Muskrat Falls Project Oversight Committee

Quarterly Project Update

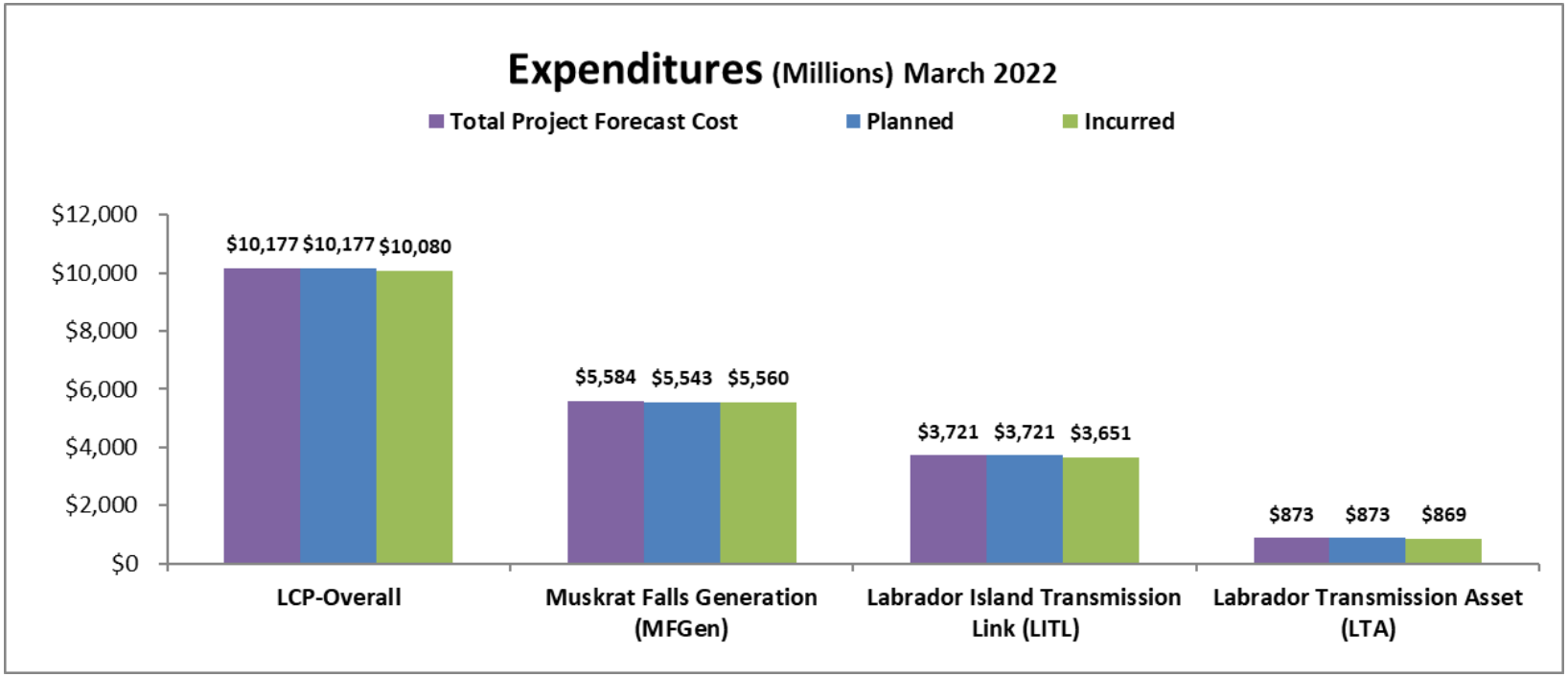
Period Ending March 2022

October 24, 2022

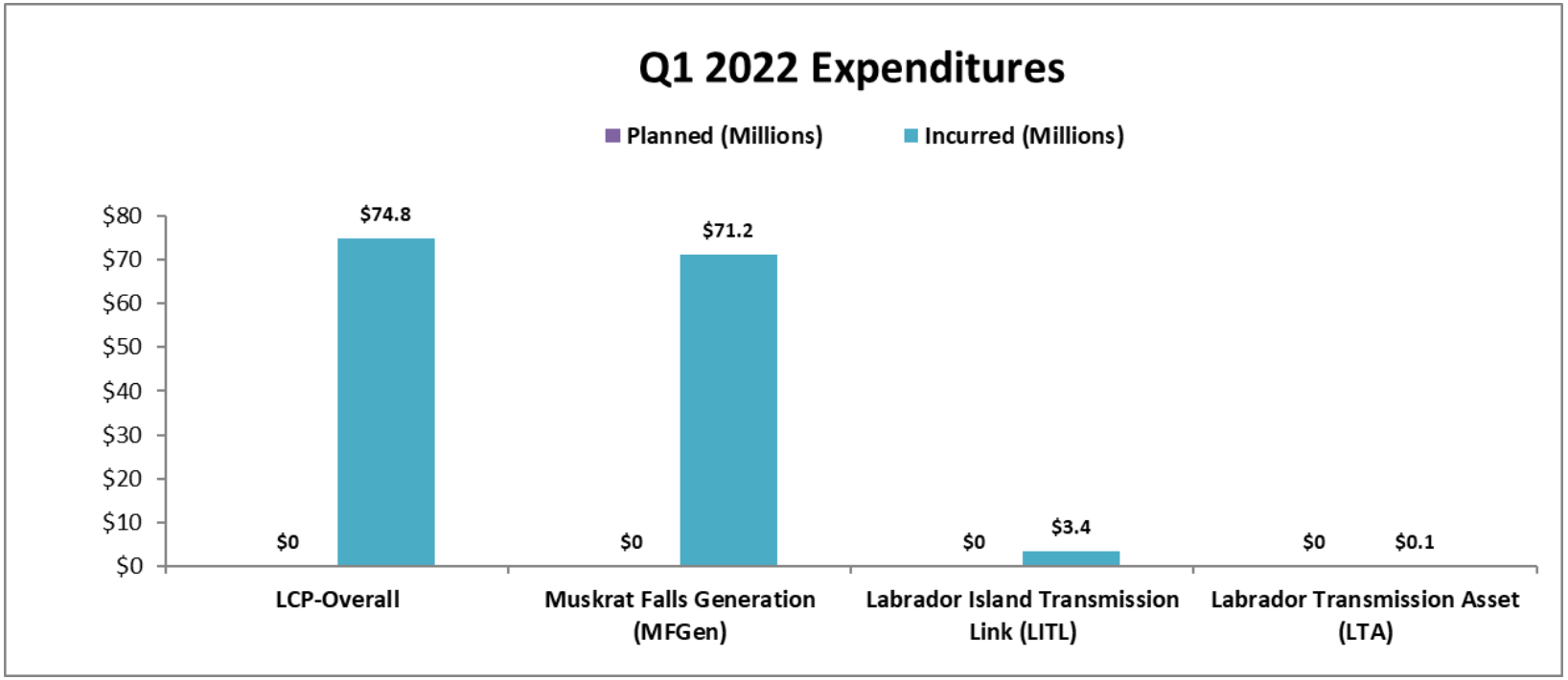
Table of Contents

- Tables and figures may not total due to rounding

1. Q1 2022 Cumulative Costs



2. Q1 2022 Planned and Incurred Costs



3.0 Oversight Committee Reporting

3.1 Overview
3.2 Committee Activities
3.3 Independent Engineer Activities
3.4 Risks and Issues Being Monitored by the Committee
3.5 Subsequent Events to Q1 and Other Notable Activity

3.1 Overview

- The Oversight Committee (Committee) receives details on project costs incurred, schedule progress, changes in costs and milestone schedule, the status of construction, and manufacturing and installation contracts.
- The Committee identifies risks and issues and follows up with Hydro to obtain more detail and explanation.
- This report covers the January 2022 to March 2022 reporting period (Q1).
- Section 3 of this report contains information developed by the Committee.
- Section 3.5 of this report includes recent information on notable activity beyond the Q1 reporting period ending, and up to the date of drafting this report (June 17, 2022). Project update information in this section supersedes information as reported in other sections of this report.
- Section 4 contains project cost and schedule information as reported by Hydro for the reporting period ending March 2022 which includes project activity updates to mid-May 2022.
- The Annexes contain a more detailed accounting of the information provided in this report.
- The next Committee Report will cover the reporting period April 2022 to June 2022.
