

**Scope of Work Summary:**

The Work shall include all design, manufacture, testing, transport, installation and pre-commissioning activities of the HVDC cable and accessories. For the Maritime Link Project, protection of the cable by trenching or other means may also be included with the supply and installation tender.

The Strait of Belle Isle cable route is nominally 34 km in length and will consist of three HVDC submarine cables. Land cables will be utilized to transmit power from shore to the transition compounds located a short distance away. The maximum water depth along the route is approximately 120 m. Cable protection will most likely be accomplished using rock placement in the deep water portions, and horizontally directional drilled boreholes for the landfalls. It is important to note that the boreholes will be approximately 2000 m long and the HVDC cable will be pulled in through the boreholes: One borehole per cable end, for a total of 6 pull-ins. The boreholes are currently planned to exit on the seafloor at approximately 60-80 m water depth. The Strait of Belle Isle is frequented by sea ice and icebergs for a majority of the year, along with strong currents, erratic bathymetric contours, harsh weather conditions and complex geotechnical features. There is a local fishery in the area as well as seasonal commercial shipping traffic.

The Cabot Strait cable route is nominally 180 km in length and will consist of two HVDC submarine cables. Land cables will be utilized to traverse from the shore to the transition compounds located a short distance away. The maximum water depth along the route is approximately 450 m. Cable protection will be accomplished through one or more of the following: Trenching, rock placement, HDD, micro-tunneling or by other means necessary. The Cabot Strait is often covered in pack ice early in the year and has moderate currents, infrequent icebergs, fishing activity and commercial traffic.

The scope of cable design and supply can be summarized as the following:

**Strait of Belle Isle (+/- 320-400 kV at total bi-pole system power of 900 MW):**

- 1) Nominally 102 km of mass-impregnated submarine cable.
- 2) Approximately 20 km or less of mass-impregnated land cable.
- 3) All applicable accessories – terminations, joints, anchoring devices, etc.
- 4) Fiber optics shall be considered as an option for inclusion within the cables for temperature sensing and possibly telecommunications.

**Cabot Strait (+/- 200-250 kV at total bi-pole system power of 500 MW):**

- 5) Nominally 360 km of mass-impregnated or cross-linked polyethylene submarine cable.
- 6) Approximately 20 km or less of mass-impregnated or cross-linked polyethylene land cable.
- 7) All applicable accessories – terminations, joints, anchoring devices, etc.
- 8) Fiber optics shall be considered as an option for inclusion within the cables for temperature sensing and possibly telecommunications.

Appropriate spares and over length quantities in addition to the lengths quoted above will be

defined in the detailed Request for Proposal provided to the Bidders selected as a result of this EOI/prequalification request.

The installation scope shall include cable delivery, permitting, laying, jointing, pull-in, land installation, termination, pre-commissioning, interim testing, and all installation aids and ancillary equipment. A fit for purpose vessel and other required equipment shall be included to execute the installation activities.

Design, manufacture and installation of cables will be performed by a company with an ISO 9001 registered quality management system, a ISO 14001 registered environmental management system and an OHSAS 18001 registered health and safety system, or equivalents thereof.

The marine installation season for each of these two projects are 2015 and 2016, respectively. The Cabot Strait is optional scope for the purposes of this EOI and its inclusion will be confirmed or denied at the Request for Proposal stage.