

From: [David Steele](#)
To: [Morris, Paul J.](#)
Subject: EY Draft Report
Date: Friday, March 21, 2014 6:44:00 PM
Attachments: [EY Report - Gov NL LCP Oversight Protocol - DRAFT - 21 March 2014.pdf](#)

Hello Paul,

Attached is the draft report as promised. We look forward to receiving feedback. We will remain flexible and work with you to bring it to a final report. Thank you and have a great weekend.

Kind regards,
Dave

Government of Newfoundland and Labrador

Review of Government protocols to oversee the
Lower Churchill Project

Draft Report

21 March 2014



**Confidential - Draft for Discussion with Government
of Newfoundland and Labrador Officials Only**



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Charles Bown
Deputy Minister, Department of Natural Resources
50 Elizabeth Avenue
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21 March 2014

Dear Mr. Bown,

Please find enclosed our Draft report regarding a proposed oversight protocol related to the Lower Churchill Project ("LCP").

The work was conducted in accordance with our Agreement dated 6 March 2014. Our scope and procedures were limited to those described in that Agreement. The work was conducted during the period 11 March 2014 and 19 March 2014.

Our Draft report is intended solely for the use of the Government of Newfoundland and Labrador. It is not intended to be used and should not be used by any other party.

We greatly appreciated the opportunity to be of service to you and the Government of Newfoundland and Labrador. We look forward to next steps to finalize this report and to continue working with you in the future.

Sincerely,

Ernst & Young LLP

David Steele
NL Advisory Lead

Mike Haycox
Associate Partner

Richard Noble
Associate Partner

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1.0 Executive Summary

1.1 Background

The Government of Newfoundland and Labrador (“Government”) has initiated oversight protocols for the Lower Churchill Project (“LCP”). This has included establishing an Oversight Committee and continuing efforts to define the Oversight Committee’s terms of reference and related protocols.

EY has been engaged by the Government to conduct a third party assessment of the Oversight Committee’s protocols under development. Program managers and other specialist resources from EY’s Major Capital Projects practice were engaged to bring the necessary experience to deliver on this mandate. Over the course of one week, EY reviewed the documents provided by Government, interviewed Oversight Committee members and met with Nalcor representatives to understand the project environment and governance landscape. EY provided recommendations based on our experience with other projects of comparable scale and complexity. These recommendations were presented at a meeting with the Oversight Committee on 19 March 2014.

We understand that the Government’s objective is to provide reliable and transparent oversight on the cost and schedule performance of the LCP and to establish an effective communication channel to Cabinet and the general public. We were informed that other components of effective project oversight related to health, safety and environment, quality, regulatory compliance and benefits tracking are specifically excluded from the mandate of the Oversight Committee. It is also clear that it is not the Government’s intention to play a role in the day to day management of the project.

This report summarizes the work performed and the recommendations for the Oversight Committee.

1.2 Recommendations

The key conventional measure of project success is whether it delivers on its intended objectives on-time and within budget. The project oversight and assurance functions are intended to monitor progress to achieving those success criteria and also reduce or eliminate surprises. Our recommendations are geared towards the Government's role in achieving this mandate while avoiding unnecessary duplication of effort.

The roles of different stakeholders as well as the Government's objectives have been considered to make the following key recommendations:

A. The Oversight Committee should review cost and schedule performance, forecasts and risk management in addition to the validity of costs incurred

In order to assess progress towards achieving the cost and schedule objectives, the Oversight Committee will need to be confident that the project is performing to the baseline plans and estimates, that it is being well managed with appropriate processes and controls and also that risks are being identified and proactively managed. These forward-looking assessment areas along with historical cost information will provide the Government with a full picture to perform its oversight mandate.

B. The Oversight Committee should be supported with specialized skills

The Oversight Committee brings seasoned public sector executives with a clear understanding of the Government's needs and protocols. However, LCP is particularly large and complex project with significant specialized areas. Analysis performed by an efficient working group comprised of resources experienced in major capital projects, would provide the Oversight Committee members with the insight necessary to robustly execute on their mandate.

