

From: [Michael Kennedy](#)
To: [Neal Argent](#); [Malcolm Bairstow](#); [Chris Matthews](#); [Claus Jensen](#)
Cc: [Damian Joy](#)
Subject: Muskrat Falls
Date: Wednesday, April 5, 2017 12:13:35 AM
Attachments: [EY Independent Assurance - 24Mar17.pptx](#)
[EY Independent Assurance - 4April17.pptx](#)
[image001.gif](#)

Good evening folks.

Update from this morning, Muskrat Falls is looking like a go ahead for the next stage. We have a million bucks to take us through the next 12 months in an independent assurance role. Attached file provides some background and also attached is a draft commercial proposal which David and Paul will socialise with the client tomorrow Weds in St Johns.

Neal and I have been talking through freeing up Sam Wolyniec for the initial mobilisation stage – we really hope this can come to pass as we need continuity from last year, as Tim Calver short term is not available. Thinking beyond this start up, I wanted to get some ideas urgently around other resources we may have available with a P&U / heavy civils / major commercial claims background from the global team. As I said in a note last week, we are really not sure what we are going to find when we get back there in there, so wanted to get your thoughts and input, with some out of the box thinking

I also wanted to introduce Damian Joy, who joined us last year as an infrastructure partner in Toronto. Oodles of experience in heavy civils, P3's etc. Damian will be helping me with this, but he will be busy on very significant mandates in Toronto really quickly. I have also been in touch with Mott MacDonald, re securing if needed some technical review expertise in power etc.

Appreciate any thoughts, we have been trying to get a call to discuss but schedules have defeated us so far.



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Muskrat Falls Project Independent Assurance

High-level scope and work plan

24 March 2017

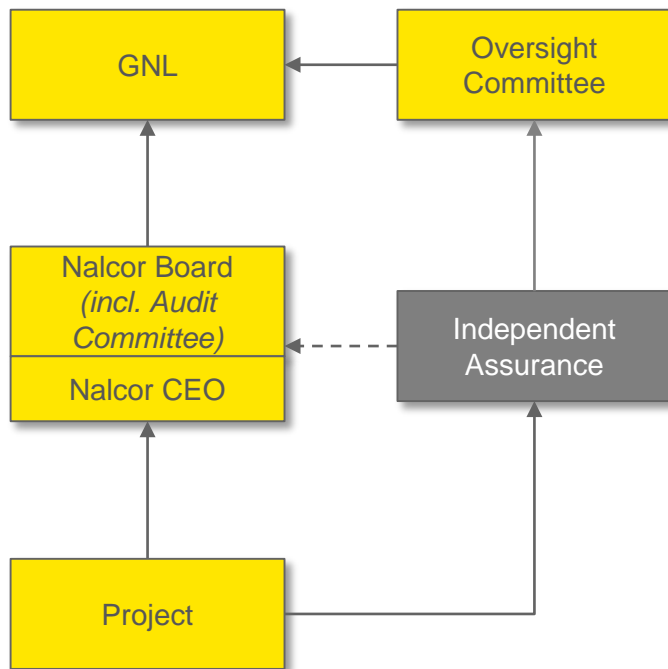
Independent Assurance for Muskrat Falls

Context

CIMFP Exhibit P-03431

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Independent Assurance is a forward looking collaboration between all key stakeholders.



Independent Assurance is generally part of a “3 lines of defence” assurance model, in which:

▶ Line 1 – Management

- ▶ Responsible for delivery to scope, budget and schedule
- ▶ Assurance provided through self-managed quality control and advice from 3rd party specialists procured to manage risk through the project’s lifecycle

▶ Line 2 – Project Assurance (internal)

- ▶ Supporting and reporting to management
- ▶ Flexible resource to provide assurance that key risk areas are being effectively managed – can include qualitative technical reviews of project information, processes, governance, resources and systems
- ▶ Provide objective interventional advice, challenge and oversight to the efficiency and effectiveness of the program
- ▶ Reporting link to the 3rd line of defence to maintain integrity

