
Nova Scotia Utility and Review Board

IN THE MATTER OF

*The Public Utilities Act, R.S.N.S 1989, c. 380, as amended
and the
The Maritime Link Act, S.N.S 2012 c.9
and the
Maritime Link Cost Recovery Process Regulations, N.S. Reg. 189/2012*

NSPML 2020 Interim Assessment Application

June 14, 2019

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1 **1.0 INTRODUCTION**

2
3 When the Nova Scotia Utility and Review Board (UARB or Board) approved Maritime
4 Link¹ (ML) assessments for 2018 and 2019 by its decision dated September 11, 2017
5 (the 2017 Decision), it contemplated another interim assessment hearing in 2019 to deal
6 with the following three matters:

- 7
- 8 (a) Continuation of the interim assessment, if necessary, after 2019
9 including any necessary adjustment to the interim assessment pending
10 delivery of the NS Block²;
 - 11 (b) The commencement date of payment of depreciation;
 - 12 (c) The status of the Muskrat Falls Generating Station (MFGS) and the status
13 of the NS Block.³
- 14

15 On January 15, 2018, NSPML placed the Maritime Link into service, on time and within
16 budget. Nova Scotia electricity customers are benefitting from enhanced reliability and
17 optimization of the Nova Scotia transmission system as well as through economic
18 energy exchanges between Nova Scotia and Newfoundland and Labrador.
19

¹ 2013 NSUARB ; M05419 – Maritime Link Project Application, January 28, 2013, page 8, paragraph 7-17: Maritime Link (or Maritime Link facilities): A new, high-voltage direct current transmission system and related components; including grounding systems, and includes: 1.) Direct current converter stations in Newfoundland and Labrador; and in Cape Breton, Nova Scotia, together with the subsea cables and high voltage direct current transmission lines connecting the converter stations; 2.) an alternating current transmission line connecting the converter station in Newfoundland and Labrador with the Newfoundland Island Interconnected System, and; 3.) any additional transmission infrastructure required in order to interconnect with the Newfoundland Island Interconnected System and the Nova Scotia Transmission System.

² The Nova Scotia Block is the energy (approximately 0.9 TWh and 0.2 TWh of Supplemental Energy annually) from the Muskrat Falls Plant to be provided to NS Power under the Energy and Capacity Agreement with Nalcor for 35 years as part of the 20 for 20 Principle. The Supplemental Energy block will be delivered over the first five years of the Maritime Link’s operation and is considered part of the Nova Scotia Block. Surplus Energy is energy which NS Power may purchase from Nalcor at market rates in accordance with the Energy Access Agreement.

³ 2017 NSUARB 149; M07718 – Interim Cost Assessment, Decision, at paragraph 188.

1 This Application requests that the Board approve a forecasted interim assessment of the
2 Maritime Link (Interim Assessment) for 2020 to be paid to NSPML by Nova Scotia
3 Power Inc. (NS Power) commencing on January 1, 2020 pending Board approval of a
4 final cost application for the Maritime Link. By this Application, NSPML also seeks
5 approval of a June 1, 2020 commencement date for recovery of depreciation.

6
7 Nalcor Energy (Nalcor) reports that it has achieved 97 percent overall completion of the
8 Muskrat Falls Project⁴ and recent updates indicate that the first generating unit is
9 forecasted to be operational in Q4 2019⁵. In light of Nalcor's sustained progress to
10 completion of the MFGS, commencement of delivery of the NS Block continues to be
11 projected to begin in Q2 2020, one month earlier than projections given at the time of
12 the 2017 Decision⁶. Indeed, the circumstances respecting the timing of the NS Block
13 and the completion of the Maritime Link remain substantially the same as they were at
14 the time of the 2017 Decision, with Nalcor focused on successful integration of MFGS
15 into the electrical system. NSPML anticipates seeking a full and final assessment of
16 Maritime Link project costs in 2020. In the meantime, this Application seeks a
17 continuation of the interim assessment through 2020 on terms consistent with those
18 approved by the Board in 2017, including the continued deferral of a portion of annual
19 2020 depreciation and amortization of deferred financing charges. In deference to the
20 intergenerational equity concerns which the Board determined to be addressed by such
21 deferrals⁷, the Interim Assessment provides that such deferrals be maintained until the
22 requested date for commencement of depreciation of June 1, 2020. Recovery of
23 depreciation as outlined in this Application will allow NSPML (i) to repay principal on
24 the debt incurred under the ML Credit Agreement⁸ owing to the ML Financing Trust⁹
25 which is required for the ML Financing Trust to repay principal on the bonds issued

⁴ Muskrat Falls Project includes the Muskrat Falls Generation Station, Labrador Transmission Assets, and Labrador-Island Transmission Link.

