

From: [Emiliano Mancini](#)
To: CMartin@gov.nl.ca
Cc: [Richard Noble](#); [David Steele](#)
Subject: Nalcor's kick off meeting deck
Date: Thursday, March 26, 2015 11:03:41 PM
Attachments: [image001.png](#)
[Muskrat Falls Project Controls Review KOM.pptx](#)

Dear Craig,

Please find attached the deck for the kick off meeting with Nalcor for your review.

This deck has been reviewed with Nalcor's Internal Audit and incorporates their comments.

Thank you.

Regards,



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Muskrat Falls

Review of Project Controls for Cost and Schedule

Kick Off Meeting

March 30, 2015

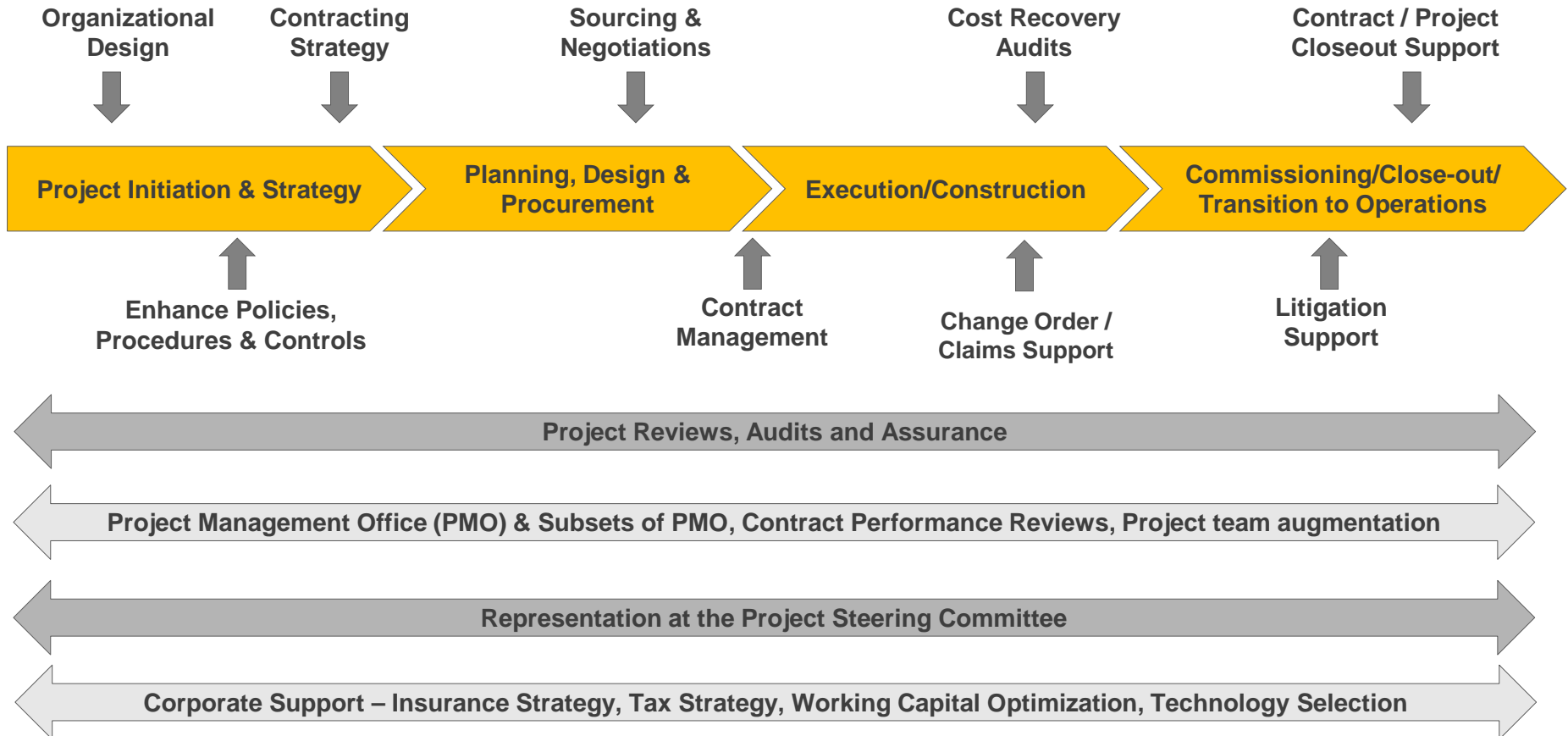


DRAFT
For Discussions Only

Overview of EY Major Capital Project Practice

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Objectives and Scope

Objective

The objective of this review is to assess the methods for calculating and reporting costs and schedule progress and confirming the completeness and accuracy of the information reported on cost and schedule.

