

DENNY WAY SUBSTATION GAS INSULATED SWITCHGEAR

Project Summary

This project consisted of new construction of a Substation off Denny Way in Seattle, WA to accommodate new power requirements.

The Denny Substation, energized in May 2018, is a long-term asset for City Light's entire system, providing reliability and flexibility through the ability to back up adjacent substations. This portion of the entire project was valued at \$18,000,000. The Denny Substation will have an initial capacity of 50 Megavolt-ampere (MVA), and could increase to 405 MVA with facilities expansions. The underground distribution network, directs electricity from the substation to the Denny Triangle and South Lake Union neighborhoods. The substation will be connected to the Massachusetts Substation in SoDo via a 115-kilovolt (kV) transmission line through Downtown Seattle. The use of a gas-insulated switchgear in the Denny Substation allowed for a smaller footprint; the facility also uses solar cells to produce its electricity and a heat recovery system. Outside consultants hired by the city government in 2018 later concluded that the overall demand in the Denny Triangle and South Lake Union area would rise to 60 megawatts by 2027, far below the 180-megawatt capacity that the substation was designed for.

Equipment and Systems Overview

- 115 KV Main Reactor Building
- GIS ZONES 14 ea. Gas Insulated Bus
- GIS Switchgear – Incoming 115 KV Oil Filled - Seattle City Light – Main
- Reactor - 115 – 278.86 MVA
- Reactor Switch to Tie Bus to Main Switchgear for Distribution 115 KV Transformer Feeders

Offeror Role

Prime Contractor

Owner Information

Seattle City Light
700 5th Ave #3200
Seattle, WA 98104
206-684-3000

Contract Amount & Type

\$1,180,390—firm fixed price

Customer Information

Mitsubishi Electric Power Products
530 Keystone Dr.
Warrendale, PA 15086-7538
Brice Carle, Project Manager
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(724) 778-5247

Project Start and Finish Dates

7/1/2017—1/30/2018

Project Location

1250 Denny Way
Seattle, WA 98109-5403

Burke Electric Scope

- Transfer to Main GIS Building Transformer Switchgear Building
- Incoming to Inner Cabling to Main GIS Building.
- The Main Circuit will energize the Main #1 Switch to the Line



Burke Electric Project Personnel

Aaron Carpenter, *General Foreman*
Greg McBride, *Project Manager*
Dominic Burke, *COO*
Katie Morton, *Safety Manager*

