

From: jamesmeaney@lowerchurchillproject.ca
To: stevepellerin@lowerchurchillproject.ca
Subject: IE Support of Nalcor Astaldi Approach - for EY data room
Date: Friday, March 11, 2016 11:58:38 AM
Attachments: [.png](#)
[Draw Confirmation Certificate - MF_LTA - IE \(Feb 24 2016\).pdf](#)
Importance: High

Steve

Please see below and page 3 in the attached.

Canada would have also needed to sign off on these IE certificates.

I spoke with Lance and he suggested this doc needs to get in the EY data room. In posting it, there needs to be a way to point EY to this doc and the specific comment.

Regards

Jim



Draw Confirmation Certificate - MF_LTA - IE (Feb 24 2016).pdf

James Meaney

General Manager, Finance

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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?

----- Forwarded by James Meaney/NLHydro on 03/11/2016 11:51 AM -----

From: Paul Harrington/NLHydro

To: "Mullaley, Julia" <JMullaley@gov.nl.ca>

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

Date: 02/26/2016 05:09 PM

Subject: Most recent IE Draw Confirmation Certificates

Julia

As I indicated in the meeting with yourself, the Premier and Ministers Coady and Bennet earlier this week, here is the comment from the IE regarding the negotiated approach Nalcor are recommending with Astaldi

During the month representatives of the Government of Canada and the IE met with Devco for an update on options and considerations relating to ongoing commercial discussions with the CH-0007 Contractor to resolve a number of pending issues related to organization, production rate and schedule. Based on the information presented and the related discussions, when considering all options and to the extent of all available information, the IE is of the opinion that, Devco's preferred option of seeking a reasonable commercial solution with the Contractor that would enable their completion of the work is a prudent approach

Regards Paul

Paul Harrington

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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?

DRAW CONFIRMATION CERTIFICATE BY INDEPENDENT ENGINEER
MF/LTA PROJECT FINANCING

This Draw Confirmation Certificate is provided by MWH Canada, Inc. (the "**Independent Engineer**") to The Toronto-Dominion Bank, as collateral agent (the "**Collateral Agent**") in connection with the amended and restated MF/LTA Project Finance Agreement among, inter alia, Muskrat Falls Corporation and Labrador Transmission Corporation (collectively the "**Borrower**"), Muskrat Falls/Labrador Transmission Assets Funding Trust (the "**Lender**") and the Collateral Agent (as amended, supplemented or restated from time to time, the "**Finance Agreement**") and Her Majesty the Queen in Right of Canada, as represented by the Minister of Natural Resources ("**Canada**"). Capitalized terms used in this Draw Confirmation Certificate and not otherwise defined herein shall have the meanings assigned to them in the amended and restated Master Definitions Agreement dated July 16, 2015 among, inter alia, the Borrower, the Lender and the Collateral Agent, as amended, supplemented or restated from time to time.



The Independent Engineer has (i) discussed matters believed pertinent to this Draw Confirmation Certificate with Devco, the Borrower and any relevant Material Project Participants, (ii) made such other inquiries as we have determined appropriate and (iii) reviewed:

- (a) the Construction Report dated February 20, 2016 (the "**Construction Report**"); and
- (b) the Borrower's funding request dated February 19, 2016 (the "**Funding Request**").

On the basis of the foregoing limited review procedures and on the understanding and assumption that the factual information contained in the Construction Report and Funding Request is true, correct and complete in all material respects, the Independent Engineer makes the following statements in favour of the Collateral Agent and to the best of its knowledge, information and belief, as of the date hereof that:

1. Construction of the Project is progressing in a satisfactory manner and in accordance with the terms of the applicable Material Project Documents with the following exceptions:

MWH reviewed the most recent Contractor's Construction Report Summary available for the following contracts: CH0007, CH0030, CH0032, CT0319, PH0014 and CH0009. Data extracted from the reports are given in the following tables and text:

CONTRACT NO./TITLE	DESCRIPTION	PROGRESS (PERIOD) BASE/ACTUAL PERCENTAGES	PROGRESS (CUMULATIVE) BASE/ACTUAL PERCENTAGES	DELTA FOR PERIOD PERCENTAGE (ACTUAL - BASE)	DELTA FOR CUMULATIVE PERCENTAGE (ACTUAL - BASE)	CONTRACT AMOUNT/ CHANGE ORDERS APPROVED & "ONGOING" STATUS <u>\$\$\$APPROVED\$\$\$</u> NEW CONTRACT AMOUNT
CH0007 Construction of Intake and Powerhouse: Spillway and Transition Dams Period: February 2016	MANAGEMENT	See Note ²	See Note ²			LABOR: CAD\$543,130,225.00 + NON-LABOR: CAD\$481,162,325.00 CAD\$1,024,292,550.00
	ENGINEERING					
	PROCUREMENT					
	MANUFACTURING/ TESTING					
	TRANSPORT					
	INSTALLATION					
	OVERALL CONCRETE PLACEMENT			78.10/34.30		
CH0030 Supply and Install Turbines and Generators Period: 26 Dec 2015 to 25 Jan 2016	MANAGEMENT					
	ENGINEERING		100.00 / 97.40		-2.60	
	PROCUREMENT		100.00 / 93.50		-6.50	
	MANUFACTURING/ TESTING		84.00 / 64.49		-19.51	
	TRANSPORT		28.00 / 25.21		-2.79	
	INSTALLATION					
	OVERALL PROJECT			64.96 / 47.87		
CH0032 Powerhouse Hydro-Mechanical Period: 26 Nov 2015 to 25 Dec 2015	MANAGEMENT					 See Note ¹ .
	ENGINEERING		100.00 / 93.07		-6.93	
	PROCUREMENT		100.00 / 94.96		-5.04	
	MANUFACTURING/ TESTING		79.91 / 68.51		-11.40	
	TRANSPORT		56.71 / 6.38		See text	
	INSTALLATION		41.39 / 1.40		See text	
	OVERALL PROJECT			60.43 / 37.03		

