PT0302 Tower Steel for AC Lines

Scope of Work Summary:

Package includes the design, fabrication, shop testing, prototype assembly, full-load testing of selected tower types, delivery and warranty of galvanized lattice tower steel and foundation (grillage) steel for self supporting towers to be used for the construction of two parallel 315kV AC transmission lines between the new Muskrat Falls Transmission Station and the existing Churchill Falls Transmission Station, in Labrador, with each line about 265km in length.

The design of the towers will be by others and will be provided to the Vendor for preparation of shop drawings to facilitate the production of tower members. There shall be five different types of towers used in the transmission lines, as described below:

Type-A, Tangent Tower (0-1 degree), Guyed-V design
Type-B, Light Angle Tower (0-1 degree), Guyed-V design
Type-C, Angle Tower - Strain (0-30 degree), Guyed-V design
Type-D, Angle Deadend - Strain (0-45 degrees), Self-supporting
Type-E, Angle Deadend - Strain (0-90 degrees), Self-supporting

Towers will be designed for horizontal phase configuration, using 2-bundle 795kcmil ACSR Drake or equivalent as phase conductors, with two shielding peaks carrying one ½" stranded galvanized steel Grade 220 OHSW and one OPGW similar to the mechanical characteristics to that of the OHSW. Estimated average span is 400m. Estimated total galvanized tower steel and foundation steel is about 10,000 metric tons.

Vendors will be responsible for the preparation of shop drawings and manufacturing of tower members and shall be as per Tower Design and Manufacturing Specifications, which will be provided to the Vendor later.

Galvanized tower steel members and foundation steel members shall be packed as per detailed packing instructions which will be provided to the Vendor at a later stage. Vendor shall be responsible for delivery of tower members to marshalling yard(s) along the lines. Exact location of delivery points for the tower steel will be specified later.