

Mar 2014 Briefing to CEO by Project team plus emails associated with Nalcor Board update and updated AFE's .

The briefing deck includes a cost summary of \$7.5B with market conditions and Contractor pricing (\$407M) being the main driver for the cost increase of \$527M.

It was clearly identified in the deck that the \$7.5B was based on certain assumptions with the key caveat being that there was no allowance for any cost increase in the Astaldi Contract because of delays and performance.

It was also noted that the Owners cost was not through to the end of project, as well that Forex of \$41m was not included along with some other cost recoveries from a bond and from NLH.

AFE Rev 1 was subsequently approved at \$6.99B



[Hide Details](#)

Management outlook

Fri 03/07/2014 4:00 PM - 5:00 PM

Attendance is **required** for Paul Harrington

Chair: **George Chehab/LCP/NLHydro**

Location: **Ed's Office**



This entry has an alarm. The alarm will go off 5 minutes before the entry starts.

Required:

Ed Bush/NLHydro@NLHYDRO, Jason Kean/NLHydro@NLHydro, Paul Harrington/NLHydro@NLHydro, Ron Power/NLHydro@NLHydro

Description

Personal Notes



Fwd: Updated Master AFE's - Capital & Financing Costs

Paul Harrington to: Jason Kean

Cc: Brian Crawley

03/10/2014 05:26 PM

9 attachments



Master AFE Memo Muskrat Falls Co BOD DRAFT March 6 2014.pdf



MF Revised Capital Cost AFE (Draft).pdf



MF Financing Cost AFE (Draft).pdf



Master AFE Memo Labrador Transmission Co BOD DRAFT March 6 2014.pdf



LTA Revised Capital Cost AFE (Draft).pdf



LTA Financing Cost AFE (Draft).pdf



Master AFE Memo LIL General Partner Co BOD DRAFT March 6 2014.pdf



LIL Revised Capital Cost AFE (Draft).pdf



LIL Financing Cost AFE (Draft).pdf

Jason

I am trying to get the AFE package to include the potential for cost risk and the need to revisit the AFE when the remaining contracts are signed.

Sent from my iPad

Begin forwarded message:

From: "James Meaney" <JamesMeaney@nalcoreenergy.com>

To: "Gilbert Bennett" <GBennett@nalcoreenergy.com>, "Paul Harrington" <PHarrington@lowerchurchillproject.ca>

Cc: "Brian Crawley" <BrianCrawley@lowerchurchillproject.ca>, "Derrick Sturge" <DSturge@nalcoreenergy.com>

Subject: Fw: Updated Master AFE's - Capital & Financing Costs

Gilbert/Paul

As a follow-up to the discussion we had earlier this afternoon with Peter Hickman, I am resending the AFE package so we can get these on the Board agenda's the week of March 17. If you could provide your confirmation of the text highlighted in yellow in the 3 memos that would be greatly appreciated.

Also, in support of the point raised by Paul with respect to giving a "heads up" on cost

pressures that may result in a subsequent revision of the capital cost AFE's, what do you think about adding the following statement after the text highlighted in yellow in each memo:

"In addition, management will re-engage with the Board of Directors once the balance of key contracts have been awarded later in 2014 with an updated capital cost/contingency analysis and revised AFE in the event variances arise compared to the Project Budget baseline used to establish the Master AFE found in Appendix A."

By all means feel free to revise. Once we get everyone's sign off I will finalize the package and provided to Peter.

Thanks
Jim

James Meaney, CFA
General Manager Finance
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----- Forwarded by James Meaney/NLHydro on 03/10/2014 03:03 PM -----

From: James Meaney/NLHydro
To: Gilbert Bennett/NLHydro@NLHydro
Cc: Paul Harrington/NLHydro@NLHydro, Derrick Sturge/NLHydro@NLHydro
Date: 03/06/2014 04:06 PM
Subject: Updated Master AFE's - Capital & Financing Costs

Hi Gilbert

As you, Derrick and I discussed on Monday, we were planning on bring forth the MF, LTA and LIL Financing Cost AFE's for Board approval the week of March 17. As a follow-up to that conversation, I have also prepared updated Capital Cost AFE's reflecting the \$6,531m Project Budget baseline from the Project Finance Agreements. In the case of LIL, we would not be making a request at this time to the LIL GPCo Board for new

funding under the Capital Cost AFE.