Notes: ¹ See text for a summary of change order progress and amounts.

² No data was furnished by Contractor; see text.

³ HST (13%) is not included in these values.

Contract CH0006 (Bulk Excavation) is discussed in the Construction Report, The Contractor has submitted a Request for Equitable Adjustment (REA) dated 27-August-2013. This REA was later denied by Devco. On 31 January 2015 the Contractor submitted a revised REA. Devco advised, "On 26 October 2015, Devco provided an assessment of the revised REA and made a settlement offer. At this time the two parties are negotiating a settlement". The Request for Equitable Adjustment will not impact the MF Project Schedule as the work has been completed, on schedule."

The monthly progress report furnished for Contract CH0007 (Construction of Intake and Powerhouse, Spillway and Transition Dams) is for the period of November'15. More recent (12 Dec'15) progress metrics were already reported in the December issued DCC and remain presented here as the concrete placement activities were stopped during the winter months.

Devco advised that during this reporting period the Contractor continued with the removal of the ICS shelter structure in parallel with formwork and rebar placement in the Powerhouse/Intake areas. The Contractor also commenced the installation of decking and miscellaneous steel for the CTU. Devco indicated that the Target Milestone for first power on December 10, 2017, is on hold and most likely will move towards the summer of 2018. Devco is in discussion with both Astaldi and the T&G Contractor Andritz (CH0030) for the development of an overall mitigation strategy. The accelerated new baseline schedule is expected to be available by the end of Q1, 2016.

During the month representatives of the Government of Canada and the IE met with Devco for an update on options and considerations relating to ongoing commercial discussions with the CH-0007 Contractor to resolve a number of pending issues related to organization, production rate and schedule. Based on the information presented and the related discussions, when considering all options and to the extent of all available information, the IE is of the opinion that, Devco's preferred option of seeking a reasonable commercial solution with the Contractor that would enable their completion of the work is a prudent approach.

Contract CH0030 (Supply and Install Turbines and Generators) appears to be currently (-) 17.09 percent behind schedule, representing a minor slippage of 1.63 percent from the previous month. The Engineering and Procurement activities are close to completion and the Manufacturing is (-) 19.51 percent behind plan. Apparently, none of these variances has any significant impact on the subsequent phases of the work. The Contractor still notes that the pre-mobilization activity is delayed and the original (and current) Base-Line Schedule is under review. It is expected that the schedule will be revised once milestones confirmation is received from Devco. Continued monitoring of the progress of all items listed is important since this is a significant contract to complete in accordance with the Integrated Project Schedule.

Additionally, the Contractor's Construction Report for Contract CH0030 notes twenty five items that remained open to Jan 25, 2016, on the Change Request Register amounting to \$12,115,069.53 + T&M (Time & Material), one has an estimated order of magnitude cost impact of [REDACTED] three are yet to be determined (TBD), one is T&M (Time & Material) and another one is based on weekly charges. There is no Potential Changes (Change Requests) Register in this monthly report.

Contract CH0032 (Powerhouse Hydro-Mechanical) is behind schedule by (-23.40) percent, with procurement (-5.04) percent and manufacturing (-11.40) percent being the baseline schedule. The Contractor reports that these variances are due to the "Just on Time" delivery concept that is maintained in order to mitigate storage risk and cost associated with the uncertain installation dates as per Devco's instructions (LCP CO # 06 – revised Exhibit 9). The

engineering variance of (-6.93) percent behind plan is apparently driven by some outstanding design clarifications of the electrical scope. The Contractor is actively working to mitigate the impact of this delay. The Contractor also advises that the approved baseline schedule is no longer valid especially for the transportation and installation activities; hence, the progress metrics are unreliable. The schedule needs to be revised following confirmation of new milestone dates by Devco.

There are twenty five Change Requests listed in the register in the Contractor's Monthly Progress Report for December 2015 with five claims "To Be Determined", one with only daily cost impact and the remaining nineteen amounting to \$8,657,996.00.

