From: Emiliano Mancini

To: <u>David Steele; Richard Noble</u>

Subject: RE: Tomorrow"s breakfast debriefing

Date: Tuesday, May 5, 2015 11:06:55 PM

Attachments: MFP - Project Controls Review - Observations to be validated draft.docx

image001.png

Hi Dave,

Please find attached list of positives findings and observations to be validated as verbally discussed with Anthony today. This is what we intend to discuss with Craig and Paul tomorrow.

Thanks.

Regards,

Emiliano Mancini | Manager | Advisory Services

?

Ernst & Young LLP

Ernst & Young Tower, 222 Bay Street, P. O. Box 251, Toronto, ON M5K 1J7 Canada

Phone: +1 416 943 4418 | Cell Phone: +1 647 455 0371 EY/Comm: 1636262 | Emiliano.Mancini@ca.ey.com

From: David Steele

**Sent:** Tuesday, May 05, 2015 6:17 PM **To:** Richard Noble; Emiliano Mancini

Subject: RE: Tomorrow's breakfast debriefing

Thanks guys. See you for breakfast.

Regards,

Dave

David Steele | Partner | Advisory Services

Ernst & Young LLP

Cell: +1 709 769 2080 | David.Steele@ca.ey.com

From: Richard Noble

**Sent:** Tuesday, May 05, 2015 6:10 PM **To:** David Steele; Emiliano Mancini

Subject: RE: Tomorrow's breakfast debriefing

Nothing has been handed to nalcor... And nothing can or should be sent to the government.

All verbal... All part of the process.

Cheers,

Richard

From: David Steele

**Sent:** Tuesday, May 05, 2015 2:20:55 PM **To:** Richard Noble; Emiliano Mancini

Subject: RE: Tomorrow's breakfast debriefing

Agreed.

Craig had asked to review prior to submission to Nalcor. Do you think we are keeping in line with that given the meeting with Anthony today at 4? Should be ok if we don't hand anything across the table to him (if this is what you meant by the second sentence below).

Please confirm with Craig expectations for tomorrow. Is it discussion or does he want a written summary for Julia and him. Thanks.

Regards,

Dave

David Steele | Partner | Advisory Services

Ernst & Young LLP

Cell: +1 709 769 2080 | David.Steele@ca.ey.com

From: Richard Noble

**Sent:** Tuesday, May 05, 2015 3:48 PM **To:** David Steele; Emiliano Mancini

Subject: RE: Tomorrow's breakfast debriefing

We will have bullet points... which we will be also discussing with Anthony Embury at 4:00 today... and then used in discussion with P Harrington tomorrow.

I assume they won't want us to table anything physical or electronic with them at this juncture due to danger of misinterpretation/misuse given broad potential access.

Best regards,

### Richard

From: David Steele

Sent: Tuesday, May 05, 2015 2:15 PM

**To:** Emiliano Mancini **Cc:** Richard Noble

Subject: RE: Tomorrow's breakfast debriefing

Hi,

Yes, meet you there.

Are you able to send me a document of results this evening? I.e, what we will be putting in front of them.

Regards,

Dave

## David Steele | Partner | Advisory Services

Ernst & Young LLP

Cell: +1 709 769 2080 | David.Steele@ca.ey.com

From: Emiliano Mancini

Sent: Tuesday, May 05, 2015 3:32 PM

To: David Steele Cc: Richard Noble

Subject: Tomorrow's breakfast debriefing

Hi Dave

Would you be available to meet tomorrow at breakfast to prep for the meeting with Craig and Julia? Maybe 8am at the Marriott hotel?

Thanks

Emiliano Mancini | Manager | Advisory Services

Ernst & Young LLP

Phone: +1 416 943 4418 | Cell Phone: +1 647 455 0371

Emiliano.Mancini@ca.ey.com



# **Muskrat Falls Project Controls Cost and Schedule**

### Preliminary observations for discussion purpose only - May 5, 2015

#### Limitations:

- 1. 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.
- 2. 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.

#### Positives:

- 1. Majority of processes are identified, developed or deployed including:
  - a. Project execution plan
  - b. Project controls management processes
  - c. Coordination procedures to govern contractors in the administration, execution and management of the contract, in particular cost and schedule management.
- 2. MonteCarlo simulation is being currently performed to assess schedule integrity
- 3. Project reporting captures key information on construction cost and schedule including:
  - a. Schedule forecast and progress
  - b. Critical path review
  - c. Incurred and committed costs
  - d. Cost forecasting and contingency

### Observations to be validated:

- 1. Astaldi is facing critical challenges including:
  - a. Significant construction delays
  - b. Unapproved Control Schedule Baseline Document and Schedule Development and Control Plan
  - c. Unapproved monthly progress reports since July 2014
  - d. 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.
- Control baselines and control plans (i.e. Control Schedule Baseline Document and Schedule
  Development and Control Plan) are incomplete and/or fail criteria, as per Nalcor's coordination
  procedures. Work down date has not been established.
- 3. Contractor's compliance on cost and schedule requirement is a significant challenge for the program.
- 4. It is not clearly defined how the MonteCarlo simulation is being performed, what inputs are being used and how the results of the simulation will be leveraged.



- 5. The basis for rebaselining is not defined. It will be up to senior management to decide when and if rebaselining is required.
- 6. Contingency and contingency forecast are weak.
- 7. IPS is not yet fully based on contractor's schedule. IPS focuses on construction and commissioning only. It does not provide engineering, procurement or operation readiness information. It also does not show percent completion.
- 8. IPS mapping/process is not documented and is complex.
- 9. Schedule delays and likely need for rebaselining. Potential change to execution strategy.

# Outstanding data review:

- 1. .Xer files for selected contractor's schedules required to check schedule review process along with identification/implementation of corrective action.
- 2. Interface management plan.

# Interviews to be completed this week:

- 1. Jason Kean for for MonteCarlo simulation and Interface Management.
- 2. Paul Harrington.