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Sent: Tuesday, June 24, 2014 10:03 PM
To: charles bown <cbown@gov.nl.ca,>; Quinton, Diana
Cc: emartin@nalcorenergy.com; dawndalley@nalcorenergy.com; gbennett@nalcorenergy.com
Subject: Draft speaking notes and public presentation on MF value/cost
Attachments: EM Speaking Notes on MF Cost and Value_June 24_draft 2.docx; Muskrat Falls Project Value and Cost Update_Public Presentation draft (2).pptx

Charles/Diana,

Attached is the draft speaking notes and presentation that Ed would use for the public/media briefing. You'll see I added some points in the closing on rate mitigation. This can be re-worked as necessary. The plan is Ed would start the briefing off with these front speaking points, then go into the presentation on what is driving costs, then summarize and conclude with the overall rate impacts...then followed by a Q&A.

We plan to meet in the morning after the Cabinet briefing to have a final review and make any final revisions.

Your feedback on these would be great.

We will develop our news release based on these speaking notes.

Thanks

Karen



EM Speaking Notes on MF Cost and Value_June 24_draft 2.docx



Muskrat Falls Project Value and Cost Update_Public Presentation draft (2).pptx

 <p>nalcor energy LOWER CHURCHILL PROJECT</p>	<p>Karen O'Neill Senior Communications Advisor Nalcor Energy - Lower Churchill Project t. 709.737.1427 c. 709.690.2012 f. 709.737.1816 e. koneill@nalcorenergy.com w. nalcorenergy.com 1.888.576.5454</p>
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You owe it to yourself, and your family, to make it home safely every day. What have you done today so that nobody gets hurt?

DRAFT – June 24, 2014 at 10:00 pm

Ed Martin Speaking Points

Muskrat Falls Value and Cost Presentation – DATE

- Nalcor is focused on delivering the Muskrat Falls Project to Newfoundlanders and Labradorians in an economical way that derives the most value for today and for many generations to come.
- Cost management is our priority. It is why we've undertaken a significant amount of work over the last few years refining contract packages, meeting with local, national and international contractors, and pressing potential and current vendors for the best possible contract value. We do all this to proactively manage costs for our electricity consumers.
- We have a highly qualified team of Newfoundlanders and Labradorians with expertise gained from working around the world on large-scale project management and construction. And they are doing an excellent job!
- We are employing best practices in project and contract management to ensure project costs and schedule are effectively managed for the benefit of the people of the province.
- Our engineering has advanced significantly since sanction and is now more than 98% complete. Contracts have been awarded or through advanced evaluation for more than 90% of project costs.
- In addition, construction is underway at all work fronts for the project; financing is completed; labour agreements are in place; and we've received environmental release from both the federal and provincial governments. This

significant progress mitigates future construction and cost risks on all components of the project.

- We are aggressively managing project costs and we have minimized cost changes to the project since sanction.
- We are making smart decisions that will pay off down the road.
- I mentioned a few months back that we were experiencing cost pressures that would result in increases to the capital costs over when the project was sanctioned more than in late 2012.
- However, we are within the reasonable range on costs and expenditures of where we expected to be at this time.
- Through our focus on cost management, we've been able to minimize external and unplanned cost increases from market conditions that are outside our control to about a 4% cost change since sanction.
- Similar to other construction projects in Newfoundland and Labrador, nationally and globally, we are experiencing changing market conditions in the extremely active construction industry and this is driving up capital costs.
- We've also made additional prudent and strategic investments in the project to enhance system reliability and increase project productivity. Our investments that will help ensure worker safety and enhanced project reliability and productivity, account for about a 9% cost change since sanction.
- We've made conscious decisions and investments that are in the best interest of the project and will ensure long-term value to Newfoundlanders and Labradorians from this 100+ year asset. Nalcor will continue to look for such

opportunities that enhance project productivity and reliability to increase long-term value to the project while benefiting the people of our province.

- The cost changes in capital costs are offset by savings we've negotiated in our financing costs, as well as an increase in revenue from our market agreements from the sale of our export energy. Both of these are having positive impacts on project costs.
- Over the life of the Muskrat Falls Project, significant value and cash flows will be generated by project and this will provide a substantial benefit for all Newfoundlanders and Labradorians. It will also give the Government considerable flexibility in making energy policy decisions.
- I'd like now to take you through some of the details that I just discussed.

