From: <u>jamesmeaney@lowerchurchillproject.ca</u>

To: Krupski, Joseph

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 $\underline{<} gregory.connors@mcinnescooper.com{>} (gregory.connors@mcinnescooper.com{)}; \\ \underline{John\ Medland}$ 

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martina.mishkova@mwhglobal.com; Freeman, Michael (TD Securities) < Michael.Freeman@tdsecurities.com> (Michael.Freeman@tdsecurities.com); nik@argirovglobal.com; Sullivan, Peter J. (psullivan@casselsbrock.com);

Ndihokubwayo, Victor; Martis Xeno (xmartis@fasken.com); Meghan Felt

Subject: LIL Construction Report Oct 20 2015

Date: Tuesday, October 20, 2015 7:12:53 PM

Attachments: \_\_pnq

LIL Construction Report 20 Oct 2015.pdf

#### Hi Folks

In accordance with the LIL Project Finance Agreement, please find attached the Construction Report dated 20 Oct 2015

Regards

Jim



LIL Construction Report 20 Oct 2015.pdf

# James Meaney

General Manager, Finance PROJECT DELIVERY TEAM

**Lower Churchill Project** 

t. **709 737-4860** c. **709 727-5283** f. **709 737-1901** 

e. JamesMeaney@lowerchurchillproject.ca

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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?

# CONSTRUCTION REPORT LIL Project Finance Agreement

Date: 20-October-2015

### THE TORONTO-DOMINION BANK

AS COLLATERAL AGENT
66 Wellington Street West
9th Floor
Toronto, Ontario M5K 1A2

### MWH CANADA INC.

AS INDEPENDENT ENGINEER Suite 740, 1185 W. Georgia Street Vancouver, BC V6E 4E6

### Ladies and Gentlemen:

We refer you to the amended and restated financing agreement dated as of July 16, 2015 entered into among Labrador - Island Link Limited Partnership (the "Partnership"), as borrower LIL Construction Project Trust (the "Intermediary Trust"), as lender, Labrador - Island Link Operating Corporation ("Opco") and Labrador - Island Link General Partner Corporation (the "General Partner"), as credit parties, and The Toronto-Dominion Bank, as collateral agent (the "Collateral Agent") (said agreement, as same may be amended, supplemented or restated from time to time is hereinafter referred to as the "LIL Project Finance Agreement").

We also refer you to the amended and restated master definitions agreement entered into among, *inter alia*, the Collateral Agent, BNY Trust Company of Canada, as issuer trustee of Labrador-Island Link Funding Trust, BNY Trust Company of Canada, as trustee of the Intermediary Trust, Nalcor Energy, Labrador-Island Link Holding Corporation, Her Majesty The Queen In Right of the Province of Newfoundland and Labrador, the Partnership, as an obligor, Opco, as an obligor, the General Partner, as an obligor, and Computershare Trust Company of Canada, as the security trustee (said agreement, as same may be amended, supplemented or restated from time to time is hereinafter referred to as the "MDA").

Unless otherwise defined herein or unless there be something in the subject or the context inconsistent therewith, all capitalized terms and expressions used herein shall have the same meaning as that ascribed to them from time to time in the MDA.

This Construction Report is delivered to you pursuant to subsection 7.3.2 and Section 11.3 of the LIL Project Finance Agreement in respect of the month ending on 30-September-2015 (the "Applicable Month").

- I, Gilbert Bennett, the undersigned, Vice-President of Devco, and as Vice-President of the General Partner, in my capacity as an officer and without personal liability, do hereby certify that:
- 1. I have conducted such investigations as I have deemed necessary to provide the information set out in this report and in so doing I have verified all engineering related matters with a licensed professional engineer working on our behalf in respect of the Project;



