

From: [Mullaley, Julia](#)
To: [David Steele](#)
Subject: FW: Muskrat Falls Oversight.pdf
Date: Friday, January 15, 2016 4:18:16 PM
Attachments: [Muskrat Falls Oversight.pdf](#)

Attached as discussed. Thanks.

Julia

From: Heath, Daisy
Sent: Friday, January 15, 2016 4:13 PM
To: Mullaley, Julia
Subject: Muskrat Falls Oversight.pdf

“This email and any attached files are intended for the sole use of the primary and copied addressee(s) and may contain privileged and/or confidential information. Any distribution, use or copying by any means of this information is strictly prohibited. If you received this email in error, please delete it immediately and notify the sender.”

**Muskrat Falls Oversight Committee
Review of Project Cost and Schedule Forecast and Related Risk****Statement of Work**

This Statement of Work, dated January 14, 2016 (this "SOW"), is made by HER MAJESTY IN RIGHT OF NEWFOUNDLAND AND LABRADOR as represented by the Executive Council (the "Province") and Ernst & Young LLP ("EY" or the "Consultant") based on the Agreement, effective April 1, 2015 between HER MAJESTY IN RIGHT OF NEWFOUNDLAND AND LABRADOR as represented by the Executive Council and EY (the "Agreement").

Except as otherwise set forth in this SOW, this SOW incorporates the Agreement by reference. The terms and conditions of this SOW shall apply only to the advisory services covered by this SOW and not to services covered by any other agreement or statement of work pursuant to the Agreement. Capitalized terms used, but not otherwise defined, in this SOW shall have the meanings in the Agreement.

Background/ objective

The objective of this review is to assess the reasonableness of the Muskrat Falls Project's (the "Project") cost and schedule forecast, and identify opportunities to address any material/critical risks.

EY shall review work in-progress and/or completed by Nalcor Energy (Nalcor) for its cost and schedule forecast, including an assessment of inputs required to complete the cost and schedule forecast.

This review is intended to look at the material/significant risks and their potential root causes in an effort to provide the the Province with an independent perspective on the cost and schedule forecasts presented by Nalcor.

EY will not develop its own cost, schedule and risk forecast but instead will assess the reasonableness of that prepared by Nalcor. The review will focus on risks and issues that have the potential to materially impact the Project.

Scope details

In order to review Nalcor's cost and schedule forecast, related risk and root causes and to make recommendations for improvement, EY will carry out the following parallel work streams:

Work Stream 1 - Project Cost and Schedule Forecast Review

To review Nalcor's cost and schedule forecast to complete the project, EY will:

1. Develop an understanding of the work performed by Nalcor to arrive at its revised baseline of cost and schedule for the Project
2. Understand the project's cost performance to date, and review estimates to complete, variances and trends
3. Understand the project's schedule performance to date, and review revised schedules and forecasts, variances and trends
4. Using the results of Workstream 1, 2 and 3, identify findings, as well as evaluate potential impacts, if any, to committed schedule and final forecast cost of the Project
5. Recommend immediate and ongoing remedial actions, where appropriate, for consideration

Work Stream 2 - Contract Level Review

To review the Project's key and material contracts and identify cost and/or schedule exposure, EY will:

1. Develop an understanding of the contract and commercial management approach, including risk allocation
2. Review contractor reports, schedules and costs, performance, trends, variances and proposed changes and/or claims
3. Identify potential cost and schedule exposure in key/material contract
4. Review ongoing remedial actions with regards to identified cost and schedule risk exposure in current contracts and make recommendations where appropriate for Nalcor's consideration

Work Stream 3 - Project Risk Management Review

To review the Project's risk management approach, the Project's quantification of cost and schedule risk and its inclusion in the Project's cost and schedule forecast, EY will:

1. Develop an understanding of the work performed by Nalcor to update the Project's risk profile and integrate risk into its cost and schedule forecast
2. Review the risk management plans, reporting, risk logs and the current risk status of the Project as a whole
3. Understand and identify interface risks and dependencies
4. Review the development of management reserve and contingency provisions
5. Assess potential cost and schedule exposure in the current Project approach to the management of risk
6. Recommend immediate and ongoing remedial actions, where appropriate, for consideration in future management of Project risks

Deliverables

1. An initial findings summary will be prepared by EY within three or four weeks of commencing the review. This summary will contain initial findings of the work undertaken up to that point in time and will identify early findings, including any critical risks and issues. It will also present recommendations for the Province's consideration on the focus and approach of EY's work for the balance of the review.
2. A report will be drafted by EY early March 2016, with a final draft issued mid-March 2016. This report will contain findings and recommendations based on the objectives and scope set forth in this SOW.
3. Status reporting will be provided by EY on a weekly basis to the appointed representative(s) from the Province.