- The Committee notes that with commissioning of MFGen/LTA having occurred in November 2021, that the future Committee reporting format will be adjusted and focus primarily on the remaining LITL work scope, cost and schedule risks.

3.2 Committee Activities

- The Committee met on two occasions during the Quarter to receive project updates and conduct other Committee business. Committee meeting minutes and reports are available on the Committee website @ Click here and Click here.
- The Committee Chair and/or Industry, Energy and Technology (IET) officials participated as an observer in three monthly calls on Hydro project reporting to the Independent Engineer (IE) and Natural Resources Canada (NRCan) and one call with NRCan.

3.3 Independent Engineer Activities

- During the Quarter, Project and other site visits have been impacted by COVID-19 travel restrictions. The Independent Engineer (IE) continues to monitor the project remotely and information exchanges are ongoing during this period.

3.4 Risk and Issues being Monitored by the Committee

- In its project reporting, Nalcor identifies risks which may impact project cost and schedule. The Committee reviews these and other project information to assess project risks. These risks can be found on pages 10-13 of this report.
- Over the reporting period the Committee notes:
  - LITL bipole final software schedule delivery and commissioning delay risk continues;
  - Synchronous condenser unit 1 collector bearing has incurred damage; root cause analysis investigation continues and is unknown if the issue is common to all three units;
  - Punch list clearance remains ongoing on MFGen/LTA; Unit 2 vibration investigation continues;
  - The Astaldi Arbitration is complete; and
  - NLH preparedness for interconnection and operations following transfer of power and final completion of bipole remains a key focus area.