C. Oversight Committee should align its information request with conventional project controls and assurance practices and the reporting rhythm of Nalcor

The level of detail required by the Government and the timing of information flow should be lined up with the reporting structure and rhythm of the project. Standard industry assurance and reporting framework should provide the level of information that the Government would require for effective oversight. Deficiencies noted in the project assurance and reporting framework or information reporting to Government which limit visibility into project performance and forecasts should be addressed.

Details of these and other recommendations are included in the following sections of this report.

1.3 Next Steps

The LCP stakeholders are all at different stages of developing their oversight and assurance programs. Oversight and assurance mechanisms should be aligned to minimize unnecessary duplication of efforts and disruption to the project.

1. The Government should work collaboratively with Nalcor and the other stakeholders to finalize the information requirements, protocols and oversight arrangements.
2. The Oversight Committee terms of reference should also be finalized
3. The Government should explore opportunities to establish appropriate communication mechanisms with other relevant stakeholders, including the Independent Engineer
4. The working group should be established to support the Oversight Committee

The Government requested EY to conduct a rapid assessment of the Oversight Committee’s protocols under development to:

- a. Provide recommendations to improve the governance structure and processes of the Oversight Committee
- b. Conduct a gap assessment of the Government’s Information Request List, which is an initial list of items the Oversight Committee would periodically request from various stakeholders

Our approach included reviewing the documents related to initial thinking on the Government’s protocols and certain agreements defining the relationships between different LCP stakeholders. Additionally, we also interviewed stakeholders from the Government and Nalcor to gain further understanding of the oversight objectives as well as the current assurance mechanisms in play.

The schedule of tasks and milestones for this project are presented below:

Tasks	Wed Mar 12	Thur Mar 13	Fri Mar 14	Mon Mar 17	Tues Mar 18	Wed Mar 19	Thur Mar 20	Fri Mar 21
Data collection and scheduling interviews								
Reviewing data and conducting interviews								
Drafting of preliminary report								
Meeting with Nalcor								
Presentation of preliminary recommendation and collecting feedback								
Issue Draft report								