Scope

The scope of the work includes assessing the appropriateness of the Lower Churchill project management processes related to:

- ▶ Schedule management, reporting and control
- ▶ Cost management, reporting and control

The management processes and controls will be assessed against leading practices and standards (PMBOK) commensurate with projects of the scale and complexity of Lower Churchill project.

We will work with Nalcor Internal Audit during the planning and execution phases of this engagement to leverage work performed by Internal Audit and avoid duplication.

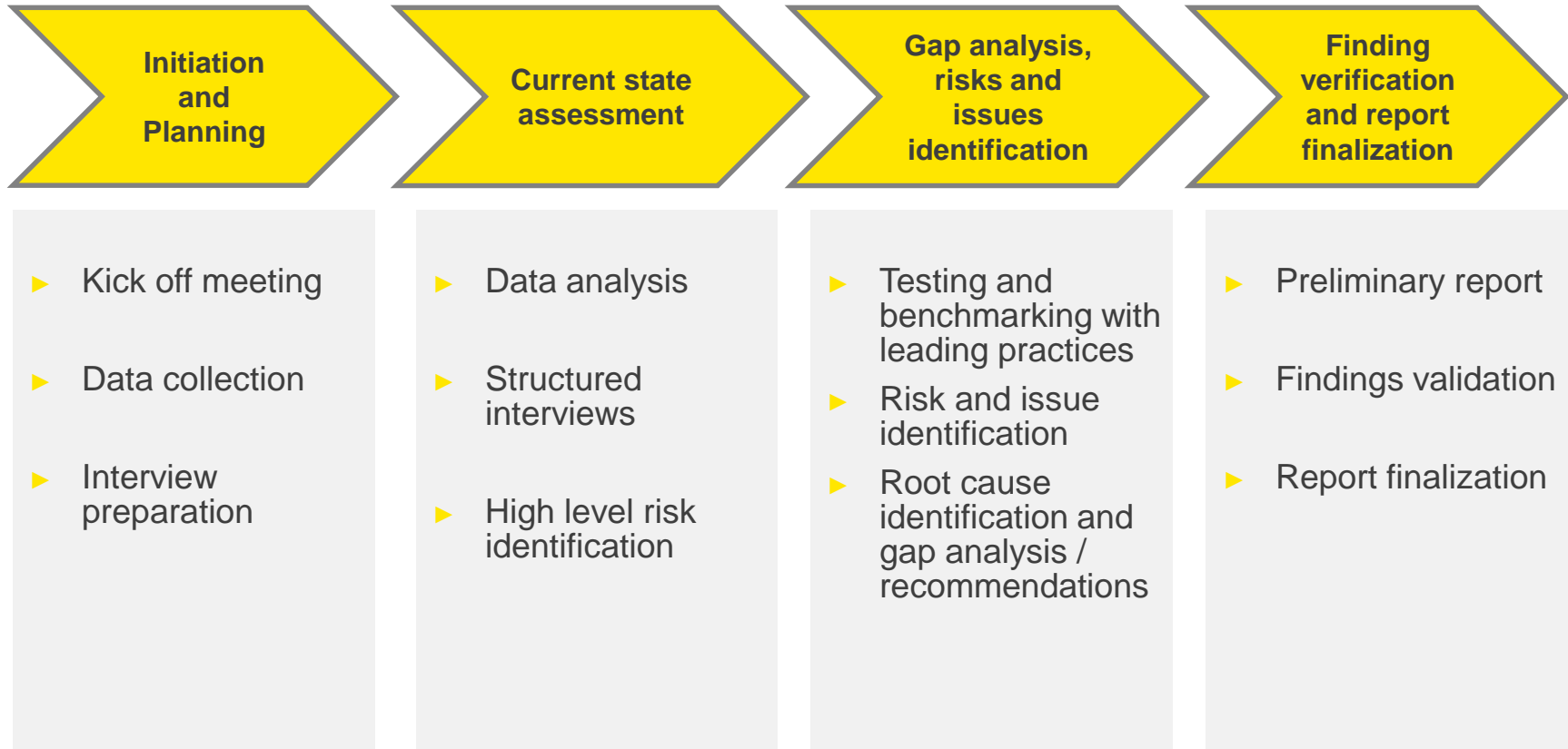
Scope limitations

- ▶ The scope of the review will not assess how the cost and schedule baselines were developed and estimated
- ▶ This scope will not include a review of the scope/change management and risk management processes
- ▶ The services will be advisory in nature and will not constitute and audit, review, examination, or other form of attestation as those terms are defined by the AICPA or the CICA.

Project Review Methodology

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Phase I - Initiation and Planning

Kick off meeting

- ▶ Identify core project team and stakeholders
- ▶ Establish communication protocols
- ▶ Review engagement scope, objectives, approach, timeline and logistics

Data collection and interview preparation

- ▶ Review data request list
- ▶ Identify key stakeholders to interview
- ▶ Set up interview schedule

Phase IV - Findings Verification and Reporting

Preliminary Report

- ▶ A preliminary report is drafted containing the full list of risks and issues as well as their prioritization and recommended actions

Finding validation and Report Finalization

- ▶ Based on feedback on preliminary report, assess need to conduct further interviews and finalize the report

Phase II - Current State Assessment

Initial data review

- ▶ Review data provided
- ▶ Request additional data (if needed) and seek clarification related to data received

Structured interviews

- ▶ Conduct interview
- ▶ Assess interviewees understanding on processes and procedures