3.4 Risk and Issues being Monitored by the Committee

- The project is now largely in the dynamic commissioning phase.
- Risks that are being tracked by the Committee include:

A) Safety Performance

- Risk associated with simultaneous operations across multiple work sites and impact on project delivery. This risk will continue through construction into operations.

B) Contractor Management and Productivity

- Nalcor ability to manage contractors and contractor ability to meet schedule;
- Contractor management and performance; and
- Potential commercial negotiations to settle claims.

3.4 Risk and Issues being Monitored by the Committee

C) Phased Commissioning

- Completion of P&C software to enhance functionality and reliability;
- Final completion and testing of HVdc system under low and full power and timing of contractor release and effective warranty period; and
- P&C software delivery and final commissioning completion to meet project schedule; remaining software work beyond dynamic commissioning and long-term system performance.

D) Synchronous Condensers

- Remediation of vibration and other commissioning issues; potential impact on project schedule and long term performance.

3.4 Risk and Issues being Monitored by the Committee

E) Insurance Claims and Coverage

- Coverage confirmed: Spillway secondary concrete - LCP cost recovery confirmed as ~$1.2M with payment received in Q2 2022. Final payment to Andritz also confirmed and paid. Insurance claim closed.
- Potential Coverage: Intake concrete repairs - LCP cost recovery confirmed as $1.4M. Payment expected in Q3 2022. Insurance claim closed pending receipt of final payments.
- No coverage: Valve Hall remediation – insurance only covers costs related to beam damage not defect. GE are still working on this claim.
- Potential Coverage: Synchronous condenser bearing damage – LCP working through claim related to bearing replacement.

F) LITL and Powerhouse Commissioning

- Commissioning of LITL and completion of powerhouse punch list clearance.

G) Project Integration and Operations Readiness

- NLH readiness to connect the Muskrat Falls Project to the Island and North American electricity grid and operate facilities effectively.

3.4 Risk and Issues being Monitored by the Committee

H) Additional Risks (above the September 2021 Project Budget)

- COVID-19 cost and schedule impacts;
- Failure to meet revised schedule milestones (unknown); and
- Any significant legal costs due to new disputes with contractors (unknown).

- Funds are not held within the September 2021 Project Budget for these additional risks.

3.5 Subsequent Events to Q1 2022 and Other Notable Activity

- In May and June 2022, Hydro provided the Newfoundland and Labrador Board of Commissioners of Public Utilities (PUB) with monthly updates in response findings of the Liberty Consulting Group Eight Quarterly Monitoring Report on the Integration of Power Supply Facilities to the Island Interconnected System.
- During June 13-17, 2022 the IE and NRCan participated project site visits and meetings. The Committee Chair participated in these meetings and site visits.
- On June 17, 2022, the Committee met with the IE and NRCan to discuss project status.
- On June 17, 2022 Hydro provided a revised project cost and schedule update. Overall project costs including; facilities costs, interest and financing, class B limited partnership unit interest, transition to operations, class A limited partnership unit Interest and financing reserves have now risen to $13,367 Million (an increase of $256 Million from the September 2020 budget update) based on current schedule estimates. The September 2021 project capital budget as reported previously by the Committee, has increased by $41 Million and is now $10,177 Million and realigns with the September 2020 project capital budget.
- On June 29, 2022 Hydro released its 2021 Annual Business and Financial results and first Quarter 2022 financial results. Further information is available on the Hydro website @ Click here.
- Lower Churchill Project Companies 2021 Combined Financial Statements and 2021 Additional Audit Procedures documents can be found on the Committee website @ Click here and Click here.

3.5 Subsequent Events to Q1 2022 and Other Notable Activity

- Lower Churchill Project June 2022 Cost Update ($Millions)

	Cost Update (September 2020)	Change	Cost Update (June 2022)
Nalcor Facilities Cost			
Muskrat Falls	5,560	24	5,584
Labrador Transmission Assets	880	(7)	873
Labrador-Island Link	3,737	(17)	3,720
Total Nalcor Facilities Cost	10,177	-	10,177
Interest & Financing Costs	1,838	145	1,983
Class B Limited Partnership Unit Interest	258	66	324
Transition to Operations	190	40	230
Total Nalcor Consolidated Project Expenditures	12,463	251	12,714
Class A Limited Partnership Unit Interest	300	106	406
Financing Reserves	348	(101)	247
Total Lower Churchill Project Expenditures	13,111	256	13,367