LIL CONSTRUCTION REPORT PERIOD ENDING 30-SEPTEMBER-2015

- 2. Attached hereto as Schedule "A" is a true and accurate table detailing the Hard Costs incurred during the Applicable Month and compared as against the original Project Budget;
- 3. Attached hereto as Schedule "B" is a true and accurate analysis of the Cost to Complete, as it relates to Hard Costs, as at the end of the Applicable Month;
- 4. Attached hereto as Schedule "C" is a true and accurate analysis of the Cost Variances, as they relate to Hard Costs, as at the end of the Applicable Month, with a narrative explanation as to any variances from the original Project Budget;
- 5. The estimated Commissioning Date is currently 01-June-2018. Please refer to Schedule "D" hereto for details;
- 6. There are no material disputes with any Material Project Participant or related claims against the Partnership, other than as set out in Schedule "E" hereto;
- 7. Attached hereto as Schedule "F" is a true and accurate report describing the progress of the construction of the Project since the Previous Construction Report and compared as against the originally established milestone in the Project Schedule;
- 8. The Project is being built substantially in all respects in accordance with the Project Plans and Good Utility Practice;
- 9. Subject to Sections 9.5 and 9.14 of the LIL Project Finance Agreement, I have no reason to believe that the Project is being built in violation of any Applicable Laws or Authorizations in effect at the time of performance of the relevant work;
- 10. Subject to Sections 9.5 and 9.14 of the LIL Project Finance Agreement, all Material Project Participants and other Persons participating or working toward the Commissioning of the Project, to the best of my Knowledge, are not in material default with respect to any of their respective obligations which would delay Commissioning beyond the Date Certain and the Partnership is not in material default in the payment of any sums due to such Persons in accordance with the terms agreed upon or in the fulfilment of any of its obligations with respect to such Persons, save and except with respect to such payments or obligations which the Partnership shall be contesting diligently and in good faith and in respect of which, in the event that such contestation should prove unsuccessful, no Lien shall be created or result upon or with respect to any LIL Assets and Rights now owned or hereafter acquired by the Partnership, except for Permitted Encumbrances;
- 11. Subject to Sections 9.5 and 9.14 of the LIL Project Finance Agreement, all Authorizations which, under Applicable Law, as at the date hereof, are necessary to have been obtained in connection with the Project and the work currently being performed on the Project, have been obtained and are in full force and effect and do not contain any condition which could prevent or adversely affect the ability of the Partnership of attaining Commissioning by the Date Certain; and

LIL CONSTRUCTION REPORT PERIOD ENDING 30-SEPTEMBER-2015

12. Attached hereto as Schedule "G" is a true and complete copy of each of the Additional Material Project Documents entered into by the Partnership since the Previous Construction Report.

Signed at St. John's, Newfoundland and Labrador, this 20<sup>th</sup> day of October, 2015.

Name: Gilbert Bennett, P. Eng.
Title: Vice-President of the General Partner

### SCHEDULE "A"

Schedule "A" - Summary of Project Budget - Hard Costs Lower Churchill Project-Phase 1 Labrador-Island Transmission Link (LIL)

	Initial Project Budget	Project Budget	r-2015 Planned Costs		Incurred Costs	
Description			Current Period	Project-to-Date	Current Period	Project-to-Date
NE-LCP Owners Team, Admin and EPCM Services	\$247,074	\$221,293	\$6,673	\$145,819	\$6,673	\$145,819
Feasibility Engineering	\$34,012	\$21,252	\$0	\$21,252	\$0	\$21,252
Environmental & Regulatory Compliance	\$25,768	\$14,446	\$34	\$10,190	\$34	\$10,190
Aboriginal Affairs	\$2,244	\$2,684	-\$3	\$450	-\$3	\$450
Procurement & Construction	\$2,135,212	\$2,717,326	\$84,942	\$947,586	\$84,942	\$947,586
Commercial & Legal	\$22,490	\$16,490	\$99	\$13,096	\$99	\$13,096
Contingency	\$79,355	\$95,887	\$0	\$0	\$0	\$0
Total	\$2,546,155	\$3,089,378	\$91,745	\$1,138,393	\$91,745	\$1,138,393

Note 1: Costs in CAD (\$ Thousands)

Note 2: Initial Project Budget represents baseline set at Financial Close in November 2013

Note 3: Project Budget represents Authorization for Expenditure (AFE) approved by the Board of Directors in September 2015

Note 4: Analysis and statements made with regard to variances are reflective of Project Budget, not Initial Project Budget

# Analysis:

Incurred Costs for the Current Period and Project-to-Date are aligned with the incurred cost flow for the 2015 revised Authorization for Expenditure (AFE) approved by the Board of Directors of the General Partner during the current period.

The net negative Planned and Incurred Cost for the Current Period under "Aboriginal Affairs" is as a result of the alignment with the AFE.

The incurring of the Contingency is reflected within the incurred and future incurred costs in the above categories as and where the work is performed.



# **SCHEDULE "B"**

Schedule "B" - Summary of Cost to Complete Lower Churchill Project-Phase 1 Labrador-Island Transmission Link (LIL)

Period Ending 30-September-2015

Description	Initial Project Budget	Project Budget	Incurred Costs Project-to-Date	Final Forecast Cost (FFC)	Cost to Complete
NE-LCP Owners Team, Admin and EPCM Services	\$247,074	\$221,293	\$145,819	\$221,293	\$75,474
Feasibility Engineering	\$34,012	\$21,252	\$21,252	\$21,252	\$0
Environmental & Regulatory Compliance	\$25,768	\$14,446	\$10,190	\$14,446	\$4,256
Aboriginal Affairs	\$2,244	\$2,684	\$450	\$2,684	\$2,234
Procurement & Construction	\$2,135,212	\$2,717,326	\$947,586	\$2,717,326	\$1,769,740
Commercial & Legal	\$22,490	\$16,490	\$13,096	\$16,490	\$3,394
Contingency	\$79,355	\$95,887	\$0	\$95,887	\$95,887
Total	\$2,546,155	\$3,089,378	\$1,138,393	\$3,089,378	\$1,950,985