Go through Presentation slides:

Closing

- The Muskrat Fall Project is a clear reminder of the crucial role natural resource development plays in creating jobs, growth and prosperity in our province.
- Over the life of the Muskrat Falls Project, more than \$30 billion in nominal value will be returned to the province. That number grows to almost \$35 billion when we factor in business, income and employment benefits, as well as taxation revenue during the 5-6 year construction phase of the project.
- I've also mentioned other benefits that will be realized from our planned and strategic investments in the project, including ensuring the safety of workers, enhanced reliability and productivity which will reduce costs over the project construction and operations phases.

- The development of Muskrat Falls is the best option to meet the growing energy demands of Newfoundlanders and Labradorians. Muskrat Falls is bringing immediate economic and employment benefits to Newfoundlanders and Labradorians during construction and operation, and will mean savings for homes and businesses through stable electricity rates long into the future.
- The changes in capital costs will have an impact on electricity rate payers in our province and that impact is expected to be in the range of about 6-7% over the rate projection at project sanction.
- The Government of NL will ensure that NLers benefit from the value that this project is returning to our province. The Government will use a portion of revenue from our export sales that were not included in the project economics to offset the anticipated 6-7% rate impact to electricity consumer in NL. As a result, electricity consumers can expect to have minimal changes in their electricity rates over the **next 15 years** – the same as what was forecasted at sanctioned.
- This decision by Government will ensure electricity consumers in the province are the primary beneficiaries of the value realized from the Muskrat Falls Project.

Muskrat Falls Project Capital Cost Update

DATE 2014

Boundless Energy




Safety on the Muskrat Falls Project

Muskrat Falls Safety Performance Statistics - 2014

1.1 Million Hours Worked






Medical Aid Incidents - 1


Orientations Completed - 2,964

Step Backs Completed - 47,219


Completed Work Site Inspections - 1,529


Lost Time Incident - 2


Total Injury Frequency Rate - 0.56

Managing Project Costs



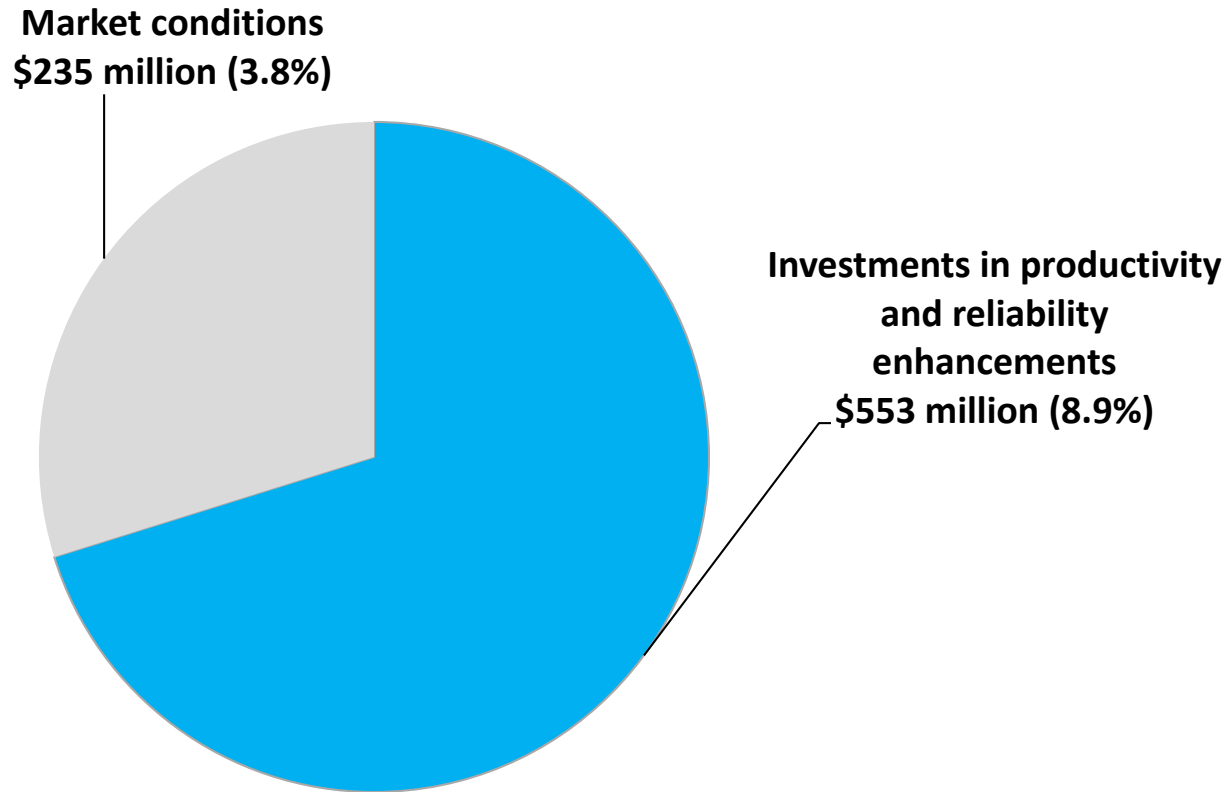
Key Changes Since Sanction (Dec'12)

