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# **Nova Scotia Utility and Review Board**

**IN THE MATTER OF**

*The Maritime Link Act, S.N.S 2012 c.9  
and the  
Maritime Link Cost Recovery Process Regulation, N.S. Reg. 189/2012*

## **NSPML Quarterly Report Q4 2021**

**December 15, 2021**

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1 **1.0 INTRODUCTION**

2  
3 This is the Q4 2021 Quarterly Report for the Maritime Link as directed by the Utility  
4 and Review Board (UARB) where the UARB ordered in its Supplemental Decision:

5  
6 [115]....detailed reports must be filed by NSPML on a semi-  
7 annual basis, on June 15 and December 15 each year. The reports  
8 shall commence December 15, 2013. Updated status reports must  
9 be filed quarterly.

10  
11 As per the UARB’s order in its Decision regarding the Maritime Link Interim Cost  
12 Assessment (M07718), this Report now includes detail regarding the status of the  
13 construction of Nalcor’s assets.

14  
15 This Decision also requested that the quarterly reports include an accounting of all  
16 transactions related to this project, cash flow analysis, and a reporting of the financial  
17 and other benefits realized for ratepayers from the Maritime Link prior to delivery of  
18 the Nova Scotia Block and Nalcor market-priced energy. Given that the benefits to  
19 ratepayers prior to the Nova Scotia Block and Nalcor market-priced energy are secured  
20 by Nova Scotia Power through the Maritime Link, Nova Scotia Power will report on  
21 these in its Quarterly Fuel Adjustment Mechanism Report.

1 **2.0 UPDATE OF PROJECT SCHEDULE**

2  
3 The Maritime Link was placed in-service on January 15, 2018.  
4  
5 Detail respecting the status of the Nalcor Project and Muskrat Falls is outlined in  
6 Section 2.9.  
7

8 **2.1 Gates and Milestones**

9  
10 The Maritime Link was placed in-service January 15, 2018.  
11

12 **2.2 Safety**

13  
14 Safety is a fundamental core value and integral part of every aspect of NSPML’s  
15 business.  
16

17 In accordance with its COVID-19 Pandemic response and safe return to normal  
18 operations, NSPML continues to follow local epidemiology, best available pandemic  
19 protocols and jurisdictional health guidance. NSPML continues to be risk-focused in  
20 the assessment of all work activities ensuring that all high-risk work is reviewed and  
21 evaluated both before commencement of activities and through post- completion  
22 evaluations.  
23

24 There have been no recordable incidents to date in 2021.  
25

26 **2.3 Commercial Activities**

27  
28 The key major procurement activities are presented in Table 1 with an update of the  
29 status for each initiative.

1 **Table 1 Key Major Procurement Activities**

2

<b>Commercial Activity</b>	<b>Background</b>	<b>Initiative Number</b>	<b>Status in December 2021</b>
HVDC Submarine Cable Supply and Installation	The Contract was awarded to Nexans in January 2014.  Substantial Completion occurred in September, 2017.  Contract Final Completion Certificate signed February 5, 2018.	E11-18	Closed
Converter stations, switchyards and related structures (“converters and structures”)	The Contract was awarded to ABB Inc. in June 2014.  Final System Test Completed January 15, 2018.  Substantial Completion achieved on January 15, 2018.	E12-74	Closed
Right of Way Clearing along Transmission Lines	Contracts were awarded to Majors Logging Limited in NL and to R. MacLean Forestry in NS in February 2014.	E13-88	Closed
Transmission Structures and Grillages	The Contract was awarded to Kalpataru Power Transmission Ltd. in September 2014 for design and delivery of Structures and Grillages.	E13-85	Closed