⁵ Muskrat Falls Project Monthly Report, March 2019, dated May 22, 2019, page 4, section 2.0.

⁶ Muskrat Falls Project Oversight Committee, Quarterly Project Update – Period Ending December 31, 2018.

⁷ *Supra*, note 3 at paragraph 139.

⁸ 2017 NSUARB 149; M07718 – NSUARB IR-009, Attachment 2.

⁹ ML Financing Trust, is the entity that has received the guarantee from Canada, which provides debt funds to NSPML to finance the Maritime Link.

1 under the ML Trust Indenture (and which are guaranteed under the Federal Loan
2 Guarantee (the FLG)) to support the financing of the Project and (ii) to return equity to
3 NSPML's shareholder to maintain NSPML's UARB approved Debt to Equity Ratio
4 (DER) in 2020.

5
6 In the 2017 ML Decision, the Board directed NS Power to hold back \$10 million from
7 NSPML's assessment in each of 2018 and 2019 pending demonstration of a minimum
8 of \$10 million in benefits to customers for each holdback year¹⁰. Consistent with
9 NSPML's proposal in this Application to continue the terms of the 2018 and 2019
10 interim assessment through 2020, NSPML proposes that NS Power hold back from the
11 2020 annual Interim Assessment set by the Board the amount of \$10 million. NSPML
12 anticipates commencement of the NS Block for the benefit of customers in 2020 as well
13 as additional benefit obtained from use of the ML throughout the year. NSPML will
14 apply to the Board for release to NSPML of the amount held back by NS Power in the
15 manner directed by the Board in its 2017 Decision based on proof satisfactory to the
16 Board that the requirements for such release have been met.

17
18 As was the case in 2017, this Application is limited to a request for the Board's approval
19 of the forecasted assessment for the Maritime Link, and payment of forecasted
20 assessment amounts from NS Power to NSPML. NSPML is not requesting final
21 approval of the actual capital costs of the Maritime Link. NSPML respects the Board's
22 direction that it is not prepared to approve the final assessment until it has confidence in
23 the timing of commencement of the NS Block, Supplemental Energy and Nalcor
24 Market-priced Energy¹¹. Moreover, the capital costs of the Maritime Link are not
25 finalized at this time, as work advances relating to the close-out of Maritime Link Project
26 activities. NSPML renews its commitment to provide a detailed reporting and
27 breakdown of the final actual costs of the entire completed Project when the final actual

¹⁰ *Supra*, note 3 at paragraph 121.

¹¹ *Supra*, note 3 at paragraph 153.

1 costs are fully available, to ensure the final costing of the Project can be reviewed in a
2 manner that is clear, complete and transparent to the Board and stakeholders.

3
4 By this Application, NSPML respectfully requests that the Board issue an order pursuant
5 to section 64 of *the Public Utilities Act* and section 8(1) of the *Maritime Link Cost*
6 *Recovery Process Regulations* and based on forecasted 2020 ML costs and expenses for
7 recovery in 2020 of a total of \$144.5 million:

8
9 (a) Setting an Interim Assessment of \$115.1 million against NS Power in 2020,
10 excluding depreciation and amortization of deferred financing charges as
11 provided for in (b) below, and approving a schedule of monthly charges for these
12 costs commencing January 1, 2020.

13
14 (b) Setting a commencement date of June 1, 2020 for the recovery of \$28.6 million
15 in depreciation and \$0.8 million of amortization of deferred financing charges,
16 with the total cost to be recovered from NS Power in time to enable the
17 required December 1, 2020 debt principal repayment under the ML Credit
18 Agreement and FLG, and maintain the approved DER of 70:30.

1 **2.0 STATUTORY AND REGULATORY CONTEXT**

2

3 **2.1 2013 Maritime Link Project Approval**

4

5 In November, 2013, the UARB approved the ML Project as the lowest long-term cost
6 alternative for electricity customers in Nova Scotia.¹² Accordingly, pursuant to section
7 5(1) of the *Maritime Link Cost Recovery Process Regulations (ML Regulations)*, the
8 UARB approved the Maritime Link.

