# CONSTRUCTION REPORT Muskrat/LTA Project Finance Agreement

Date: <u>20-August-2015</u>

# THE TORONTO-DOMINION BANK

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

#### MWH CANADA INC.

AS INDEPENDENT ENGINEER 505 Burrard Street, Suite 1500 One Bentall Centre Vancouver, BC V7X 1M5

#### Ladies and Gentlemen:

We refer you to the amended and restated financing agreement dated as of July 16, 2015 entered into among Muskrat Falls Corporation ("Muskrat") and Labrador Transmission Corporation ("Labrador Transco"), as borrowers, Muskrat Falls/Labrador Transmission Assets Funding Trust (the "Funding Vehicle"), as lender, 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 "Muskrat/LTA 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 the Funding Vehicle, Computershare Trust Company of Canada, as security trustee, Nalcor Energy, Her Majesty The Queen In Right of the Province of Newfoundland and Labrador, Muskrat, as a credit party, and Labrador Transco, as a credit party (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 7.4.2 and Section 11.3 of the Muskrat/LTA Project Finance Agreement in respect of the month ending on 31-July-2015 (the "Applicable Month").

I, Gilbert Bennett, the undersigned, the Vice-President of Devco, and Vice-President of Muskrat, in my capacity as an officer and without personal liability, do hereby certify the matters set forth in Section A below, and I, Gilbert Bennett, the undersigned, the Vice-President of Devco, and Vice-President of Labrador Transco, in my capacity as an officer and without personal liability, do hereby certify the matters set forth in Section B below:

MF/LTA CONSTRUCTION REPORT PERIOD ENDING 31-JULY-2015

# A. MUSKRAT MATTERS

- 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 MF Plant.
- 2. Attached hereto as Part I of Schedule "A" is a true and accurate table detailing the Hard Costs incurred during the Applicable Month with respect to the MF Plant by and compared as against the MF Project Budget.
- 3. Attached hereto as Part I of Schedule "B" is a true and accurate analysis of the Cost to Complete the MF Plant, as it relates to Hard Costs, as at the end of the Applicable Month.
- 4. Attached hereto as Part I of Schedule "C" is a true and accurate analysis of the Cost Variances for the MF Plant, as they relate to Hard Costs, as at the end of the Applicable Month, with a narrative explanation as to any variances from the MF Project Budget.
- 5. The estimated Commissioning Date is currently 01-June-2018. Please refer to Part I of Schedule "D" hereto for details.
- 6. There are no material disputes with any Material Project Participant related to the MF Plant and any related claims against Muskrat, other than as set out in Part I of Schedule "E" hereto.
- 7. Attached hereto as Part I of Schedule "F" is a true and accurate report describing the progress of the construction of the MF Plant since the Previous Construction Report and compared as against the established milestones in the MF Project Schedule.
- 8. The MF Plant is being built substantially in all respects in accordance with the MF Project Plans and Good Utility Practice.
- 9. Subject to Sections 9.5 and 9.14 of the Muskrat/LTA Project Finance Agreement, I have no reason to believe that the MF Plant is being built in violation of any Applicable Laws or Authorizations pertaining to the MF Plant in effect at the time of performance of the relevant work.
- 10. Subject to Sections 9.5 and 9.14 of the Muskrat/LTA Project Finance Agreement, all Authorizations which, under Applicable Law, as at the date hereof are necessary to have been obtained in connection with the MF Plant and the work currently being performed on the MF Plant, 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 Credit Parties of attaining Commissioning by the Date Certain.
- 11. Subject to Sections 9.5 and 9.14 of the Muskrat/LTA Project Finance Agreement, all Material Project Participants related to the MF Plant and other Persons participating or working toward the Commissioning of the MF Plant, to the best of my Knowledge, are not in material default with respect to any of their respective obligations which would

MF/LTA CONSTRUCTION REPORT PERIOD ENDING 31-JULY-2015

delay Commissioning beyond the Date Certain and Muskrat 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 Muskrat 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 of its Assets, except for Permitted Encumbrances.

