

**LC-SB-022**

**Provision of Drilling Rig and Surface Spread for HDD Program**

**Scope of Work Summary:**

Nalcor Energy (Nalcor) is developing the Lower Churchill Project (LCP) which involves hydroelectric generation in Labrador and transmission across the Strait of Belle Isle (SOBI) to the island of Newfoundland. The SOBI marine crossing involves three HVdc submarine cables. Three conduits will be installed on each side of the Strait for both transitioning the cables from shore to deep water and providing protection from surface ice and icebergs. Horizontal directional drilling (HDD) will be used to establish holes for the conduits. Other holes may be required for communication cables.

The length of the Cable Conduits will be between 1500m and 2500m on the Labrador and Newfoundland Island sides, respectively. The bores are to be drilled from shore and extend out under the Strait of Belle Isle and exit the rock into the ocean at a depth of 60 - 80 meters below sea level. The geology in the area consists of sedimentary sandstone, limestone, dolomite, shale, and Precambrian granite. Proposed hole profiles and related data and documentation will be provided in request for proposal (RFP) packages to qualified EOI respondents. Access to the holes will be possible from the shore position only.

The drilling program is anticipated to commence in Q3-2013 in the Shoal Cove area on the west coast of the island and in early-2014 in the Forteau Point area of Labrador. Targeted completion date is late-2015. Operations will progress concurrently on both sides for much of the program. Both locations are remote with harsh environments. Planning and logistics are key to continued operations. Ground access to the island of Newfoundland from Nova Scotia and between Newfoundland and Labrador is via ferry.

Nalcor intends to engage drilling rig services, drilling fluids services, directional drilling services, downhole tools, and related goods and services on a direct basis. Technical input for developing the drilling program will require a collaborative effort between Nalcor and the various contractors involving several group planning sessions, kick-off meetings, and technical training sessions prior to mobilization of equipment. Formal plans and programs will be required for this effort and for execution of the program.

**Scope of work**

Nalcor is seeking expressions of interest from drilling contractors for;

- A. Drilling of 3 HVdc cable holes and the installation of casing (plus holes for communication cables, if any) on the Island side (Shoal Cove) of the Strait of Belle Isle.
- B. Drilling of 3 HVdc holes and the installation of casing (plus holes for communication cables, if any) on the Labrador side (Forteau Point) of the Strait of Belle Isle.

C. Or a combination of both A and B

The scope of work will include supplying, operating and maintaining a drilling rig and associated surface equipment (such as mud plant, power units, etc.), for directionally drilling the boreholes, reaming them to the required final bore diameter, and installing casing for the final cable conduit.

The work must be complete by the end of the year-2015 to facilitate cable lay and pull-in in early 2016. An access road must be established in the Forteau Point area whereafter drilling will occur concurrently on both sides of the Strait.

Approximate Period	Expected Duration	
	Shoal Cove	Forteau Point
2013	August Start	-
2014		January Start
2015 ( End of Year )	Finish	Finish