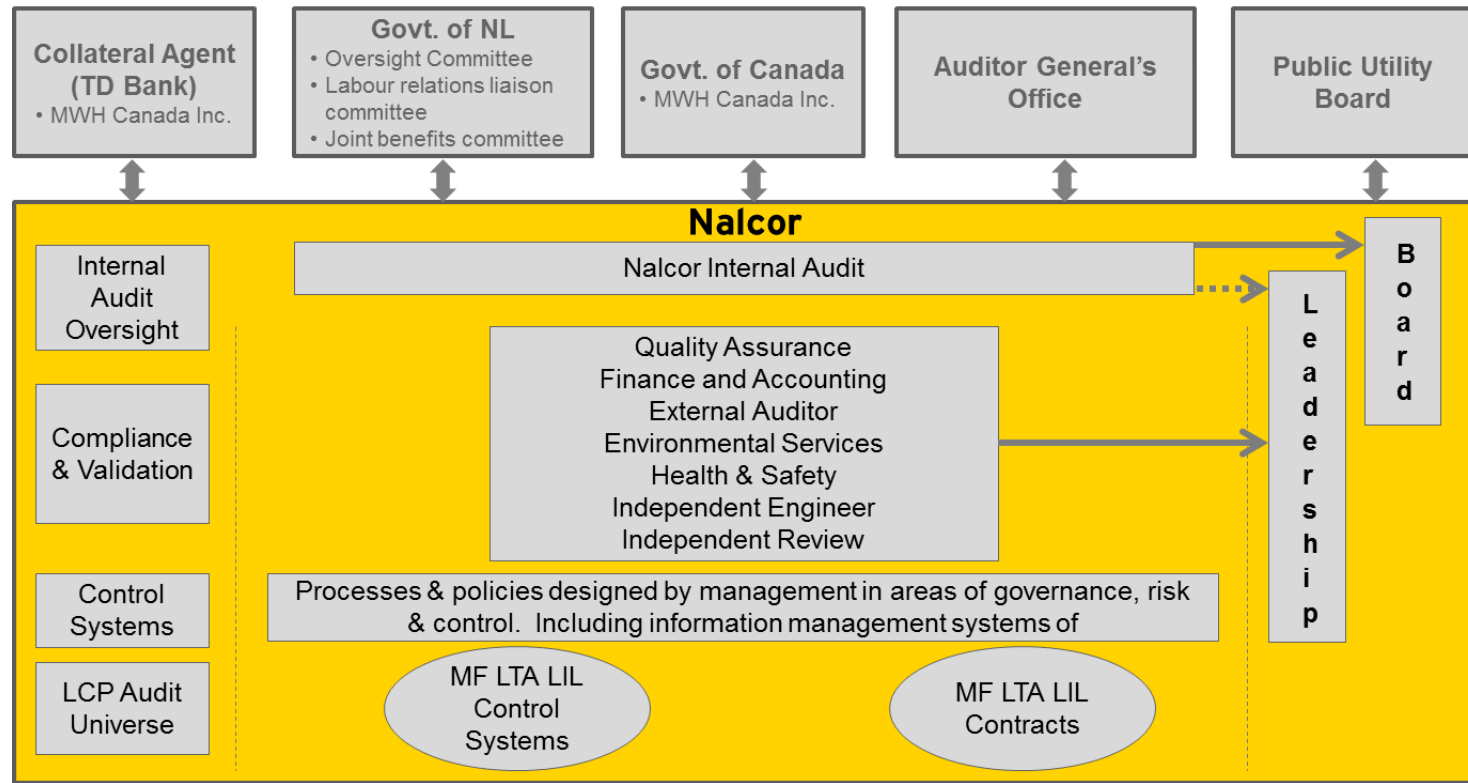
EY would like to thank the members of the Government of Newfoundland and Labrador as well as Nalcor who participated openly and collaboratively in this rapid assessment process. We have listed the individuals who were interviewed in Section 5.0 of the report.

3.0 Guidelines Used in Developing Recommendations

The complex stakeholder landscape for LCP represented in the diagram below makes it imperative to clearly define and communicate the role of each stakeholder. Key consideration for effective oversight on the project include:

- Ensuring there are neither gaps nor overlaps in the extent of oversight
- Avoiding duplication of effort while ensuring independent oversight
- Leveraging appropriate skill sets for analysis required to support effective oversight
- Streamlining information sharing and communication protocols

Our recommendations have been developed with these considerations in mind.



Representative project reporting/control framework

4.0 EY Recommendations for Improving Oversight Protocols

4.A - The Oversight Committee should review cost and schedule performance, forecasts and risk management in addition to the validity of costs incurred

Since the Oversight Committee's role is focused on the project's cost and schedule performance, we recommend that their mandate should address whether:

i. The project cost and schedule is well managed:

- Have the management process and controls been well designed?
- Is there adequate adherence to the management processes and controls?
- Are contracts being managed diligently?
- Are the financial draws complying with established processes?

ii. The project is meeting the cost and schedule objectives:

- How does schedule performance and forecast compare to the plan?
- How do cost performance and forecast compare with the baseline?
- Are the cost and schedule forecasts consistent with current performance?
- Are the cashflow forecasts adequately reflecting the project's funding requirements?

iii. The cost and schedule risks are being reasonably anticipated and managed:

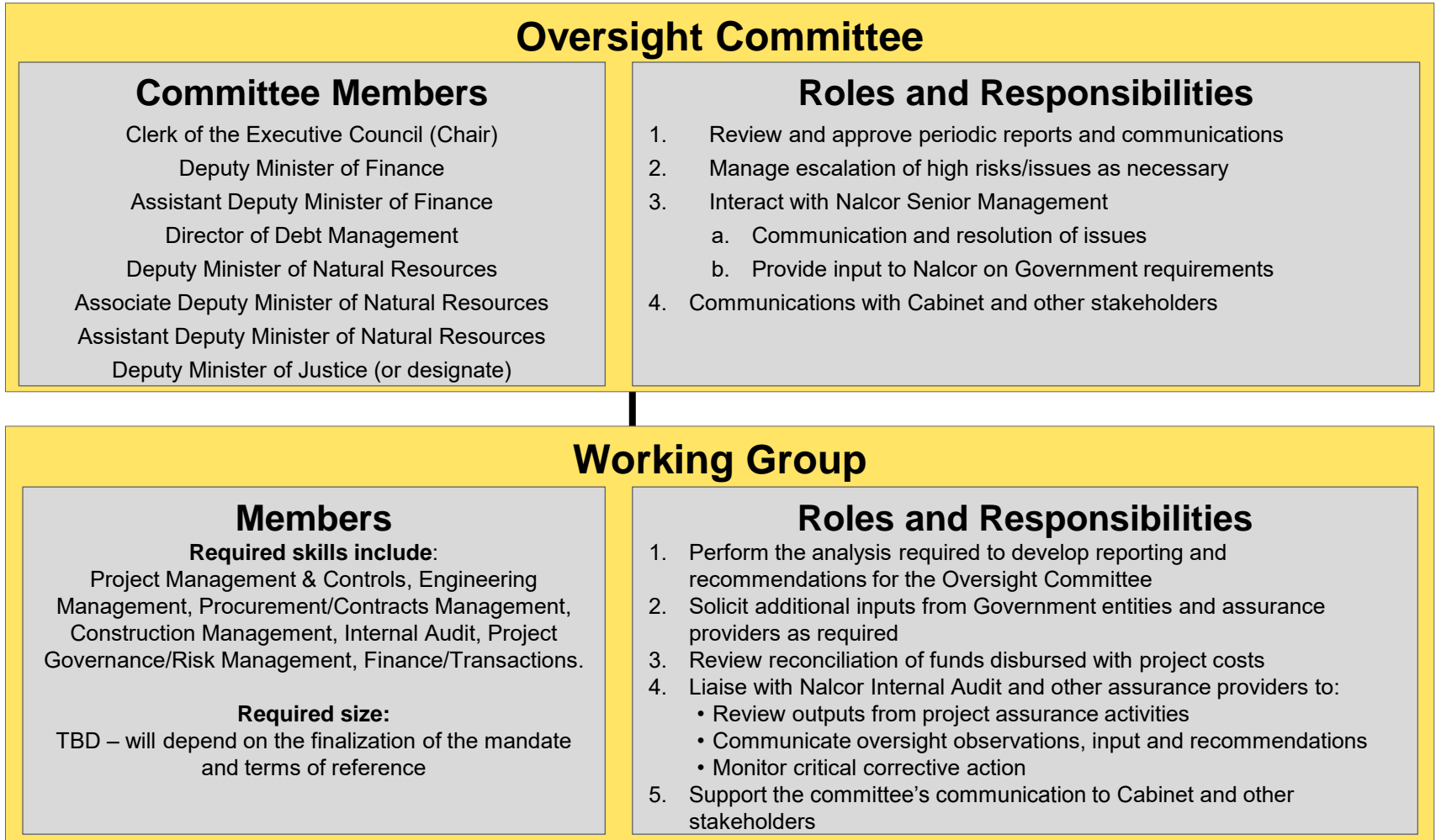
- Are risks being sufficiently identified and addressed?
- Is there adequate contingency in place to address the outstanding project risks?

Structuring the mandate to address the performance of existing controls as well as anticipation of future risks would result in more effective oversight. Such a proactive role by the Government will have a favorable impact on the overall project performance.