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

# B. LABRADOR TRANSCO MATTERS

- 13. 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 LTA.
- 14. Attached hereto as Part II of Schedule "A" is a true and accurate table detailing the Hard Costs incurred during the Applicable Month with respect to the LTA and compared as against the LTA Project Budget.
- 15. Attached hereto as Part II of Schedule "B" is a true and accurate analysis of the Cost to Complete for the LTA, as it relates to Hard Costs, as at the end of the Applicable Month.
- 16. Attached hereto as Part II of Schedule "C" is a true and accurate analysis of the Cost Variances for the LTA, as they related to Hard Costs, as at the end of the Applicable Month, with a narrative explanation as to any variances from the LTA Project Budget.
- 17. The estimated Commissioning Date is currently 01-June-2018. Please refer to Part II of Schedule "D" hereto for details.
- 18. There are no material disputes with any Material Project Participant related to the LTA and any related claims against Labrador Transco, other than as set out in Part II of Schedule "E" hereto.
- 19. Attached hereto as Part II of Schedule "F" is a true and accurate report describing the progress of the construction of the LTA since the Previous Construction Report and compared as against the established milestones in the LTA Project Schedule.
- 20. The LTA is being built substantially in all respects in accordance with the LTA Project Plans and Good Utility Practice.
- 21. Subject to Sections 9.5 and 9.14 of the Muskrat/LTA Project Finance Agreement, I have no reason to believe that the LTA is being built in violation of any Applicable Laws or Authorizations pertaining to the LTA in effect at the time of performance of the relevant work.

MF/LTA CONSTRUCTION REPORT PERIOD ENDING 31-JULY-2015

- 22. Subject to Sections 9.5 and 9.14 of the Muskrat/LTA Project Finance Agreement, all Authorizations which, under Applicable Law, as at the date hereof are necessary to have been obtained in connection with the LTA and the work currently being performed on the LTA, 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 Credit Parties of attaining Commissioning by the Date Certain.
- 23. That, subject to Sections 9.5 and 9.14 of the Muskrat/LTA Project Finance Agreement, all Material Project Participants related to the LTA and other Persons participating or working toward the Commissioning of the LTA, to the best of our Knowledge, are not in material default with respect to any of their respective obligations which would delay Commissioning beyond the Date Certain and Labrador Transco 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 Labrador Transco 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 of its Assets, except for Permitted Encumbrances.
- 24. Attached hereto as Part II of Schedule "G" is a true and complete copy of each of the Additional Material Project Documents entered into by Labrador Transco since the Previous Construction Report.

Signed at St. John's, Newfoundland and Labrador, this 20th day of August, 2015.

Name: Gilbert Bennett, P. Eng.

Title: Vice-President of Muskrat Falls

Corporation

Name: Gilbert Bennett, P. Eng.
Title: Vice-President of Labrador

**Transmission Corporation** 

Name: Gilbert Bennett, P. Eng.

# **SCHEDULE "A"**

# Part I - Hard Costs for the MF Plant

Schedule "A" - Summary of Project Budget - Hard Costs
Lower Churchill Project-Phase 1
Muskrat Falls Generation
Period Ending 31-July-2015

			Planne	d Costs	Incurred Costs	
Description	Initial Project Budget	Project Budget	Current Period	Project-to-Date	Current Period	Project-to-Date
NE-LCP Owners Team, Admin and EPCM Services	\$378,969	\$382,811	\$3,076	\$256,696	\$3,288	\$279,669
Feasibility Engineering	\$18,345	\$17,949	\$0	\$17,949	\$0	\$17,949
Environmental & Regulatory Compliance	\$20,312	\$24,312	\$227	\$17,723	\$24	\$16,448
Aboriginal Affairs	\$13,314	\$13,314	\$227	\$7,867	\$1	\$6,683
Procurement & Construction	\$2,719,626	\$2,786,766	\$73,737	\$1,383,607	\$73,415	\$1,314,190
Commercial & Legal	\$20,457	\$25,989	\$155	\$21,509	\$148	\$15,239
Contingency	\$94,255	\$120,847	\$3,094	\$26,169	\$0	\$0
Total	\$3,265,278	\$3,371,989	\$80,516	\$1,731,521	\$76,876	\$1,650,178