3.5 Subsequent Events to Q1 2022 and Other Notable Activity

- In June 2022, Power Supply advised:
  - <u>Full Function Bipole Software Completion Status</u>
    - During May 2022, GE worked to resolve the punchlist items identified during the Factory Acceptance Testing (FAT) in April 2022
    - In late May 2022, GE advised regression testing to confirm punchlist items that required resolution had been resolved and the bipole software was ready to start the next round of FAT
    - FAT was executed from June 6 - 8, 2022, and was witnessed in person at GE's Stafford facility by Hydro resources, and remotely by the project team, Independent Third Party (ITP) and the IE
    - After completion of FAT, the results were reviewed by all parties who determined the software was acceptable to release to site for dynamic commissioning
    - Dynamic commissioning is planned to start on June 14, 2022, and is expected to take 2-3 weeks to complete
    - Due to current grid conditions, GE will perform the lower power tests this month followed by commencement of the 30 trial operations period
    - High power testing, which will trigger issuance of the commissioning certificate and the Newfoundland and Labrador System Operator (NLSO) acceptance, cannot be completed until the island grid conditions are suitable, which will likely be during late fall 2022
    - Risk remains high that milestones may not be met

3.5 Subsequent Events to Q1 2022 and Other Notable Activity

- LITL Operation
  - The LITL operated at various power levels throughout the month of May 2022
  - The 450 MW power transfer limit is still applied to the current version of software, and the NLSO determines the actual power transfer level daily based on system conditions
  - GE requested a monopole outage from June 4-8, 2022, to replace the Muskrat Falls Pole 1 DCCT; this work is complete
  - GE requested a bipole outage from June 8-13 to clear a number of punchlist items in advance of dynamic commissioning
- Synchronous Condensers
  - SC2 and SC3 are in service
    - Minor changes have been made to the operating logic of each unit to reduce risk of repeating similar incident as seen on SC1
    - GE has requested that if a unit is not required for service, it remain at 900RPM to eliminate shut downs. If a unit trips and does not coast down in the proper manner, then GE will review the vibration and temperature data to ensure it can be returned to service
    - Contamination has been observed in the glycol cooling system of each unit
  - SC1
    - Reassembly of SC1 is complete; commissioning activities are ongoing
    - Return to service is on schedule for mid-July
    - GE have submitted several iterations of their RCA; current revision is with Hydro and is under review
    - Field testing to support findings of the root cause analysis (RCA) continue. The RCA will be updated to include test results and GE's final proposed solution. Field testing to support oil cooling system modifications are ongoing.
    - Contamination has been observed in the glycol cooling system of the unit

4.0 Hydro Reporting

4.1 Summary - Quarter Ending March 2022
4.2 Project Expenditures
4.3 Contingency
4.4 Earned Progress

*Information in this section was provided for period ending March 2022 project reporting which includes project activity updates to mid-May 2021. Recent updates to this section can be found in Section 3.5.

4.1 Summary – Quarter Ending March 2022

March 2022 Summary:

- $10,080 Million in incurred costs; and
- $10,020 Million in committed costs.

- The current forecast contingency budget at March 2022 is $12.5 Million, a decrease of $26.6 Million from the previous Quarter.

- For further detail see Section 4.2, 4.3 and Annex A

4.1 Summary – Quarter Ending March 2022

Quarterly Planned vs Incurred Cost Variances:

MFGen	
Cumulative Planned: $5,543M	Q1 2022 Planned: $0M
Cumulative Incurred: $5,560M	Q1 2022 Incurred: $71M
Variance: $17M	Variance: $71M

- Planned expenditure by month was set in September 2020.
- During Q1, 2022, the variance in planned vs. incurred cost is primarily due to the Astaldi arbitration final award as well as other items in the project budget being incurred later than planned due to project schedule delay.
- See Section 4.2 and Annex B for further detail.

4.1 Summary – Quarter Ending March 2022

Quarterly Planned vs Incurred Cost Variances:

LITL	
Cumulative Planned: $3,721M	Q1 2022 Planned: $0M
Cumulative Incurred: $3,651M	Q1 2022 Incurred: $3.4M
Variance: -$70M	Variance: $3.4M

LTA	
Cumulative Planned: $873M	Q1 2022 Planned: $0M
Cumulative Incurred: $869M	Q1 2022 Incurred: $0.121M
Variance: -$4M	Variance: $0.121M

- The planned expenditure by month was set in June of 2020.
- During Q1 2022, the variance in planned vs. incurred cost is due to project schedule delay. Existing project budget is being incurred later than planned.
- See Section 4.2 and Annex B for further detail.

4.1 Summary – Quarter Ending March 2022

- Power Supply [1]:
  - Full Function Bipole (FFB) Software
    - Following a review of GE's regression testing report and Factory Acceptance Testing (FAT) plan, LCP and Hydro gave GE approval to proceed with FAT of the bipole software
    - The FAT was executed from April 13 - 18, 2022; testing was complete several days ahead of schedule. LCP and Hydro resources witnessed the FAT at PES in Stafford, UK; the ITP witnessed remotely. Overall the LCP and Hydro teams were pleased with the results; however a small number of issues require resolution
    - The results were reviewed by LCP, Hydro, ITP, and GE and it was decided that the software would not be released to site due to the significance of the unresolved issues
    - GE are currently working to resolve these outstanding items, which will then require additional testing before the software can be released to site for commissioning
    - GE has not provided a detailed schedule for this work. It is anticipated to take several additional weeks
    - Risk remains high that milestone dates may not be achieved