Approach considerations and overview

1. The Province will appoint a representative (or small steering committee) to interface directly with the EY team. Weekly status meetings will be held at the Province's offices in St John's. The attendees, timing and duration of such meetings will be mutually determined during the first week of mobilization in January 2016.
2. EY will conduct face to face meetings through the course of the Review with representatives from Nalcor. Meeting schedules and agenda will be provided in advance. It is expected that the timing, duration and frequency of these meetings will be dependent on agenda (general coordination,

interviews, results discussion/validation, etc.). It is expected that meetings will be undertaken with the following individuals, including:

- a) Nalcor senior leadership, including CEO and relevant VP's
- b) Project Director
- c) Construction Managers (or equivalent) for construction packages
- d) Contract Managers (or equivalent) for material contracts
- e) Project Controls Leaders
- f) Other senior project leaders as deemed appropriate

3. All meetings will take place in St John's. It is expected that a limited number of site visits to Muskrat Falls may be needed. Video conferencing technology may be utilized where feasible.
4. EY has separately provided a preliminary data / information request list. Receipt of this information is requested in a timely fashion to enable an efficient start of the review the second week of January. Additional information will be requested as required throughout the fieldwork.
5. Where appropriate, EY will leverage the work performed as part of its prior review of the Project's Cost and Schedule Management Processes and Controls, as well as existing reviews Nalcor has already participated in.

The graphic below outlines EY's proposed work schedule (to be finalized week of January 4th):

Week starting	Dec-21	Dec-28	Jan-04	Jan-11	Jan-18	Jan-25	Feb-01	Feb-08	Feb-15	Feb-22	Mar-01	
	Preparation		Finalize Detail Plan	Review Program Level Baseline & Critical Risk		Review Cost & Schedule Performance /Forecast & Risk - PMO/Project Level			Program Integrated Analysis and Impact Assessment		Deliver Final Report	
						Review Performance/ Forecast & Risk - 20 Material Contracts		Finding & Recommendations Validation				
						Review Risk Profile, Risk Quantification & Contingency Provisions						
	Milestone meetings/ reporting											
			1	Planning complete and agreements on approach with Province and Nalcor								
			2	Summary presentation of interim findings and updated strategy/plan for completing the EY assignment								
			3	Presentation of Final Draft Report (Final dependent on validation/acceptance period as agreed between Province and Nalcor)								

Timing may be adjusted slightly depending on progress and the interim results of the review.

EY Project Leadership Team

- **David Steele - Local Engagement Partner.** David leads EY's Advisory Services practice in St John's as well as related transformation services delivered specifically to the Province. He continues as the key point of contact for the Province in respect of EY's services related to the Project.
- **Michael Kennedy - Engagement Delivery Partner.** Michael leads EY's Capital Project and Infrastructure Advisory practice for Canada. Recently joining EY from a large EPC/EPCM firm, he brings credentials spanning billions of dollars in major capital initiatives across Canada. He will oversee the delivery of the services on the assignment as well as providing strategic program advice.
- **Tim Calver - Engagement Lead.** Tim brings direct industry experience in the planning, development and execution of large capital investment programs. He has 20 years of experience in the energy industry, including senior asset management, project delivery and business development roles in the UK and Europe.

EY Steering Group

- **Paul Hickey - Local Relationship Partner.** Paul is the senior partner in EY's St John's Office and is experienced in major initiatives. He will be the EY's key point of contact for senior level interactions with the Province and Nalcor.
- **Kirsten Tisdale - Executive Advisor.** Kirsten is EY Canada's National leader for the Public Sector practice. She brings a background of oversight of major projects at both Federal and Provincial level. She will also provide strategic advice to the Province during the course of the assignment and assist in the positioning and prioritizing of EY's service delivery.
- **Malcolm Bairstow - Executive Advisor.** Malcolm is EY's Global Leader for Capital Project and Infrastructure Advisory services. He will provide strategic advice to the Province as well as bring the best practices and resources from EY's global team to support the assignment.