▶ Line 3 – Independent Assurance

- ▶ Provides an independent and systematic evaluation of the project’s risk management framework including governance, processes and controls
- ▶ Independent assessment of the project’s reported cost and schedule forecast and related risks
- ▶ Audits the compliance of Lines 1 and 2 to the risk framework
- ▶ Generally a predetermined cycle of periodic reviews

Independent Assurance

EY scope of work

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This scope of work for EY is designed to assist the GNL's Oversight Committee (OC) and Nalcor achieve appropriate independent assurance over the Muskrat Falls Project. It is comprised of two phases:

- ▶ Independent Assurance mobilization (4 weeks):
 - ▶ A review of the status of implementation by Nalcor and GNL of the recommendations from EY's interim report of April 2016 (the "Interim Report").
 - ▶ Obtain preliminary update from GNL / Nalcor on project status and key issues.
 - ▶ Advise OC and Cabinet on current status, including issues and risks.
 - ▶ Co-development of "Ongoing Independent Assurance" protocols, scope and schedule with OC and Nalcor.
- ▶ Ongoing Independent Assurance activities:
 - ▶ **Monthly assistance to OC** – collection and review of detailed project reports and status, contract reviews, project re-forecasts etc.
 - ▶ **Quarterly reporting to OC** - deliver independent assurance with respect to project processes, forecasts, risk management and governance.
 - ▶ **Targeted support to OC** – to provide targeted support on any critical emergent issues that might arise.
 - ▶ **Nalcor's reforecast cost and schedule** - this reforecast is anticipated to be completed in June 2017. Additional effort will be required to assess the reasonableness of this reforecast as contemplated in the Interim Report. EY will review any reforecasts or significant updates to project's cost and schedule as they occur.

Independent Assurance

High-level activities and illustrative timeline

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- ▶ The timing of Independent Assurance activities is illustrative. Activities should synchronise with Nalcor / GNL reporting processes.
- ▶ Monthly reviews would not be required when quarterly reviews are being conducted.

Phase/Activity	Q1												Q2											
	April					May				June			July					August				S		
	W1	W2	W3	W4	W5	W1	W2	W3	W4	W1	W2	W3	W4	W1	W2	W3	W4	W5	W1	W2	W3	W4	W5	
Independent Assurance - Mobilization																								
Kick off with OC and Nalcor, establish protocols	█																							
Documentation review (offsite)		█																						
In-person meetings			█																					
Working sessions and review of key areas			█																					
Obtain status of management response to EY Report 1			█																					
Communicate to Oversight Committee/ Cabinet / Nalcor					▲																			
Independent Assurance - Monthly Assistance																								
Collection of data/reports for past month						█					█										█			█
Conduct Review (remote and onsite as required)						█					█										█			█
Discussions with Nalcor as required							█					█										█		
Communicate to Oversight Committee/ Cabinet							▲				▲										▲			
Independent Assurance - Quarterly Reporting																								
Collection of data/reports for past quarter														█										
Conduct Onsite Review															█									
Discussions with Nalcor as required																		█						
Quarterly report to Oversight Committee																		▲						

Appendix A – Recommendations from Interim Report

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Recommendations from April 2016 report

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Recommendations:

- ▶ Section 1.6 of EY Interim Report
 - ▶ the 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
 - ▶ the Project contingency should make appropriate allowances for all risks, including strategic, at a confidence level reflecting stakeholders' required cost certainty. EY recommends that consideration be given to the use of a more conservative confidence level for setting Project contingency, based on a thorough risk assessment
 - ▶ the sufficiency of the 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
- ▶ Section 1.8 of EY Interim Report
 - ▶ Project governance and independent oversight should be re-evaluated by the Provincial Government and strengthened at the Project, Nalcor Board and Provincial 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 Provincial Government oversight

Appendix B – Interview and Document list

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Interview list and initial documents required for mobilization

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Interview List

- ▶ Orientation discussions with Minister for Energy and Natural Resources, Head of Oversight Committee and Nalcor CEO and Chair of Audit Committee
- ▶ Project Director for Muskrat Falls and Transmission Lines projects
- ▶ Project Component Managers
- ▶ Project Controls Lead
- ▶ Project Finance Lead
- ▶ Other Project team members with significant involvement in the planning, forecasting, risk management & reporting processes

