From: Emiliano Mancini

To: David Steele; Richard Noble
Subject: RE: All meetings minuted
Date: Friday, May 8, 2015 3:12:12 PM

Attachments: Memo Meeting with J Mullaley and C Martin May 6 2015.docx

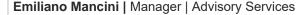
Memo Meeting with P Harrington May 6 2015.docx Memo Meeting with J Kean May 6 2015.docx

image001.png

Please see attached notes from our meetings with Julia/Craig, J Kean and P Harrington for your review.

Thanks

Regards,



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From: David Steele

Sent: Wednesday, May 06, 2015 2:27 PM **To:** Richard Noble; Emiliano Mancini **Subject:** All meetings minuted

Hello Emiliano,

Could you formally minute all meetings today with Craig/Julia, Jason Keane and Paul Harrington? In the meeting with Julia and Craig, we raised some significant risks with the project and IA coverage (depth) and inherent scope limitations. Please send to Richard and I for input, and then put on file.

We now have been provided the Nalcor IA reports and we have been able to confirm our original expectation that significant gaps remain for the Oversight Committee to get comfort over the MRF's Project Controls processes (cost, schedule, scope, risk). We should have been provided the IA draft reports months ago before we started our current scope of work and we could have addressed any gaps as we executed our work, but Craig insisted we focus on Cost and Schedule, as any deviation from that would be resisted by Nalcor and be a set-back in terms of timing. We are where we are at this point, so let's act on this promptly and issue a recommended scope of work to the Oversight Committee (Craig and Julia), which focuses on closing the gaps in coverage. We should issue it with a recommendation to initiate in the near term. Please prepare a draft and send along to Richard and

I for review. I will be out of town next week, so it would be great if I could review before Frid	day. I	t
can be a one page scope statement.		

Thanks.

Regards,

Dave

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Internal Memorandum

To: File 8 May 2015

Ref: Muskrat Falls Project
Project Controls Review for Cost and
Schedule

Notes from the meeting with Julia Mullaley and Craig Martin on May 6, 2015

The purpose of this memo is to document the above meeting.

Purpose of the meeting: status update on the review of Nalcor`s Project Controls for cost and schedule on Lower Churchill Project.

Attendees:

Julia Mullaley - Clerk of Executive Council, Government of Newfoundland and Labrador

Craig Martin - Executive Director, Government of Newfoundland and Labrador

David Steele - EY Partner

Richard Noble - EY Associate Partner

Emiliano Mancini - EY Manager

Place: Cabinet Secretariat Boardroom, 4th Floor, East Block, Confederation Building, St. John`s

Time: from 10:30 to 11:10am

During the meeting EY provided a brief status update covering the following points:

- Limitations of EY review:
 - a. The review did not assess how the cost and schedule baselines were developed and estimated. The focus of the review has been on cost and schedule forecasting and reporting.

- b. This scope did not include a review of scope/change management and risk management processes. Only Internal Audit's reports on scope/change and risk management processes were reviewed. From the review, it appears that significant gaps remain for the Oversight Committee to get comfort over the Lower Churchill project controls processes (cost, schedule, scope, risk). Preliminary gaps include insufficient depth of the analysis conducted, lack of quality assessment of key processes and lack of project's compliance assessment.
- Key preliminary and positive findings:
 - a. Majority of processes are identified, developed or deployed
 - b. Majority of processes are in execution
- Key preliminary gaps and/or observations to be validated:
 - a. Astaldi is facing significant challenges, including:
 - i. Construction delays
 - ii. Unapproved controls schedule baseline document and schedule development and control plan.
 - iii. Outstanding control schedule to reflect current status and forecast of the work. The last approved schedule baseline has many activities with negative float (up to -150 days) which does not comply with Nalcor's coordination procedure.
 - iv. Unapproved monthly progress report since July 2014.
 - v. In absence of approved monthly progress reports from Astadi, Nalcor is using a quantity surveyor who has developed and is maintaining a master quantity tracking database (LCP database) for unit price items under Astaldi contract. That system supports progress reporting to IPS, however does not provide any information on forecasting.
 - b. Progress reported in the IPS is not fully accurate. Spot checks revealed instances where the progress reported in the IPS differed from the progress reported from contractors. Although these discrepancies were not big, that indicates that progress is subject to interpretation and is not fully objective.
 - c. Based on the feedback received during some interviews with Nalcor's project team, it appears that a MonteCarlo simulation is being performed on the project, however it is not clear what the inputs are and how the results will be treated.
- Craig / Julia mentioned that:
 - a. Nalcor is working on a 120-day plan with Astaldi, which started in April 2015, to try to increase production and reduce delays.

- b. The Government of Newfoundland and Labrador will be 'on the hook' for any cost overrun and schedule delay on the project.
- c. The Government may have to disclose to the public any report EY will issue, even if in draft version.



Internal Memorandum

To: File 8 May 2015

Ref: Muskrat Falls Project
Project Controls Review for Cost and
Schedule

Notes from the meeting with Paul Harrington on May 6, 2015

The purpose of this memo is to document the above meeting.

Purpose of the meeting: interview with Paul Harrington

Attendees:

Paul Harrington - Project Director, Lower Churchill Project, Nalcor

Steve Pellerin - Relationship Manager, Lower Churchill Project, Nalcor

Craig Martin - Executive Director, Government of Newfoundland and Labrador

Richard Noble - EY Associate Partner

Emiliano Mancini - EY Manager

Place: Nalcor's Project office, 350 Torbay Road, St. John's

Time: from 2:30 to 3:30pm

- As soon as EY prepared to formulate the first question, Paul Harrington interrupted the meeting and left saying that he was expecting a debriefing and was not prepared to respond to any question.
- After Paul Harrington left, EY and Craig Martin had a meeting with Steve Pellerin and Doug Woodford to present the points EY intended to discuss with Paul Harrington.

 New time to interview Paul Harrington was discussed. He will not be available the following week; any meeting will have to be rescheduled during the week of May 18, 2015.



Internal Memorandum

To: File 8 May 2015

Ref: Muskrat Falls Project
Project Controls Review for Cost and
Schedule

Notes from the interview with Jason Kean on May 6, 2015

The purpose of this memo is to document the above meeting.

Purpose of the meeting: review of the use of MonteCarlo simulation and Interface Management Plan on the Lower Churchill Project.

Attendees:

Jason Kean - Deputy General Project Manager Nalcor, Lower Churchill Project, Nalcor

Alison Ball - Nalcor Energy Internal Audit

Richard Noble - EY Associate Partner

Emiliano Mancini - EY Manager

Place: Nalcor's Project office, 350 Torbay Road, St. John's

Time: from 11:30 to 12:10am

- Use of the MonteCarlo Simulation (MCS) on the Lower Churchill Project:
 - a. Jason Kean mentioned that the MCS was used only during DG2 and DG3, however he did not recall the probability (e.g.: P50, P80) associated with cost and schedule baseline calculated with MCS. The simulation was conducted using industry standards. No more detail was provided.
 - b. He mentioned that there is no MCS currently being performed on the project to assess schedule integrity and/or risk.

- c. He recently met Westney Consulting Group (Risk Advisor who worked on the MCS for DG2 and DG3) in Houston but the meeting did not assess any MCS.
- d. He mentioned that the project contingency forecast is based on trends.
- Interface Management Plan:
 - a. Jason Kean mentioned that interface management is currently being drafted to consider 2015 activities. The plan is not available at the moment.
 - b. Interfaces were considered during the engineering phase.
 - c. Contractors will manage their own interfaces on site.