735-kV Chamouchouane-Bout-de-l'lle Transmission Line

Saguenay-Lac-St-Jean, Quebec





July 2019 marked the completion of a new 735,000-volt hydro-electric transmission line. The Chamouchouane–Bout-de-l'Île line will carry electricity from Northern Quebec to millions of consumers in the Montreal area. This line was the first major North-South supply line built in 25 years and the first n the new economic reality of low natural gas prices and aggressive Asian competition in fabrication. This three-year project cost \$1.3 Billion and ended up below budget and ahead of schedule.

The unmatched durability and performance of hot-dip galvanizing is particularly well suited to the needs of this market. However, the challenges to the transmission tower manufacturing industry

are significant - plentiful and inexpensive shale gas has heavily impacted the competitiveness of hydro-powered electricity. Gas power generation is typically done directly adjacent to urban centers negating the need for long transmission lines from remote dams to far away consumers. Also, the rise of fabricating competition from developing countries without our environmental and employee responsibilities is challenging the domestic fabricating industry.

Both fabricators and galvanizers have been responding to this challenge with modern, automated plants to both lower costs and improve quality. Closer cooperation has also streamlined logistics from fab shop to erection sites. In this new and very competitive world, galvanizing is building on its strengths and working on its weaknesses.

Hot-dip galvanizing's amazing life-cycle cost is no stranger to the electrical power transmission sector.

The multi-year project used 33,000 tons of hot-dip galvanized steel and the fact 84% of it was domestic content, despite the many unfair trade advantages afforded to third world importers, is a testament to the ability of domestic industries continuing to improve the value they bring to market.

The rugged nature of galvanized steel is of especially great benefit during the rough and tumble onsite tower assembly and erection process under

often extremely challenging conditions. Once installed these towers and substations will enjoy many decades of corrosion-free service life with essentially no maintenance. In fact, they will join an inventory of galvanized transmission structures still in maintenance free service, some now well over 100 years old.



Galvanizer

Corbec Inc. - Quebec City

Fabricator

Prometek Inc. **Fabrimet**

Specifier Hydro-Quebec

Other

Hamel & GRL