Note 1: Costs in CAD (\$ Thousands)

Note 2: Initial Project Budget represents baseline set at Financial Close in November 2013

Note 3: Project Budget represents Authorization for Expenditure (AFE) approved by the Board of Directors in September 2015

Note 4: Analysis and statements made with regard to variances are reflective of Project Budget, not Initial Project Budget

#### Analysis:

The Final Forecast Cost has been updated to align with the 2015 revised Authorization for Expenditure (AFE) approved by the Board of Directors of the General Partner during the current period, resulting in an approximate increase of \$211M in the overall Cost to Complete, compared to the previous period.

The majority of the increase is contained in the category of "Procurement & Construction" as a result of the increase in Final Forecast Cost, and continues to remain significant as construction activities for work in progress are ongoing.

The Cost to Complete for "Owners Team, Admin and EPCM Services" has decreased from last month notwithstanding the increase in Final Forecast Cost for this category.

The Cost to Complete for "Feasibility Engineering" remains unchanged from the last reporting period.

The Cost to Complete for "Environmental & Regulatory Compliance" has decreased from last month as a result of the decrease in Final Forecast Cost for this category.

The Cost to Complete for "Aboriginal Affairs" has increased from last month as a result of the increase in Final Forecast Cost for this category.

The Cost to Complete for "Commercial & Legal" has decreased from last month by the incurred cost this period as the Final Forecast Cost remains unchanged from the last reporting period.

The Cost to Complete for "Contingency" has increased as a result of the increase in Final Forecast Cost for this category.

#### SCHEDULE "C"

Schedule "C" - Summary of Cost Variances Lower Churchill Project-Phase 1 Labrador-Island Transmission Link (LIL) Period Ending 30-September-2015

Description	Initial Project Budget	Project Budget	Final Forecast Cost (FFC)	Variance
NE-LCP Owners Team, Admin and EPCM Services	\$247,074	\$221,293	\$221,293	\$0
Feasibility Engineering	\$34,012	\$21,252	\$21,252	\$0
Environmental & Regulatory Compliance	\$25,768	\$14,446	\$14,446	\$0
Aboriginal Affairs	\$2,244	\$2,684	\$2,684	\$0
Procurement & Construction	\$2,135,212	\$2,717,326	\$2,717,326	\$0
Commercial & Legal	\$22,490	\$16,490	\$16,490	\$0
Contingency	\$79,355	\$95,887	\$95,887	\$0
Total	\$2,546,155	\$3,089,378	\$3,089,378	\$0

Note 1: Costs in CAD (\$ Thousands)

Note 2: Initial Project Budget represents baseline set at Financial Close in November 2013

Note 3: Project Budget represents Authorization for Expenditure (AFE) approved by the Board of Directors in September 2015

Note 4: Analysis and statements made with regard to variances are reflective of Project Budget, not Initial Project Budget

## Analysis:

The Final Forecast Cost has been updated to align with the 2015 revised Authorization for Expenditure (AFE) approved by the Board of Directors of the General Partner during the current period. The result of the AFE has been an increase of \$302,898 in the overall Final Forecast Cost, primarily impacted by market conditions and pressures, as well as reliability improvements & design enhancements.

The main component of this variance is an increase of \$250,126 in the category of "Procurement & Construction", followed by increases of \$30 in the category of "Owners Team, Admin and EPCM Services", and \$439 in the category of "Aboriginal Affairs", amended from the last reporting period as a result of the impacts indicated above.

Of the impact to the category of "Procurement & Construction", as previously reported in forecast adjustments, the revised AFE incorporates these matters into the Project Budget. This includes the impact in labour productivity matters, as well as the increase in manpower. In addition, the difficult and the unknown topography of the terrain have resulted in the adjustment in the type of contracts for clearing and accesses of the dc line; poor productivity experienced by Contractors due to unknown geotechnical constraints, and severe weather have contributed to cost escalation. Due to the recent turmoil in the markets, there has also been a realized impact of foreign currency within various contracts. Design enhancements on the HVdc Transmission Line have been made to ensure reliability in order to adapt to geotechnical conditions of the terrain encountered. As well, issues relating to the soil at Muskrat Falls, size constraints in Soldier's Pond, and the layout of the Converter Stations were adjusted, along with grounding quantities. Reliability improvements were made in consideration of the extensive access requirements

required for construction; due to a combination of remoteness and the size of the transmission line towers and hardware, all bridging, culverts and roads were recommended be left in place for post- operational support, while incremental effort (e.g., abutment height) be made for long-term infrastructure for line survey and emergency repair.