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 June 2014

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 lower than planned mainly due to lower than anticipated progress under Contracts CH0030 and CH0032 for Manufacturing of the Turbines and Generators, and Supply and Installation of Hydro-Mechanical Equipment respectively, as well as CH0007 for Construction of the Intake, Powerhouse, Spillway and Transition Dams overall; however, higher than anticipated progress in the period was achieved in relation to CH0007 due to recovery of progress.

Incurred Costs for the Current Period under "Owners Team, Admin and EPCM Services" are higher than planned mainly as a result of the higher than planned costs for contractor management.

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.

# Part II - Hard Costs for the LTA

Schedule "A" - Summary of Project Budget - Hard Costs Lower Churchill Project-Phase 1 Labrador Transmission Asset (LTA) Period Ending 31-July-2015

	Initial Duniant		Planne	d Costs	Incurred Costs	
Description	Initial Project Budget	Project Budget	Current Period	Project-to-Date	Current Period	Project-to-Date
NE-LCP Owners Team, Admin and EPCM Services	\$76,238	\$99,973	\$859	\$69,044	\$1,416	\$85,480
Feasibility Engineering	\$256	\$220	\$0	\$220	\$0	\$220
Environmental & Regulatory Compliance	\$710	\$710	\$1	\$679	\$0	\$809
Aboriginal Affairs	\$188	\$188	\$0	\$189	\$0	\$1
Procurement & Construction	\$626,869	\$696,322	\$18,013	\$371,289	\$29,732	\$390,058
Commercial & Legal	\$2,030	\$3,141	\$10	\$2,846	\$21	\$2,279
Contingency	\$14,030	\$31,391	\$1,099	\$9,574	\$0	\$0
Total	\$720,322	\$831,945	\$19,982	\$453,842	\$31,168	\$478,848

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 June 2014

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

# Analysis:

Both Incurred Costs Project-to-Date and Incurred Costs Current Period continue to be higher than planned, mainly as a result of higher than planned progress on the HVac Transmission Line under "Procurement & Construction", and higher than planned costs for contractor management under "Owners Team, Admin and EPCM Services".

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"

# Part I - Muskrat Cost to Complete

# Schedule "B" - Summary of Cost to Complete Lower Churchill Project-Phase 1 Muskrat Falls Generation Period Ending 31-July-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	\$378,969	\$382,811	\$279,669	\$387,723	\$108,054
Feasibility Engineering	\$18,345	\$17,949	\$17,949	\$17,949	\$0
Environmental & Regulatory Compliance	\$20,312	\$24,312	\$16,448	\$24,742	\$8,293
Aboriginal Affairs	\$13,314	\$13,314	\$6,683	\$13,314	\$6,632
Procurement & Construction	\$2,719,626	\$2,786,766	\$1,314,190	\$2,806,949	\$1,492,759
Commercial & Legal	\$20,457	\$25,989	\$15,239	\$25,239	\$10,000
Contingency	\$94,255	\$120,847	\$0	\$96,073	\$96,073
Total	\$3,265,278	\$3,371,989	\$1,650,178	\$3,371,989	\$1,721,811

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 June 2014

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

# Analysis:

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

The Cost to Complete for "Procurement & Construction" has decreased from last month due to the incurred cost this period notwithstanding the increase in Final Forecast Cost for this category, and continues to remain significant as construction activities for work in progress remain in the early stages, along with two major construction contracts for MF (CH0009 and CH0031) pending award.

