



THE DALLES DAM STATION SERVICE IMPROVEMENTS



CLIENT
U.S. Army Corps
of Engineers



LOCATION
Klickitat County,
WA



TIMELINE
September 2008 –
December 2013



DIVISION
Construction, Controls
& Engineering



VALUE
\$26,000,000

OVERVIEW

Olsson Industrial Electric completed a comprehensive modernization of the station service electrical distribution system at The Dalles Dam, a 2100 MW hydroelectric power generation facility, as the prime contractor. Olsson upgraded the existing 1950's vintage control system, rerouted and installed new power distribution feeders, and connected a secondary power source to create internal redundancy. The electrical upgrades improved turbine control, power generation efficiency, system reliability and serviceability.

SCOPE

- Replaced 4160 V station service protective relaying and breaker controls
- Installed 2 new 5000 kVa station service transformers
- Replaced 13.8 kV CLR & vacuum switchgear at main unit Isolated Phase Bus (IBP)
- Retrofitted five 480 V station service substations and MCC sections
- Installed 5 new 500 kVA transformers, switchgear sections, and 4160 V switchgear
- Retrofitted all existing 4160 V switchgear sections
- Designed, installed and tested redundant DC and preferred AC systems

HIGHLIGHTS

- Zero safety incidents while working in a hydroelectric generation power production facility
- "Outstanding" performance rating from the U.S. Army Corps of Engineers