

Summary of EY Interim Report

March 2016

Objective of Review



- Government announced the engagement of EY in December 2015 to independently:
 - Assess the reasonableness of the Muskrat Falls Project's cost and schedule forecast; and
 - Identify opportunities to address any material/critical risks
- Final report was anticipated in March 2016
- Interim Report to be issued week of March 14th
 - Nalcor currently completing a Quantitative Risk Assessment that will adjust **Project Cost and Schedule**
 - Will not be completed to facilitate final report by EY as originally scheduled

Newfoundland Labrador

Review Basis

Cost and Schedule basis for review:

Total forecast cost, including contingency	\$7.653 billion
Ready for sustainable power transfer from Labrador to Newfoundland	November 2017
First Power from Muskrat Falls (Note 1)	December 2017

Note 1 - EY acknowledged that at the time of the September 2015 Forecast, Nalcor communicated that First Power was not achievable by this date and was under review

Key Findings



- September 2015 Forecast is not reasonable
 - Contract for civil construction on the Generating Facility is significantly behind schedule in the Powerhouse and Intake areas.
 - Direct and indirect consequences of this delay are expected to have material impacts on cost and schedule that are not reflected in the September 2015 Forecast.
 - Current contingency level representing 4.7% of the cost to complete, or 2.3% of total cost, is low for the current stage of completion of the Project. Significant amount of physical construction work remaining, followed by commissioning and integration – exposed to a wide range of execution risks.
 - Risk of multiple-month delay to completion of the HVdc transmission line contract as a result of a number of delivery challenges that have been experienced; risks associated with remaining scope where full mitigation may not be possible.
 - Risks defined by Nalcor as strategic and outside of the controllable scope of the Project team are not allowed for in the financial forecast.

Key Findings (con't)



- Potential cost and schedule impacts of all individual risks are recorded in the Project's risk register but are not systemically reflected in the overall reported forecasts for cost and schedule.
- Some anticipated material cost variances have only been reflected in the forecast cost when they are contractually committed.
- Nalcor has identified and documented contract risks above; however, potential impacts of these risks on cost and schedule are not adequately reflected in the September 2015 Forecast
 - Nalcor currently undertaking risk assessment to evaluate impacts of all Project risks, including those above



Key Findings (con't)



- Observed that governance and reporting arrangements to date have not been effective in giving stakeholder confidence on forecast Project cost and schedule.
 - Need to strengthen Project governance and reporting to provide more effective oversight and constructive challenge to Project performance and execution, key decisions and forecasting.

Recommendations



- Project should revise its planning and forecasting processes to explicitly include the regular reporting of a fully risk-adjusted final forecast of cost and schedule.
- Project contingency should make appropriate allowances for all risks, including strategic, at a confidence level reflecting stakeholders' required cost certainty (recommend P80 confidence level).
- Sufficiency of Project contingency should be reviewed quarterly to assess whether it appropriately covers all risks, taking account of the effectiveness of mitigation plans and the likelihood of risks crystallizing.
- There should be separation of the Project contingency into an amount to be managed by the Project team and an amount to be managed at a higher level of governance.

Recommendations (con't)



- Project governance and independent oversight should be reevaluated by Government and strengthened at the Project, Nalcor Board and Government levels.
- Project reporting should be enhanced to support senior management focus on key risks and issues, to communicate more clearly how key risks are reflected in the forecast and to enable more effective Government oversight.



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Deputy Clerk File XX2016-

A Presentation respecting Summary of EY Interim Report was received by the Clerk of the Executive Council. Approval was given to release the EY Interim Report.

Clerk of the Executive Council