- Overall project value is a function of revenue, cost, quality/reliability and schedule
- Revenue comprised of:
 - Domestic electricity sales (includes return on equity)
 - Water rentals
 - Value from excess power sales and other storage/transmission opportunities
 - Revenue from export sales has increased \$100 million from sales of surplus energy (Net Present Value)

Key Changes Since Sanction (Dec'12)

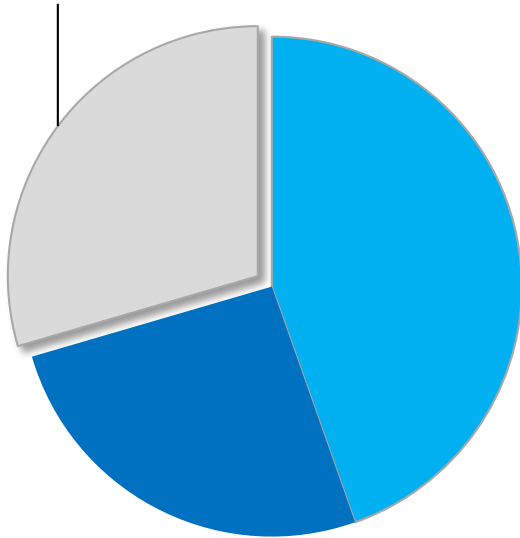
- Costs are comprised of capital (facilities), financing and operating costs:
 - Capital (facilities) costs
 - Market influences have increased costs by \$235 million (accounting for an ~4% cost change since Sanction)
 - Planned investments in project enhancements have increased costs by \$553 million (accounting for an ~9% cost change since Sanction)
 - Financing costs
 - Saved ~\$300 million more than expected on NPV basis
 - Operating costs
 - No change

Factors Influencing Capital Costs



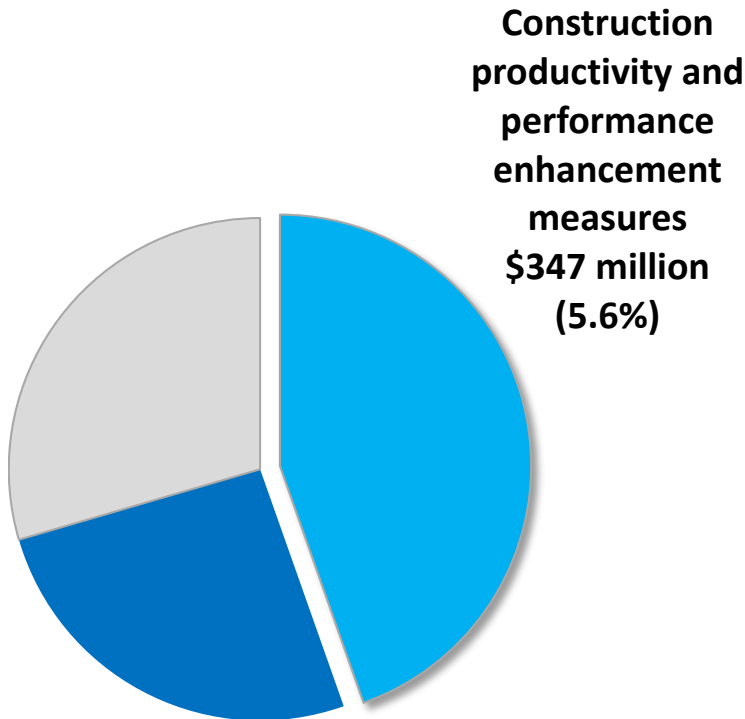
Market Conditions

Market conditions
\$235 million (3.8%)



