

Questions and Answers

Project Costs and Expenditures (Updated August 20, 2014)

July 2014

Q1. When will Nalcor release an updated cost estimate for the Muskrat Falls project?

A1. Nalcor Energy released information on the capital cost update on June 26, 2014. The presentation and background information on the \$6.99 billion capital cost for the Muskrat Falls Project is available online at: <http://muskratfalls.nalcorenergy.com/newsroom/news-releases/>

April 2014

Q1. What is the revised capital cost estimate for completion of the project?

A1. Nalcor firmly believes that transparency, project oversight and the release of information to the public is critical and we understand people's desire to know how we're progressing on the project. It's important to find the right balance of providing the public with cost information on the project and protecting the interest of electricity customers and our shareholder by not incurring financial harm. We're still in the process of negotiating and awarding some large contracts for the project and a cost update will be provided as soon as that process concludes. By not releasing contract value and cost information, we are able to maintain our negotiating position with contractors and ensure we continue to get the best possible outcome for customers.

March 2014

Q1. In a recent interview Nalcor CEO Ed Martin spoke about the tradeoff between costs control and tight management of the project schedule. He indicated some flexibility on the schedule in order to keep costs under control. Please advise if there has been a change in the 2017 target for first power. Also, please advise if flexibility in the schedule, leading to a latter completion date, is likely to reduce rather than increase overall project costs.

A1. Target for first power remains unchanged at 2017. These are early days on the project and Nalcor continues to aggressively manage the cost and schedule profile for the project. We will make the necessary decisions at the appropriate time regarding costs vs. schedule and we cannot predict what changes may occur with any decision to alter the schedule of the project.

Q2. Nalcor's Muskrat Falls Benefit report for November states that the expenditures on Muskrat Falls for the month of November were \$88 million and cumulative expenditures to the end of November amount to \$426 million. The Auditor General reported that expenditures and commitments to November 15, 2013 amounted to \$1.8 Billion (Audit of the Financial Statements of the Province of Newfoundland and Labrador for the Year Ended March 31,

2013, page 4). Please provide total expenditures and commitments as of December 31, 2013 and projected expenditures and commitments to the end of calendar year 2014.

- A2. Nalcor's December 2013 Monthly Report states the incurred costs on the project for the month as well as the Muskrat Falls Project to date. Additionally, the report states expenditures from project sanction (January 2013). This information is provided in section 5 of the December report. This report is online at: https://muskratfalls.nalcorenergy.com/wp-content/uploads/2013/03/December-2013-Monthly-Benefits-Report_final.pdf

To-date, Nalcor has been able to receive competitive bids for the contracts, in large part, by not releasing estimates for work in advance of the bidding process and keeping the bids from contractors confidential. This process allows Nalcor to continue to get competitive bids, ensuring best value for the project and Newfoundland and Labrador ratepayers. Releasing commitment value for contracts could compromise our ability to get the best value for work on the project. This same process is followed for all major projects in our province.

Q3. Please provide budget vs actual contract variances for the period to December 31, 2013 since project sanction.

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Q4. What are Nalcor's plans to report on the construction of the Muskrat Falls project and to keep its shareholders apprised of deviations from cost estimates, particularly cost escalation beyond the values projected in the Decision Gate Three Project Budget? Also, regarding the information in the comments section by the Auditor General that "the project is expected to cost \$6.9 billion and will be financed in part by the Province through equity contributions to Nalcor Energy" this is comprised of the \$6.2B capital cost and the Government's estimate of \$700M for interest during construction (IDC).

- A4. There are many ways that Nalcor informs its stakeholders on the progress of the Muskrat Falls Project. This is done through presentations with stakeholder groups, media interviews, detailed answers to questions submitted by individuals, the project website, annual reports, Nalcor's Annual General Meeting and through many other ways that we deliver information to the public. In addition, Nalcor publishes monthly reports that report on the progress of construction activities, procurement, costs, employment, safety, environment, and other highlights activities that occurred over the prior months. All of these pieces of information are available on the Muskrat Falls Project website at: www.muskratfalls.nalcorenergy.com.

Specifically regarding cost updates for the Muskrat Falls Project, we are still in the process of negotiating and letting some large contracts for the project. We need to finalize these contracts before we can provide a complete picture on costs. We will provide an update on project costs as soon as this process is completed.

Q5. What strategies have been adopted to keep labour costs from escalating due to national and provincial megaprojects undertaken at the same time and competing for the same labour force?

A5. In 2013, Nalcor negotiated and implemented collective agreements with the Resource Development Trades Council of NL (RDTC), International Brotherhood of Electrical Workers (IBEW) and the Labourers' International Union of North America and Construction and General Labourers' Union, Rock and Tunnel Workers Local 1208. These agreements are for the Lower Churchill Hydroelectric Generation, the Lower Churchill Project Transmission Construction and the Lower Churchill Reservoir Clearing. The three collective agreements can be viewed online at www.muskratfallsjobs.com/collective-agreements/.

