

From: pharrington@lowerchurchillproject.ca
Sent: Tuesday, November 19, 2013 1:56 PM
To: jamesmeaney@nalcoreenergy.com
Cc: gbennett@nalcoreenergy.com; emartin@nalcoreenergy.com;
lanceclarke@lowerchurchillproject.ca; jasonkean@lowerchurchillproject.ca;
edbush@lowerchurchillproject.ca
Subject: Updated Costs
Attachments: Major Package Status Report - Oct 31, 2013 (Summary) rev3 .pdf; Major Package Status Report - Oct 31, 2013 (Details) rev3 .pdf

Jim

please find the approved version of costs for IE and Insurance placing

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.nalcoreenergy.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.

----- Forwarded by Paul Harrington/NLHydro on 11/19/2013 01:54 PM -----

From: George Chehab/LCP/NLHydro
To: Paul Harrington/NLHydro@NLHydro,
Cc: James Meaney/NLHydro@NLHYDRO, Jason Kean/NLHydro@NLHYDRO
Date: 11/19/2013 01:51 PM
Subject: Re: Fw: Insurance costs for determining premium

Paul

please find attached

cheers



Major Package Status Report - Oct 31, 2013 (Summary)

Major Package Status Report - Oct 31, 2013 (Details)

rev3 .pdf
rev3 .pdf

George Chehab
Lead Cost Controller
PROJECT DELIVERY TEAM
Lower Churchill Project
t. 709-752-3461 x55147
e. GeorgeChehab@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?

Paul Harrington---11/19/2013 11:47:01 AM---Pls make these changes and get the revised spreadsheet, cover note back to me Thx

From: Paul Harrington/NLHydro
To: Jason Kean/NLHydro@NLHydro,
Cc: George Chehab/LCP/NLHydro@NLHYDRO, James Meaney/NLHydro@NLHYDRO
Date: 11/19/2013 11:47 AM
Subject: Fw: Insurance costs for determining premium

Pls make these changes and get the revised spreadsheet, cover note back to me

Thx

paul

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.

----- Forwarded by Paul Harrington/NLHydro on 11/19/2013 11:43 AM -----

From: Ed Martin/NLHydro
To: Paul Harrington/NLHydro@NLHydro,
Cc: Gilbert Bennett/NLHydro@NLHydro, James Meaney/NLHydro@NLHydro
Date: 11/19/2013 09:30 AM
Subject: Re: Fw: Insurance costs for determining premium

Paul and Gilbert,

1. Please adjust the comment box at the bottom of the table to reflect the following words, instead of what is there;

"Material Contract variance explanation detail provided as part of overall 06-Nov-2013 Project Update Deck, with variance summarized in 3 categories; 1. Design Enhancements to improve reliability 2. Construction productivity enhancement measure 3. Market conditions"

2. In the second to last column heading, please add a postscript footnote reference number next to "F=E-C-D", and reference it to the comment above, just to make it clearer.

3. Then ok to forward.

Ed

Paul Harrington---11/18/2013 11:02:07 AM---Ed we would like to file the attached spreadsheet and cover sheet in the data room - I believe that

From: Paul Harrington/NLHydro
To: Ed Martin/NLHydro@NLHydro
Cc: Gilbert Bennett/NLHydro@NLHydro, James Meaney/NLHydro@NLHYDRO
Date: 11/18/2013 11:02 AM
Subject: Fw: Insurance costs for determining premium

Ed

we would like to file the attached spreadsheet and cover sheet in the data room - I believe that Gilbert was talking to you about it. We have shared all the data with the Feds and IE already and the data room contains a lot of similar and even more commercially sensitive material and has very restricted access.

Please let me know if OK with you.... we are chipping away at the list of items we need to clear off and I would like to move this one forward.

[attachment "major contracts overview Nov 2013.pdf" deleted by Ed Martin/NLHydro] [attachment "cover sheet Costs.pdf" deleted by Ed Martin/NLHydro]

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.

