

From: Krupski, Joseph <joseph.krupski@nrcan-rncan.gc.ca>
Sent: Wednesday, April 30, 2014 4:46 PM
To: ronpower@lowerchurchillproject.ca;
pharrington@lowerchurchillproject.ca
Cc: amanzi@casselsbrock.com; Kapoor, Anoop;
jamesmeaney@nalcenergy.com; jasonkean@lowerchurchillproject.ca;
lanceclarke@lowerchurchillproject.ca; 'Nikolay Argirov'
(Nikolay.V.Argirov@mwhglobal.com)
Subject: RE: Updates on IE Report Recommendations

Ron,

Thanks for the update on these items.

Regards

Joe

Joseph Krupski

Senior Policy Analyst / Analyste principal de la politique

Tel. / Tél.: 613 947 5172

Renewable and Electrical Energy Division / Division d'énergie renouvelable
et électrique

Electricity Resources Branch / Direction des ressources en électricité

Natural Resources Canada / Ressources Naturelles Canada

580 Booth St., Ottawa, ON, 17th floor, K1A 0E4

Government of Canada / Gouvernement du Canada

From: RonPower@lowerchurchillproject.ca
[mailto:RonPower@lowerchurchillproject.ca]

Sent: April-30-14 3:14 PM

To: PHarrington@lowerchurchillproject.ca

Cc: amanner@casselsbrock.com; Kapoor, Anoop; JamesMeaney@nalconenergy.com;
JasonKean@lowerchurchillproject.ca; Krupski, Joseph;
LanceClarke@lowerchurchillproject.ca; 'Nikolay Argirov'
(Nikolay.V.Argirov@mwhglobal.com)

Subject: Re: Updates on IE Report Recommendations

Paul - please be advised as follows:

Item a - North Spur studies: Separate e-mail sent on this today.

Item b - Rock Bolts: The site geologists, in conjunction with our engineering team here in St. John's, are compiling a complete package of

information. The package will be completed by Monday, 05 May. Peter Madden will then transmit the package to the IE.

Item c - Trial shop testing: As you indicate, dates are not established yet.

Regards,

Ron

Ron Power, P. Eng.

General Project Manager

PROJECT DELIVERY TEAM

Lower Churchill Project

t. 709-737-4245 c. 709-746-8498 f. 709-737-1985

e. RonPower@lowerchurchillproject.ca

w. muskratfalls.nalcorenergy.com

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?

From: Ron Power/NLHydro

To: Paul Harrington/NLHydro@NLHydro,

Cc: "amanzer@casselsbrock.com" <amanzer@casselsbrock.com>, "Kapoor, Anoop" <Anoop.Kapoor@NRCan-RNCan.gc.ca>, James Meaney/NLHydro@NLHydro, Jason Kean/NLHydro@NLHydro, "Krupski, Joseph" <Joseph.Krupski@NRCan-RNCan.gc.ca>, Lance Clarke/NLHydro@NLHydro, "'Nikolay Argirov' (Nikolay.V.Argirov@mwhglobal.com)" <Nikolay.V.Argirov@mwhglobal.com>

Date: 04/30/2014 08:45 AM

Subject: Re: Updates on IE Report Recommendations

Paul - I will be sending the response to items a, b (and potentially c) today.

thanks

From: Paul Harrington/NLHydro

To: "Krupski, Joseph" <Joseph.Krupski@NRCan-RNCan.gc.ca>,

Cc: James Meaney/NLHydro@nlhydro, "'Nikolay Argirov' (Nikolay.V.Argirov@mwhglobal.com)" <Nikolay.V.Argirov@mwhglobal.com>, "Kapoor, Anoop" <Anoop.Kapoor@NRCan-RNCan.gc.ca>, "amanzer@casselsbrock.com" <amanzer@casselsbrock.com>, Jason Kean/NLHydro@nlhydro, Ron Power/NLHydro@nlhydro, Lance Clarke/NLHydro@nlhydro

Date: 04/28/2014 01:39 PM

Subject: Re: Updates on IE Report Recommendations

Thanks Joe

The anniversary date is when the FLG was achieved with all CPs completed

Sent from my iPad

On Apr 28, 2014, at 11:22 AM, "Krupski, Joseph" <Joseph.Krupski@NRCan-RNCan.gc.ca> wrote:

Thanks Paul, this is helpful. I appreciate you taking the time to respond while on vacation.

On (a) and (b), we look forward to hearing from Ron. On (d), Nik and I will discuss your suggestion. On (e), what do you mean by "the anniversary date"?

