



DIABLO DAM SUBSTATION HGIS INSTALLATION

(High Voltage Gas Insulated Switchgear)

Project Summary

The project consisted of design, construction and installation of HGIS (High Voltage Gas Insulated Switchgear) at the Diablo Dam Switchyard owned by Seattle City Light. Diablo is one of three dams that are part of the century-old Skagit power project deep in the Cascade Mountains in Whatcom County. Burke Electric worked with Mitsubishi Electric Power Products, Inc. to complete this project.

Burke Electric Scope

Demo existing 230kv

- Remove (2) each 230kv breakers, all 4" al bus, bus supports, high side switches and high side ground switches.

230 KV Breakers:

- Assemble and Install with crane 2ea. 230KV SF6 Breakers.

Install new bus support columns:

- (9) 12' steel columns with 6" AL bus supports.

Install New Switches:

- Install (2 ea.) new ovhd 230kv ground switches.
- Install 92ea.) T-structures (9,000lbs ea) and mount the new Cleavland Price 230kv high side disconnect switches w/ mechanical operators

Install Substation Aluminum Bus:

- Installation of 6" aluminum bus and welding to existing substation bus.
 - Installation of a-frame aluminum bus supports, insulators and anchoring.
- Grounding:

- Installation of station grounding as per drawings
- Installation of Ground grid mounted to the deck
- Install Conduit and wiring between Breaker and Local Control Cabinet
- Conduit and wire as per drawings
- Relocate Potential Transformer and supports
- Remove and Re-install 1 ea. Potential Transformer and anchor's
- Installation of 795 ACSR and Insulators
- 795 ACSR from high side OVHD to new OVHD 230kv ground switches, from ground switches to new 230kv SF6 breakers.

Burke Electric Project Personnel

Tim Harper –General Foreman
Greg McBride—Project Manager
Dominic Burke—COO
Katie Morton—Safety Manager

Equipment and Systems Overview

- 245kv Breakers
- Substation Aluminum Bus
- Switches
- Grounding and Bonding
- Conduit, Wire Control Cabinets
- Potential Transformers
- 795 ACSR and Insulators

Offeror Role

Subcontractor

Owner Information

Seattle City Light
700 5th Ave Ste. 3200
Seattle, WA. 98124-4023
Cynthia Gilbert 206.727.3790

Contract Amount & Type

\$ 460,912.00—firm fixed price

Customer Information

Mitsubishi Electric Power Products
530 Keystone Dr.
Warrendale, PA. 15086-7538
Brice Carl
724.778.5247

Project Start and Finish Dates

3/23/2018—12/8/2020

Project Location

Diablo Dam Road
Rockport, WA 98283