- ▶ Get clarification / review data provided

Phase III - Gap Analysis, Risks and Issues Identification

Testing / benchmarking with leading practices (PMBOK, AACE) and root cause analysis

- ▶ Assess cost/schedule management processes and controls against leading practices
- ▶ Identify gaps in complying with corporate/functional policies and procedures
- ▶ Root cause identification and gap analysis and improvement opportunities identification

Approach of the Review

The review will assess:

- ▶ The processes and procedures for managing, controlling and reporting on cost and schedule against leading practices and standards (PMBOK).
- ▶ Implementation and compliance of these processes and procedures on selected contracts/work packages.

The review will be conducted through a series of interviews and data review which will include:

- ▶ Interviewing staff within the Project Controls Team.
- ▶ Data review of material contracts/work packages (tentatively Astaldi, Vallard, Andritz Hydro) with regard to cost and schedule. A sample of cost and schedule data/reporting will be reviewed.
- ▶ Interview of identified interfaces of Project Controls Team, including Project Managers of selected contracts/work packages.

Proposed Timeline

Activities	Mar 9 to 13	Mar 16 to 20	Mar 23 to 27	Mar 30 to Apr 3	Apr 6 to 10	Apr 13 to 17	Apr 20 to 24	Apr 27 to May 1
	Wk 1	Wk 2	Wk 3	Wk 4	Wk 5	Wk 6	Wk 7	Wk 8
Meeting with Nalcor IA to plan and review documentation/reports for potential reliance and identify areas where IA could leverage the work to be performed in this engagement								
Planning and review initiation								
Conducting Kick Off Meeting								
Perform fieldwork including interviews and analysis								
Validate results with Nalcor								
Perform additional review as required								
Write and present draft report								
Finalize and issue the final report								

Timely access to data and respective stakeholders determines the amount of time required to conduct the review. The timeline is based on timely access to data and Nalcor personnel as well as timely feedback during the reporting phase.