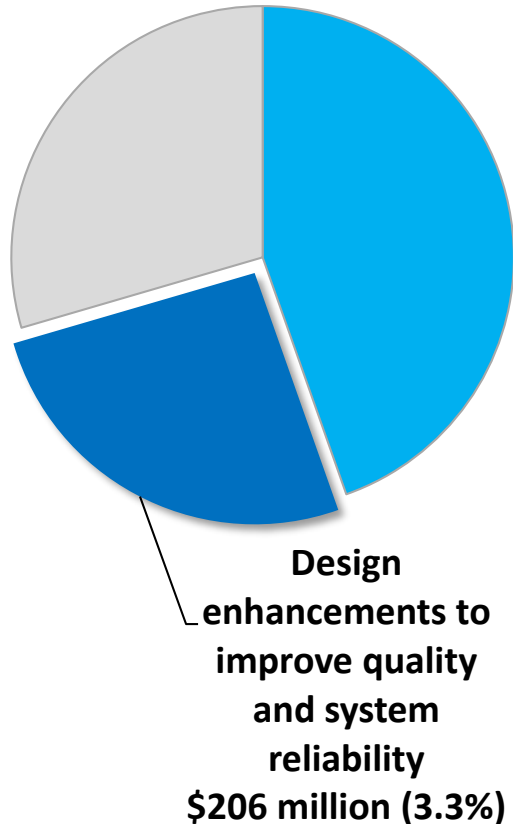
- Market condition drivers:
 - Highly competitive labour market with significant construction activity ongoing in NL, North America and globally
 - Perception of low labour productivity in NL by contractors is resulting in risk premiums which are driving up bids

Productivity and Performance Enhancements



- Strategic investments include:
 - Enclosure of powerhouse to provide safer working conditions, increased productivity, year-round employment opportunities for workforce
 - Enhanced accommodation complex and catering to increase worker attraction and retention
 - Significant site infrastructure upgrades to promote work face efficiencies – e.g., laydown area expansion
 - Change in river diversion window from 2015 to 2016 to reduce weather window risk on spillway construction

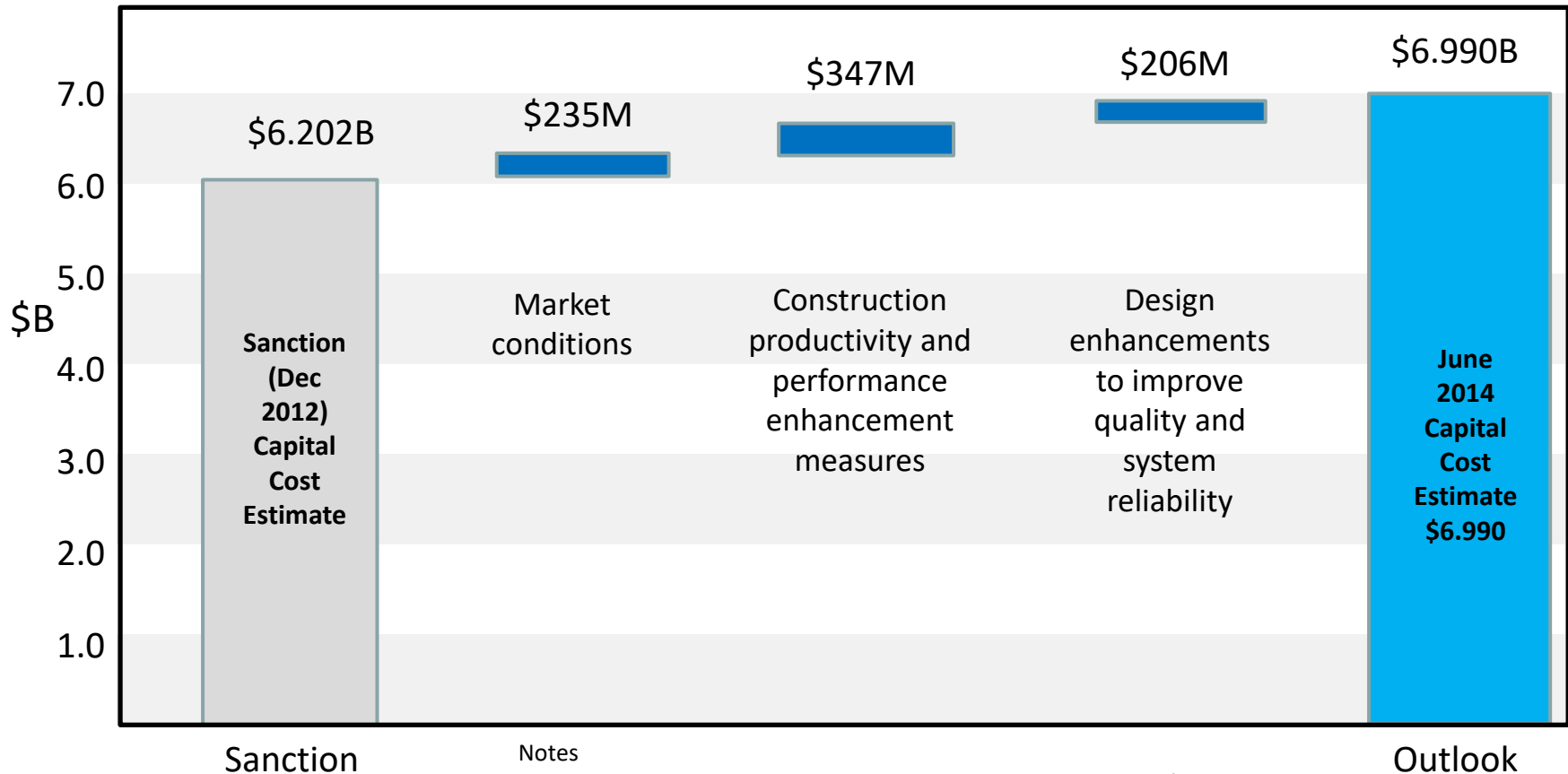
Quality & System Reliability Improvements