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

The Cost to Complete for all other categories has decreased from last month by the incurred cost this period as the Final Forecast Cost remains unchanged from the last reporting period.

# Part II - Labrador Transco Cost to Complete

# Schedule "B" - Summary of Cost to Complete Lower Churchill Project-Phase 1 Labrador Transmission Asset (LTA)

Period Ending 31-July-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	\$76,238	\$99,973	\$85,480	\$99,958	\$14,477
Feasibility Engineering	\$256	\$220	\$220	\$220	\$0
Environmental & Regulatory Compliance	\$710	\$710	\$809	\$1,019	\$210
Aboriginal Affairs	\$188	\$188	\$1	\$188	\$188
Procurement & Construction	\$626,869	\$696,322	\$390,058	\$702,537	\$312,478
Commercial & Legal	\$2,030	\$3,141	\$2,279	\$3,141	\$862
Contingency	\$14,030	\$31,391	\$0	\$24,882	\$24,882
Total	\$720,322	\$831,945	\$478,848	\$831,945	\$353,097

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 June 2014

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

# Analysis:

The Cost to Complete for "Feasibility Engineering", "Environmental & Regulatory Compliance", and "Aboriginal Affairs" remains unchanged from the last reporting period.

The Cost to Complete for "Procurement & Construction" has decreased from last month due to the incurred cost this period notwithstanding the increase in Final Forecast Cost for this category, and continues to remain significant as construction activities for work in progress are ongoing.

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

The Cost to Complete for all other categories has decreased from last month by the incurred cost this period as the Final Forecast Cost remains unchanged from the last reporting period.

# SCHEDULE "C"

#### Part I - Muskrat Cost Variances

# Schedule "C" - Summary of Cost Variances Lower Churchill Project-Phase 1 Muskrat Falls Generation

Period Ending 31-July-2015

Description	Initial Project Budget	Project Budget	Final Forecast Cost (FFC)	Variance
NE-LCP Owners Team, Admin and EPCM Services	\$378,969	\$382,811	\$387,723	\$4,912
Feasibility Engineering	\$18,345	\$17,949	\$17,949	\$0
Environmental & Regulatory Compliance	\$20,312	\$24,312	\$24,742	\$430
Aboriginal Affairs	\$13,314	\$13,314	\$13,314	\$0
Procurement & Construction	\$2,719,626	\$2,786,766	\$2,806,949	\$20,182
Commercial & Legal	\$20,457	\$25,989	\$25,239	-\$750
Contingency	\$94,255	\$120,847	\$96,073	-\$24,775
Total	\$3,265,278	\$3,371,989	\$3,371,989	\$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 June 2014

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

# Analysis:

The Final Forecast Cost for "Procurement and Construction" has increased during the current reporting period by \$2,086 primarily as a result of costs associated with mold remediation at the Muskrat Falls Camp. As a result of the above, the variance has increased from \$18,097 as reported last period.

The Final Forecast Cost for "Contingency" has decreased by a net amount of \$2,086 as a result of the change described above.

The Final Forecast Costs for all other categories remain unchanged from the last reporting period, and there is no change to the overall Final Forecast Cost for Muskrat Falls Generation.

# Part II - Labrador Transco Cost Variances

# Schedule "C" - Summary of Cost Variances Lower Churchill Project-Phase 1 Labrador Transmission Asset (LTA) Period Ending 31-July-2015

Description	Initial Project Budget	Project Budget	Final Forecast Cost (FFC)	Variance
NE-LCP Owners Team, Admin and EPCM Services	\$76,238	\$99,973	\$99,958	-\$16
Feasibility Engineering	\$256	\$220	\$220	\$0
Environmental & Regulatory Compliance	\$710	\$710	\$1,019	\$309
Aboriginal Affairs	\$188	\$188	\$188	\$0
Procurement & Construction	\$626,869	\$696,322	\$702,537	\$6,215
Commercial & Legal	\$2,030	\$3,141	\$3,141	\$0
Contingency	\$14,030	\$31,391	\$24,882	-\$6,509
Total	\$720,322	\$831,945	\$831,945	\$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 June 2014

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

# Analysis:

The Final Forecast Cost for "Procurement & Construction" has increased during the current reporting period by \$4,563 mainly as a result of the costs associated with alternative foundation types required for the HVac Transmission Line to suit infield conditions, as well as increases in costs associated with the 735 kV line. As a result of the above, the variance has increased from \$1,652 as reported last period.

