

**From:** jamesmeaney@nalconenergy.com  
**Sent:** Saturday, November 9, 2013 11:50 AM  
**To:** Home  
**Subject:** Fw: VAriance Explanation for Feds  
**Attachments:** Major Package Status Report - Oct 31, 2013 Costed rev GC.xlsx; Approval form.xlsx; cost flow october for cash flow purpose.XLS

Sent from my BlackBerry 10 smartphone.

**From:** James Meaney  
**Sent:** Friday, November 8, 2013 10:56 PM  
**To:** George Chehab  
**Cc:** Ed Bush; Jason Kean; Lance Clarke; Paul Harrington  
**Subject:** Re: VAriance Explanation for Feds

Hi George

Thanks again for all your assistance today in pulling together the major contracts summary for the Feds.

I've been giving some more thought to the monthly cost flow series that Auburn's team should be using in the financial models, as this will also be presented to the Feds and their advisors this upcoming week. It really needs to be the same cost flow series that underpins the approved \$6,531m FFC and reconciles to the major contracts summary. As I understood it, I think the \$6,508m was a forecast with a cutoff at a slightly different point in time?

Is the monthly cost flow series that underpins the \$6,531m something that's already available? If not, when is the earliest this could be provided?

Paul, depending on timing, it's quite possible this figure might become the official "Project Budget" in the schedule to the Project Financing Agreements that will also serve as the baseline in the Construction Report going forward. Similarly, this latest run of the financial models may also end up being the "model of record" for financial close. So in that light, critical that we have consistency in what's being used for the latest view of capital costs.

If you have any questions or want to discuss further please feel free to give me a call over the weekend on my cell at 727-5283.

Thanks

Jim

*(See attached file: Approval form.xlsx) (See attached file: cost flow october for cash flow purpose.XLS)*

## **George Chehab**

**Lead Cost Controller**

**PROJECT DELIVERY TEAM**

**Lower Churchill Project**

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James Meaney, CFA

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George Chehab---11/08/2013 04:18:47 PM---Jason i was preparing with Paul, Lance, James a file to explain the variances for the 17 major packa

From: George Chehab/LCP/NLHydro

To: Jason Kean/NLHydro@NLHydro

Cc: Lance Clarke/NLHydro@NLHydro, Paul Harrington/NLHydro@NLHydro, James Meaney/NLHydro@NLHYDRO, Ed Bush/NLHydro@NLHYDRO

Date: 11/08/2013 04:18 PM

Subject: Variance Explanation for Feds

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Jason

i was preparing with Paul, Lance, James a file to explain the variances for the 17 major packages based on the 6,531 B Forecast

the file shows the major 17 contracts and a line the balance of scope

it aligns with the Approval form Paul signed today ( end of September) and the 3 variance categories (market, Construction, Reliability) i provided you

let me know if you have questions

cheers

*(See attached file: Major Package Status Report - Oct 31, 2013 Costed rev GC.xlsx)*

**George Chehab**

**Lead Cost Controller**


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Package #	Package Title	Actual Award Date	Expected Award Date	Procurement Status	Est. Substantially Completion Date	A DG3 Base Estimate	B DG3 Escalation Allowance	C = A + B Original Control Budget	D Final Forecast Cost (FFC)	E Transfer from other contracts	F Market Conditions	G Construction Productivity Enhancement Mesures	H Design Enhancements to Improve Reliability	I=F+G+H Actual Variance
CH0007	Construction of Intakes & Powerhouse, Spillway and Transition Dams	24-Sep-2013		LNTP Signed	2017	\$ 687,994,112	\$ 63,993,604	\$ 751,987,716	\$ 1,117,743,386	\$ (6,969,480)	\$ 82,502,364	\$ 240,055,286	\$ 50,167,500	\$ 372,725,150
CD0501	Supply and Install of Converters and Cable Transition Compounds		20-Dec-2013	Bids in - Evaluation Continues	Q2 2017	\$ 401,654,399								
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	\$ 492,176,817	\$ 90,297,291			\$ 9,150,000	\$ 9,150,000
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	\$ 259,084,236	\$ (1,440,850)	\$ 24,252,592	\$ 6,000,000	\$ 25,844,592	\$ 56,097,184
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	\$ 185,579,978	\$ (3,284,413)			\$ 1,450,000	\$ 1,450,000
CH0030	Supply and Install Turbines and Generators	02-Jan-2013		Contract Awarded	2017	\$ 200,000,000								
CD0502	Construction of AC Substations and synchronous condensers facilities		31-Mar-2014	RFP closes Nov 27	Q3 2016	\$ 141,056,231								
CH0024-001	Construction of Reservoir Clearing - North Bank	25-Apr-2013		Contract Awarded	Q4 2016	\$ 54,045,313	\$ 3,265,312	\$ 57,310,625	\$ 131,170,400	\$ 90,551,215	\$ (16,691,440)			\$ (16,691,440)
CH0009	Construction of North and South Dams			Exercising options with CH0007 for completion of scope	Q4 2017	\$ 117,166,506								
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	\$ 136,800,943	\$ (11,932,067)		\$ 26,025,000		\$ 26,025,000
CH0006-001	Construction of Bulk Excavation Works	06-Nov-2012		Contract Awarded	Q4 2013	\$ 135,471,949	\$ 4,410,934	\$ 139,882,883	\$ 147,239,655	\$ 2,880,997	\$ (12,626,455)	\$ 15,437,534	\$ 1,664,696	\$ 4,475,775
CH0002-001	Supply and Install Accommodations Complex Buildings	22-Oct-2012		Contract Awarded	Q1 2014	\$ 65,267,191	\$ 1,628,207	\$ 66,895,398	\$ 151,826,189	\$ 15,537,176	\$ 67,417,426	\$ 1,976,189		\$ 69,393,615