As we had done the last time these were presented to the Boards, I have prepared a cover memo to accompany the AFE's. Where there is a "transfer" of funding from the original AFE to clearly separate Capital Costs from Financing Costs, I thought it made sense to address on a combined basis for the Boards in a single memo. With respect to the factors driving the changes in Capital costs between DG3 \$6,202m and Project Budget \$6,531m, I have taken some language provided by Jason Kean (highlighted in yellow in the attached memos). Could you or Paul please confirm these points are OK.

I understand Ed is leaving Saturday and not back until March 17? In light of that, I'd like to get the 4 of us together with him tomorrow to sign the AFE's as will need to be included in Board packages that Peter Hickman will be sending out early next week.

If you'd like to get together first thing in the morning to discuss by all means let me know.

Thanks
Jim

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Review LCP-AFE 

Bev Tucker to: James Meaney

Cc: Paul Harrington, Derrick Sturge, Ed Martin, Gilbert Bennett

03/07/2014 12:26 PM

Hi Jim

I didn't hear back from you so I'm going to go ahead and move this out to a couple weeks time. If you want cancelled altogether, please let me know.

Thanks

Bev



Bev Tucker

Executive Assistant to E. J. Martin
President and Chief Executive Officer
Nalcor Energy

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Information Update - Subject has changed: Review LCP-AFE

Fri 03/07/2014 3:00 PM - 3:30

PM

Attendance is **optional** for Paul Harrington

Chair: **Bev Tucker/NLHydro**

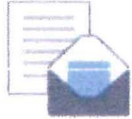
Location: **EJM meeting room or dial in option (877) 216-4736. Conference code: 9071067354. Leader Pin 3644**

Bev Tucker has sent updated information; subject has changed

Required: **Derrick Sturge/NLHydro@NLHydro, Ed Martin/NLHydro@NLHydro, Gilbert Bennett/NLHydro@NLHydro, James Meaney/NLHydro@NLHYDRO**

Optional: **Paul Harrington/NLHydro@NLHydro**

Description



Re: Fwd: Updated Master AFE's - Capital & Financing Costs 

Jason Kean to: Paul Harrington

This message is digitally signed.

03/07/2014 07:11 AM

Paul,

As before, these do not reflect the higher number nor any management reserve. The text in the accompanying memos is generally ok.

JK

Jason R. Kean, P. Eng., MBA, PMP

Deputy General Project Manager

PROJECT DELIVERY TEAM

Lower Churchill Project

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Paul Harrington

Sent from my iPad Begin forwarded message:

03/06/2014 04:52:49 PM

From: Paul Harrington/NLHydro
 To: Jason Kean/NLHydro,
 Date: 03/06/2014 04:52 PM
 Subject: Fwd: Updated Master AFE's - Capital & Financing Costs

Sent from my iPad

Begin forwarded message:

From: "James Meaney" <JamesMeaney@nalcorenergy.com>
To: "Gilbert Bennett" <GBennett@nalcorenergy.com>
Cc: "Paul Harrington" <PHarrington@lowerchurchillproject.ca>, "Derrick Sturge" <DSturge@nalcorenergy.com>
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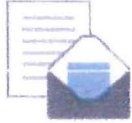
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You owe it to yourself, and your family, to make it home safely every day. What have you done today so that nobody gets hurt?[attachment "Master AFE Memo Muskrat Falls Co BOD DRAFT March 6 2014.pdf" deleted by Jason Kean/NLHydro] [attachment "MF Revised Capital Cost AFE (Draft).pdf" deleted by Jason Kean/NLHydro] [attachment "MF Financing Cost AFE (Draft).pdf" deleted by Jason Kean/NLHydro] [attachment "Master AFE Memo Labrador Transmission Co BOD DRAFT March 6 2014.pdf" deleted by Jason Kean/NLHydro] [attachment "LTA Revised Capital Cost AFE (Draft).pdf" deleted by Jason Kean/NLHydro] [attachment "LTA Financing Cost AFE (Draft).pdf"

deleted by Jason Kean/NLHydro] [attachment "Master AFE Memo LIL General Partner Co BOD DRAFT March 6 2014.pdf" deleted by Jason Kean/NLHydro] [attachment "LIL Revised Capital Cost AFE (Draft).pdf" deleted by Jason Kean/NLHydro] [attachment "LIL Financing Cost AFE (Draft).pdf" deleted by Jason Kean/NLHydro]

**Updated Master AFE's - Capital & Financing Costs****James Meaney** to: Gilbert Bennett

Cc: Paul Harrington, Derrick Sturge

03/06/2014 04:06 PM

Hi Gilbert

As you, Derrick and I discussed on Monday, we were planning on bring forth the MF, LTA and LIL Financing Cost AFE's for Board approval the week of March 17. As a follow-up to that conversation, I have also prepared updated Capital Cost AFE's reflecting the \$6,531m Project Budget baseline from the Project Finance Agreements. In the case of LIL, we would not be making a request at this time to the LIL GPCo Board for new funding under the Capital Cost AFE.