Documentation required for the start of the review:

- ▶ Documented response to recommendations from Nalcor
- ▶ Any relevant updated project process documents (e.g. risk, forecasting, contingency management etc.)
- ▶ Recent reports evidencing risk adjusted final forecast reporting
- ▶ Documents detailing current cost and schedule forecast
- ▶ Documentation of most recent QRA processes
- ▶ Quantitative report on contingency calculation and management
- ▶ Documented response to recommendations from GNL
- ▶ Any documents relating to updated governance processes

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Muskrat Falls Project Independent Assurance

Work phases and fee estimate for F2018

4 April 2017

Independent Assurance

Fiscal 2018

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This Phases described below are designed to assist the GNL's Oversight Committee (OC) and Nalcor achieve appropriate independent assurance over the Muskrat Falls Project.

Phase	Timing	Outcomes	Cost
I. Independent Assurance Mobilization	April – May 2017 (5 weeks)	<ul style="list-style-type: none"> • A review of the status of implementation by Nalcor and GNL of the recommendations from EY's interim report of April 2016 (the "Interim Report"). • Obtain preliminary update from GNL / Nalcor on project status and key issues. • Advise OC and Cabinet on current status, including issues and risks. • Co-development of "Ongoing Independent Assurance" protocols, scope and schedule with OC and Nalcor. 	\$200K
II. Report on Nalcor's reforecast cost and schedule	May – July 2017 (10 weeks)	<ul style="list-style-type: none"> • EY will perform its review and issue a report on the reasonableness of Nalcor's reforecast cost and schedule. • The fieldwork will be performed concurrent to Nalcor's reforecast activities and EY will provide GNL with it's report prior to the release of the reforecast by Nalcor. 	\$450K
III. Quarterly report (Qtr. ended 30 Sept 17)	October 2017 (4 weeks)	<ul style="list-style-type: none"> • Delivery of ongoing independent assurance with respect to project processes, forecasts, risk management and governance. 	\$175K
IV. Quarterly report (Qtr. ended 31 Dec 17)	January 2018 (4 weeks)	<ul style="list-style-type: none"> • Delivery of ongoing independent assurance with respect to project processes, forecasts, risk management and governance. 	\$175K

The above fee estimates are for professional services. Out of pocket expenses will be charged to GNL at cost incurred.

Appendix A – Overview of Independent Assurance for Muskrat Falls

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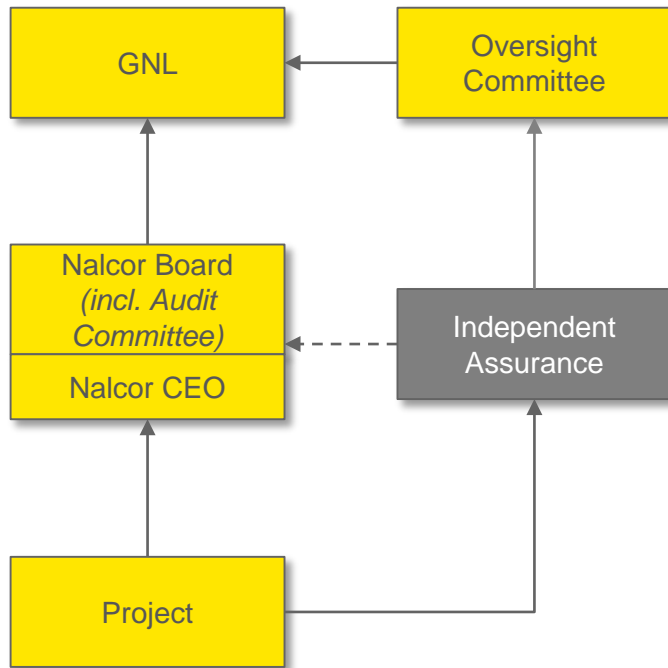
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Recommendations from April 2016 report

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