Key assumptions and limitations

The estimates, schedule and work products from this review are dependent on a range of assumptions including the following:

1. The review does not include an engineering design review, physical inspection or validation of construction process and quality management.
2. Contract Award or approval to proceed is granted on or before January 8th 2016.
3. The scope of work specified herein will be completed within the 8 week period from contract award as scheduled.
4. The work schedule and the fee estimates herein will be dependent on the timely availability of data, access to resources and the full cooperation of the Province and Nalcor, and any contractors as agreed with the Province.
5. All work products will be subject to client review.
6. EY will respect commercial sensitivities as agreed between the Province and Nalcor.

Other Terms and Conditions

1. The services described in this scope of work are advisory in nature. EY will not render an assurance report or opinion under the scope of work, nor will the Services constitute an audit, review, examination, or other form of attestation as those terms are defined by the American Institute of Certified Public Accountants or Chartered Professional Accountants Canada. The scope of work will not constitute any legal opinion or legal advice. EY will not conduct a review to detect fraud or illegal acts.
2. The Province will assign a qualified person to oversee the Services and will be responsible for management decisions relating to the Services, the use or implementation of the output of the Services and for determining whether the Services are appropriate for your purposes.
3. EY may identify Project risks, however does not, and cannot, guarantee that it will identify all risks associated with the Project.
4. EY will not identify, address or correct any errors or defects in IT systems, other devices or components thereof ("Systems"), whether or not due to imprecise or ambiguous entry, storage, interpretation or processing or reporting of data. EY will not be responsible for any defect or problem arising out of or related to data processing in any Systems.
5. Output reports provided by EY hereunder, will be prepared solely in order to assist the Province in the context of the scope of work described above and EY assumes no duty, obligation or responsibility whatsoever to any other parties not bound by this SOW. The report will state that EY shall have no responsibility whatsoever to any third party which obtains a copy thereof; any use such a third party may choose to make of EY's report is entirely at its own risk. The Province shall provide the report to third parties only in its original, complete and unaltered form as provided by EY.
6. Notwithstanding anything to the contrary in this SOW, EY do not assume any responsibility for any third-party products, programs or services, their performance or compliance with the Province's specifications or otherwise.
7. In the event the Province refers publicly to EY the Client shall use best efforts to consult EY as to the form and content of such disclosure in order to ensure that the scope of EY's involvement is factual and accurate. The Province shall not refer to EY as "auditor" or suggest that EY has been engaged to audit any aspect of the Project or suggest that EY's work is for the benefit of third parties.
8. The EY partners, personnel, and agents providing Services hereunder or otherwise having access to EY information about the Project shall be governed by the obligations set out in the Ring-Fence Procedures Memo attached hereto as Appendix "A".

Schedule "B" of the Agreement will be read as including these additional terms for the purpose of the Services:

(continuing from the existing numbering):

5. The following is added as Article 12.3 in the General Terms and Conditions:
 - 12.3 Notwithstanding Article 12.1 and 12.2, the Services may involve EY review of, or advice relating to, agreements to which the Province (which for the purpose of this clause shall include Nalcor Energy and its affiliated entities) is a party with, services performed by, or products produced by, a third party (an "EY Client") for which EY (or another EY Firm) performs, or has performed, services unrelated to the agreements, services, or products such EY Client performed or produced for the Province. The Province hereby acknowledges and consents to EY performance of such services for any EY Client, and agrees that the Province will not make a claim that these circumstances present a conflict of interest, real or perceived, for EY or any other EY Firm. If, however, EY should become aware of services for an EY Client that directly relate or related to the agreements, services, or products, EY will seek the written consent of the Province, Nalcor Energy, and the EY Client to the continued performance of the Services. In any event, EY confirms that, except as the Province and the EY Client otherwise agree in writing, each client's respective confidential or privileged information will remain confidential to that client in accordance with applicable professional standards.

6. Notwithstanding section 13.1 (Subcontracting) of the Agreement, EY may subcontract portions of the Services as deemed necessary by EY.
7. Notwithstanding sections 7.2 and 7.3 (Liability) of the Agreement, the Province acknowledge and agree that the third party indemnity described in such sections shall not apply to any potential disputes, actions, claims or awards for compensation by or with Nalcor in relation to the Project.

EY Resources, Fees and Expenses:

EY has provided an initial estimate of fees for this review with a range of \$750,000 to \$1,250,000 based on time and materials, with a target fee of \$1,000,000 provided by the Province. These are estimates for professional services, and do not include out of pocket costs (e.g. travel, accommodations, meals, etc.) or applicable taxes. All out of pocket expenses will be charged at cost.

