Briefing Note Confidential & Commercially Sensitive

Title: Implications of Cancelling or Significantly Delaying the Muskrat Falls Project

lssue

What are the implications for the Government of Newfoundland & Labrador ("Government") making a decision to cancel or significantly delay all or a component of the Muskrat Falls Project (the "Project"), and providing the associated direction to Nalcor Energy?

Summary Conclusion and Recommendation

If the Government were to cancel or significantly delay the Project there would be substantive legal and financial implications for the Province. In addition, there would also be future negative implications on the reliability of the Province's electricity system during any delay period.

As a result, it is recommended that Government continue to support and facilitate the timely completion of the Project, including ensuring that the appropriate level of equity contributions are made.

Background and Analysis

The above noted question has been raised in the context of Newfoundland & Labrador's current challenging fiscal situation. In the fiscal update released by Government in late December 2015, annual deficits of approximately \$2 billion and annual borrowing requirements in the range of \$2 to \$4 billion have been projected over the 2016 to 2021 timeframe. In assessing whether or not the Government should cancel or delay the Project, the following factors should be considered:

1) Need for Power

- Demand for power continues to grow and is expected to exceed what the current energy assets can supply from a capacity perspective by 2018/19 absent interconnection and a new generation source being available to meet Island customer requirements.
- As has been seen over the past few winters, the aged Holyrood generating plant is experiencing operational issues and is in need of significant repairs. With the in-service of Muskrat Falls and the transmission links, this aged plant will be retired. If the Project is delayed, then continuing to rely on the Holyrood generating plant will have a significant negative impact on the reliability of the Province's electricity system.

2) Significant Financial Commitments to Date

- As at the end of 2015, over 50% of work on the Project has been completed. A total of \$4.4 billion in facilities capital and interest/financing costs has been incurred, and \$6.6 billion has been committed for construction and procurement contracts. This compares to the current facilities capital cost estimate of \$7.65 billion released in September 2015, and nearly \$9 billion when interest/financing costs are included.
- Almost all of the contracts are awarded, goods are procured and many components, such as the turbines and generators or subsea cable, are advancing through or completed manufacturing.

• Any delay or cancellation related to the Project will only add to the overall cost, including costs associated with cancellation or delay penalties for committed contracts.

3) Federal Loan Guarantee & Financing Agreements

- Nalcor, through its Project related subsidiaries, has borrowed \$5 billion under a Federal Loan Guarantee ("FLG") with the Government of Canada ("Canada") at a very favorable interest rate of approximately 3.8% over 35 years for Muskrat Falls / Labrador Transmission Assets ("MF/LTA") and 40 years for the Labrador-Island Link ("LIL"). These funds were fully secured in December 2013 and have to be repaid with interest.
- As part of the FLG, the Province executed an equity completion guarantee to provide whatever funding is required above the \$5 billion to ensure the full Project achieves in-service. If the Province decides to cancel or significantly delay all or a component of the Project, this would trigger default provisions under the FLG and financing agreements. This would include cross defaults between all Project components in the event just one component was cancelled or significantly delayed. Absent a cure for these defaults, Canada has the right to step in and take over the Project assets, as well as pursue the Province for damages resulting from these defaults. A detailed review of these implications is outlined in memos prepared by Fasken Martineau DuMoulin, Nalcor's legal counsel on the FLG and financing arrangements, found in Appendix A.
- In a situation where Canada steps in and completes the Project, customers in the Province will still have to pay for the electricity through power supply and transmission agreements with NL Hydro, and the associated dividends and Muskrat Falls export revenues will be paid to the Federal government (or to an entity it may decide to sell the assets to) instead of to the Province.
- In a situation where for some reason Canada chose not to have the events of default and its step-in rights realized, the repayment of the \$5 billion debt plus interest would still be required, incremental Project costs would still accumulate, a new source of generation would still be required, and all these costs would still be passed onto ratepayers in the Province.