9

10 The Board further approved a capital cost forecast for the Maritime Link of \$1.52
11 billion, and pursuant to section 6 of the *ML Regulations* the Board also approved a
12 variance for the Project of up to \$60 million¹³, for a total approved capital cost envelope
13 of \$1.58 billion.

14

15 In addition, the Board approved AFUDC for the ML Project of up to \$230 million.¹⁴

16

17 **2.2 ML Schedule Prudence and 2018 and 2019 Assessment Approvals**

18

19 In December, 2016 NSPML applied to the UARB for approval pursuant to section 8 of
20 the *ML Regulations* for recovery from NS Power of an assessment in each of 2018 and
21 2019 to allow NSPML to commence recovery of the ML costs upon the ML going into
22 service.

23

24 In its 2017 Decision the UARB approved ML assessments of \$109.5 million for 2018
25 and \$111.5 million for 2019.¹⁵

¹² 2013 NSUARB 154, M05419, Maritime Link Project Application, page 56, paragraph 170.

¹³ *Supra*, note 12 at page 111, paragraph 356.

¹⁴ *Supra*, note 12 at page 103, paragraph 324.

¹⁵ 2017 NSUARB 149, M07718, Application for Approval of Interim Cost Assessment, page 66, paragraph 186.

1 In its 2017 Decision the UARB further stipulated that the approved assessments would
2 be subject to a holdback of \$10 million in each of these years, pending proof satisfactory
3 to the Board that \$10 million per year in benefits for Nova Scotia customers has been
4 achieved through operation of the ML.¹⁶

5
6 In the course of the 2017 application, NSPML recommended adjustments to the applied-
7 for interim assessments in each of these years in response to questions raised by
8 interested parties regarding intergenerational equity between customers paying the
9 interim assessment in the early years pending receipt of the NS Block and customers
10 receiving MFGS power in the final years of delivery of the NS Block. In light of the
11 questions raised, NSPML amended its application for 2018 and 2019 Assessments to
12 adjust its applied for assessments by:¹⁷

- 13
14 (a) deferring depreciation expenses totalling \$51 million in each of 2018 and 2019;
15 and
16 (b) implementing the Board's suggestion to defer amortization of deferred financing
17 charges of \$1.5 million in each of 2018 and 2019.

18
19 In approving NSPML's proposed, adjusted, interim assessments¹⁸, the UARB indicated
20 that:¹⁹

21
22 The issue of whether NSPML prudently incurred the costs of
23 constructing the Maritime Link (including construction and contract
24 costs, management costs, financing costs, etc.) are not the subject of this
25 proceeding and will be canvassed in the final assessment proceeding to
26 be held later.
27

¹⁶ *Supra*, note 3 at page 64, paragraph 177.

¹⁷ *Supra*, note 3 at page 65, paragraph 180.

¹⁸ *Supra*, note 3 at page 65, paragraphs 183 and 186.

¹⁹ *Supra*, note 3 at page 24, paragraph 65.

1 In its 2017 Decision the UARB additionally determined that:

2

3 (a) The ML depreciation expense is to be recovered over a period of 35 years,
4 matching the depreciation period with the delivery duration of the NS Block.²⁰

5 (b) Cost recovery of ML deferred financing costs shall occur over a period of 33
6 years, coinciding with the period of the ML Financing Trust bonds (guaranteed
7 under the FLG) principal repayment starting in 2020 and ending in 2052.²¹

8

9 In its 2017 Decision the UARB also indicated its expectations for a further NSPML
10 application in 2019 to deal with the following:

11

12 1. Continuation of the interim assessment, if necessary, after 2019
13 including any necessary adjustment to the interim assessment
14 pending delivery of the NS Block;

15 2. The commencement date of payment of depreciation;

16 3. The status of the Muskrat Falls Generation Station and the status
17 of the NS Block.²²

18

19 This Interim Assessment is made in accordance with the requirements set by the Board
20 in its 2017 Decision, and is consistent with the information presented by NSPML in its
21 Quarterly Reports.

