of the study. It is the Applicant's responsibility to check the Public Utility's web site regularly for transmission system updates (http://www.pacificorp.com/tran.html)

6.0 REQUIREMENTS

6.1 SMALL GENERATOR FACILITY REQUIREMENTS

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

6.1.1 APPLICANT TO BE RESPONSIBLE FOR

- Procure all necessary permits, lands, rights of way and easements required for the construction and continued maintenance of the Small Generator Facility and collector substation.
- Design, procure, construct, own and maintain the Applicant's Small Generator Facility and associated collector substation.
- Design the Small Generator 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 Applicant'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 Small Generator 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.
- Equip the Small Generator 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 Public Utility.

- Operate the Small Generator Facility so as to maintain the voltage at the Point of Interconnection, or other designated point as deemed appropriated by Public Utility, at a voltage schedule to be provided by the Public Utility following testing.
- Operate the Small Generator Facility with a voltage droop.
- Have any Public Utility required studies, such as a voltage coordination study, performed and provide results to Public Utility. Any additional requirements identified in these studies will be the responsibility of the Applicant.
    - A voltage coordination study will be required with the other large solar facilities already operating in this area.
- Meet the NERC and WECC low voltage ride-through requirements as specified in the interconnection agreement.
- Provide test results to the Public Utility verifying that the inverters for this Project have been programmed to meet all PRC-024 requirements rather than manufacturer IEEE distribution standards.
- Provide the Public Utility a standard model from the WECC Approved Dynamic Model Library.
- Provide the Public Utility the manufacturer Electromagnetic Transient Modeling ("EMT") model a minimum of 180 days prior to Commercial Operation.
- Provide the Public Utility 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.
- 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.
- Design the Generating Facility control system such that it can receive an analog output from the Public Utility for setpoint control and

provide an analog input back to the Public Utility on the status of the setpoint.

- Design, procure, and install a Public Utility approved data concentrator to transfer data from the collector substation to the Public Utility's RTU located at the POI substation control building via an optical fiber communications circuit in DNP3 protocol. The Public Utility will input and hold the second level passwords for the data concentrator. Password control ensures the Public Utility is aware of and is accepting of the changes being requested by the Applicant.
- Design, procure and install conduit and control cabling and hard wire the Applicant's source devices to the data concentrator. Replicated values are not acceptable.
- Provide the following points which are based on the Applicant's most recent design information. Please note that this list of points could change if the Applicant's final design changes:
  Analogs:
  - Global Horizontal Irradiance (GHI)
  - Average Plant Atmospheric Pressure (Bar)
  - Average Plant Temperature (Celsius)
  - Max Generator Limit MW (set point control)
  - Potential Power MW
  - Status:
  - 34.5 kV Transformer Breaker
  - 115 kV Transformer Breaker

  Analogs from meters at the TCS-52 collector site (1 Primary and 1 Backup):
  - Net Generation real power MW
  - Net Generator reactive power MVAR
  - Energy Register KWH
  - A phase 115 kV voltage
  - B phase 115 kV voltage
  - C phase 115 kV voltage
- Arrange for and provide permanent retail service for power that will flow from the Public Utility's system when the Project is not generating with the retail service provider in this area. If the retail provides is not Pacific Power this will require the retail service provider to obtain transmission service from the Public Utility. These arrangements must be in place prior to approval for backfeed.
- Provide any construction or backup retail service necessary for the Project.
- Provide a professional engineer ("PE") stamped maintenance plan package for all Applicant protective equipment prior to energization.

6.1.2 PUBLIC UTILITY TO BE RESPONSIBLE FOR

- Provide the Applicant the designated point at which the voltage is to be maintained and the associated voltage schedule.
- Identify any necessary studies that the Applicant must have performed.

6.2 APPLICANT TIE LINE REQUIREMENTS

The following outlines the design, procurement, construction, installation, and ownership of equipment associated with the radial line connecting the Applicant's Generating Facility to the Applicant's shared facilities substation.

6.2.1 APPLICANT TO BE RESPONSIBLE FOR

- Procure all necessary permits, property rights and/or rights of way for the new transmission line between the Applicant's collector and shared facilities substations. Applicant will be responsible for all required regulatory or compliance reporting associated with its transmission tie line facilities.
- Design, construct, own and maintain the 115 kV transmission tie line between the Applicant's collector and shared facilities substations.
- If line crossings of existing Public Utility lines are required coordinate with the Public Utility to ensure all clearance requirements are met.
- Install Public Utility approved fiber optic cable from the collector substation to the POI substation to provide the required data to the Public Utility. Leave a sufficient quantity to allow the Public Utility to splice the fiber to the fiber running from the POI substation control building.