Contract CT0319-001 (315 kV HVac Transmission Line – MF to CF) Contractor's Construction Report, for the month of November 2015, indicates (from the tracking metrics provided by the Contractor) the following progress for the work:

Item	Cumulative Planned Total ¹ / Actual (Percentage)	Delta for Cumulative Percentage
Access	100.00 / 97.79	-2.21
Foundation Installation	74.5 / 97.94	23.44
Structure Assembly	76.9 / 91.03	14.13
Anchor Installation	75.7 / 96.76	21.06
Structure Erection	73.4 / 81.43	8.03
Conductor Stringing	54.1 / 62.46	8.36
OHSW Stringing	54.1 / 61.75	7.65
OPGW Stringing	27.7 / 24.05	-3.65

Note: 1. Planned total is 1263 structures

According to the Contractor's Monthly Report, the foundations for 1234 structures were completed as of November 25, 2015. Currently, this activity is 22.3 percent ahead of schedule. Contractor advised that 1147 structures were assembled by the end of the reporting period. This is 12.3 percent ahead of schedule. The structure erection is now ahead of schedule by 6.3 percent with 1026 structures erected. The stringing is 0.3 percent ahead of plan. The Contractor reports that the crews have encountered a significant snowfall throughout the reporting period and work fronts have been changed to mitigate snow and assist with clearing/grating of access. The forecasted completion date for HVac Transmission line construction has been adjusted, but line construction activities continue to be forecasted to complete in advance of the AC switchyards.

Forty eight Change Requests are listed in the register; thirty six Change Requests total \$19,843,074.58 and twelve Change Requests amounts are "To Be Determined." The total contract price (including all CHO issued to date) is \$258,157,712.85. The forecast final contract price is now \$270,208,099.61.

Contract PH0014-001 (Supply of Power GSU Transformers, MF) latest Contractor's Progress Report is for the month of December 2015. The current overall progress appears to be behind the base line schedule by 2.0 percent. The main activities for this period are still related to engineering and procurement of raw materials. The progress metrics provided by the Contractor indicate slight 3.5 percent slippage of progress in comparison to the previous reporting period.

There are five Change Requests listed open in the register in this Contractor's Progress Report. No price impact is provided for these items. The total contract price (including three CHOs issued to date) is \$15,012,670.

The monthly progress report for Contract CH0009 (Construction of North and South Dams) is for the month of December 2015. The report indicates the following progress for the work:

DESCRIPTION	PROGRESS (PERIOD) BASE/ACTUAL PERCENTAGES	PROGRESS (CUMULATIVE) BASE/ACTUAL PERCENTAGES	DELTA FOR PERIOD PERCENTAGE (ACTUAL - BASE)	DELTA FOR CUMULATIVE PERCENTAGE (ACTUAL - BASE)
Overall Project	1.06 / 1.26	4.41 / 5.61	0.2	1.2

The engineering of the temporary bridge is at 76 percent completion and the procurement is at 25%. The supply of batch plan and crushing equipment is ongoing and the south temporary bridge abutment is complete. The intake channel cofferdam is 75 percent complete and the starter groin is at 100 percent completion. Thy Office Complex Setup is complete too. The Contractor is preparing for winter shutdown. Activities are scheduled to resume in the spring of 2016.

MWH also notes that according to the latest Devco's Monthly Construction Report, the planned Commissioning Date (01 June 2018) as well as Date Certain (28 February 2019) remain under review as a result of MF schedule review. The IE will further closely monitor the potential schedule changes.

2. We believe that all payments to the Material Project Participants to be paid with the proceeds of the Muskrat/LTA Construction Loan requested to be made pursuant to the Funding Request, are allowed under the payment terms of the applicable Material Project Documents and the Finance Agreement as to the funds release requirements of Section 7.3/7.4/7.5/7.6/7.7, as applicable, with the following exceptions:

NO EXCEPTIONS NOTED

3. Assuming the Borrower and Devco exercise proper engineering and construction management throughout the remainder of the Project, we have no reason to believe that the Commissioning Date will not occur prior to the Date Certain, or that the total Project Costs will exceed \$4,563,523,000, with the following exceptions:

MWH notes that for Contract CH0030 the approved Change Orders to Jan 26, 2016 amount to \$7,872,769.54.

For Contract CH0032, the approved Change Orders for the period of December 2015 amount to \$20,598,407.

For Contract CT0319-001, the approved Change Orders for the period of November 2015 amount to \$12,050,386.76.


For Contract PH0014, the approved Change Orders to date (31 Dec'15) amount to (-) \$37,800.00.

There are no Change Orders reported to date (19 Dec'15) for Contract CH0009.

This Draw Confirmation Certificate is solely for the information and assistance of the Collateral Agent and Canada in connection with the Funding Request and shall not be used, circulated or relied upon for any other purpose or by any other party.

Dated: February 24, 2016

MWH CANADA, INC.

By:  _____

Title: IE Team Leader