22

23 **2.3 Quarterly Reports**

24

25 NSPML's forecast of the Interim Assessment is supported by NSPML's Quarterly
26 Reports. The most recent Quarterly Report filed by NSPML with the Board dated April
27 15, 2019 (April 2019 Quarterly Report) is attached to this Application as Appendix A.

²⁰ *Supra*, note 3 at page 66, paragraph 184.

²¹ *Supra*, note 3 at page 66, paragraph 185.

²² *Supra*, note 3 at page 66, paragraphs 187 and 188.

1 All Quarterly Reports filed by NSPML with the Board are publicly available and may be
2 found on the Board's website. Table 2 in the April 2019 Quarterly Report provides the
3 cost summary for the Maritime Link for actual costs incurred to the end of Q4 2018 and
4 forecast costs for the remainder of the project's construction related activities.

5 The forecasts outlined in the Quarterly Reports confirm that the ML Project remains within
6 the amount approved by the Board and within budget at a forecast capital cost of no more
7 than \$1.577 billion. The Quarterly Reports have also tracked and recorded financing costs
8 associated with AFUDC. NSPML has accumulated a total of \$209 million in AFUDC as
9 at December 31, 2017 which is less than the \$230 million amount approved by the Board
10 in respect of the Project²³.

11
12 Once NSPML files its final actual costs with the Board, a final assessment of Maritime
13 Link Project costs can be established. At that time, differences in the Interim Assessment
14 payable to NSPML will be trued up so that NS Power and customers pay no more and no
15 less than the actual approved costs to build and finance the Maritime Link.

16

²³ NSPML Quarterly Report Q4 2016, December 15, 2016, section 3.0.

1 **3.0 SCOPE OF THIS APPLICATION**

2

3 **3.1 Recovery of 2020 Project Costs**

4

5 As a continuation of the UARB approved assessments in 2018 and 2019, NSPML seeks
 6 an assessment and recovery from NS Power of 2020 Project costs in the sum of \$144.5
 7 million, including a portion of annual depreciation and amortization of deferred
 8 financing charges as outlined below. The components of the 2020 assessment sought by
 9 NSPML from NS Power are outlined in Table 1 below:

10

11 **Table 1**

12

Description	\$M
Depreciation **	\$28.6
Operating & Maintenance *	20.6
Debt Financing Costs	
- Interest (Net) *	44.5
- Amortization of Deferred Financing Charges **	0.8
Equity Financing Costs *	50.0
Total Interim Assessment	\$144.5

13

14 *To be collected beginning January 1, 2020

15 **To be collected beginning June 1, 2020

16

17 NSPML anticipates continuing the existing process of using monthly invoices, payable
 18 by NS Power on the first day of each month, to facilitate the recovery of the assessment
 19 for 2020, commencing on January 1, 2020 for all cost components excluding
 20 depreciation and amortization costs, which NSPML seeks approval to recover
 21 commencing June 1, 2020. Appendix B to this Application provides NSPML's

1 proposed cost recovery profile outlining the monthly amounts to be recovered from NS
2 Power in respect of the 2020 assessment.

3
4 The individual components of the assessment required for 2020, as outlined in Table 1
5 are explained further below.

6
7 **3.1.1 Capital Cost Recovery via Depreciation**

8
9 In the 2017 Decision, the Board determined that the ML should be depreciated over a
10 period equivalent to the 35-year term of the NS Block, stating:

11
12 The Board finds that the Maritime Link depreciation expense is to be
13 recovered over a period of 35 years. This will match the depreciation
14 period with the delivery duration of the NS Block.²⁴
15

16 Depreciating the total capitalized construction cost of the ML over a 35-year term results
17 in approximately \$51 million per year based on current forecasted capital costs.

18
19 NSPML previously proposed to defer the commencement of payment of depreciation
20 costs for 2018 and 2019, which proposal was accepted by the Board in the 2017
21 Decision. As a result of this deferral, NSPML has not collected any depreciation to date.

22
23 NSPML proposes a further deferral of recovery of a portion of annual depreciation
24 expense in 2020. As opposed to a full year of depreciation recovery of approximately
25 \$51 million, assuming a 35-year depreciation period as directed by the Board, NSPML
26 is requesting recovery of \$28.6 million of depreciation. This is the amount required to
27 repay debt principal under the ML Credit Agreement and FLG as well as return a portion
28 of Emera's equity investment to maintain NSPML's approved DER of 70:30. As the
29 Board took note in its 2017 Decision, payment of principal on the FLG bonds is
30 scheduled to start in 2020²⁵. NSPML requires \$20 million to pay its first semi-annual

²⁴ *Supra*, note 3 at paragraph 184.