Regards,

Joe

From: PHarrington@lowerchurchillproject.ca
[<mailto:PHarrington@lowerchurchillproject.ca>]

Sent: April-25-14 7:12 PM

To: Krupski, Joseph

Cc: JamesMeaney@nalcoreenergy.com; 'Nikolay Argirov' (Nikolay.V.Argirov@mwhglobal.com); Kapoor, Anoop; amanzer@casselsbrock.com; JasonKean@lowerchurchillproject.ca; RonPower@lowerchurchillproject.ca; LanceClarke@lowerchurchillproject.ca

Subject: Re: Updates on IE Report Recommendations

I am on vacation so I am asking Ron, Lance or Jason to double check my responses, shown below against your items

Sent from my iPad

On Apr 25, 2014, at 9:51 AM, "Krupski, Joseph" <Joseph.Krupski@NRCan-RNCan.gc.ca> wrote:

Hi Jim, Paul -

Just a reminder about this. Would appreciate a response.

Thanks

Joe

From: Krupski, Joseph

Sent: April-10-14 8:45 AM

To: JamesMeaney@nalconenergy.com; PHarrington@lowerchurchillproject.ca

Cc: 'Nikolay Argirov' (Nikolay.V.Argirov@mwhglobal.com); Kapoor, Anoop; amanzer@casselsbrock.com

Subject: RE: Updates on IE Report Recommendations

Jim, Paul:

Thanks for the update on these items. Some questions:

a. North Spur: When do you expect that this analysis will be completed and be made available to the IE?

I understand that this will be available July/august (Ron pls ask Regis to confirm)

b. Rock bolts: If you will not be preparing a single plan or document that shows the pattern bolting and spot bolting, please provide the primary source information mentioned in the IE report ("individual blast faces maps and data sheets") to the IE so that the IE can review and confirm that sufficient rock support has been installed.

I am asking Ron to work on this and advise how best to satisfy the IE request

c. Trial shop testing: please provide results to the IE once available.

Agreed, we will advise of timing once dates are known

d. Integration of contractor's schedules - Please provide revised versions of the master schedule as it is updated to the IE. When do you anticipate that the schedule revised to reflect the contractor's schedule for contract CH0007 will be ready for the IE's review? Also, has the master schedule been updated to reflect the contractor's schedules for LC-SB-003 and CH0030? These contracts were awarded back in 2012.

We are currently working the 07 schedule with the contractor and will provide ..we suggest that the IE planning resource come to St Johns to go through the latest schedules we have

e. Class 2 estimate: As you state, this will be prepared once most/all material contracts have been awarded. Which material contracts do you require to be in place to prepare the Class 2 estimate? For all of the material contracts that have not yet been awarded, could you please provide expected award dates for our records?

The class two estimate will be when we have firm pricing from the remaining contracts ,

The big hitters are converters, HVDC transmission, switch yards, n spur, north and south dams, balance of plant. As we agreed last meeting that will be in the fall with a class two ready by the anniversary date.

f. O&M information: I believe Nik is looking into whether he has this information.

Ok pls let us know if we need to resend

Thanks,

Joe

Joseph Krupski

Senior Policy Analyst / Analyste principal de la politique

Tel. / Tél.: 613 947 5172

Renewable and Electrical Energy Division / Division d'énergie renouvelable
et électrique

Electricity Resources Branch / Direction des ressources en électricité

Natural Resources Canada / Ressources Naturelles Canada

580 Booth St., Ottawa, ON, 17th floor, K1A 0E4

Government of Canada / Gouvernement du Canada

From: JamesMeaney@nalcoreenergy.com [<mailto:JamesMeaney@nalcoreenergy.com>]

Sent: April-02-14 1:49 PM

To: Nikolay Argirov; Manzer, Alison; Krupski, Joseph

Cc: EdBush@lowerchurchillproject.ca; GBennett@nalcoreenergy.com;
PHarrington@lowerchurchillproject.ca

Subject: Updates on IE Report Recommendations

Hi Folks

See updates below in **red**....I think the O&M spreadsheet was sent to MWH a couple of times last fall

Regards

Jim

<M2.jpg>		<p>James Meaney, CFA</p> <p>General Manager Finance</p> <p>Nalcor Energy - Lower Churchill Project</p> <p>t. 709 737-4860 c. 709 727-5283 f. 709 737-1901</p> <p>e. JamesMeaney@nalcorenergy.com</p> <p>w. nalcorenergy.com</p> <p>1.888.576.5454</p>
----------	--	--

**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?**

----- Forwarded by James Meaney/NLHydro on 04/02/2014 03:16 PM -----

From: Paul Harrington/NLHydro

To: James Meaney/NLHydro@NLHYDRO

Cc: Gilbert Bennett/NLHydro@NLHydro, Peter Madden/NLHydro@NLHYDRO,
Ed Bush/NLHydro@NLHYDRO

Date: 04/02/2014 09:20 AM

Subject: Re: Fw: Nalcor meeting on Wednesday

Here is the status----PETER ... pls check into item f) for me and let me know if this has been sent already