----- Forwarded by Paul Harrington/NLHydro on 11/18/2013 10:48 AM -----

From: Gilbert Bennett/NLHydro

To: Paul Harrington/NLHydro@NLHydro,

Cc: James Meaney/NLHydro@NLHYDRO, Lance Clarke/NLHydro@NLHydro

Date: 11/18/2013 10:34 AM

Subject: Re: Insurance costs for determining premium

I'm in Halifax this morning working on the SOBI file, but I didn't get any further feedback from Ed, other than a question on performance security on the Astaldi sheet.

If somebody can check with him, that would be great...

G



Gilbert J. Bennett, P. Eng.
Vice President
Nalcor Energy - Lower Churchill Project
t. 709 737 1836
e. gbennett@nalcorenergy.com
w. nalcorenergy.com
1.888.576.5454

Paul Harrington---18/11/2013 10:25:32 AM---Gilbert is that spreadsheet and cover sheet OK to file in the data room?

From: Paul Harrington/NLHydro
To: James Meaney/NLHydro@NLHYDRO, Gilbert Bennett/NLHydro@NLHydro
Cc: Lance Clarke/NLHydro@NLHydro
Date: 18/11/2013 10:25 AM
Subject: Re: Insurance costs for determining premium

Gilbert

is that spreadsheet and cover sheet OK to file in the data room?

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.

James Meaney---11/18/2013 10:24:16 AM---I have the charts which George Chabab prepared for Canada/IE. I would envision we use the data from

From: James Meaney/NLHydro
To: Paul Harrington/NLHydro@nlhydro,
Cc: Lance Clarke/NLHydro@nlhydro
Date: 11/18/2013 10:24 AM
Subject: Re: Insurance costs for determining premium

I have the charts which George Chabab prepared for Canada/IE. I would envision we use the data from that for insurers and Moore McNeil once we get the OK from Ed re: Gilbert's email of Friday. Have we heard anything on that front?

Sent from my BlackBerry 10 smartphone.

From: Paul Harrington
Sent: Monday, November 18, 2013 10:21 AM
To: James Meaney
Cc: Lance Clarke
Subject: Insurance costs for determining premium

Jim
I am not certain that this is clearly allocated to any one person
Do you have the data that is required to align the Insured amount to the \$6.531B number ? - I know some costs were not included in the insured amount and if someone in Project needs to rerun the costs based on those costs that were included, reflecting the \$6.531B number please let me know - I get the feeling that this may be falling between two chairs...but hope I am wrong
Thanks paul