The Final Forecast Cost for "Contingency" has decreased by a net amount of \$4,563 as a result of the change described above.

The Final Forecast Costs for all other categories remain unchanged from the last reporting period, and there is no change to the overall Final Forecast Cost for LTA.

# SCHEDULE "D"

# Part I - Muskrat Estimated Commissioning Date

The planned Commissioning Date of 01-June-2018 set forth in the MF Project Schedule is under review; however it is anticipated not to extend past the Date Certain.

# Part II - Labrador Transco Estimated Commissioning Date

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

# **SCHEDULE "E"**

# **Part I - Muskrat Material Disputes**

Material disputes with any Material Project Participant or related claims against Muskrat are listed below:

CH0006 – Construction of Bulk Excavation Works and Associated Works:

The Contractor, IKC-ONE, submitted a Request for Equitable Adjustment (REA) dated 27-August-2013 in the approximate amount of \$31million. The Contractor has stated that there were delays outside of its control and they were required to accelerate their work to meet their contract schedule.

The REA is being managed in accordance with Devco business processes however a deadline has not been established for resolution.

Evaluation completed to date by Devco has established the value of the REA as submitted by the Contractor is inflated, and that the estimated value is well below \$10 million. A forensic audit of the Contractor's costs was completed May 2014 and discussions with the Contractor are ongoing. A revised REA was submitted by the Contractor and is currently under review by Devco.

The Request for Equitable Adjustment will not impact the MF Project Schedule as the work has been completed, on schedule.

# Part II - Labrador Transco Material Disputes

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



# SCHEDULE "F"

**Part I - MF Plant Construction Progress** 

Milestone Description	Planned	Actual/Forecast	Status
Project Sanction	17-Dec-2012	17-Dec-2012	Actual
North Spur Works Ready for Diversion	30-Nov-2015	28-Sep-2016	
River Diversion Complete (to 25m)	09-Nov-2016	09-Nov-2016	
Reservoir Impoundment Complete (to 39m)	19-Nov-2017	19-Nov-2017	Under Review
Powerhouse Unit 1 Commissioned - Ready for Operation	30-Dec-2017	30-Dec-2017	Under Review
First Power from Muskrat Falls	30-Dec-2017	30-Dec-2017	Under Review
Powerhouse Unit 2 Commissioned - Ready for Operation	18-Feb-2018	18-Feb-2018	Under Review
Powerhouse Unit 3 Commissioned - Ready for Operation	12-April-2018	12-April-2018	Under Review
Powerhouse Unit 4 Commissioned - Ready for Operation	22-May-2018	22-May-2018	Under Review
Full Power from Muskrat Falls	22-May-2018	22-May-2018	Under Review
Commissioning Complete - Commissioning Certificate Issued	01-Jun-2018	01-Jun-2018	Under Review
Date Certain	28-Feb-2019	28-Feb-2019	



#### Construction Narrative:

During the period, the CH0007 contractor responsible for the Intake, Powerhouse, Spillway, and Transition Dams made progress in the following areas:

- Continuation of concrete placement 27 spillway pier placements; 10 placements at the
  center transition dam; 8 separation wall placements; 5 North and 2 South Transition Dam
  placements; 11 intake placements; 4 south service bay placements; and 9 draft tube
  placements.
- Ongoing maintenance of curing, hoarding and heating of the placed concrete.
- Commencement of field testing for curtain grouting operations.
- Commencement of installation of spillway downstream temporary and permanent bridges; and installation of tower cranes in support of the powerhouse and intake Units 3 & 4 construction.