<b>Commercial Activity</b>	<b>Background</b>	<b>Initiative Number</b>	<b>Status in December 2021</b>
Site Preparation Services (Includes construction of access road upgrades)	<p>The Contract was awarded to JonelJim Concrete Construction (1994) Ltd. for NS Site Preparation Services in September 2014.</p> <p>Contracts awarded to Marine Contractors Inc., MCI Limited Partnership for NL Site Preparation Services in September 2014.</p>	E13-92	<p>Closed</p> <p>Closed</p>
Transmission Line Construction	<p>E13-95 contract terminated as of late 2016.</p> <p>Contract replaced with E16-284 and E16-269 previously reported.</p>	E13-95	Closed
Transmission Line Construction – NL AC Line	The contract with PowerTel was re-assigned to NSPML for the completion of the two Grounding Lines and the HVAC Line. Final Completion was achieved January 31, 2019.	E16-284	Final Completion achieved; internal closeout process underway.
Transmission Line Construction - NL and NS HVDC Lines	The contract for the construction of the HVDC Transmission Lines was awarded to a joint venture of Emera Utility Services and Rokstad Power Corporation (ERJV).	E16-269	Contract terminated following mechanical completion. Warranty claims being actively pursued.

<b>Commercial Activity</b>	<b>Background</b>	<b>Initiative Number</b>	<b>Status in December 2021</b>
Transmission Line Conductors	<p>The Contract for the supply of conductors was awarded to Midal Cables in March 2015.</p> <p>The contract for the supply of OPGW was awarded to Composite Power Group Inc. in June 2015. This is also within the scope of the E13-87 initiative.</p>	E13-87	<p>Closed</p> <p>Closed</p>
Horizontal Directional Drill (HDD) Construction Program	<p>Contract awarded to Directional Horizontal Drilling (DHD) in January 2016.</p> <p>E13-157 was divided into two contracts.</p> <p>E13-157 A was awarded to Schlumberger in March 2016 for the supply of HDD fluids. E13-157B was awarded to Baker Hughes in April 2016 for the Supply of directional drilling services, drill bits and other materials.</p> <p>E13-158 for marine intervention services was awarded in April 2016 to DOF Marine.</p> <p>The supply of the HDD casing (E15-238) was awarded to East Coast Tubulars Limited in October</p>	<p>E13-156</p> <p>E13-157</p> <p>E13-158</p> <p>E15-238</p>	<p>Closed</p> <p>Closed</p> <p>Closed</p> <p>Closed</p>

<b>Commercial Activity</b>	<b>Background</b>	<b>Initiative Number</b>	<b>Status in December 2021</b>
	2015.		
Accommodations Operations	The contract for the accommodations operations services was awarded to East Coast Catering in April 2015.	E13-89	Closed

1



1 **2.3.1 Land Access Agreements**

2  
3 The majority of land rights are now in place, and NSPML is in the final stages of  
4 securing any outstanding rights; moving to expropriation for 54 parcels of land as  
5 required where agreement could not be reached, landowners could not be found, or  
6 title to a land parcel was imperfect. These easements do not impact the ability of the  
7 project to complete contract closeouts or to operate according to plan.

8  
9 **2.3.2 Funding**

10  
11 The IE Certificates allow for Project costs to be paid from the proceeds of the  
12 Maritime Link Construction Loan under the payment terms of the Material Project  
13 Documents and the Maritime Link Credit Agreement. The final draw against the \$1.3  
14 billion was requested in February 2020.

15  
16 **2.3.3 Joint Development Agreements**

17  
18 NSPML continues to work with Nalcor and NS Power to finalize one agreement  
19 relating to regulation service which is anticipated to be concluded in 2022. The two  
20 remaining agreements are internal matters to Nalcor as they relate to the assignment by  
21 Nalcor of these agreements to an affiliate. Nalcor is not contractually required to  
22 assign the agreements to an affiliate. The status of these agreements do not impact the  
23 ability of the company to operate according to plan. Please refer to Attachment 1 for a  
24 listing of the Agreements that remain to be concluded.

1 **2.4 Engineering Activities**

2

3 Engineering is captured in three main categories across several Work Breakdown  
4 Structures (“WBSs”):

5

6 • HVDC Submarine Cable Supply and Installation - Completed.

7

8 • HVDC Converters and Substations – Completed.

9

10 • Overland Transmission – All project as-builts completed.