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

MATERIAL CONTRACTS COST SUMMARY

19-Nov-2013

#	Package #	Package Title	Actual Award Date	Expected Award Date	Procurement Status	Estimated Substantial Completion Date	A		C = A + B		E		F = E - C - D ⁽¹⁾ Variance	Transfer Details
							DG3 Base Estimate	DG3 Escalation Allowance	Original Control Budget	Transfer To/From other contracts	Final Forecast Cost (FFC)			
1	CH0007	Construction of Intakes & Powerhouse, Spillway and Transition Dams	24-Sep-2013		LNTP Signed	2017	\$ 687,994,112	\$ 63,993,604	\$ 751,987,716	\$ (6,969,480)	\$ 1,024,292,550	\$ 279,274,314	* Transfer of 8,1 M from SH0021 for snow clearing and road maintenance * Transfer of 6,1 M from CH0009 for south transition dam structure * Transfer of 9,8 M to CH0032 for secondary concrete of intake and PH * Transfer of 9,2 M to CH0009 for cofferdams scope transfer * Transfer of 10,1 M from CH0031 for electro-mechanical embedments * Transfer of 12,2 M to SM0709 for air transportation	
2	CD0501	Supply and Install of Converters and Cable Transition Compounds		20-Dec-2013	Bids in - Evaluation Continues	Q2 2017	\$ 401,654,399						* Transfer of [redacted] from CD502 for per diem * Transfer of [redacted] to CD0503 for 30,000 M3 of granular fill 300mm * Transfer of [redacted] from CD502 for ac breakers for MF and SP * Transfer of [redacted] to SM0709 for Air transportation * Transfer of [redacted] from CD502 for the supply of ac breakers for MF and SP * Transfer of [redacted] from SM0705 for Lab services of the LTA and LITL	
3	CT0327	Construction of 350 kV HVdc Transmission Line - Section 1 (MF to SOBI to Deer Lake 610 km)		Q2 2014	RFP being developed (with CT0346 scope included)	Q1 2017	\$ 358,988,474	\$ 33,741,052	\$ 392,729,526	\$ 90,297,291	\$ 492,176,817	\$ 9,150,000	* Transfer of 97 M for merging CT0343 to CT0327 * Transfer of 3,6 M to CT0354/CT0355 for Marshalling yard * Transfer of 4.4 M to SM0709 for Air transportation * Transfer of 1.4 M from SM0705 for Lab services of LITL	
4	CT0319	Construction of 315 kV Hvac Transmission Line (MF to CF)		Q4 2013	Bids in - Evaluation Continues	Q3 2016	\$ 188,116,443	\$ 16,311,459	\$ 204,427,902	\$ (1,440,850)	\$ 259,084,236	\$ 56,097,184	* Transfer of 2,5 M to CT0354 for Marshalling yard * Transfer of 1.05 M from SM0705 for Lab services of LTA	
5	CT0346	Construction of 350 kV HVdc Transmission Line - Section 2 (Central & Eastern NL 470 km)		Q2 2014	RFP being developed (with CT0346 scope included)	Q1 2017	\$ 167,647,168	\$ 19,767,223	\$ 187,414,391	\$ (3,284,413)	\$ 185,579,978	\$ 1,450,000	* Transfer of 2 M to CT0355 for Marshalling yard * Transfer of 2.36 M to SM0709 for Air transportation * Transfer of 1.05 M from SM0705 for Lab services of LITL	
6	CH0030	Supply and Install Turbines and Generators	02-Jan-2013		Contract Awarded	2017	\$ 200,000,000							
7	CD0502	Construction of AC Substations and synchronous condensers facilities		31-Mar-2014	RFP closes Nov 27	Q3 2016	\$ 141,056,231						* Transfer of [redacted] from SM0705 for Lab services of LTA and LITL * Transfer of [redacted] to CD534 for SyC civil and Mech. Works * Transfer of [redacted] to CD501/CD503/CD0534 for per diem * Transfer of [redacted] to CD0503 for 78,000 M3 of granular fill 300mm * Transfer of [redacted] from PD0537 for dry type tranfos * Transfer of [redacted] to merge PD0505 to CD0502 as EPC contract * Transfer of [redacted] to CD501 for ac breakers for MF and SP * Transfer of [redacted] to CD0534 for installing the auto transformers * Transfer of [redacted] to SM0709 for Air transportation * Transfer of [redacted] for the SST scope from PD0537	
8	CH0024-001	Construction of Reservoir Clearing - North Bank	25-Apr-2013		Contract Awarded	Q4 2016	\$ 54,045,313	\$ 3,265,312	\$ 57,310,625	\$ 90,551,215	\$ 131,170,400	\$ (16,691,440)	* Transfer of 90,5 M from CH0023 for merging the 2 packages	
9	CH0009	Construction of North and South Dams			Exercising options with CH0007 for completion of scope	Q4 2017	\$ 117,166,506						* Transfer of [redacted] from CH0006 for Spillway D/S cofferdam removal * Transfer of [redacted] to CH0007 for south transition dam structure * Transfer of [redacted] from CH0007 for cofferdams scope transfer * Transfer of [redacted] to SM0709 for air transportation	
10	SH0018	Provision of Catering, Housekeeping & Janitorial Services (MF)		29-Nov-2013	Bids in - Evaluation Continues	Q4 2017	\$ 114,800,000	\$ 7,908,010	\$ 122,708,010	\$ (11,932,067)	\$ 136,800,943	\$ 26,025,000	* Transfer of 0,6 M to SM0714 for early works accommodations * Transfer of 11,3 M to SH0054 for temporary site services at MF	
11	CH0006-001	Construction of Bulk Excavation Works	06-Nov-2012		Contract Awarded	Q4 2013	\$ 135,471,949	\$ 4,410,934	\$ 139,882,883	\$ 2,880,997	\$ 147,239,655	\$ 4,475,775	* Transfer of 0,6 M for Spillway D/S cofferdam removal to CH0009 * Transfer of 0,8 M for one year of snow clearing from SH0021 * Transfer of 2,4 M for one year of ground transportation from SH0041 * Transfer of 0,3 M as accommodation costs to CH0006	
12	CH0002-001	Supply and Install Accommodations Complex Buildings	22-Oct-2012		Contract Awarded	Q1 2014	\$ 65,267,191	\$ 1,628,207	\$ 66,895,398	\$ 15,537,176	\$ 151,826,189	\$ 69,393,615	* Transfer of 1 M for the clinic building to CH0003 * Transfer of 0,3 M as accommodation costs to CH0006 * Transfer of 16,5 M of the utilities budget CH0005	
13	CH0032	Supply and Install of Powerhouse Hydro-Mechanical Equipment	31-Oct-2013		LNTP Signed	Q1 2018	\$ 101,525,168						* Transfer of [redacted] from CH0031 for electrical and mechanical aux works * Transfer of [redacted] to merge CH0046 with CH0032 * Transfer of [redacted] to CH0032 for secondary concrete of intake and PH * Transfer of [redacted] M to SM0709 for air transportation	
14	LC-SB-003	Submarine Cable Design, Supply and Install	29-Nov-2012		Contract Awarded	Q3 2016	\$ 141,000,000	\$ 6,089,747	\$ 147,089,747		\$ 147,089,747	\$ -		
15	SM0714	Engineering, Procurement and Construction Management (EPCM) Services	01-Feb-2011		Contract Awarded	N/A	\$ 352,005,457	\$ 18,939,735	\$ 370,945,192	\$ 1,600,000	\$ 359,318,706	\$ (13,226,486)	* Transfer of 1 M from SM0710 to S/I IT equipment * Transfer of 0,6 M from SH0018 for early works accommodations	
16	PH0014	Supply of Generator Step-up Transformers		29-Nov-2013	Bids in - Evaluation Continues	Q4 2016	\$ 19,464,469	\$ 1,084,547	\$ 20,549,016		\$ 20,547,836	\$ (1,180)		
17	PH0016	Supply of Generator Circuit Breakers		27-Nov-2013	Bids in - Evaluation Continues	Q1 2017	\$ 5,056,000	\$ 114,372	\$ 5,170,372	\$ (125,000)	\$ 5,045,372	\$ -	* Transfer of 0,1 M to PH0015 for the generator surge capacitor	
		BALANCE OF SCOPE					\$ 2,241,527,820	\$ 101,749,985	\$ 2,343,277,805	\$ (304,774,737)	\$ 2,044,746,880	\$ 6,243,812		
		CONTINGENCY					\$ 367,852,397		\$ 367,852,397		\$ 182,944,870	\$ (184,907,527)		