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Thanks

Jim



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Muskrat Falls Project Cost Update

5-Mar-2014

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Capital Cost Drivers and Forecast

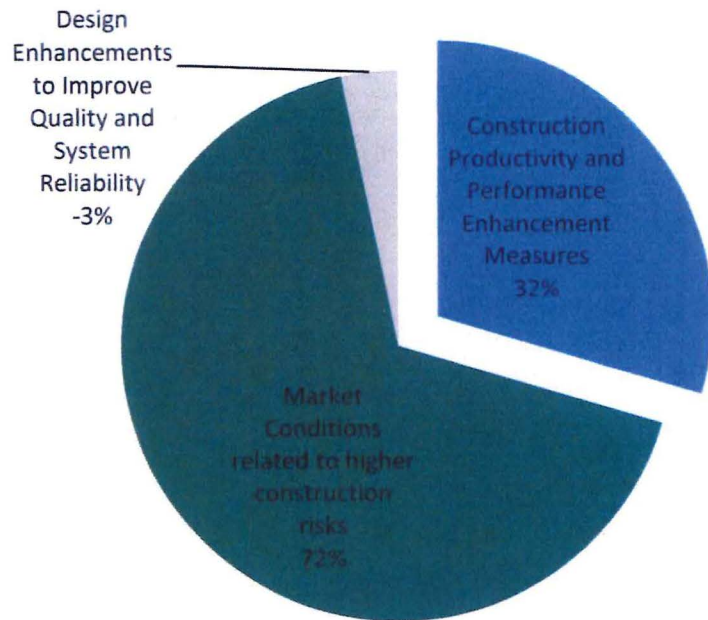


Capital Cost Drivers and Forecast

Asset	Construction productivity and Contractors performance	Market Conditions related to higher construction risks	Design Enhancement to improve quality and system reliability	Total
MF	\$ 21 M	\$ 319 M	-	\$ 340 M
LIL	-	\$ 82 M	\$ 72 M	\$ 154 M
LTA	-	\$ 6 M	\$ 27 M	\$ 33 M
LCP	\$ 21 M	\$ 407 M	\$ 99 M	\$ 527 M

MF: Construction Productivity and Contractors performance

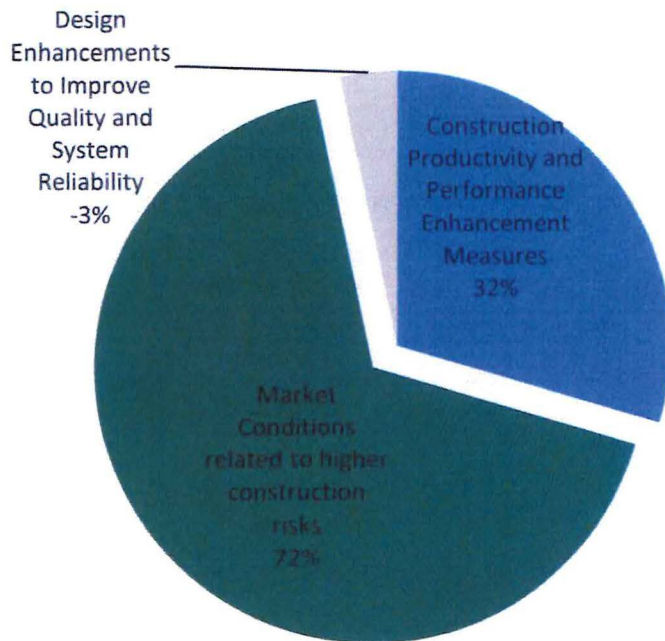
Total growth of \$ 21 M includes:



- Additional security and medical cost at the North Spur site: \$ 3M
- Increase in owner’s cost due to additional contractor management above and beyond that which was reasonable assumed: \$ 18 M