- Substantive design enhancements:
 - Spillway discharge channel concrete liner to remove risk of potential erosion
 - Use of 5 low-level vertical gates in spillway to improve winter operation reliability
 - Increase reliability in transmission lines beyond initial design return period expectations:
 - Lower utilization factor for AC towers
 - Use of low temperature steel for HVdc line
 - Additional foundation corrosion protection
 - Increased number of accesses providing flexibility for long-term operations
 - Increased hardware quantities and tower weight, etc.) for HVdc line

Capital Cost Outlook (Sanction to June'14)

Cost growth contributors since Sanction



Notes

1. Value excludes interest during construction and capitalized financing costs
2. June 2014 cost outlook includes contingency of \$224 million
3. Additions may vary due to rounding

Project Oversight

Project Oversight

- GNL, on behalf of the people of the province, holds Nalcor accountable for project management and establishing oversight practices and procedures
- Government of NL (GNL) - Muskrat Falls Oversight Committee established
- Independent Engineer's oversight is part of GNL Oversight

Our Project, Our Benefits



Realizing Benefits Today

- Employment Benefits (as of April 2014)
 - Total project workforce is 1,785
 - 1,527 of project workforce are NL residents
 - 321 females working on the project (91% are NLers)
 - 164 Innu working on site
 - 52% of Labrador workforce are Aboriginal workers
- Employment expected to reach 2,500 by end of 2014

WOMEN ARE PART OF SOMETHING **BIG**

AT MUSKRAT FALLS



Learn more about employment opportunities with the Muskrat Falls Project at muskratfallsjobs.com



