

From: Sam Wolyniec
To: [Mitchell Curley](#); [Michael Kennedy](#); [Damian Joy](#)
Subject: Muskrat Falls Update Presentation.pptx
Date: Wednesday, July 19, 2017 4:16:10 PM
Attachments: [Muskrat Falls Update Presentation.pptx](#)

As presented.

Review of project cost, schedule, and related risks – Final Report

Muskrat Falls - Update Briefing to GNL

19th July 2017

Muskrat Falls Review - Final Report

EY work completed to date

CIMFP Exhibit P-03401

Page 3

- ▶ **Project review sessions held covering;**
 - ▶ Generation team project update
 - ▶ Transmission team project update
 - ▶ Review of the June 2017 rebaseline
 - ▶ Review sessions of the cost and schedule forecasting processes and & key issues
- ▶ **Document reviews covering;**
 - ▶ Project performance reporting suite
 - ▶ Reporting to external oversight bodies
 - ▶ Selected review of major subcontractor progress reports
- ▶ **Site visit to Muskrat Falls**
- ▶ **Held discussions with;**
 - ▶ Nalcor CEO
 - ▶ Chair of the Oversight Committee
 - ▶ Generation EVP & Project Director
 - ▶ Transmission EVP & Project Director
 - ▶ VP Finance, Power Supply
 - ▶ Selected Nalcor Board Members (inc Audit Committee Chair)
 - ▶ Project Controls Lead
- ▶ **Requested discussions to follow**
 - ▶ Vanessa Newhook - OC independent member
 - ▶ Jason Muise – OC independent member
 - ▶ Brendan Paddick – Nalcor board chair

Muskrat Falls Review - Final Report

Changes observed since April 2016 EY Interim Report

CIMFP Exhibit P-03401

Page 4

- ▶ **Bifurcation impact**
 - ▶ Provided dedicated EVP for Transmission & Stakeholder Engagemnet
 - ▶ Doubled senior management bandwidth
 - ▶ Functional team strengthening
- ▶ **Rebaselining of cost & schedule**
 - ▶ June 2017 QRA has re-quantified the full risk universe, including strategic risks
 - ▶ Has informed a more robust risk management environment
- ▶ **Commercial settlements**
 - ▶ Reducing the risk profiles & re-aligned incentivisation
 - ▶ Some milestones to shift out with Andritz renegotiation
- ▶ **Cultural shift**
 - ▶ More open discussion of challenges
 - ▶ Willingness to share information
- ▶ **Quality of performance reporting**
 - ▶ The documented process for controls reporting has not materially changed, however the format and content of reporting has improved significantly
 - ▶ Quality of information feeding into performance reporting has significantly improved

Muskrat Falls Review - Final Report

CIMFP Exhibit P-03401

Page 5

Draft EY assessment so far

▶ **Construction progress**

- ▶ Project team has achieved desired progress since EY Interim Report

▶ **Project bifurcation**

- ▶ The bifurcation has had a material positive impact on management, but needs close day to day coordination / dialogue

▶ **Updated risk review**

- ▶ April 2017 QRA & rebaseline
- ▶ Inclusion of previously excluded risks
- ▶ Risk provisioning appears robust & well managed

▶ **Post review commercial renegotiation**

- ▶ Settled existing claims
- ▶ Shifted selected risks to key contractors

▶ **Improved control and reportings post renegotiaion**

- ▶ Improved project controls capacity & capability
- ▶ Improved performance reporting & management engagement



▶ **Improved project risk profile**

▶ **Improved cost & schedule to complete certainty**

▶ **There is still a long way to go, there is a need for a relentless focus on risk management**

Muskrat Falls Review - Final Report

CIMFP Exhibit P-03401

Page 6

Areas for further investigation

Timeline to complete

- ▶ Evaluation, impacts and mitigations of “excluded risks” and degree of explicit reporting;
 - ▶ Significant unrest
 - ▶ Significant government directives
 - ▶ Reservoir clearing
- ▶ Further review of oversight governance structure, in context of project status, regarding;
 - ▶ Roles of Nalcor board and oversight committee
 - ▶ Timing & content of reporting
 - ▶ Information & decision-making requests to the shareholder, and vice versa
- ▶ Data validation

- ▶ 10th July – 20th July - EY onsite
- ▶ 24th July – 31st July – Draft report finalization
- ▶ To Be Discussed – EY return to site for report finalization with Nalcor & GNL
 - ▶ Option 1 – 31st July
 - ▶ Option 2 – 7th August