Package #	Package Title	Actual Award Date	Expected Award Date	Procurement Status	Est. Substantially Completion Date	A DG3 Base Estimate	B DG3 Escalation Allowance	C = A + B Original Control Budget	D Final Forecast Cost (FFC)	E Transfer from other contracts	F Market Conditions	G Construction Productivity Enhancement Mesures	H Design Enhancements to Improve Reliability	I=F+G+H Actual Variance
CH0032	Supply and Install of Powerhouse Hydro-Mechanical Equipment	31-Oct-2013		LNTP Signed	Q1 2018	\$ 101,525,168								
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					\$ -
SM0714	Engineering, Procurement and Construction Management (EPCM) Services	01-Feb-2011		Contract Awarded	N/A	\$ 352,005,457	\$ 18,939,735	\$ 370,945,192	\$ 359,318,706	\$ 1,600,000		\$ (13,226,486)		\$ (13,226,486)
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)			\$ (1,180)
PH0016	Supply of Generator Circuit Breakers		27-Nov-2013	Bids in - Evaluation Continues	Q1 2017	\$ 5,056,000	\$ 114,372	\$ 5,170,372	\$ 5,045,372	\$ (125,000)				\$ -
	BALANCE OF SCOPE					\$ 2,241,527,820	\$ 101,749,985	\$ 2,343,277,805	\$ 2,044,746,880	\$ (304,774,737)	\$ (39,754,698)	\$ 55,370,004	\$ (9,371,493)	\$ 6,243,813
	CONTINGENCY					\$ 367,852,397		\$ 367,852,397	\$ 89,494,034					\$ (278,358,363)
						\$ 5,860,639,097	\$ 341,853,448	\$ 6,202,492,545	\$ 6,531,754,580	\$ -	\$ 142,702,133	\$ 399,933,692	\$ 64,984,573	\$ 329,262,035

**MONTHLY FORECAST APPROVAL FORM**

**Period Ending: 30 September 2013**

**Currency : \$ CAD**

Base Estimate + Escalation	A	5,834,640,148
Contingency	B	367,852,397
<b>Original Control Budget (OCB)</b>	<b>C = A+B</b>	<b>6,202,492,545</b>
Approved Scope changes (PCNs)	D	210,769,975
<b>Current Control Budget ( Excluding Contingency)</b>	<b>E = A+D</b>	<b>6,045,410,123</b>
<b>Remaining Contingency (LITL)</b>	F	89,494,034
Value of Approved Trends in FFC	G	351,322,554
Potential Exposure (Trends Under Study)	H	45,527,869
Final Forecast Cost (FFC)	<b>I= E+F+G+H</b>	<b><u>6,531,754,580</u></b>
FFC - OCB	I - C	<b><u>329,262,035</u></b>

**Note: the Final Forecasted Cost includes the cost impact of executed LNTP's, Contracts and PO costs**

<b>Prepared by:</b>	<b>Name</b>	<b>Signature</b>	<b>Date</b>
<b>Lead Cost Controller</b>	George Chehab		
<b>Reviewed and Approved by:</b>			
<b>Project Control Manager</b>	Ed Bush		
<b>Deputy General Project Manager</b>	Jason Kean		
<b>General Project Manager</b>	Ron Power		
<b>Project Director</b>	Paul Harrington		

## COSTFLOW - LCP