11

12 **2.5 Submarine Cables**

13

14 The 2021 marine survey was completed in late November.

15

16 NSPML continues to mature its inspection, maintenance, and repair framework across  
17 multiple proactive and contingency elements, including its consideration of a  
18 Contingency Services Agreement.

19

20 **2.6 Converters and Substations**

21

22 The Construction of the Converters and Substations was completed with the  
23 conclusion of system testing and the Maritime Link placed in-service on January 15,  
24 2018 and all punch list items are completed.

25

26 **2.7 Transmission Lines**

27

28 The overhead transmission system continued to perform well into the fourth year of  
29 operations with no significant reliability or downtime impacts experienced.

30

31 The replacement of dampers is complete, and all other required corrective work on the  
32 Transmission lines has been completed.

1 NSPML continues to pursue claims for transmission repair work under the project  
2 insurance. NSPML is also actively engaged in discussions with the relevant third  
3 parties to resolve any uninsured costs for matters falling within those parties' warranty  
4 obligations.

5

6 **2.8 Independent Engineer**

7

8 NSPML remains engaged with the Independent Engineer (IE) related to the Operations  
9 phase of the Maritime Link, as per the Federal Loan Guarantee requirements.

10

11 The IE completed a site visit in November 2021 in Cape Breton. A copy of the IE's  
12 report will be provided once it is completed.

13

14 **2.9 Status of Nalcor Project and Muskrat Falls**

15

16 The most recent public report of the status of the Nalcor Project and Muskrat Falls is  
17 set out in Newfoundland Hydro's Monthly Status Report dated December 2, 2021 and  
18 filed as Exhibit No. N-40 under Matter No. M10206.

19

20 **Muskrat Falls Assets**

21

22 Units 1-4 are now commissioned and have been handed over to the Operations team.  
23 At least two of the four units (Units 1 and 3 at present) have generally been active and  
24 contributing to power flows while Nalcor and their contractors complete punch list  
25 items on the offline units. Units 2 and 4 are both scheduled to return to service in mid-  
26 December 2022. A planned outage of Unit 3 is scheduled for early January 2022 to  
27 complete any remaining punch list items on that unit.

28

29 **Synchronous Condensers at Soldiers Pond**

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31 Dynamic Commissioning, Trial Operations and special tests for all three synchronous  
32 Condenser (SC") units are now complete.

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In mid-November, SC1 was taken out of service to repair an end bearing that was damaged during testing. SC2 and SC3 remain in service with no planned maintenance work. The Synchronous Condensers are not on the critical path for project completion; they are relevant for system stability purposes as they eliminate the need for Newfoundland and Labrador Hydro to use the Holyrood Generating Units for equivalent system stability reasons through the lower power demand months in the summer.

**Labrador Island Link**

GE and Nalcor are presently in the process of commissioning the LIL with updated protection and control software after FAT in early December and system operators are in the process of planning for high power testing across the LIL and ML.

NSPML and Nalcor meet routinely to discuss completion schedules and coordinate the initiation of energy transfers across the Labrador Island Link and Maritime Link as generation is commissioned.

**2.10 Status of Benefits to NS Power Customers**

Customer benefits received to date are being reported by NS Power with its Quarterly Fuel Adjustment Mechanism Report.

1 **3.0 UPDATED COST SUMMARY**

2

3 As per Enerco U-31, section 6, the details below outline the DG3 forecasted costs.

4

5 Table 2 provides an updated cost summary for the Maritime Link, which includes  
6 actual costs incurred as of September 30, 2021 and forecasted total costs for the  
7 remainder of the Project's construction activities as detailed in the Maritime Link  
8 Project Capital Cost Application filed in August 2021.

9

10 NSPML continues to track and report all costs, actual and forecast, consistent with the  
11 methodologies used in the cost forecast represented in the Maritime Link Project  
12 Application. Capitalized project costs include fully allocated costs for the entire  
13 Project Management Team, including contractors, employees, executives dedicated to  
14 the project, and NS Power seconded employees at rates in accordance with the  
15 Affiliate Code of Conduct. All costs provided are in Canadian dollars.