TOTAL

\$ 5,860,639,097 \$ 341,853,448 \$ 6,202,492,545 \$ - \$ 6,531,754,580 \$ 329,262,035

COMMENTS: (1) Material Contract variance explanation detail provided as part of overall 06-Nov-2013 project Update Deck, with variance summarized in 3 categories:

1. Design Enhancements to improve reliability
2. Construction Productivity Enhancement Measures
3. Market Conditions

LCP DG3 Estimate vs. Current Final Forecast Cost Reconciliation**19-Nov-2013**

	<u>DG3 - OCB</u>	<u>Current FFC</u>
Historical Cost (Pre-May 2012)	\$ 186,806,422	\$ 186,806,422
Material Contracts (1)	\$ 3,491,362,343	\$ 4,304,062,830
Project Management	\$ 235,998,337	\$ 245,998,337
Environmental	\$ 26,839,853	\$ 27,014,853
Balance of Scope	\$ 1,893,630,314	\$ 1,584,927,268
Contingency	<u>\$ 367,852,397</u>	<u>\$ 182,944,870</u>
	\$ 6,202,489,666	\$ 6,531,754,580

(1) See Attached for Details on 17 Material Contracts

(2) Includes Escalation

(3) The Final Forecasted Cost includes the cost impact of executed LNTP's, Contracts and PO costs