

Maritime Link Project - Converter Stations

Bottom Brook & Woodbine, NewFoundland



The multi-billion dollar Maritime Link is a large-scale project to bring clean and green hydro-electric power from the Churchill Falls power stations in Labrador Canada to the Northeastern United States with a more than 100-mile long undersea passage to Nova Scotia. The project includes two converter stations that required 1,230 tons of steel, all of it hot-dip galvanized.

Given the very remote location, prone to the extreme maritime climate, the specifiers believed it was paramount to ensure low-maintenance long-term corrosion protection for these buildings. Hot-dip galvanizing's proven track record in the electrical utility industry as well as its unparalleled cost effectiveness and environmental sustainability made it a natural choice. An additional consideration was the excellent conductivity of galvanized steel, which is an important safety factor because it drains the electric charge that can build in the airspace around the ultra-high voltage equipment. Painted steel structures do not give these electric charges a natural route to ground allowing ambient electricity levels to reach dangerous levels for employee safety and proper machinery function.

The factory controlled quality of hot-dip galvanizing as well as its rugged impact and abrasion resistance were much appreciated during erection, minimizing touch-ups and speeding up the overall construction. The galvanizer's multiple, high capacity plants ensured rapid turnaround, and state-of-the-art plant data systems greatly minimized the possibility of item misidentification with unparalleled traceability in the event of any nonconformity.

The Maritime Link is the first project to connect the Island of Newfoundland to the North American electricity market. It will also deliver renewable clean energy to Nova Scotia and throughout New England. Strong, long-lasting, sustainable, low-cost and reliable hot-dip galvanizing is playing a big role in protecting the assets of this important sustainable energy project for generations to come. ■



Galvanizer
Galvanisation Quebec
Corebec Inc. - Quebec City

Architect
ABB, Power and Industrial Systems

Fabricator
Constructions Beauce-Atlas

Owner, Specifier
Emera Newfoundland & Labrador

Electrical, Utility & Communication