16

17 Actual AFUDC has been tracked and recorded monthly up to December 31, 2017 and  
18 totaled approximately \$209 million, which is below the \$230 million amount  
19 originally estimated.

1 **Table 2 Updated Cost Summary for the Maritime Link Project**

(000's of Canadian Dollars)	Actual Costs					Estimate to Completion	Total Project Estimate at Completion (A)
	Description	2011-2020	Q1 2021	Q2 2021	Q3 2021		
Emera NL Project Management Costs	194,834	966	657	950	197,407	5,896	203,302
Nalcor Project Support Costs	16,214	-	-	-	16,214	2	16,216
Construction and Engineering Initiatives	1,349,520	2,361	950	78	1,352,909	(1,197)	1,351,712
Environmental Approval	18,416	-	-	-	18,416	1	18,417
Submarine and related	343,449	-	-	-	343,449	2	343,451
Converters, structures, and other ancillary equipment	548,481	64	13	2	548,560	1,518	550,078
AC and DC Transmission	439,174	2,297	937	76	442,484	(2,718)	439,766
<b>Grand Total</b>	<b>1,560,568</b>	<b>3,327</b>	<b>1,607</b>	<b>1,028</b>	<b>1,566,530</b>	<b>4,701</b>	<b>1,571,230</b>

2  
3  
4 Note: Total forecast for Project completion is expected to total \$1.5712B as outlined in  
5 the Maritime Link Final Capital Cost Application. Recovery of costs from third parties  
6 continue to be advanced and will be reported once finalized.

7  
8 A balance of \$6.12 million remains in the DG3 Budget of \$1.577 billion should  
9 NSPML require it to fund any remaining contingency draws. No requirements for  
10 additional contingency are currently expected.

1           **Total Actual Project Costs at end of Q3 2021 Compared to Previous Forecast**

2  
3           The total actual project capital costs incurred during Q3 2021 of \$1,028,000 and  
4           explanation of key amounts are detailed below:

- 5
- 6           •       Emera NL Project Management Costs of \$950,000: Project management costs  
7                   continue to be incurred primarily for project closeout and regulatory purposes.  
8           NSPML has segregated these capital costs from costs relating to operating and  
9           maintenance activities and have expensed such operating and maintenance  
10           costs accordingly.
  
  - 11
  - 12           •       AC and DC Transmission of \$76,000: This reflects corrective transmission  
13                   activities.