4.B - Oversight Committee should be supported with specialized skills

A meaningful cost and schedule oversight would require monitoring exposure across multiple indicators of project performance such as earned value, engineering and construction productivity, management of critical path, manpower histograms, forecasting techniques and risk identification, quantification and management. These indicators serve as early warning systems for identifying gaps in project performance and can be effectively used as inputs for meaningful oversight. However, specialized skills are required in different areas of engineering, construction and project management to connect the dots between different project performance indicators.

The graphic below illustrates a potential operating model, whereby the Oversight Committee is supported by a Working Group which is comprised of a team of professionals with the required skill sets for detailed analysis of project information. The level of engagement of each skill set may vary from time to time based on the subject matter at hand and the communication and reporting protocols of the Oversight Committee and other adhoc requirements.



4.C - Oversight Committee should align its information request with conventional project controls and assurance practices and the reporting rhythm of Nalcor

The current Information Request List provided to EY for review identified some of the key cost and schedule information needs. We have identified additional cost, schedule and other information requirements and metrics for Government's consideration. The data requirements listed below are typical metrics and documents which exist in contemporary mega-projects. Review and analysis of this information will further improve visibility into project performance and mechanisms that are in place to achieve successful cost and schedule outcomes.

1. Cost information

- a. Baseline Budget with Basis of Estimate
- b. Cost report showing: Cost Performance Index (CPI), Budget (Baseline, Change Approved, Change Pending, In Period), Actuals (Incurred -In Period, Cumulative), Estimate To Complete (ETC), Estimate at Complete (EAC), Variance – Period and Cumulative
- c. Contingency draw log, report of planned vs. consumed contingency
- d. Performance Graphs showing performance, trend and forecast
- e. Independent Estimate At Complete (IEAC) and To Complete CPI (TCPI)
- f. Contract level cost reporting as above but including: original commitments, approved changes, pending changes, revised commitments, invoiced to date, paid to date, percentage complete and CPI
- g. Rolling cash flow (TBD Period) – planned versus actual
- h. Log for tracking funding draws
- i. Analysis and management corrective actions for variance at the individual line item level

2. Schedule information required

- a. Schedule Specification, Basis of Schedule, Assumptions and a Predecessor/Successor report
- b. Updated Gantt Chart including with critical path, baseline, float, % complete, actual/forecast start, actual/forecast end date (full requirements in Appendices)
- c. Schedule milestone report showing Baseline Finish, Actual/Forecast Finish, Schedule Performance Index, Variance
- d. Performance Graph showing performance, trend and forecast
- e. Top 10 Critical Items and Float
- f. Analysis and management corrective action (at individual line item level)