²⁵ *Supra*, note 3 at paragraph 142.

1 debt principal payment on December 1, 2020. NSPML also requires \$8.6 million by the
2 same time so as to return equity invested by its shareholder in order to maintain the
3 UARB approved 70:30 DER. NSPML seeks recovery of these costs in seven monthly
4 installments commencing on June 1, 2019 (\$4.1 million each month between June 1,
5 2020 and November 1, 2020 and \$4.0 million on December 1, 2020 being \$28.6 million
6 in total).

7
8 Commencement of depreciation on June 1, 2020 presently aligns with the
9 commencement of the term of the NS Block which is forecasted by Nalcor to commence
10 in May 2020. However, NSPML's ML Credit Agreement obligations are not impacted
11 or relieved by when the NS Block is, or is not, delivered. The ML Credit Agreement
12 requires that NSPML pay its debt principal payments on a semi-annual basis, beginning
13 December 1, 2020. The ML Credit Agreement also requires that NSPML maintain a
14 Debt Service Coverage Ratio (DSCR) of at least 1.4 times its total debt service costs.
15 This provides an important and standard coverage for ML Financing Trust and the
16 guarantor under the FLG since the borrower is collecting rate revenues in excess of its
17 operating & maintenance and debt servicing costs. Moreover, the decision to structure
18 the project financing in a manner that qualified for the FLG has reduced the cost of
19 borrowing by more than \$250 million.²⁶ The 2017 Decision acknowledges the benefits
20 of the FLG arrangement and that virtually all stakeholders expressly recognize that
21 NSPML must be able to recover expenses necessary to meet its obligations under the
22 ML Credit Agreement and in connection with the FLG.²⁷

23
24 **3.1.2 Operating Costs**

25
26 As the Maritime Link has been in-service since January 15, 2018, operating and
27 maintenance costs are now being incurred and will continue through 2020.
28

²⁶ M07718, Application for Approval of Interim Cost Assessment, page 11, lines 3-5.

²⁷ *Supra*, note 3 at paragraphs 95, 99, 102.

1 NSPML has forecasted that its operating and maintenance costs for 2020 will total \$20.6
 2 million which is comprised of the cost categories outlined in Table 2. This forecast is
 3 based upon NSPML’s experience in operating and maintaining the Maritime Link since
 4 January 2018. It represents an increase of approximately \$1 million as compared to the
 5 2020 forecasted operating and maintenance costs estimated during the 2017 Interim Cost
 6 Assessment proceeding²⁸. This is due to a number of factors including increased
 7 submarine cable surveillance activities, increased vegetation management and
 8 inspection work, and an increase in operations personnel. The increase in operations
 9 personnel is attributable to learnings gained during the execution of the Project
 10 supporting an incremental increase in operations field personnel to maintain and operate
 11 the assets following good utility practice. The 2020 forecasted amounts reflect increased
 12 cost confidence including insurance and critical operations and maintenance scopes of
 13 work such as submarine cable surveillance and converter stations maintenance.

14
 15
 16
 17
 18

Table 2: NSPML Operations and Maintenance Forecast – 2020 (\$ millions)

Operating & Maintenance Cost Projection (Amounts in \$M’s)	2020
Labour and Administration	6.9
Converters & substations operations	4.7
Marine Surveillance	3.3
Vegetation Management/Inspections	1.3
Insurance	2.2
Independent Engineer	0.3
Environmental Assessment	0.4
Contingency and Escalation	1.5
Total	20.6

19
 20
 21
 22

²⁸ M07718, NSPML Interim Cost Assessment Supplementary Evidence Appendix C, page 4, lines 1-3.

1 **3.1.3 Debt Financing Costs**

2
3 In addition to the debt principal repayment obligations addressed in section 3.1.1 above,
4 NSPML projects debt financing costs of \$45.3 million in 2020, comprised of the
5 following two components:

- 6
7 (a) Annual net interest of \$44.5 million; and
8 (b) Amortization of deferred financing charges of \$0.8 million.