Overall, CH0007 production, while making significant improvements, continues to trend behind plan, however, Devco continue to collaborate with the Contractor in the implementation of organizational and production changes at the construction management level, and plans to improve production are being realized since re-start of 2015 operations. A review of the C1 (Muskrat Falls Generation) work plan is underway, and implementation of an updated C1 schedule will remain on hold pending acceptance of agreed actions and mitigations plan.

Manufacturing of the Turbines and Generators under CH0030 is proceeding on schedule and is now at 47% complete. Shipment of stay ring and draft tube components which has been on route from China has now arrived in Goose Bay, with delivery to site laydown area in progress. Packaging and preservation activities are ongoing in preparation for the next shipment of components scheduled for August 2015.

Manufacturing of the primary anchor materials for the intake, powerhouse and spillway is continuing under contract CH0032 for the Supply and Installation of Hydro-Mechanical Equipment. Spillway guides painting and packaging is near completion, intake and draft tube embedded parts fabrication, draft tube crane fabrication, and primary anchor installation are ongoing.

The CH0008 Contractor for Construction of North Spur Stabilization Works continued with activities during the period. Concrete pad for the cement bentonite plant was completed, along with the temporary work platform for the upstream cement bentonite cut-off wall. Work commenced on excavation of the access road to downstream slopes. Overburden excavation activities (primarily grubbing & stripping) were completed in the upstream embankment area, and backfilling commenced. Significant progress was made on general overburden excavation at the South End. The schedule for stabilization works has been updated, and is forecast to be completed prior to the planned Winter Headpond (elev. 25 m) milestone date.



**Part II - LTA Construction Progress** 

Milestone Description	Planned	Actual/Forecast	Status
Project Sanction	17-Dec-2012	17-Dec-2012	Actual
HVac Transmission Line Construction Complete	08-Jun-2016	28-Sept-2016	
Churchill Falls Switchyard Ready to Energize	31-May-2017	31-May-2017	
Muskrat Falls Switchyard Ready to Energize	31-May-2017	31-May-2017	
Ready for Power Transmission	31-May-2017	31-May-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	



# Construction Narrative:

Work is continuing on the preparation of management, technical, and commercial deliverables under Contract CD0502 for Construction of AC Substations, and the Contractor is mobilizing at both Muskrat Falls and Churchill Falls. Fabrication and Factory Acceptance Testing of seven transformers for Churchill Falls has been completed under PD0537 for Supply of Power Transformers, AC Substations at facilities in Quebec, along with Factory Acceptance Testing of grounding reactors at facilities in Finland, all of which are scheduled for shipment to Site in the Fall. One transformer for Muskrat Falls is pending testing at facilities in St. Louis. Activities in relation to civil works and building services under CD0504 commenced at the Churchill Falls switchyard during the period, and are scheduled to commence at Muskrat Falls in August.

The Labrador marshalling yard operation is ongoing and supporting the HVac transmission line construction activities. Receipt of materials is continuing for the HVac transmission line, along with the ongoing issuance of towers, hardware and foundation materials to the CT0319 contractor.

Construction activities for the HVac Transmission Line in Labrador under CT0319 continued to progress during the period with ongoing tower assembly, tower erection, guy anchor installation and testing, foundation installation, and conductor stringing.

By the end of July, 1158 foundations have been installed, 882 towers were assembled and 650 erected, out of a total of 1260; 804 of the 932 guy anchors installed have been tested, out of a grand total of 1088; and 167,005 metres of conductor stringing out of a total of 490,481 metres, was completed. Work continues on the development of access routes and distribution of materials along the transmission line ROW.

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. Resources and work priorities are being managed across both the LTA and the LIL to optimize progress on both.



# SCHEDULE "G"

# Part I - Muskrat Additional Material Project Documents

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

# Part II - Labrador Transco Additional Material Project Documents

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