[1] Some activities in this and the following Power Supply slides have occurred since March 2022

4.1 Summary – Quarter Ending March 2022

- LITL Operation
  - The LITL returned to bipole operation on April 1, 2022
  - The 450 MW power transfer limit is still applied to the current version of software, and the Newfoundland and Labrador System Operator (NLSO) determines the actual power transfer level daily based on system conditions
  - The LITL was offline from April 23-24, 2022, to allow GE to perform work on the system. The LITL was re-energized in monopole mode on April 25, 2022; return to bipole mode is pending repair work on the MF Pole 1 DCCT
  - A number of Maritime Link Runback Tests were performed on April 8, 2022; the remaining tests are planned for May 2022, pending the DCCT repairs and system conditions
  - A safety incident occurred on April 29, 2022, while GE was carrying out work on the MF Pole 1 DCCT. The incident was investigated and determined that neither GE nor Operations followed the proper permitting procedure when executing work. Recommendations for improvement have been identified as part of the investigation, and have been agreed by all parties

4.1 Summary – Quarter Ending March 2022

- Synchronous Condensers
  - SC2 and SC3 are in service
  - SC1 collector bearing has been replaced; re-assembly of the unit is ongoing
  - The cause of the bearing damage remains unknown at this time, and whether the issue is unique to SC1 or if it is common to all three units
  - Drafts of GE Power's Root Cause Analysis have been provided; however the final report is pending further test results, and it is expected to be finalized in May, 2022. The results and proposed resolution will be provided to LCP and Hydro when complete
  - GE Power's Return to Service schedule for SC1 is currently July 2022

4.1 Summary – Quarter Ending March 2022

Power Development[1]

- Muskrat Falls Plant
  - Has been released to the NLSO for dispatch
  - All four units are operational

- Pending Work
  - Andritz has identified that one runner blade on unit 2 becomes offset from the others when power on the unit is reduced, producing a vibration. The vibration is reduced when unit power is increased
  - Unit 2 has been operating at constant power for most of Q1 2022, and Andritz has recently advised that Unit 2 power can be adjusted downward by undershooting the desired power setting and then increasing it back up to the target setting
  - Andritz has recommended limiting the number of power setting decreases on Unit 2 to 4 operations per week, and this has not been a problem for plant operations as the other units in service are operating normally
  - Andritz is planning undertake an internal inspection of the Unit 2 turbine during the upcoming summer shutdown

- Astaldi Arbitration
  - The Arbitration has concluded

[1] Some activities in this Power Development slide have occurred since March 2022

4.2 Project Expenditures

March 2022 ($000)	Project Revised Budget September 2021	Cumulative $			Cumulative %		
		Plan	Incurred	Variance	Plan	Incurred	Variance
Description	*A*	*B*	*C*	*C-B*	*D=B/A*	*E=C/A*	*E-D*
NE-LCP Owners Team, Admin and EPCM Services	$1,162,016	$1,158,877	$1,149,421	($9,456)	99.7%	98.9%	-0.8%
Feasibility Engineering	$35,843	$35,847	$35,552	($295)	100.0%	99.2%	-0.8%
Environmental & Regulatory Compliance	$40,566	$40,706	$39,713	($993)	100.3%	97.9%	-2.4%
Aboriginal Affairs	$52,301	$52,301	$53,796	$1,495	100.0%	102.9%	2.9%
Procurement & Construction	$8,680,933	$8,732,457	$8,684,787	($47,670)	100.6%	100.0%	-0.5%
Commercial & Legal	$119,731	$116,245	$116,528	$283	97.1%	97.3%	0.2%
Contingency	$45,044	$0	$0	$0	0.0%	0.0%	0.0%
TOTAL	$10,136,431	$10,136,431	$10,079,797	($56,636)	100.0%	99.4%	-0.6%

March 2022 ($000)	Project Revised Budget September 2021	Incurred Cumulative Costs March 2022	Project Final Forecast Cost March 2022	Variance PFC from Budget
Description	*A*	*B*	*C*	*D=A-C*
NE-LCP Owners Team, Admin and EPCM Services	$1,162,016	$1,149,421	$1,162,193	($177)
Feasibility Engineering	$35,843	$35,552	$35,552	$291
Environmental & Regulatory Compliance	$40,566	$39,713	$39,806	$760
Aboriginal Affairs	$52,301	$53,796	$53,918	($1,617)
Procurement & Construction	$8,680,933	$8,684,787	$8,749,909	($68,976)
Commercial & Legal	$119,731	$116,528	$123,595	($3,864)
Contingency	$45,044	$0	$12,458	$32,586
TOTAL	$10,136,431	$10,079,797	$10,177,431	($41,000)