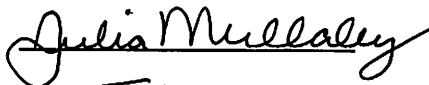
At this point it is difficult to determine the detailed level of effort that will be required to complete this review, given that key opportunities for improvement requiring further analysis may be identified. Within the interim report expected to be late January/ early February 2016, EY will recommend a strategy for any required further actions which will include a revised work plan and level of effort to complete such actions. This will be presented and co-developed/agreed with the Province.

Signed:

Name: _____

Title:

Ernst & Young LLP



Name: Julia Mullaley

Title: Clerk of the Executive Council
Government of Newfoundland and Labrador

Appendix A - Ring-Fence Procedures Memo

Internal Memorandum – Private and Confidential

To: Individuals Listed on Schedule A (the "Client Team")

[Date]

cc:

From:

Ring-Fence Procedures – Muskrat Falls Oversight Committee Review of Project Cost and Schedule Forecast and Related Risk

Ernst & Young LLP ("EY") has been engaged to provide Her Majesty In Right of Newfoundland and Labrador as represented by the Executive Council ("Client") with an assessment of the Muskrat Falls Project's cost and schedule forecast, and to identify opportunities to address any material or critical risks in relation to such project.

The procedures listed below shall be followed to ensure that there is no transfer of information between the Client Team and other EY personnel who have provided (or may be asked to provide) services to EY clients that are (or may become) directly or indirectly involved in the engagement.

Violation of the procedures set out in this memorandum will result in sanctions, up to and including dismissal. If you have any questions with respect to these procedures, please contact your Client Team leader or Diane Osak, Associate Director of Conflict Management, Risk Management Group.

1. Members of the Client Team shall not communicate or otherwise disclose any information relating to the Client or the engagement (the "Client Information") to anyone other than members of the Client Team, unless such communication or disclosure is specifically authorized by the Client Team Leader. Additionally, members of the Client Team shall not access any EY files, servers or information relating to the entities listed in Schedule B ("Major Contractors").
2. Access to any and all computer files relating to the Client Information shall be restricted to the Client Team.
3. EY's files relating to the Client Information shall be segregated from the regular file system and shall be maintained in designated, locked locations.
4. Prospective members of the Client Team will review the Major Contractors listed in Schedule B and confirm that they (i) have not performed services for Major Contractors in respect of the Muskrat Falls Project, (ii) will not perform services for Major Contractors in respect of the Muskrat Falls Project (without the consent of all parties involved), and (iii) shall sign the undertaking attached hereto as Schedule C prior to becoming members of the Client Team.
5. Members of the Client Team who request other partners and staff members, including executive assistants, clerks or students to join the Client Team are responsible for (i) confirming (by making the appropriate enquiries) that such person has not performed services for Major Contractors in respect of the Muskrat Falls Project; and (ii) ensuring that such person signs the undertaking attached hereto as Schedule C.
6. In the event that members of the Client Team wish to access expertise from industry or other experts who are partners, associates or employees of EY or its affiliated entities, then unless such experts agree to be bound by the obligations of confidentiality contained herein and sign the attached undertaking, such experts should not be provided with any information particular to the Client or Major Contractors in respect of the Muskrat Falls Project. Provided that this provision is complied with, the Client Team shall be at liberty to consult with such experts to obtain general advice in respect of an industry or other matter related to this engagement.

7. The principles contained in paragraph 6 above shall also apply when the Client Team seeks to access industry or other information through EY's Centre for Business Knowledge or other knowledge centres, whether affiliated with EY or not.

Each recipient must review this memorandum carefully and sign a copy of the attached Undertaking confirming that he or she shall adhere to the provisions contained herein. Undertakings, with an attached copy of this memorandum, must be returned to me, as soon as possible.

SCHEDULE A – THE CLIENT TEAM

[list members of the client team]

SCHEDULE B – THE MAJOR CONTRACTORS

[list legal names of major subcontractors]

SCHEDULE C – THE UNDERTAKING

UNDERTAKING

(To be signed by each member of the Client Team)

THE UNDERSIGNED hereby acknowledges receipt of a memorandum describing the confidentiality arrangements which apply to Ernst & Young LLP in respect of its engagement described in the said memorandum, a copy of which is attached hereto, and undertakes to observe all of the terms and conditions therein described as they relate to the undersigned's role in such engagement.

DATED this _____ day of _____, 2016.

Signature: _____

Print Name: _____

Please return to Engagement Team Manager, after signing.