- a. North Spur recommendations - pages 9, 175- **The analysis is ongoing and not complete - The IE requested the complete analysis. Nalcor will provide this when available**
- b. Rock bolt recommendations - page 15-16- **Nalcor are not planning to compile the information , this was an IE opinion not shared by Nalcor**
- c. Trial shop testing for governors under CH0030 - page 28- **Factory Acceptance Tests (FATs) and Site Acceptance Tests (SATs) are planned for the controls**
- d. Schedules from various contractors (including CH0030, CH0007, SB003) to be integrated into master schedule and provided to the IE for its review - various places, including page 175. - **These schedules are being developed and will be integrated into the Master Schedule when fully accepted by Nalcor**
- e. Adjustment of contingency -- pages 85-87- **The IE has noted that the DG3 contingency is considered aggressive for a Class 3 estimate, Nalcor is currently working towards a Class 2 estimate with the award of the major contracts, wherein contingency is established at a much tighter band around the forecast to complete value. Nalcor shall review the contingent equity, when Class 2 is achieved later in 2014.**
- f. Supporting spreadsheet for Table 6-1 (O&M Annual Charges) - page 103- **Nalcor is checking to see if this has been provided previously**

Paul Harrington

Project Director

PROJECT DELIVERY TEAM

Lower Churchill Project

t. 709 737-1907 c. 709 682-1460 f. 709 737-1985

e. PHarrington@lowerchurchillproject.ca

w. muskratfalls.nalcorenergy.com

This email communication is confidential and legally privileged. Any unauthorized reproduction, distribution or disclosure of this email or any attachments is strictly prohibited. Please destroy/delete this email communication and attachments and notify me if this email was misdirected to you.

From: James Meaney/NLHydro
To: Gilbert Bennett/NLHydro@NLHydro, Paul Harrington/NLHydro@NLHydro, Ed Bush/NLHydro@NLHYDRO,
Date: 03/31/2014 02:33 PM
Subject: Fw: Nalcor meeting on Wednesday

See below....Ed, just got your note that you may need to go to site on Weds....in light of this request, would it be possible for you to stay in St John's?

<M2.jpg>		<p>James Meaney, CFA</p> <p>General Manager Finance</p> <p>Nalcor Energy - Lower Churchill Project</p> <p>t. 709 737-4860 c. 709 727-5283 f. 709 737-1901</p> <p>e. JamesMeaney@nalcorenergy.com</p> <p>w. nalcorenergy.com</p> <p>1.888.576.5454</p>
----------	--	--

**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?**

----- Forwarded by James Meaney/NLHydro on 03/31/2014 02:31 PM -----

From: "Manzer, Alison" <amanzer@casselsbrock.com>

To: Nikolay Argirov <nikolay.v.argirov@mwhglobal.com>, James Meaney
<jamesmeaney@nalcorenergy.com>

Date: 03/31/2014 02:27 PM

Subject: Fw: Nalcor meeting on Wednesday

Please ensure we have time and some preparation re these.

Sent from my BlackBerry 10 smartphone on the Rogers network.

From: Krupski, Joseph

Sent: Monday, March 31, 2014 12:55 PM

To: Manzer, Alison

Cc: Boudreau, Anne: IC; Lazarus, Rhonda (Rhonda.Lazarus@justice.gc.ca); Kapoor,

Subject: Nalcor meeting on Wednesday

Hi Alison -

Would like to add an item to the agenda for our meeting with Jim and Nik on Wednesday. We need to understand the process for updating the final forecast cost and the contingency over time. We are seeing contract costs going up (e.g. \$40 million for the accommodations complex), but this is not showing up in a change to the final forecast cost (presumably because it is eating up contingency, or some other costs are decreasing). I think there needs to be a periodic, scheduled cost review like the one that was done in November that resulted in the update of the cost from the DG3 figure of 6.202 billion to the Financial Close figure of \$6.532 billion. The fact that the construction reports say that the FFC has not changed implies that a rigorous cost review like the one done in November is being done on a monthly basis, but I am sure this is not the case.

Also, I have gone through the Nov 29th IE report and identified a number of items where IE made recommendations or requests, as per item 5 of the IE Matters agenda. I would like to hear from Nalcor as to where things stand with these recommendations/requests. Here they are:

- a. North Spur recommendations - pages 9, 175
- b. Rock bolt recommendations - page 15-16
- c. Trial shop testing for governors under CH0030 - page 28
- d. Schedules from various contractors (including CH0030, CH0007, SB003) to be integrated into master schedule and provided to the IE for its review - various places, including page 175
- e. Adjustment of contingency -- pages 85-87
- f. Supporting spreadsheet for Table 6-1 (O&M Annual Charges) - page 103

Joseph Krupski

Senior Policy Analyst / Analyste principal de la politique

Tel. / Tél.: 613 947 5172

Renewable and Electrical Energy Division / Division d'énergie renouvelable et électrique

Electricity Resources Branch / Direction des ressources en électricité

Natural Resources Canada / Ressources Naturelles Canada

580 Booth St., Ottawa, ON, 17th floor, K1A 0E4

Government of Canada / Gouvernement du Canada