These collective agreements set the labour costs for the project during construction.

Q6. What measures have been taken to ensure a stable industrial relations climate for the duration of construction?

A6. In 2013, the Government of Newfoundland and Labrador issued Special Project Orders (SPOs) for the Muskrat Falls Project. A special project is an undertaking of construction work designed for the purpose of developing a natural resource or establishing a primary industry and requiring a construction period exceeding two years. An SPO sanctions the unique labour relations regime for a special project.

Labour relations stability is important to ensuring the timely and successful completion of the Muskrat Falls Project. These SPOs are the result of positive collaboration by employers and unions who successfully negotiated the collective agreements for the Muskrat Falls Project.

SPOs have proven to be successful for major construction projects in Newfoundland and Labrador as they allow for a single collective agreement to govern labour relations for all trades working on each component of the project and support labour relations stability. Three SPOs have been issued confirming distinct labour relations regimes for specific components of the Muskrat Falls Project:

1. Construction of the hydroelectric generation facility at Muskrat Falls;
2. Land clearing to support a water reservoir at Muskrat Falls; and,
3. Construction of transmission line and associated infrastructure running from Churchill Falls to Muskrat Falls in Labrador and from Muskrat Falls to Soldier's Pond on the Avalon Peninsula (includes the Labrador Transmission Assets as well as the Labrador-Island Link pending release from environmental assessment).

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The collective agreements referenced in these SPOs outline a hiring protocol that is consistent with the Lower Churchill Construction Projects Benefits Strategy and Lower Churchill Innu Impacts and Benefits Agreement. These agreements outline priority hiring for qualified Labrador Innu, qualified residents of Labrador and qualified residents of the island. In addition, the SPOs confirm commitments from the Benefits Strategy regarding development and implementation of a gender equity and diversity plan.

January 2014

Q1. What is the percentage breakdown in costs of Muskrat Fall for the dam, the power plant and the transmission line?

A1. The direct capital cost information for the Newfoundland and Labrador components of the project at Decision Gate 3 in October 2012 are:

1. The as spent capital cost of the Muskrat Falls generation plant at DG3 - \$2.9 billion and includes base cost, escalation and contingency. This value excludes interest during construction and capitalized financing costs.
2. The as spent capital cost at DG3 of the required transmission interconnection between Muskrat Falls and Churchill Falls (Labrador Transmission Assets) - \$0.7 billion, inclusive of base cost, escalation, and contingency. This value excludes interest during construction and capitalized financing costs.
3. The as spent capital cost at DG3 of the Labrador-Island transmission link - \$2.6 billion, inclusive of base cost, escalation, and contingency. This value excludes Interest during construction and capitalized financing costs.

Right now, on materials/supplies, this is generally coming in where we expected them to be. For the unit rate contracts, we are seeing some cost pressures here. Some are up and some are down at this point. This is no surprise as we are seeing pressures on capital cost being experienced throughout the province and country. On the financing side, we now have certainty here and we have saved more money than we budgeted. This savings in excess of \$1B will go directly to the electricity rate consumer.

These are early days on the project and we continue to aggressively manage the cost profile.

January 2014

Q1. What is the average cost to replace the generators at Holyrood, Hardwoods and Stephenville with new more efficient generators of equal capacity?

A1. To determine the least-cost option to meet the long-term and growing electricity needs in the province, Nalcor Energy completed a detailed cost analysis and examined a broad range of generation supply options, including natural gas, small hydro, wind power, biomass, solar, enhanced conservation efforts, continued oil-fired generation at the Holyrood plant, and other thermal-based options.

After examining all available options to determine which ones were viable, two alternatives were confirmed:

- an oil-dependent alternative with continued use of Holyrood and the addition of more thermal generation, wind power and small hydro (Isolated Island); and
- Muskrat Falls with a transmission link to the island (Interconnected Island).

Building Muskrat Falls is the lowest-cost option for meeting the province's growing electricity needs.

Remaining isolated would mean a future that is dependent on thermal generation, burning millions of barrels of oil at the aging Holyrood plant. It would also include development of a series of smaller hydro, thermal and wind generating facilities around the island. The combined cost of building and operating the Isolated Island option exceeds the cost of building and operating the Interconnected Island option by more than \$2.4 billion in 2012 (present day) dollars.