Columns in tables may not total due to rounding

4.3 Contingency

March 2022 ($000)	Project Revised Budget September 2021	Project Forecast Cost December 2021	Project Forecast Cost March 2022	Change from Previous Quarter	Variance PFC from Budget
	A	*B*	*C*	*C - B*	*C - A*
Total Project	$45,044	$39,097	$12,485	($26,612)	($32,559)

Columns in tables may not total due to rounding

4.4 Earned Progress (December 2019)

Cumulative to end of December 2019	Weight Factor %	December 2019 Cumulative % Earned
Sub-Project	A	C
Muskrat Falls Generation (MFGen)	46.3%	98.5%
Labrador Island Transmission Link (LITL)	43.9%	99.97%
Labrador Transmission Asset (LTA)	9.8%	100.0%
Muskrat Falls Project - Overall	100.0%	99.3%

Columns in tables may not total due to rounding

Annex A

I. Project Capital Budget
II. Project Milestone Schedule

Columns in tables may not total due to rounding

I. Project Capital Budget - September 2020

Muskrat Falls Generating Facility (in $ thousands)	September 2020
Expenditure Category	
NE-LCP Owners Team, Admin and EPCM Services	$634,838
Feasibility Engineering	$16,865
Environmental & Regulatory Compliance	$28,230
Aboriginal Affairs	$51,508
Procurement & Construction	$4,703,316
Commercial & Legal	$80,978
Contingency	$44,240
Muskrat Falls Generation Total	$5,559,974
Labrador-Island Transmission Link (in $ thousands)	**September 2020**
Expenditure Category	
NE-LCP Owners Team, Admin and EPCM Services	$397,565
Feasibility Engineering	$18,679
Environmental & Regulatory Compliance	$11,664
Aboriginal Affairs	$625
Procurement & Construction	$3,266,059
Commercial & Legal	$29,350
Contingency	$13,546
Labrador-Island Transmission Link Total	$3,737,488
Labrador-Transmission Assets (in $ thousands)	**September 2020**
Expenditure Category	
NE-LCP Owners Team, Admin and EPCM Services	$133,365
Feasibility Engineering	$303
Environmental & Regulatory Compliance	$812
Aboriginal Affairs	$168
Procurement & Construction	$734,424
Commercial & Legal	$9,017
Contingency	$1,419
Labrador Transmission Assets Total	$879,508
Muskrat Falls Capital Cost Budget Total	$10,176,970

Contingency Budget (in $ thousands)	September 2020
Sub-Project:	
Muskrat Falls Generating Facility	$44,240
Labrador-Island Transmission Link	$13,546
Labrador Transmission Assets	$1,419
Total Project	$59,205

I. Project Capital Budget - September 2021

Muskrat Falls Generating Facility (in $ thousands)	September 2021
Expenditure Category	
NE-LCP Owners Team, Admin and EPCM Services	$633,767
Feasibility Engineering	$16,865
Environmental & Regulatory Compliance	$28,230
Aboriginal Affairs	$51,508
Procurement & Construction	$4,694,037
Commercial & Legal	$81,978
Contingency	$36,761
Muskrat Falls Generation Total	$5,543,145
Labrador-Island Transmission Link (in $ thousands)	**September 2021**
Expenditure Category	
NE-LCP Owners Team, Admin and EPCM Services	$396,095
Feasibility Engineering	$18,679
Environmental & Regulatory Compliance	$11,664
Aboriginal Affairs	$625
Procurement & Construction	$3,256,529
Commercial & Legal	$29,350
Contingency	$7,837
Labrador-Island Transmission Link Total	$3,720,778
Labrador-Transmission Assets (in $ thousands)	**September 2021**
Expenditure Category	
NE-LCP Owners Team, Admin and EPCM Services	$132,154
Feasibility Engineering	$299
Environmental & Regulatory Compliance	$672
Aboriginal Affairs	$168
Procurement & Construction	$730,367
Commercial & Legal	$8403
Contingency	$446
Labrador Transmission Assets Total	$872,508
Muskrat Falls Capital Cost Budget Total	$10,136,431

Contingency Budget (in $ thousands)	September 2021
Sub-Project:	
Muskrat Falls Generating Facility	$36,761
Labrador-Island Transmission Link	$7,837
Labrador Transmission Assets	$446
Total Project	$45,044

II. Project Milestone Schedule

Muskrat Falls Generating Facility	Sep 2020 Planned Dates
North Spur Works Ready for Diversion	Oct-16
River Diversion Complete	Feb-17
Reservoir Impoundment Complete	Sep-19
Powerhouse Unit 1 Commissioned - Ready for Operation	Oct-20
First Power from Muskrat Falls	Sep-20
Powerhouse Unit 2 Commissioned - Ready for Operation	Dec-20
Powerhouse Unit 3 Commissioned - Ready for Operation	May-21
Powerhouse Unit 4 Commissioned - Ready for Operation	Sep-21
Full Power from Muskrat Falls	Sep-21
Commissioning Complete - Commissioning Certificate Issued	Oct-21