Muskrat Falls Review - Final Report

CIMFP Exhibit P-03401

Page 7

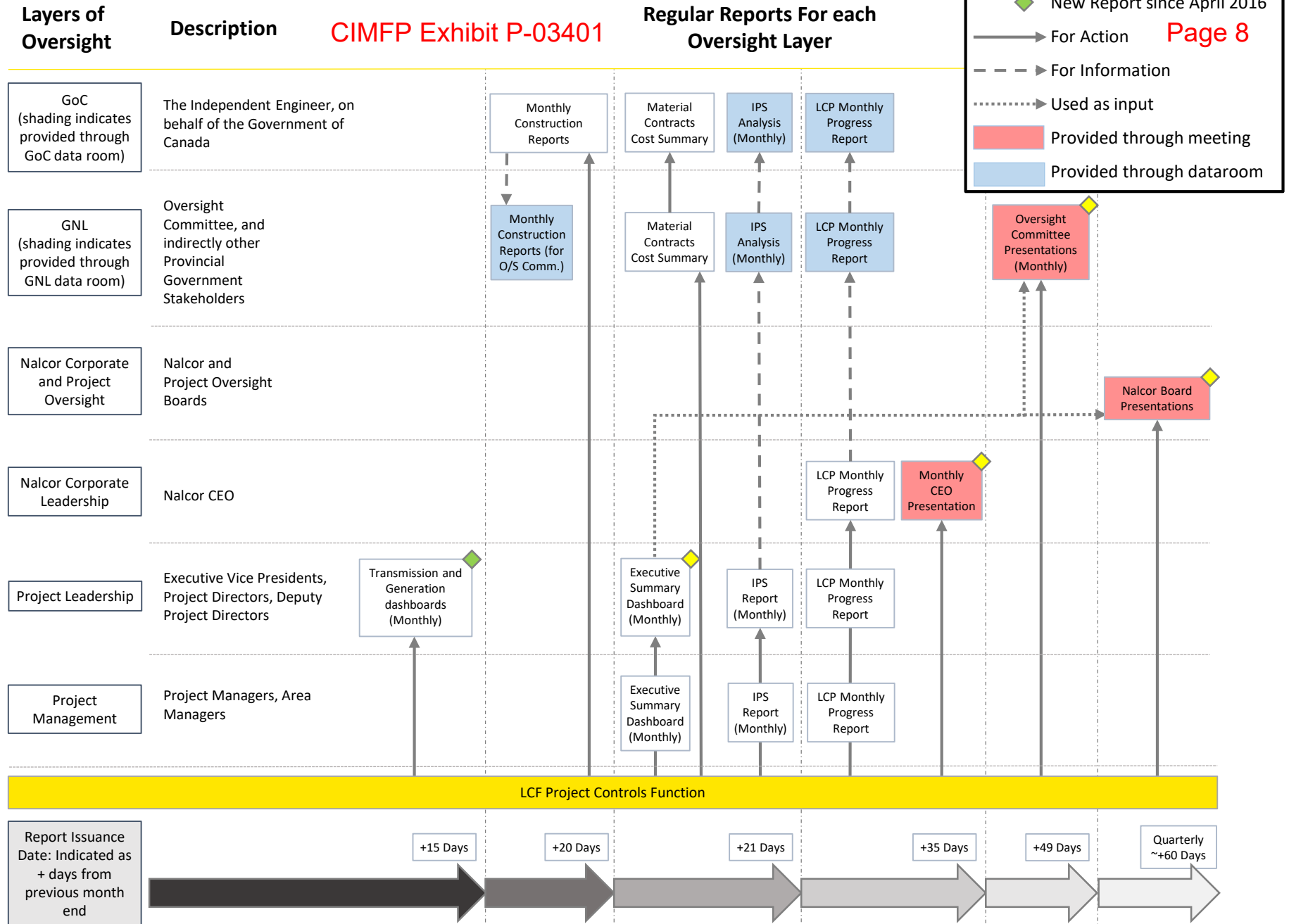
Draft assessment against recommendations

Recommendation 1: 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.	Review to date indicates achievement
Recommendation 2: 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.	Review to date indicates achievement, with defined exclusions relating to the strategic risks
Recommendation 3: 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.	While there is a higher degree of diligence around assessment of risk, there isn't yet a formal quarterly review
Recommendation 4: 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.	All risks are quantified, and the project has identified risks that should be managed elsewhere
Recommendation 5: Project governance and independent oversight should be re-evaluated by the Provincial Government and strengthened at the Project, Nalcor Board and Provincial Government levels	Significant changes have been made to governance and oversight, however further refinements and process improvements will further improve effectiveness
Recommendation 6: 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.	Significant progress has been made on the quality of performance reporting, however further refinements should be made regarding timing, content and coordination of decisions required from and to the shareholder (see overleaf)

Oversight Governance Layers and Project Reporting

Does not include communications to the public

- ◆ Revised Since April 2016
- ◆ New Report since April 2016
- For Action
- - - → For Information
- ⋯ → Used as input
- Provided through meeting
- Provided through dataroom



EY | Assurance | Tax | Transactions | Advisory

EY is a global leader in assurance, tax, transaction and advisory services. The insights and quality services we deliver help build trust and confidence in the capital markets and in economies the world over. We develop outstanding leaders who team to deliver on our promises to all of our stakeholders. In so doing, we play a critical role in building a better working world for our people, for our clients and for our communities.

EY refers to the global organization, and may refer to one or more, of the member firms of Ernst & Young Global Limited, each of which is a separate legal entity. Ernst & Young Global Limited, a UK company limited by guarantee, does not provide services to clients. For more information about our organization, please visit ey.com.

In a world of unprecedented change, EY Advisory believes a better working world means helping clients solve big, complex industry issues and capitalize on opportunities to grow, optimize and protect their businesses.

From C-suite and functional leaders of Fortune 100 multinationals to disruptive innovators and emerging market small and medium-sized enterprises, EY Advisory works with clients – from strategy through execution – to help them design better outcomes and realize long-lasting results.

A global mindset, diversity and collaborative culture inspires EY consultants to ask better questions. They work with their clients, as well as an ecosystem of internal and external experts, to create innovative answers. Together, EY helps clients' businesses work better.

The better the question. The better the answer. The better the world works.

© 2017 Ernst & Young LLP.

All Rights Reserved.

This material has been prepared for general informational purposes only and is not intended to be relied upon as accounting, tax or other professional advice. Please refer to your advisors for specific advice.

ey.com