

Schnebly Coulee Solar Energy Project Description

The Project is a ground-mounted photovoltaic (PV) solar power production facility that will generate up to 90 megawatts (MW) of renewable energy. The Project is comprised of the following major components and related and supporting facilities. The general arrangement of the Project is presented on the Site Plan.

Major Components

Solar Arrays

The Project will include approximately 210,600 solar PV modules (also known as panels) to convert solar energy into direct current (DC) electricity. By design, the solar PV panels absorb sunlight to generate electrical output by being manufactured with anti-reflective glass that also minimizes potential for glare.

The PV modules will be mounted together in arrays on a modular tracking system such that the angle of the panels varies throughout the day. Each tracking assembly will consist of galvanized steel posts on which the frames for the PV modules rest. Each tracker will hold approximately 80 PV modules mounted on this metal framework structure and range between 7 and 15 feet above grade, depending on the topography, as shown on the Construction Details Sheet (Sheet Number C.704) of the Site Plan.

The Site Plan (Sheet Number C-500) includes contingency areas for solar arrays. These designated areas serve as reserve locations for solar modules should the primary sites become unviable for construction. Contingency areas are excluded from the Project's buildable area since panels will be relocated from other areas of the Project if the contingency areas are required. The application refers to a buildable area of 695 acres, which excludes contingency areas.

Inverter Blocks

The Project will include approximately 24 inverter blocks to convert the DC electricity from the solar arrays to alternating current (AC) electricity. The inverter blocks will be located along the internal access roads within the solar arrays. Each inverter block will consist of enclosed inverter stations and a transformer approximately 10 feet in height above grade, as shown on the Construction Details Sheet (Sheet Number C-704) of the Site Plan, set on concrete or steel foundations.

Related and Supporting Facilities

The Project and related supporting facilities include underground electrical collection lines, an on-site substation, a 230-kV transmission line to the existing Poison Springs substation, the site access road, internal service roads, security fencing, gates and lighting, a construction laydown yard, and other temporary construction areas.

Electrical Collection System

The electrical collection system will be installed underground, buried a minimum of 3 feet below grade. Underground AC electrical cables will be arranged in several branch circuits to connect the electrical output of the energy facility to the on-site substation. Cable lengths will vary with the distance of the solar arrays to the on-site substation.

Substations

The facility substation will be located on an approximately 5-acre area within the Project. The substation will include a generator step-up transformer to increase the output voltage from the module blocks (34.5

kV) to the voltage of the 230-kV transmission line, protective relay and metering equipment, utility and customer revenue metering, and a station service transformer that will provide power to the substation and its weatherproof control house.

The 230-kV transmission line will then interconnect to the Poison Springs Switchyard owned and operated by Puget Sound Energy. The switchyard is located approximately 2.8 miles east of the Project area.

Site Access Driveway

The site will be accessed via Stevens Road as shown on the Site Plan (Sheet Number C-505). The driveway will consist of a 20-foot-wide gravel road. A hammerhead turnaround will provide truck and other vehicle access at the Project entrance, as shown on the Construction Details Sheet (Sheet Number C-703) of the Site Plan.

Internal Service Roads

Internal service roads will be built to access the Project as shown on the Site Plan (Sheet Number C-500). The internal access roads will total approximately 32,860 feet in length and will consist of 20-foot-wide gravel roads.

Security Fencing, Gates, and Lighting

The solar array perimeter will be bordered by an elk fence. specifications will consist of 8-ft high elk fence, no barbed wire at the top, and composed of 12 in horizontal openings with vertical openings tapering from 8 in at the bottom and top to 3 in at the middle to allow small mammals and birds to enter/exit and to keep big game safely out. In the event constructability, safety concerns or other unforeseen circumstances prevent this design from being utilized, fencing specification will consist of 8-ft high elk fence, no barbed wire at the top, and 4-8" square openings. The substation will be bordered by a separate 6-foot-tall chain link fence topped by 1 foot of barbed wire. A locked security gate will be located at the site entrance where the driveway meets the Project boundary. The security gate will have a knock box to allow access to the local fire department.

Construction Laydown Yards

One main construction laydown yard is included in the Project, as shown on Site Plan (Sheet Number C-503 & C-505). The laydown yard is approximately 8.75 acres in size, located 0.8 miles north of the Site access point. The laydown yard will be graded with a gravel surface and temporarily fenced to provide storage for supplies, vehicles, and equipment during construction.