Labrador-Island Transmission Link	Sep 2020 Planned Dates
SOBI Cable Systems Ready	Dec-16
Soldiers Pond Switchyard Ready to Energize	Aug-17
Ready for Power Transmission (LTA)	Apr-18
Muskrat Falls Converter Station Ready to Energize (Pole 1)	May-18
HVdc Transmission Line Construction Complete	Nov-17
Soldier's Pond Converter Station Ready to Energize (Pole 1)	May-18
1ST Power Transfer (Pole 1)	Jun-18
Soldiers Pond Synchronous Condenser Ready for Operation	Aug-21
Ready for Power Transmission (Low Load Testing Complete Pole 1)	Jun-19
Muskrat Falls and Soldiers Pond Converter Stations - Bipole Dynamic Testing Complete	Sep-21
Commissioning Complete - Commissioning Certificate Issued	Oct-21

Labrador Transmission Assets	Sep 2020 Planned Dates
HVac Transmission Line Construction Complete	Jun-17
Churchill Falls Switchyard Ready to Energize	Feb-18
Muskrat Falls Switchyard Ready to Energize	Apr-18
Ready for Power Transmission	Apr-18
Commissioning Complete - Commissioning Certificate Issued	Oct-21

Date Certain – Nov-2021

Annex B

Project Expenditures

I. Muskrat Falls Generation
II. Labrador Island Transmission Link
III. Labrador Transmission Assets

Columns in tables may not total due to rounding

I. Muskrat Falls Generation

March 2022 ($000)	Project Revised Budget September 2021	Cumulative $			Cumulative %		
		Planned	Incurred	Variance	Planned	Incurred	Variance
Description	*A*	*B*	*C*	*C-B*	*D=B/A*	*E=C/A*	*E-D*
NE-LCP Owners Team, Admin and EPCM Services	$633,767	$630,347	$628,763	($1,584)	99.5%	99.2%	-0.2%
Feasibility Engineering	$16,865	$16,865	$16,568	($297)	100.0%	98.2%	-1.8%
Environmental & Regulatory Compliance	$28,230	$28,230	$27,470	($760)	100.0%	97.3%	-2.7%
Aboriginal Affairs	$51,508	$51,508	$53,086	$1,578	100.0%	103.1%	3.1%
Procurement & Construction	$4,694,037	$4,737,999	$4,755,383	$17,384	100.9%	101.3%	0.4%
Commercial & Legal	$81,978	$78,197	$78,734	$537	95.4%	96.0%	0.7%
Contingency	$36,761	$0	$0	$0	0.0%	0.0%	0.0%
TOTAL	$5,543,145	$5,543,145	$5,560,005	$16,860	100.0%	100.3%	0.3%

March 2022 ($000)	Project Revised Budget September 2021	Incurred Cumulative Costs March 2022
Description	*A*	*B*
NE-LCP Owners Team, Admin and EPCM Services	$633,767	$628,763
Feasibility Engineering	$16,865	$16,568
Environmental & Regulatory Compliance	$28,230	$27,470
Aboriginal Affairs	$51,508	$53,086
Procurement & Construction	$4,694,037	$4,755,383
Commercial & Legal	$81,978	$78,734
Contingency	$36,761	$0
TOTAL	$5,543,145	$5,560,005

II. Labrador Island Transmission Link

March 2022 ($000)	Project Revised Budget September 2021	Cumulative $			Cumulative %		
		Plan	Incurred	Variance	Plan	Incurred	Variance
Description	*A*	*B*	*C*	*C-B*	*D=B/A*	*E=C/A*	*E-D*
NE-LCP Owners Team, Admin and EPCM Services	$396,095	$395,165	$388,833	($6,332)	99.8%	98.2%	-1.6%
Feasibility Engineering	$18,679	$18,679	$18,684	$5	100.0%	100.0%	0.0%
Environmental & Regulatory Compliance	$11,664	$11,664	$11,571	($93)	100.0%	99.2%	-0.8%
Aboriginal Affairs	$625	$625	$542	($83)	100.0%	86.7%	-13.3%
Procurement & Construction	$3,256,529	$3,265,615	$3,201,040	($64,575)	100.3%	98.3%	-2.0%
Commercial & Legal	$29,350	$29,031	$29,899	$868	98.9%	101.9%	3.0%
Contingency	$7,837	$0	$0	$0	0.0%	0.0%	0.0%
TOTAL	$3,720,778	$3,720,778	$3,650,569	($70,209)	100.0%	98.1%	-1.9%

March 2022 ($000)	Project Revised Budget September 2021	Incurred Cumulative Costs March 2022
Description	*A*	*B*
NE-LCP Owners Team, Admin and EPCM Services	$396,095	$388,833
Feasibility Engineering	$18,679	$18,684
Environmental & Regulatory Compliance	$11,664	$11,571
Aboriginal Affairs	$625	$542
Procurement & Construction	$3,256,529	$3,201,040
Commercial & Legal	$29,350	$29,899
Contingency	$7,837	$0
TOTAL	$3,720,778	$3,650,569

