

1 Q. Please confirm that the dc cable has been designed for the polarity reversal that
2 may occur in the event of having to switch the spare cable from one pole to the
3 other. In the response include how many times during the life of the cable can such
4 a polarity reversal be allowed to take place and the measures that will be taken to
5 minimise the stress on the cable resulting from a polarity reversal.

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8 A. The mass impregnated cable system used for the Strait of Belle Isle (SOBI) crossing
9 is designed to accommodate polarity reversals. They are used in Line Commutated
10 Converters (LCCs), which require that polarity be reversed in order to reverse power
11 flow and LCC HVdc links are used for electricity trading, which regularly reverse
12 polarity on the cable system.

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14 No restrictions on polarity reversal have been imposed by suppliers, and cable
15 stresses will be reduced during the switching process by switching a pre-insertion
16 resistor in series with the cable during discharge and charge operations.