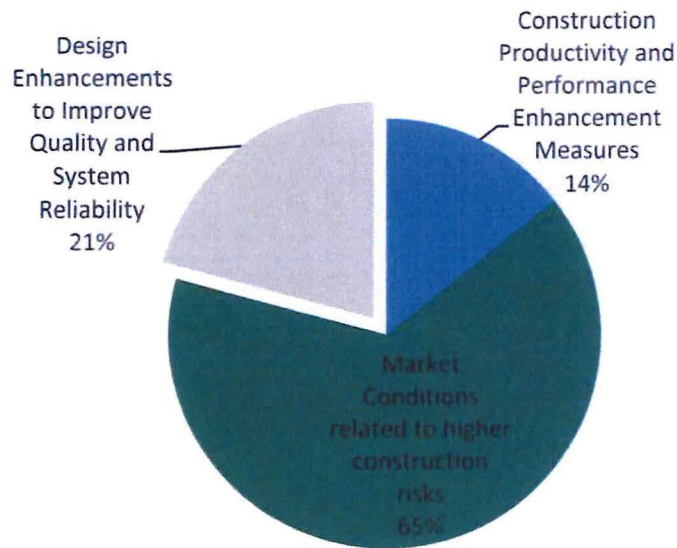
MF: Market Conditions related to higher construction risks

Total growth of \$ 319 M includes:



- Higher cost for several contracts caused by market reaction to risk concerning labor productivity and construction risks, affecting the following contracts:
 - North Spur: \$ 58 M
 - North and South Dams: \$ 158 M
 - Mechanical and Electrical Auxiliaries: \$ 70 M
- Adjustment in Contingency due to lower risk on un awarded contracts and decrease in the asset FTC value: (\$ 43 M)
- Use of the LMAX value in Astaldi’s contract due to productivity constraints: \$ 64 M
- Increase in scope of services at MF to accommodate the additional manpower requested by contractors to perform their scope of work: \$ 12 M

LIL: Design Enhancements to Improve Quality and System Reliability

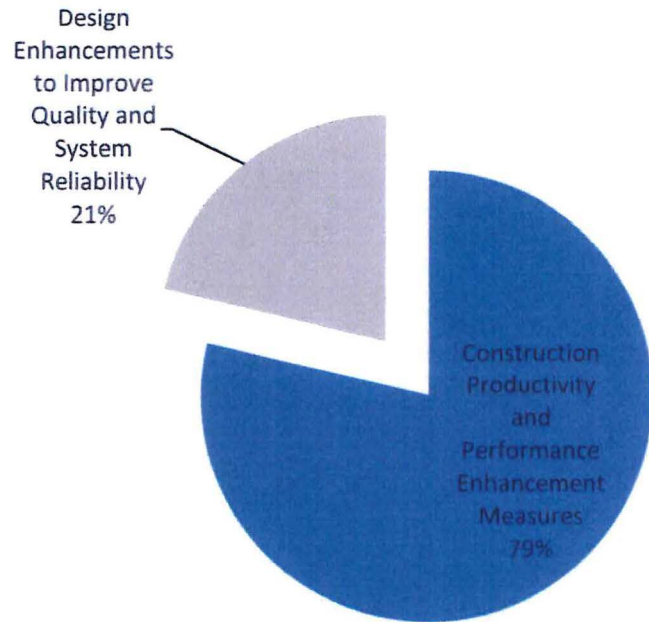


Total growth of \$ 72 M includes:

- Additional filters in the converters and improvement in grounding design: \$ 17 M
- Additional foundations, tower steel and backfills in the DC line: \$ 15 M
- Strategic investment in accesses: \$ 40 M

LTA: Design Enhancements to Improve Quality and System Reliability

Total growth of \$ 27 M includes:



- Savings related to the GIS system: (\$ 6 M)
- Additional foundations and increase in anchors length at the AC line: \$ 13 M
- Increase in owner’s cost due to additional contractor management above and beyond that which was reasonable assumed: \$ 20 M

Remarks

- Currency impact is not included in the AFE (Refer to “Summary” slide); an estimated value of \$ 41 M needs to be considered outside of this AFE value
- A value of (\$15) M was considered in the AFE as a recoupment related to the GWF bond for the AC line clearing (Refer to “Summary” slide)
- A value of (\$ 13) M was considered in the AFE as recoupment related to the cost of the HVGB line (Refer to “Summary” slide)
- Any cost increase resulting of schedule delays, acceleration or change in milestones dates for any of the contractors is not included in the AFE revision
- Any cost increase for the Astaldi contract resulting of acceleration or change in LMAX value or other changes in the contract terms is not included in the AFE revision
- The MFL shortage is calculated based on 100% of the requirements until end of Q2 2016 and 50% of the requirements from Q3 2016 thru the end of the project