III. Labrador Transmission Assets

March 2022 ($000)	Project Revised Budget September 2021	Cumulative $			Cumulative %		
		Plan	Incurred	Variance	Plan	Incurred	Variance
Description	*A*	*B*	*C*	*C-B*	*D=B/A*	*E=C/A*	*E-D*
NE-LCP Owners Team, Admin and EPCM Services	$132,154	$133,365	$131,825	($1,540)	100.9%	99.8%	-1.2%
Feasibility Engineering	$299	$303	$300	($3)	101.3%	100.3%	-1.0%
Environmental & Regulatory Compliance	$672	$812	$672	($140)	120.8%	100.0%	-20.8%
Aboriginal Affairs	$168	$168	$168	$0	100.0%	100.0%	0.0%
Procurement & Construction	$730,367	$728,843	$728,364	($479)	99.8%	99.7%	-0.1%
Commercial & Legal	$8,403	$9,017	$7,895	($1,122)	107.3%	94.0%	-13.4%
Contingency	$446	$0	$0	$0	0.0%	0.0%	0.0%
TOTAL	$872,508	$872,508	$869,223	($3,285)	100.0%	99.6%	-0.4%

March 2022 ($000)	Project Revised Budget September 2021	Incurred Cumulative Costs March 2022
Description	*A*	*B*
NE-LCP Owners Team, Admin and EPCM Services	$132,154	$131,825
Feasibility Engineering	$299	$300
Environmental & Regulatory Compliance	$672	$672
Aboriginal Affairs	$168	$168
Procurement & Construction	$730,367	$728,364
Commercial & Legal	$8,403	$7,895
Contingency	$446	$0
TOTAL	$872,508	$869,223

Annex C

Earned Progress

I. Overall Construction
II. Muskrat Falls Generation
III. Labrador Island Transmission Link
IV. Labrador Transmission Assets

No Longer Being Reported (Construction Complete)

Annex D

Project Milestone Schedule Forecast

I. Muskrat Falls Generation
II. Labrador Island Transmission Link
III. Labrador Transmission Assets

I. Muskrat Falls Generation

December 2021	Planned Date September 2020	December 2021 Actual/Forecast
Project Sanction	17-Dec-12	Complete
North Spur Works Ready for Diversion	5-Oct-16	Complete
River Diversion Complete	15-Feb-17	Complete
Reservoir Impoundment Complete	4-Sep-19	Complete
Powerhouse Unit 1 Commissioned - Ready for Operation	31-Oct-20	Complete
First Power from Muskrat Falls	22-Sep-20	Complete
Powerhouse Unit 2 Commissioned - Ready for Operation	31-Dec-20	Complete
Powerhouse Unit 3 Commissioned - Ready for Operation	31-May-21	Complete
Powerhouse Unit 4 Commissioned - Ready for Operation	30-Sep-21	Complete
Full Power from Muskrat Falls	30-Sep-21	Complete
Commissioning Complete - Commissioning Certificate Issued	1-Oct-21	Complete
Date Certain	November 2021	Complete

II. Labrador Island Transmission Link

March 2022	Planned Date September 2020	March 2022 Actual/forecast
Project Sanction	17-Dec-12	Complete
SOBI Cable Systems Ready	9-Dec-16	Complete
Soldiers Pond Switchyard Ready to Energize	24-Aug-17	Complete
Ready for Power Transmission (LTA)	27-Apr-18	Complete
Muskrat Falls Converter Station Ready to Energize (Pole 1)	10-May-18	Complete
HVdc Transmission Line Construction Complete	27-Nov-17	Complete
Soldier's Pond Converter Station Ready to Energize (Pole 1)	16-May-18	Complete
1ST Power Transfer (Pole 1)	11-Jun-18	Completion of 45 megawatt heat run
Soldiers Pond Synchronous Condenser Ready for Operation	31-Aug-21	Complete
Ready for Power Transmission (Low Load Testing Complete Pole 1)	4-Jun-19	Complete
Muskrat Falls and Soldiers Pond Converter Stations - Bipole Dynamic Testing Complete	30-Sep-21	TBD*
Commissioning Complete - Commissioning Certificate Issued	1-Oct-21	TBD*
Date Certain	November 2021	31-May- 2022

* Updated forecast from last reporting period

III. Labrador Transmission Assets

December 2021	September 2020 Planned Date	December 2021 Actual/Forecast
Project Sanction	17-Dec-12	Complete
HVac Transmission Line Construction Complete	27-Jun-17	Complete: Turnover of HVac TL and all subsystems complete
Churchill Falls Switchyard Ready to Energize	14-Feb-18	Complete
Muskrat Falls Switchyard Ready to Energize	2-Apr-18	Complete
Ready for Power Transmission	27-Apr-18	Complete
Commissioning Complete - Commissioning Certificate Issued	1-Oct-21	Complete
Date Certain	November 2021	Complete

End of Report