

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.

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