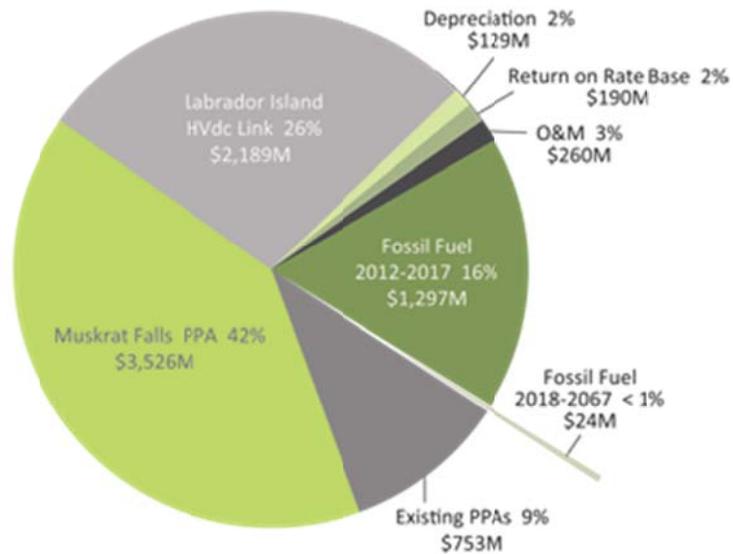
The analysis completed was a comprehensive analysis of the total cost to meet electricity demand on the island and it did not look at the replacement of individual generating assets such as only the cost to refurbish/replace the Holyrood plant.

The charts below show the cost comparison of building and operating an oil-dependent alternative with continued use of Holyrood and the addition of more thermal generation, wind power and small hydro (Isolated Island) and Muskrat Falls with a transmission link to the island (Interconnected Island).

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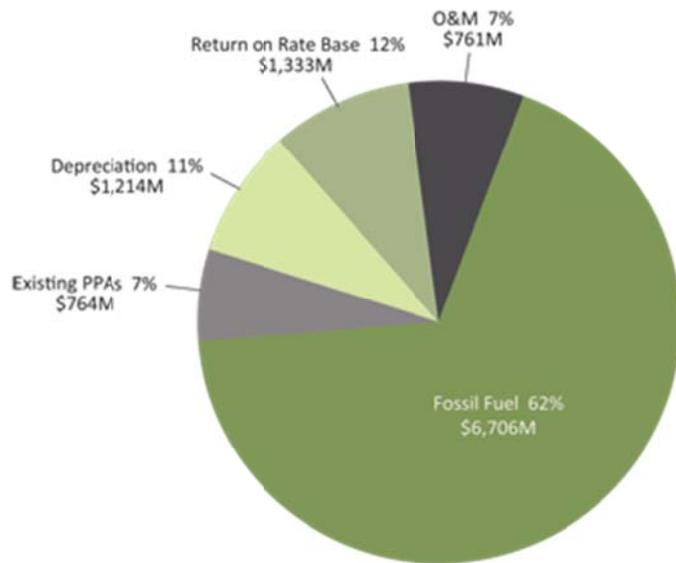
Finally, Manitoba Hydro International (MHI) completed an independent assessment of the two generation supply options, as prepared by Nalcor Energy, in preparation for Decision Gate 3, for

**Interconnected Island Cumulative Present Worth
(\$8.366 billion stated in 2012\$)**
(Alternative primarily driven by renewable energy)



the future supply of electricity to the Island of Newfoundland. *“MHI found Nalcor’s work to be skilled, well-founded, and in accordance with industry practices.”* (MHI, October 2012, page 8).

**Isolated Island Cumulative Present Worth
(\$10.778 billion stated in 2012\$)
(Alternative primarily driven by fuel)**



December 2013

Q1. What is the value of a) commitments to and b) expenditures on Muskrat Falls since project sanction?

A1. Each month, Nalcor publishes a Benefits Report which summarizes the employment and expenditure benefits generated from the Muskrat Falls Project, as well as some general project highlights. The report also summarizes employment and expenditures to date for 2013. The current Benefits Report that is published is as of September 30, 2013. Between January 2013 and September 2013, \$275,509,951 has been spent on the project. Of this, \$154,370,988 has been spent in the province - \$82.6 million in Newfoundland and \$71.8 million in Labrador. Additional information about project expenditures can be found in Section 6 of the Benefits Report at <https://muskratfalls.nalcorenergy.com/newsroom/reports/> To-date, Nalcor has been able to receive competitive bids for the contracts, in large part, by not releasing estimates for work in advance of the bidding process and keeping the bids from contractors confidential. This process allows Nalcor to continue to get competitive bids, ensuring best value for the project and Newfoundland and Labrador ratepayers. Releasing commitment value for contracts could compromise our ability to get the best value for work on the project. This same process is followed for all major projects in our province.

Q2. When will Nalcor be issuing updated cost estimates for completion of the Muskrat Falls project, reflecting cost escalation experienced to date?

- A2. Ed Martin mentioned this week during a media scrum following the province's announcement on the FLG and financing on Tuesday, that at this point we have not released a revised capital cost estimate from the DG3 number of \$6.2B for the NL component of the project. Regarding updates, Nalcor will aim for a capital cost update during the first quarter of 2014. We just finished financing and we are still letting some large contracts and we need to get a full picture before an updated capital cost estimate can be provided. This time-frame is when we anticipate having the last of the major contracts in place and that would be the right time to provide an update on the full cost picture. When we examine project costs, we look at a combination of things: capital, operating and financing. To date, some of these elements are lower than budget, some are similar, and some are higher.

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