The Final Forecast Costs for "Feasibility Engineering" and "Commercial & Legal" remain unchanged from the last reporting period.

The Final Forecast Cost for "Environmental & Regulatory Compliance" has decreased by (\$3,859), and has increased by a net amount of \$56,161 for "Contingency", from the last reporting period as a result of the analysis of these categories during the AFE revision.

# SCHEDULE "D"

Due to the schedule review under Muskrat Falls, the Commissioning Date of 01-June-2018 set forth in the LIL Project Schedule is under review; however it is anticipated not to extend past the Date Certain.

# SCHEDULE "E"

There are currently no material disputes with any Material Project Participant, or related claims against the Partnership.



# SCHEDULE "F"

Milestone Description	Planned	Actual/Forecast	Status
Project Sanction	17-Dec-2012	17-Dec-2012	Achieved
SOBI Cable Systems Ready	25-Oct-2016	25-Oct-2016	
Muskrat Falls Switchyard and Converter Station Ready for Operation	28-Feb-2017	24-July-2017	
HVdc Transmission Line Construction Complete and Connected	30-Jun-2017	03-July-2017	
Soldier's Pond Switchyard and Converter Station Ready for Operation	04-Oct-2017	24-July-2017	
Ready for Power Transmission	04-Oct-2017	22-Sept-2017	
Soldier's Pond Synchronous Condenser Ready for Operation	13-Nov-2017	17-June-2017	
Commissioning Complete - Commissioning Certificate Issued	01-Jun-2018	01-Jun-2018	Under Review (as a result of noted MF schedule review)
Date Certain	28-Feb-2019	28-Feb-2019	Under Review (as a result of noted MF schedule review)



### Construction Narrative:

Manufacturing and testing of the submarine cable in Japan under contract LC-SB-003 continues to progress, with ongoing spooling of Cable Batch No. 3, and FAT on schedule for completion by October 2015. All land cables were delivered to both the Shoal Cove and Forteau Point sites during the period, along with the subsequent commencement of cable installation at Shoal Cove. Land cable preparation activities, including scaffolding erection and guy wire support installation, along with trench earthworks continued in support of cable installation at both sites. Marine terminal construction is ongoing, with 446,000 tonnes of rock currently available for use for the 2016 season.

ROW clearing and access development is ongoing under the various CT0327 clearing contracts. By the end of September, approximately 1,850 hectares had been cleared to date in Labrador representing 78% complete of the clearing required for the region, and approximately 1,607 hectares cleared to date in Newfoundland representing 38% of the clearing required on the Island.

Mass fabrication activities of material for the HVdc transmission line towers are continuing in Texas, Dubai and India, and receiving, storage and handling activities at both the Port of Argentia marshalling yard and the Labrador marshalling yard to support HVdc construction is ongoing.

By the end of September, quantities produced for Workfront 1 (of 3) were as follows: 559 foundations installed, 536 towers assembled and 165 erected, out of a total of 1288 (total quantity adjusted from 1284 based on field changes); and 198 guy anchors tested, out of 315 installed, of an overall total of 1151 (total quantity adjusted from 1147 based on field changes).

Work is continuing on the preparation of management, technical, and commercial deliverables under contracts CD0501 for the Supply and Installation of Converters and Cable Transition Compounds, CD0502 for Construction of AC Substations and CD0534 for EPC Synchronous Condensers at Soldiers Pond. Civil works activity for the Soldier's Pond Switchyard and Converter Station continued during the period. Progress has been made with excavation activities and concrete foundations in the Valve Hall and Control Building areas, along with footings and foundations for the gantries. Civil works activity under CD0534 continued at the Soldier's Pond site, with the commencement of building structural steel erection, along with completion of foundation piling and transformer gantry foundations, and the continuation of water reservoir, building and transformer foundations. All transformer units for the Soldier's Pond Switchyard under PD0537 for Supply of Power Transformers, AC Substations have been shipped from facilities in St. Louis, and are scheduled for arrival in early October.

Work is progressing well under Contract CD0508 for Supply and Install of Electrode Sites in support of construction of the two electrode stations. At the Dowden's Point site in Conception Bay South, core, filter and armour stone material have all been delivered, and at the L'Anse au Diable site in the Strait of Belle Isle area of Labrador, placement of core material, filter and armour stone continued. Completion of armour stone placement; and installation of the conduit, junction boxes, and other underground appurtenances at both sites are scheduled for end of October.

# SCHEDULE "G"

There were no Additional Material Project Documents entered into since the Previous Construction Report.