6.2.2 PUBLIC UTILITY TO BE RESPONSIBLE FOR

- As necessary, coordinate with the Applicant on any line crossings.
- Provide the Applicant the specifications for the fiber optic cable to be installed on the tie line.

6.3 APPLICANT SHARED FACILITIES SUBSTATION

The following outlines the design, procurement, construction, installation, and ownership of equipment at the Applicant's shared facilities substation.

6.3.1 APPLICANT TO BE RESPONSIBLE FOR

- Procure all necessary permits, lands, rights of way and easements required for the construction and continued maintenance of the Applicant's shared facilities substation.
- Design, procure, construct, own and maintain the Applicant's shared facilities substation. The shared facilities substation shall be designed and constructed such that the ground grid can be connected to the POI substation ground grid to support the installation of a Public Utility owned and maintained bus differential scheme. The Applicant is

responsible to ensure the ground grid design supports safe step and touch potentials.

- Design, provide and install conduits between the Applicant shared facilities substation and the marshalling cabinet to be installed just inside the fence of the POI substation to support copper circuits installed between the facilities.
- Design, provide and install control cabling (number and size TBD) and hard wire the Applicant's source devices to the marshalling cabinet. Replicated values are not acceptable.
- Provide and install a set of current transformers from the 115 kV devices to be fed into the bus differential relays with a maximum current transformer ratio matching the maximum CT ratio of the breakers at the POI substation. Provide and install conduit and cabling to the POI substation marshalling cabinet with these outputs.
- Provide the following data points from the collector substation via hardwire to the marshalling cabinet located in the POI substation. Please note that these points are based on the most recent design information provided by the Applicant and could change based on final design:
  Status:
  - 115 kV Circuit Switcher 1
  - 115 kV Circuit Switcher 2
  - 115 kV Circuit Switcher 3
  - 115 kV Circuit Switcher 4
  - 115 kV Circuit Switcher 5
  - 115 kV Circuit Switcher 6
  - 115 kV Facility Circuit Breaker
- Provide and install conductor, shield wire and line hardware in sufficient quantities to allow the Public Utility to terminate the segment running from the transformer substation deadend structure into the POI substation deadend structure. The last segment will be owned by the Public Utility.
- Provide a separate graded, grounded and fenced area along the perimeter of the Applicant's shared facilities substation for the Public Utility to install a control building. The site will share a fence and ground grid with the Applicant shared facilities substation and have separate, unencumbered access for the Public Utility. Fencing, gates and road access shall meet Public Utility standards. The Applicant shall provide a Public Utility approved easement for its control building.
- Perform a CDEGS grounding analysis for both the collector substation site and the Public Utility control building and provide the results to the Public Utility.
- Provide permanent AC power to the Public Utility's control building.

- Procure and install Public Utility approved H-Frame structures for the Public Utility's instrument transformers. The installation locations shall be coordinated with the Public Utility.
- Install complete conduit and control cable provided by the Public Utility from each of the Public Utility's instrument transformers to the Public Utility's building. Leave sufficient quantities of control cable to allow the Public Utility to terminate the cable inside its control building.
- Install the Public Utility provided instrument transformers.
- Procure and install disconnect switches on each side of each of the instrument transformers.
- Provide Public Utility unfettered and maintained access to the Public Utility's instrument transformers.
- Install complete conduit and fiber optic cable from the Public Utility's control building to the Ponderosa substation fence line. Leave sufficient quantities of fiber to allow the Public Utility to terminate both ends.

6.3.2 PUBLIC UTILITY TO BE RESPONSIBLE FOR

- Provide the Applicant the necessary specifications to allow the ground grid of the Applicant's shared facilities substation and the POI substation to be tied together.
- Provide the Applicant the necessary specifications for the bus between the Applicant's shared facilities substation and the new POI substation to be connected.
- Coordinate with Applicant on the location, size, and types of conduits and control cables between the POI substation and the shared facilities substation.
- Install a control building on the property prepared by the Applicant.
- Procure and install a backup DC battery system for the Public Utility control building.
- Procure and install a communications racks and associated communications equipment in the Public Utility's control building.
- Coordinate with the Applicant on the location of the Public Utility's instrument transformers.
- Provide the Applicant the specifications for the instrument transmission installation structures.
- Procure and provide to the Applicant a set of 115 kV instrument transformers.
- Design, procure and install a set of 115 kV revenue metering equipment including metering panels, primary and secondary revenue quality meters, test switches, junction boxes and secondary metering wire.

- Provide the control cable to be installed by the Applicant from the instrument transformers to the Public Utility's control building and coordinate on the location of the cable.
- Terminate the Applicant fiber into the control building.

6.4 POINT OF INTERCONNECTION

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

6.4.1 APPLICANT TO BE RESPONSIBLE FOR

- Coordinate with the Public Utility to test and commission the communications system between the Applicant's collector and shared facilities substation and the Ponderosa substation.

