Q. **Muskrat Falls to Happy Valley Interconnection, Volume II, Tab 13, Appendix A, Eastern Labrador Transmission System – Planning Report, Section 5, Pages 7 - 19**

For Options 4 and 5, which feature 2 single circuits from Muskrat Falls to Happy Valley, is the existing 25 MW gas turbine at Happy Valley still required? Please provide an estimate of the cumulative net present value of life cycle costs for continued operation of the existing 25 MW gas turbine in service for the study period.

A. For Options 4 and 5, the existing 25 MW gas turbine at Happy Valley would not be required to meet the needs of the Happy Valley-Goose Bay system as the second transmission line would satisfy reliability concerns of the area. A detailed analysis relating to the removal of the Happy Valley Gas Turbine and the resulting impact on generating capacity and reserves within the Newfoundland and Labrador Transmission Systems was beyond the scope of the investigation. These considerations would be evaluated as part of an application for the second phase of the interconnection.

It is estimated that the cumulative net present value of the life cycle cost for continued operation of the existing 25 MW gas turbine for the study period is $21.3 million. These numbers were not included in any of the proposed options. The calculated life cycle cost value included in this response assumes continued operation to the same degree as it has been operated historically. Changes in operational use of the unit will impact this cost; however, revised operational and maintenance plans for this unit have not yet been determined.