3. Other information

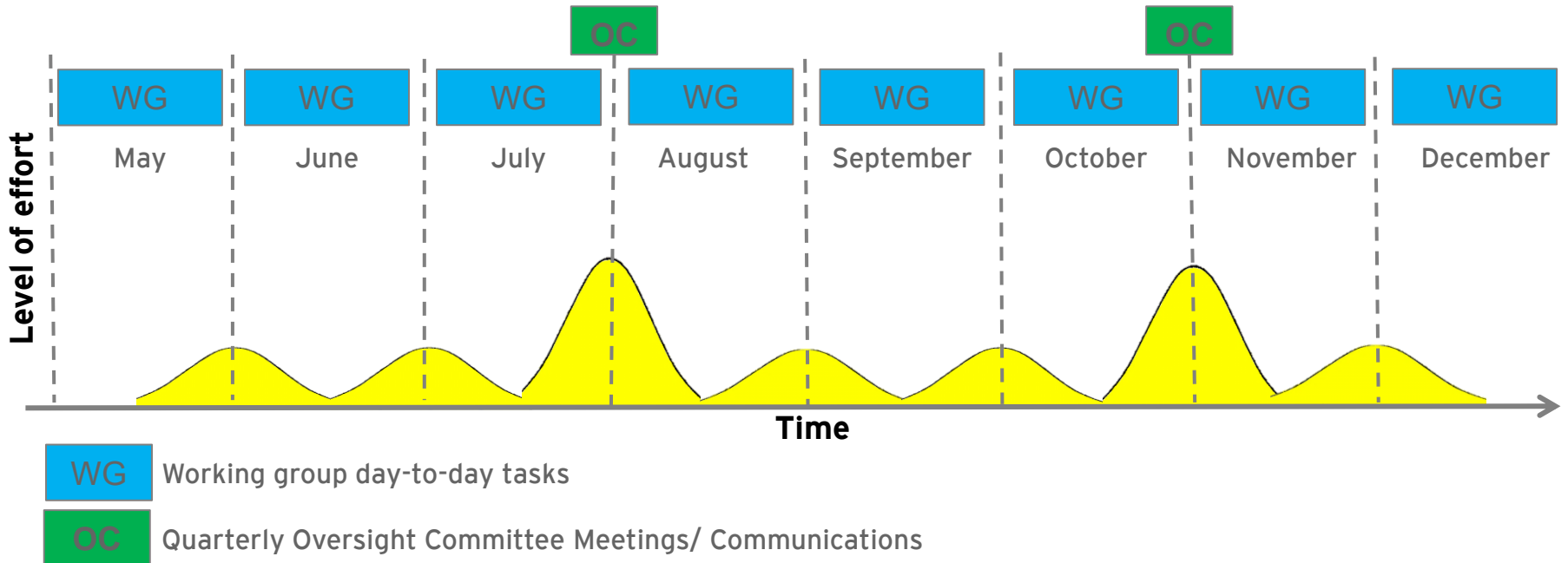
- a. Standard project monthly progress report (including Health & Safety, Environment, Community/Stakeholder, Scope & Change, Cost, Schedule, Quality, Risk and Contract reports)
- b. Resource profile and graphs/histograms (planned versus actual/forecast)
- c. Project WBS structure and dictionary
- d. Project policies and procedures (Project Management Plan, Project Execution Plan, other processes)
- e. Project execution and contracting strategy
- f. Project risk register
- g. Change order log
- h. Claims log
- i. Liens register
- j. Project assurance plan(s) – including internal audit and third party assurance

3. Other information (continued)

- k. All assurance reports
- l. Independent Engineer reports
- m. Updates on the award of major construction contracts
- n. Other sensitive issues that the committee should be aware of
- o. Nalcor financial statements

Alignment of reporting rhythm between Government and Nalcor

The Government and Nalcor should align the project related communication and information flow with the project’s standard reporting rhythm. The diagram below illustrates a potential rhythm of business between the Government’s Oversight Committee and working group and the change in effort required to support the monitoring activities.



5.0 Acknowledgements

As stated in Section 2.0, our approach included conducting structured interviews with members of the Oversight Committee. We also met with leaders from Nalcor's Finance and Internal Audit team to gain a high level understanding of their project assurance framework.

We would like to acknowledge and thank the individuals listed below for their participation in the interviews.

Name	Title	Department
Julia Mullaley	Clerk of the Executive Council & Secretary to the Cabinet	Executive Council
Tracey King	Assistant Secretary to Cabinet	Executive Council
Charles Bown	Deputy Minister	Natural Resources
Tracy English	Associate Deputy Minister	Natural Resources
Paul Morris	Assistant Deputy Minister	Natural Resources
Randy Pelletier	Solicitor	Justice
Donna Brewer	Deputy Minister	Finance
Peter Au	Assistant Deputy Minister	Finance
Paul Myrden	Director Debt Management Division	Finance
Derrick Sturge	Chief Financial Officer	Nalcor
Jim Meaney	LCP – GM Finance	Nalcor
Robb Hull	GM Finance	Nalcor
Mark Bradbury	Internal Audit	Nalcor