6.4.2 PUBLIC UTILITY TO BE RESPONSIBLE FOR

- Procure the necessary permits and/or property rights to allow for the expansion of the substation to the east.
- Procure the necessary permits and/or property rights to allow for the rerouting of the current access road running along the east side of substation.
- Design, procure and construct, own and maintain the equipment to create new line positions for the Applicant's tie line, the new line to Corral substation and a new transformer which will include the following major pieces of equipment:
  - (1) 230/115 kV 250 MVA Transformer
  - (1) 230 kV Horizontal Mount Vertical Break Group Operated Switch
  - (1) 125 VDC Motor Operator
  - (3) 115 kV CCVT
  - (7) 115 kV Vertical Break Group Operated Switch
  - (3) 145 kV Circuit Breakers
  - (1) 28' X 40' Control Building
  - (1) 125 VDC Battery Bank
  - (2) 145 kV Circuit Breakers
  - (3) 115 kV Vertical Break Group Operated Switches
  - (3) CT/VT Combination Metering Units
  - (3) 115 kV Surge Arresters
  - (1) 125 VDC Motor Operator
  - (1) 115 kV, Vertical Mount Vertical Break Group Operated Line Disconnect Switch with Ground Switch.
- Terminate the last bus/line segment running from the Applicant's shared facilities substation deadend structure into the POI substation deadend structure using Applicant provided and installed conductor, shield wire and line hardware.

- Terminate the new transmission line running from Corral substation.
- Design, procure and install a marshalling cabinet near the Applicant's shared facilities substation shared fence line.
- Provide and install conduit and control cabling between the marshalling cabinet and the control building bus differential cabinet.
- Design, procure and install a bus differential relay system for the connection to the Applicant's shared facilities substation.
- Procure and install a relay for under/over voltage and over/under frequency protection of the system.
- Modify the north and south bus differential logic for the expansion of the new 115 kV bay breakers.
- Design, procure and install a line current differential relay system for the new line to Corral substation.
- Design, procure and install a redundant transformer differential relay system for the new transformer.
- Include the following data points from the new POI substation into the new substation RTU:
  Analogs:
  - Net Generation real power MW
  - Net Generator reactive power MVAR
  - Energy Register KWH
  - A phase 115 kV voltage
  - B phase 115 kV voltage
  - C phase 115 kV voltage
- Install conduit and fiber optic cable from the control building to the shared fence line with the Applicant's shared facilities substation and splice to the Applicant's fiber.
- Procure and install the necessary communications equipment for protection and data provision to the Public Utility's existing communications network.
- Design, procure and install 115 kV revenue metering equipment including two (2) revenue quality meters, test switch, instrument transformers, metering panels, junction box and secondary metering wire.
- Provide and install an Ethernet connection for retail sales and generation accounting via the MV-90 translation system.
- Provide

6.5 OTHER

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

6.5.1 APPLICANT TO BE RESPONSIBLE FOR

- Bonneville Power Administration ("BPA") Requirements

- If deemed necessary by the Public Utility and BPA, execute any necessary agreements with BPA to facilitate any requirements on BPA's system.

6.5.2 PUBLIC UTILITY TO BE RESPONSIBLE FOR

- Corral-Ponderosa Transmission Line
  - Procure and install conductor on the existing double circuit structures between Corral and Ponderosa substation to energize a new 230 kV transmission line.

- Corral Substation
  - Procure the necessary permits and/or property rights to allow for the expansion of the substation.
  - Design, procure and construct, own and maintain the equipment to create a new line position for the new line from Ponderosa substation which will include the following major pieces of equipment:
    - (2) 230 kV Circuit Breaker
    - (4) 230 kV Horizontal Mount Vertical Break Group Operated Switches
    - (1) 230 kV Vertical Mount Vertical Break Group Operated Switch
    - (1) 125 VDC Motor Operator
    - (3) 230 kV CCVT
    - (3) 230 kV Lightning Arresters
  - Design, procure and install a line current differential relay system for the new line to Ponderosa substation.

- Bonneville Power Administration
  - Coordinate with BPA to ensure any requirements for BPA's system required to support the Applicant's Interconnection Request are in place prior to the commencement of generation activities.

- System Operations
  - Update databases to include the Applicant's Generating Facility along with Interconnection Facilities and Network Upgrades.

7.0 COST ESTIMATE

The following estimate represents only scopes of work that will be performed by the Public Utility. Costs for any work being performed by the Applicant are not included.

