

## **PT0303 Supply of Hardware 315 kv HVac**

### **Scope of Work Summary:**

Package includes the design, fabrication, shop testing, packaging, delivery and warranty of hardware, accessories and fittings be used for the construction the following transmission lines:

Two parallel 315kV AC transmission lines will be built between the new Muskrat Falls Transmission Station and the existing Churchill Falls Transmission Station, in Labrador and each line will be about 265km in length. Average span is estimated to be 400m. HVAC towers have two shielding peaks; one for OHSW and one for OPGW. Conductor is 2-bundled 795kcmil ACSR Drake or equivalent and OHSW is ½" galvanized steel stranded wire, Grade 220.

Materials to be supplied under this package include, but not limited, to the following items:

1. Phase conductor spacer-dampers
2. OHSW dampers
3. Suspension assembly to connect suspension insulators to the tower crossarms and connect the conductor to insulators.
4. Deadend assembly to connect deadend insulators to the tower crossarms and connect the conductor to insulators.
5. Suspension assembly to connect OHSW to the tower peak.
6. Deadend assembly to connect OHSW to the tower peak.
7. Conductor splices (implo type)
8. OHSW splices
9. Guy wire grips suitable for different sizes from ½" to 1"
10. Guy wire insulators
11. Guy wire PVC covers
12. Tower danger plates, tower number plates
13. Anti-climbing devices
14. Step-bolt for climbing towers

Applicable hardware fittings shall be low temperature performance rated for minimum energy absorption of 20 Joules at minus 20 Degrees Celsius.

Materials shall be delivered in suitable crates to multiple delivery points along the lines. Exact type and quantity of materials and delivery points will be specified later.