4) Nalcor/Emera Agreements

- Nalcor has entered into a series of agreements with Nova Scotia's Emera Inc. ("Emera"), who is
 investing \$1.5 billion plus interest/financing costs to build the Maritime Transmission Link ("ML")
 and will receive 20% of Muskrat Falls' power over 35 years (the "NS Block"). The ML reverts back to
 Nalcor for \$1 at the end of that period.
- Nalcor will have access to about 70% of the ML's capacity at no cost and can use the link to transmit surplus power to markets outside NL. Nalcor has also negotiated additional transmission rights from Emera through Nova Scotia, New Brunswick and the US northeast so that it can access markets. The ML will also allow imports of power and facilitate increased reliability for the NL electricity grid.
- In the event the Project was cancelled or delayed, even for a short period of time, there are significant remedies to Emera if this power is not provided, including recovery of Emera's costs and related damages plus an obligation for Nalcor to deliver power or financial compensation equivalent to the NS Block.
- Emera also has an equity investment in the LIL, and in the event the Project is halted there are significant remedies available to Emera including recovery of Emera's investment in the LIL and any related damages.
- A detailed review of these implications is outlined in a memo prepared by McInnes Cooper, Nalcor's legal counsel on the Nalcor/Emera agreements and the NL domestic power supply and transmission agreements, found in Appendix B.

5) Significant Economic Value to the Province

- Approximately \$9 million is invested in the NL economy weekly as a result of the Project, and over \$1 billion has been spent with NL businesses since the start of the Project.
- At peak in 2015 over 4,500 NL residents were working on the Project, which equates to over \$1 billion in wages to NL residents. Employment is expected to be at similar levels in 2016.
- The Province's total equity investment in the Project is currently estimated at \$3.1 billion based on the \$7.65 billion facilities capital cost estimate released in September 2015. As at the end of 2015, approximately \$1.5 billion of this has been invested. The Province is currently borrowing long-term debt at approximately 3-3.5% to fund these equity commitments which will provide a guaranteed equity return of greater than 8% over a 50 year period.
- The development of the Project will result in approximately \$60 billion in benefits and cost savings to Newfoundlanders and Labradorians over 50 years.
- The Project lays the groundwork for development of other energy projects in the Province such as small hydro, wind and the much larger Gull Island hydroelectric facility.

6) Clean Energy Impact

- With the completion of the Project, Newfoundland and Labrador will have over 98% renewable electricity generation.
- Muskrat Falls essentially eliminates the Province's reliance on burning fossil fuels for electricity generation. The retirement of the Holyrood thermal generation station will result in the reduction of one million tonnes of green house gas ("GHG") emissions annually and provide long-term stability to electricity rates.
- Hydropower is a clean, renewable, and stable source of energy. Once built, a hydropower resource will last for more than 100 years.
- The benefits of clean, renewable hydropower can be seen in other jurisdictions in Canada.

Alternatives

1) Proceed with the Project (RECOMMENDED)

Advantages

- Provides a long-term, clean energy solution to meet the Province's growing power demands and provides long-term rate stability to electricity customers.
- Eliminates the need to rely on thermal generation from the Holyrood generating plant.
- Delivers significant short and long-term economic benefits to the people of the Province as outlined above.
- Fulfills the Provinces contractual commitments to Canada, Nova Scotia and Emera under the FLG, financing arrangements and Nalcor/Emera agreements to support completion of a clean energy project of significant value to both the Atlantic region and country.
- Connects the island of Newfoundland to the North American electricity grid for the first time, providing opportunities to import/export power and increased reliability to the NL electricity grid.

Disadvantages

• Based on current fiscal and economic projections by Government, it is expected that the Province's remaining \$1.6 billion equity commitment to the Project, plus any additional cost overruns, will have to be funded through borrowings in the capital markets.

2) Cancel or Significantly Delay the Project (NOT RECOMMENDED)

Advantages

• None identified

Disadvantages

- Cancellation of a significant clean energy development that is over 50% complete which will meet the Province's growing power demands, replace an aging oil burning thermal generation asset, and provide long-term rate stability and added reliability to electricity customers.
- Default under the FLG and financing arrangements would result in loss of the assets and associated long-term dividends and Muskrat Falls export revenue to Canada while still having NL ratepayers being required to pay for the cost of the Project upon completion.
- Defaults under the FLG/financing arrangements and the Nalcor/Emera agreements would result in significant reputational, legal and financial damages to the Province.
- High likelihood of downgrade by the credit rating agencies and potential that investors would be unwilling to buy future NL bond issuances due to concerns over the Province's willingness to meet its financial obligations, resulting in a fiscal situation for Newfoundland & Labrador significantly more negative than current projections.
- Reluctance by governments from other jurisdictions or privately owned corporations to partner with the Government of Newfoundland & Labrador on future energy developments within the Province.

Prepared by: Nalcor Energy Date: March 7, 2016

Pages 5 to 19 of this document have been fully redacted and replaced with this page.