Realizing Benefits Today

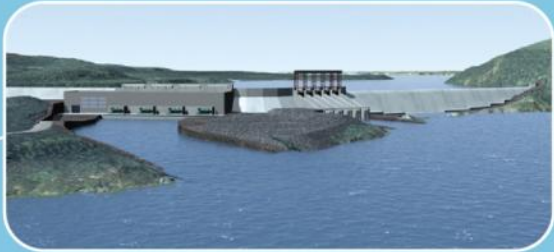
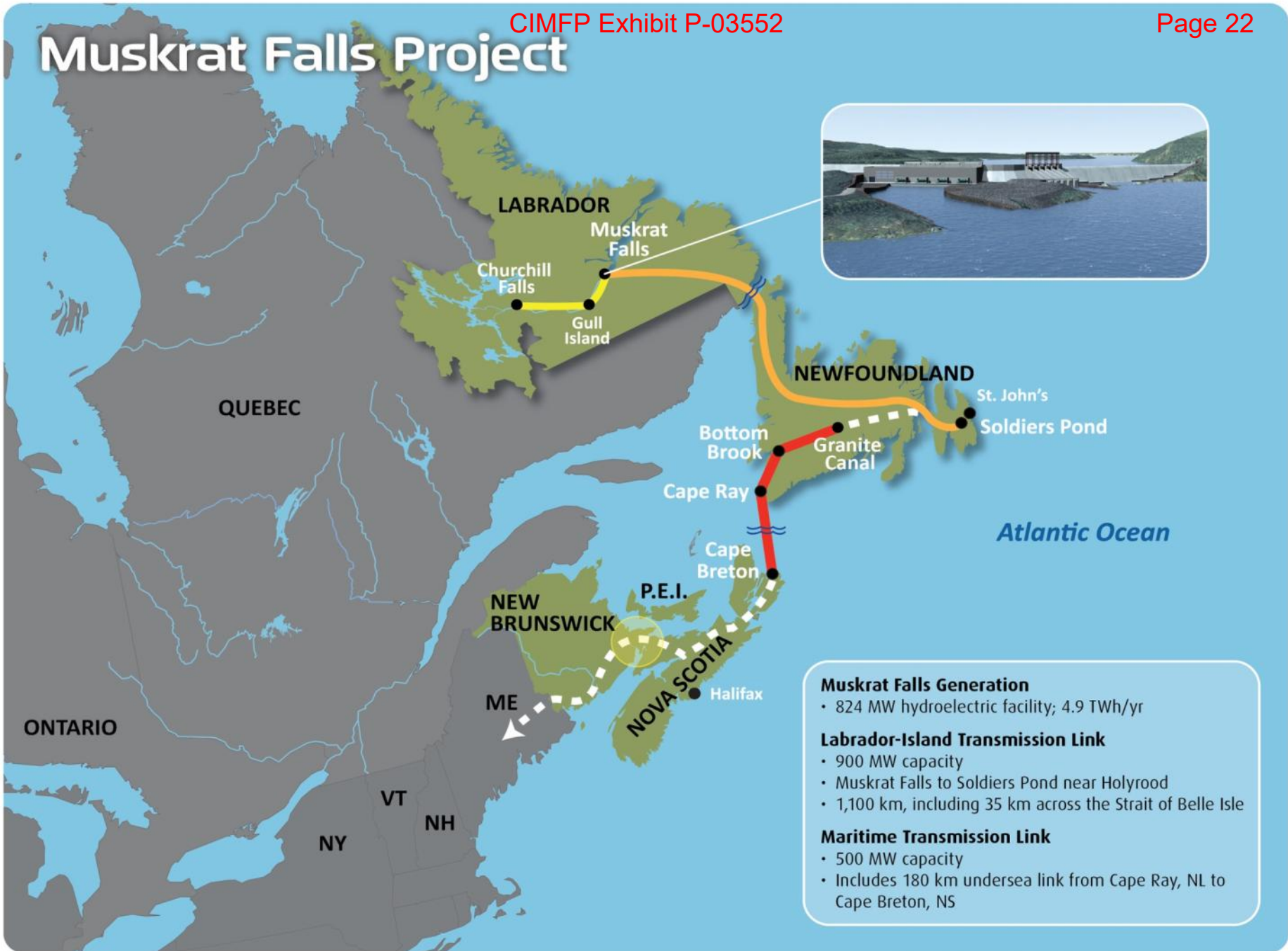
- Economic & Income Benefits (Jan'13 to April'14):
 - >\$457 million invested in NL businesses
 - >\$105 million in salaries paid to NL residents
 - Total direct benefits to NLers and NL-based businesses >\$562 million
 - IBA procurement commitments exceeded - ~\$450 million in contracts awarded to Innu businesses
- Total incurred costs to April'14 - >\$1.2 billion



Summary

- The Muskrat Falls Project will return significant value and revenue to the Province of Newfoundland and Labrador
- Muskrat Falls is the best option to meet growing electricity needs
- Nalcor is aggressively managing project costs
- Market conditions outside our control have increased some project costs
- The majority of cost changes on the project are a result of additional, strategic and prudent investments made to enhance and increase project productivity and reliability
- Total value of project provides opportunity for GNL to offset net cost increases to electricity consumers
- Our focus is on providing the greatest benefits to the province
- People of our province will be the owners of a valuable, long-term power-producing asset that they can take pride in

Muskrat Falls Project



Muskrat Falls Generation

- 824 MW hydroelectric facility; 4.9 TWh/yr

Labrador-Island Transmission Link

- 900 MW capacity
- Muskrat Falls to Soldiers Pond near Holyrood
- 1,100 km, including 35 km across the Strait of Belle Isle

Maritime Transmission Link

- 500 MW capacity
- Includes 180 km undersea link from Cape Ray, NL to Cape Breton, NS