Q. Re: 9, Replace Fuel Oil Heat Tracing - Holyrood \$1,474,300 in 2012, \$1,413,900 2 in future years.

> In Volume I, Tab 4, page 8, in the report Replace Fuel Oil Heat Tracing, Hydro states that the existing heat tracing system was installed in 2002 and replaced the original system. Please describe the process that was followed in the selection of the replacement system in 2002.

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When it was realized that the existing system was problematic and needed to be replaced, the OEM was contacted to provide quotes for possible options. The OEM, Tyco, provided three options for replacement of the heat tracing system. The self regulating cable system was at a cost of \$1.12 million; the mineral insulated cable system was at a cost of \$880,000; and the Skin Effect Tracing System was at a cost of \$710,400. The Tyco recommendation was for the stainless steel heat tracing system to be chosen based on the environment it was to be used in, in addition to the relatively good service history of the original system. However, a lower cost option provided by Tyco was chosen and Hydro installed the copper Mineral Insulated (MI) cable. This decision was based on the past service history of the copper mineral insulated cables which had provided many years of reliable service without incident before becoming problematic. In an attempt to prevent corrosion of the copper Mineral Insulated cables, this time it had the additional feature of a High Density Polyethylene (HDPE) jacket provided as well. However, the jacket of this cable later contributed to problems with the heat tracing system.