Shared Costs

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

Shared Facility Substation *Control building, metering & communications equipment*	$464,000
Ponderosa Substation *Expansion, line positions, transformer*	$1,794,000
Corral Substation *Line position*	$313,000
Corral-Ponderosa Transmission Line *Install conductor for second 230 kV transmission line*	$20,000
Total	**$2,590,000**

*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 Public Utility must develop the project schedule using conservative assumptions. The Applicant may request that the Public Utility perform this field analysis, at the Applicant's expense, prior to the execution of an Interconnection Agreement in order to obtain more cost and schedule certainty.

Note: Costs for any excavation, duct installation and easements shall be borne by the Applicant and are not included in this estimate. This estimate approximates the costs incurred by the Public Utility to interconnect this Small Generator Facility to the Public Utility's electrical distribution or transmission system based upon the level of study completed to-date. The Applicant will be responsible for all actual costs, regardless of the estimated costs communicated to or approved by the Applicant.

8.0 SCHEDULE

Execute Interconnection Agreement	February 3, 2023
Provision of Fist Progress Payment	March 17, 2023
Provide Shared Facilities Agreement	April 7, 2023
Applicant Approval for Public Utility to Commence Engineering and Procurement Activities	April 7, 2023
*Applicant Initial Design Package Provided	May 5, 2023
Public Utility Engineering & Procurement Commences	May 15, 2023

Applicant Executes Construction Agreement with Bonneville Power Administration	June 2, 2023
Energy Imbalance Market Modeling Data Submittal	June 2, 2023
Applicant Property/Permits/ROW Procured	December 1, 2023
Contingent Facilities Complete	December 15, 2023
Public Utility Property/Permits/ROW Procured	January 5, 2024
*Applicant Final Design Package Provided	February 2, 2024
Public Utility Engineering Design Complete	June 14, 2024
Applicant Commences Voltage Coordination Study	June 17, 2024
Applicant Approval for Public Utility to Commence Construction Activities	July 12, 2024
Public Utility Construction Begins	August 19, 2024
Applicant Maintenance and Commissioning Plans Provided	January 10, 2025
Applicant and Public Utility Construction Complete	June 6, 2025
**Bonneville Power Administration Construction Complete	July 7, 2025
Public Utility Commissioning Activities Complete	August 8, 2025
Public Utility Commissioning Document Review Complete	August 15, 2025
Applicant's Facilities Receive Backfeed Power	August 18, 2025
Initial Synchronization/Generation Testing	September 1, 2025
Commercial Operation	November 7, 2025

*Applicant 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. Applicant 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.

9.0 PARTICIPATION BY AFFECTED SYSTEMS

Public Utility has identified the following Affected Systems: Bonneville Power Administration

Copies of this report will be shared with each Affected System.

10.0 APPENDICES

Appendix 1: Higher Priority Requests
Appendix 2: Contingent Facilities
Appendix 2: Property Requirements

10.1 APPENDIX 1: HIGHER PRIORITY REQUESTS

All active higher priority 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 Public Utility 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:

Responsible Utility	Project Number	POI:	Size (MW)
PAC	Q443	Ponderosa 115 kV bus	34.56
PAC	Q731	Stearns Butte 115 kV bus	55
PAC	Q734	Ponderosa 115 kV bus	63.5
PAC	Q824	Ponderosa 115 kV bus	40
Distributed Energy Resources (DER) – in service			
PAC	DER	Prineville sub (transformer 1 aggregate)	0.897
PAC	DER	Prineville sub (transformer 2 aggregate)	0.188
PAC	DER	Powell Butte substation	1.355
PAC	DER	Redmond sub(transformer 1 aggregate)	0.801
PAC	DER	Redmond sub (transformer 2 aggregate)	0.757
Foreign Utility Requests:			
BPA	G0501	Captain Jack 500 kV substation	1100
BPA	G0527	Fort Rock 500 kV substation	105
BPA	G0539	BPA Ponderosa 230 kV Bus	600
BPA	G0640	Captain Jack 500 kV substation	238.5
PGE	QF17-068	Pelton-Round Butte 230 kV line	65
PGE	QF19-081	Redmond - Round Butte 230 kV line	53

10.2 APPENDIX 2: CONTINGENT FACILITIES

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

Public Utility Planned Projects:

- New Houston Lake-Ponderosa 115 kV transmission line (Q4 2023).

10.3 APPENDIX 3: PROPERTY REQUIREMENTS

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

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

The Applicant 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.

Applicant 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 Public Utility. The real property shall be a permitted or permittable use in all zoning districts. The Applicant shall provide Public Utility with a title report and shall transfer property without any material defects of title or other encumbrances that are not acceptable to Public Utility. 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:

- 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 Public Utility unless waived by Public Utility.

- 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. Public Utility may require Applicant to procure various studies and surveys as determined necessary by Public Utility.

- Operational: inadequate access for Public Utility'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 Public Utility.