Data Request Listing

1.0	Schedule Information
1.1	Schedule Development & Control Plan including Schedule Specification, Basis of Schedule and Assumptions
1.2	Updated Program Gantt Charts to Level 3 and Contractors/Work Package Gantt Charts to level 4 including with critical path, baseline, float, % complete, actual/forecast start, actual/forecast end date and predecessor/successor (full requirements for Gantt specifications to be provided)
1.3	Integrated Program Schedule (IPS) report to Level 3 (where available) including: Schedule milestone report showing Baseline Finish, Actual/Forecast Start and Finish, Schedule Performance Index (where available), Variance, % Complete, Critical and Sub-Critical Path, Predecessor/Successor and Float analysis for all program areas and major contracts/work packages
1.4	Performance Graph showing performance, trend and forecast where available for Program as a whole and each Material Contract/Work Package
1.5	Variance and analysis and corrective action for all material schedule variances
2.0	Cost Information
2.1	Baseline Budget with Basis of Estimate (DG3 Estimate) and June 2014 revision
2.2	Cost report showing in period and cumulative data for the following: Budget (Baseline, Change Approved, Changes Pending (with status), Cost to Complete, Final Forecast Cost, Variance, Cost Performance Index/EV data for all program areas and major contracts/work packages down to level 4/5
2.3	Contingency draw log, report of planned vs. consumed contingency
2.4	Performance graphs showing performance, trend and/or forecast where management has this information
2.5	Contract and Work Package level cost reporting including: original commitments, approved changes, pending changes (with status), revised commitments, invoiced and incurred to date: <ul style="list-style-type: none"> • Detail shall be provided for all material contracts • Summary level for all other contracts
2.6	Rolling cash flow– forecast and planned versus actual
2.7	PFA Funding Request/Log for tracking funding draws (including record of all Liens as noted in McInnes Cooper report)
2.8	Variance analysis and corrective action for all material cost variances

3.0	Other information
3.1	Program/ Project Management Processes & Procedures (i.e.: Project Control Management Plan; Project Risk Management Plan; Project Finance and Accounting Management Plan; Project Change Management Plan; Contract Administration Management Plan)
3.2	Standard project monthly progress report (including Scope & Change, Cost, Schedule, Quality, Risk and Contract reports)
3.3	Progress reporting of Material contractors
3.4	Resource profile and graphs/histograms (planned versus actual/forecast)
3.5	Project WBS structure and dictionary
3.6	Program/Project Management Plan
3.6	Project execution and contracting strategies/plans
3.7	Project risk register with updates
3.8	PCNs & Change request/ order log(s)
3.9	Claims log
3.10	Project assurance plans – including internal and third party assurance
3.11	Relevant assurance reports, as issued including Quality Management Metrics.
3.12	Independent Engineer reports
3.13	Notification of the award of: <ul style="list-style-type: none"> • Material Contracts • Summary of awards (Value) of other contracts
3.14	Issues log or other established reports for recording and managing issues
3.15	Nalcor financial statements
3.16	Deviation Alert Notices and accompanying scope, cost and schedule impact/control information: <ul style="list-style-type: none"> • For material deviations: Analysis and proposed management corrective captured in Deviation Alert Notices (DANs) listing and Change Control documentation • Summary of DANs status for the program as a whole including summary of deviation alerts not captured under material deviations above

Preliminary Interview List

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#	Name	Role / Area	Date and Time
1	Anthony Embury	Project Controls Manager	Mar 30 th at 3pm
2	Carlos Fernandez	Deputy Project Controls Manager	Mar 31 st at 9am
3	Brian Marsh	Sr. Cost Controller	Mar 31 st at 1pm
4	Georges Chehab	Lead Cost Controller	Mar 31 st at 10:30am
5	Tom Chudy	IPS Sr. Planner	Apr 1 st at 1:30pm
6	Jennifer Grandy	Stewardship Reporting Coordinator	TBC
7	Scott Gillis	Change and Interface Management Lead	TBC
8	Ed Bush	Project Controls Lead - Muskrat Falls	TBC
9	Tanya Power	Project Controls Lead - HVdc Specialties	TBC
10	Nick Ternasky	Project Controls Lead - Overland Transmission	TBC
11	Craig Freake	Planner SOBI	TBC
12	Scott O'Brien	Project Manager - Muskrat Falls	Apr 1 st at 3:00pm
13	Darren Debourke	Project Manager - HVdc Specialties	Apr 2 nd at 9:00am
14	Kumar Kandaswamy	Project Manager - Overland Transmission	Apr 2 nd at 10:30am
15	Greg Fleming	Project Manager SOBI Crossing	Mar 31 st at 2:30pm
16	Paul Harrington	Project Director	TBC

Note: This is a preliminary list and additional interviews may be required.

Next Steps

- ▶ Conduct interviews with selected individuals
- ▶ Collect outstanding data
- ▶ Continue data analysis