14

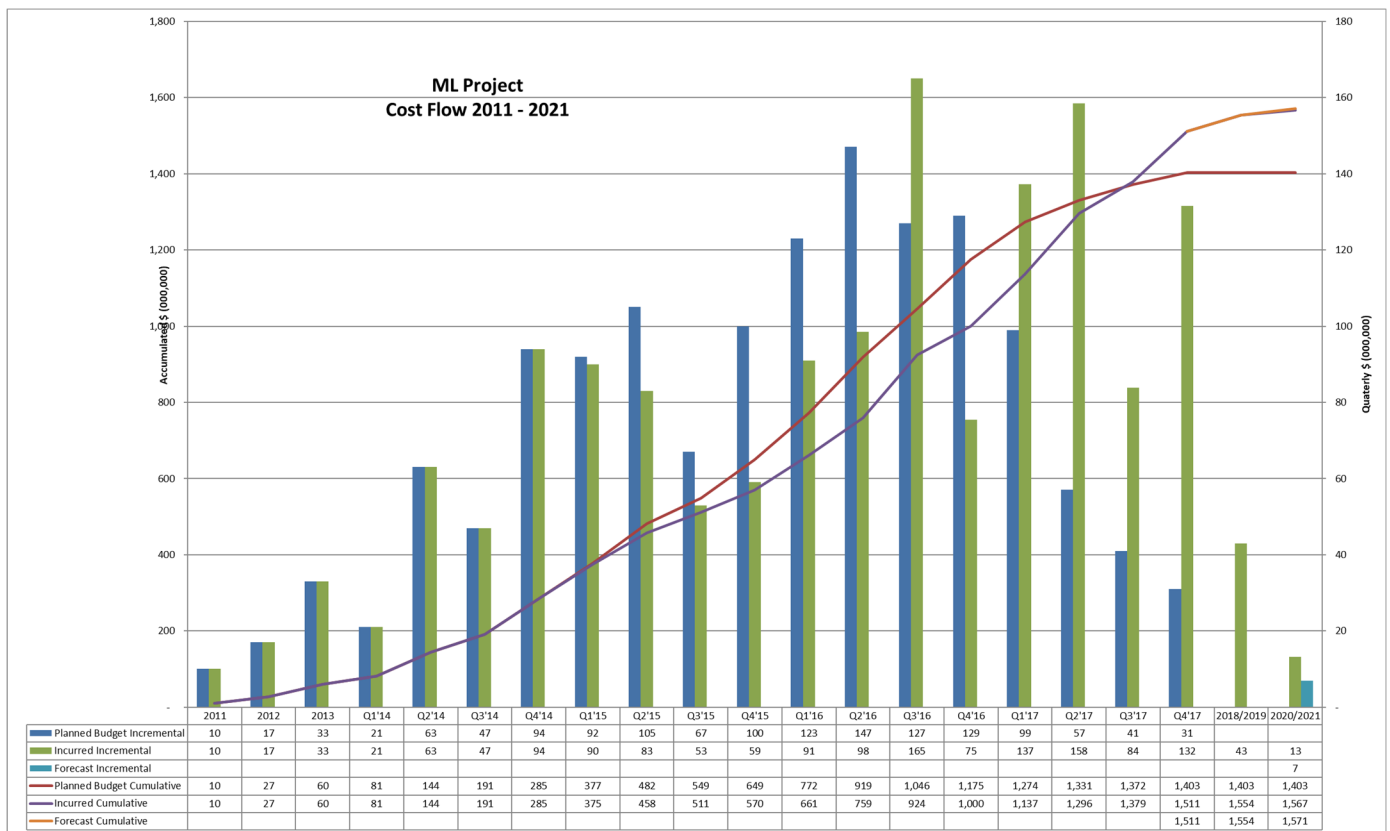
15           The Project capital cost remains within budget.

4.0 COST FLOW

As per Enerco U-31, section 2.2, please refer to Table 3 below for the cost flow of the Maritime Link. This cost flow report for the base capital spending is forecast at \$1.571 billion. While unlikely, additional contingency draws may be required depending on the timing and outcome of potential recovery of costs from third parties as noted in Section 3.0. This is not expected to impact the final cost forecast of \$1.571 billion.

The remaining budget primarily relates to the regulatory requirements relating to the construction aspect of the project and project close-out activities.

**Table 3 Maritime Link Cost Flow**





1 **5.0 INTERIM ASSESSMENT FINANCIAL UPDATE 2021**

2

3

With the Maritime Link placed in-service on January 15, 2018, NSPML continues to receive monthly cost recovery revenues from NS Power pursuant to the Board's orders. NSPML forecasts its 2021 operating and maintenance, debt and equity financing costs to be within the amounts budgeted for the year.

