

**Nalcor Energy Response to Grant Thornton Question 7.1****Question:**

*In reference to a presentation on June 23, 2017 ([https://muskratfalls.nalcorenergy.com/wp-content/uploads/2017/06/Muskrat-Falls-Project-Update-Presentation-June-23\\_Final.pdf](https://muskratfalls.nalcorenergy.com/wp-content/uploads/2017/06/Muskrat-Falls-Project-Update-Presentation-June-23_Final.pdf)), it notes on slide 14 that annual O&M costs were adjusted from \$34 million to \$109 million to be consistent with the industry standard of \$100 million. Based on this, please confirm that O&M costs were understated in the CPW analysis at the time of Sanctioning and if so, what was the cause of the understatement. In addition, please provide the approximate impact on the CPW analysis (i.e. if O&M was adjusted to industry standard at that time).*

**Response:**

The O&M cost estimates at Sanction were based on the information available and the operating philosophy for the LCP assets established at that time. The O&M cost forecast in the June 2017 update increased from previous forecasts as a result of a reassessment of the basis of estimate, taking into consideration (i) current industry benchmarks relating to O&M costs as a percent of installed asset base and HVdc staffing models, (ii) the decision in 2016 by Nalcor to create a functionally-separate Power Supply organization to manage non-regulated electricity assets independently of regulated Hydro assets, (iii) an evolution to an operating philosophy for the LCP assets to support a high degree of reliability and availability to island customers, given these assets will be the single largest source of capacity and energy to the island, and (iv) the knowledge obtained regarding the O&M requirements of the assets installed. Subsequent to the June 2017 update, as the establishment of the Power Supply operations organization has evolved, Nalcor has further refined the O&M cost estimate for the 2018-2021 period. The current comparable estimate to the \$100 million base O&M cost estimate for the first full year of operation, per slide 14 of the above noted presentation, is approximately \$76 million. The estimate for environmental monitoring has remained consistent with the June 2017 estimate of \$9 million.

**Date Prepared:** June 5, 2018