4

5

6

### Operating Agreement Requirements Arising from the Formal Agreements

	<b>Agreement</b>	<b>Parties</b>	<b>Description</b>	<b>Formal Agreement Source</b>	<b>Status</b>
1.	Asset Interconnection Agreement (NL)	Emera, NLH	Interconnection of ML with the Island Interconnected System	ML-JDA, s. 2.1 (c )	Completed
2.	Multi-Party Pooling Agreement	Emera, NLH	NLH (SO) to have operational control of ML NLH AC Upgrades	ML-JDA, s. 2.1 (d )	Completed
3.	Transmission Operating Agreement (NL)	Emera, NLH	NLH (SO) to have operational control of ML NL HVdc Facilities	ML-JDA, s. 2.1 (e )	Completed
4.	Asset Interconnection Agreement (NS)	Emera, NSPI	Interconnection of ML with NS bulk electric transmission system	ML-JDA, s. 2.1 (f )(i)	Completed
5.	Transmission Operating Agreement (NS)	Emera, NSPI	NS SO to have general operational control of the ML	ML-JDA, s. 2.1 (f )(ii)	Completed
6.	ECA – Metering and Measuring Standards – Transmission Losses	NSPML, Nalcor	Metering and measuring standards used in the calculation of Transmission Losses	ECA, Schedule 3, s. 5	Completed
7.	Regulation Service Agreement	NS Power NLH	Nalcor’s provision of the Regulation Service with respect to the Nova Scotia Block for the Initial Term	ECA, Schedule 5	Expect completion in 2022.
8.	Metering and Measuring Standards – NS NTQ transmission losses	NSPML, Nalcor	Metering and measuring standards used in calculation of NS –NTQ Path Peak and Off-Peak Hour transmission losses	NSTUA, Schedule 3, s. 6	Completed
9.	NB Back-up Capacity Agreement	Bayside Power L.P, Nalcor	Emera’s provision of backup Capacity to NB to Nalcor until March 31, 2021	NBTUA, s. 2.1(d)	No longer required given sale of Bayside to NB Power.
10.	IOA – ML Transmission Procedures	NSPI, NLH	Rules and practices applicable to administration of transmission service over the ML	IOA, Schedule D	Completed
11.	IOA – Reserve Sharing	NSPI, NLH	Sharing of energy and reserves between the Parties to improve Reliability	IOA, Schedule A	Completed
12.	IOA – Description of Interconnection Facilities	NSPI, NLH	Description of Interconnection Facilities for which each Party is responsible	IOA, Schedule B	Completed
13.	IOA – Functional Operating Relationship	NSPI, NLH	Various matters relating to operating relationship	IOA, Schedule C	Completed

14.	IOA – Operating Procedures	NSPI, NLH	IOC to develop “operating procedures”	IOA s.7.2 and s. 7.4(a)	Completed
15.	IOA – Schedule A1.0	NSPI, NLH	Parties to prepare a plan for NLH participation in Reliability Assessment Program (“RAP”)	IOA Schedule A1.0	Completed
16.	ML TSA – ML Scheduling Process	Emera and Nalcor	Scheduling process applicable to the provision of Firm Point-to-Point Transmission Service	MLTSAs, Schedule 2	Completed
17.	Amendments to Formal Agreements	Emera, Nalcor	Amendments to Formal Agreements required by Sanction Agreement	Sanction Agreement	Completed
18.	Energy Access Agreement	Emera, Nalcor	Commitments regarding access to market priced energy	Compliance Filing, Appendix A	Completed
19.	Balancing Service Agreement	Emera, Nalcor	Nalcor commitment to provide balancing services from generation sources in NL for 25 years.	Energy Access Agreement Term Sheet, s. 7(g) and Appendix 1	Completed
20.	Assignment of Transmission Rights under ML(E)TSA	Emera, Nalcor	Assignment of Transmission Rights	ML(E)TSA, s. 3.3 (h)	Completed
21.	Assignment of Energy Access Agreement	Emera, Nalcor, NSPI and Nalcor Energy Marketing (NEM)	Assignment/assumption of Nalcor’s rights and obligations to/by NEM	EAA s. 15.1 (a)	At Nalcor’s discretion. Not a requirement of NSPML.
22.	Assignment of Nalcor Master Agreement (EAA Schedule 2)	Nalcor, NSPI and NEM	Assignment/assumption of Nalcor’s rights and obligations to/by NEM	Nalcor Master Agreement s. 10.5 (a)	At Nalcor’s discretion. Not a requirement of NSPML.
23.	JOA-Joint Operating Committee (“JOC”)	Nalcor and NSPML	Establish/Operationalize JOC	JOA s. 3.1, 3.5	Completed
24.	NS Transmission Utilization Agreement	Nalcor and Emera	Status of Emera firm Point to Point Transmission Service	NSTUA s.s.2.2 (a)-(c)	Completed