9
10 Each of these items is addressed below.

11
12
13 **3.1.3.1 Annual Interest Costs**

14
15 As noted in Table 1, the requested recovery of total net annual interest costs in 2020 is
16 \$44.5 million. This is comprised of total interest costs of \$45.5 million and offsetting
17 interest revenues of \$1 million.

18
19 The debt financing of the Maritime Link under the ML Credit Agreement is based on
20 the \$1.3 billion bonds issued by ML Financing Trust and guaranteed in accordance with
21 the FLG which have a locked-in coupon interest rate of 3.50 percent during the term of
22 the bonds. This fixed 3.50 percent coupon interest rate is payable on a semi-annual basis.

23
24 As was the case in 2018 and 2019, the coupon interest cost in 2020 is \$45.5 million²⁹.
25 The \$45.5 million is required in 2020 to pay semi-annual interest payments of \$22.75
26 million on each of June 1 and December 1, 2020; prior to the first principal debt payment
27 on December 1, 2020. The reduction in interest costs resulting from the first and
28 subsequent \$20 million semi-annual principal repayments will begin to be reflected in
29 2021 beginning with the payment of the June 1, 2021 semi-annual interest payment.

²⁹ Based on a calculation of \$1.3 billion x 3.5 percent.

1
2 The \$45.5 million in coupon interest costs payable by NSPML will be partially offset
3 by interest revenues from cash held in restricted accounts. The cash reserve held in the
4 Debt Service Reserve Account is required by the terms of the ML Credit Agreement to
5 increase from \$22.8 million to \$42.8 million in 2020 (representing six months of debt
6 servicing – interest and principal). It is forecasted that interest revenue on that and other
7 restricted accounts will be approximately \$1.0 million for 2020.

8
9 **3.1.3.2 Amortization of Deferred Financing Charges**

10
11 As noted in Table 1, the requested recovery of Amortization of Deferred Financing
12 Charges for 2020 is \$0.8 million.

13
14 NSPML has incurred deferred financing charges of approximately \$50.1 million³⁰
15 related to the \$1.3 billion in debt financing for the Project relating to the bonds issued
16 by ML Financing Trust and guaranteed in accordance with the FLG. Of the \$50.1
17 million of financing costs, \$4.4 million were amortized during the ML construction
18 period and have thus been included in the \$209 million in AFUDC as noted above,
19 leaving an unamortized balance of \$45.7 million.

20
21 In the 2017 Decision, the Board found that NSPML’s proposal to defer collection of
22 amortization of deferred financing charges to 2020 to be appropriate, and ordered that
23 the cost recovery period for these expenses shall be approximately 33 years - over the
24 life of the FLG bonds - commencing in mid-2020 and ending in 2052.³¹ In accordance
25 with that order, NSPML has included the recovery of \$0.8 million of Deferred Financing
26 Charges amortization in its requested 2020 Assessment³².

27

³⁰ NSPML previously forecasted deferred financing charges to be approximately \$55 million – see M07718, Interim Cost Assessment Application, December 16, 2016 at page 25, lines 15-17.

³¹ *Supra*, note 3 at paragraph 142.

³² Calculated based on a straight line basis of \$45.7 million unamortized balance divided by 33 years and prorated in 2020, pending the beginning of the NS Block.

1 NSPML seeks recovery of these costs in seven monthly installments commencing on
2 June 1, 2019 (\$0.1 million each month between June 1, 2020 and November 1, 2020 and
3 \$0.2 million on December 1, 2020 being \$0.8 million in total).
4
5

6 **3.1.4 Equity Financing Costs**

7
8 NSPML is forecasting that its shareholder will have invested an average³³ shareholder
9 equity (capital stock and retained earnings) of approximately \$553 million in 2020. This
10 relates to the 30 percent equity invested to fund all construction costs, including
11 AFUDC, Deferred Financing charges and the Debt Service Reserve Account as required
12 under the ML Credit Agreement and FLG. As a result, the requested 2020 Assessment
13 includes a Return on Equity of \$50.0 million using the Board-approved 9.0 percent rate
14 of Return on Equity.
15
16

³³ Based on 5 quarters (Q4 2019 as well as 4 quarters in 2020).

1 **4.0 UPDATE ON THE STATUS OF THE MUSKRAT FALLS GENERATING**
2 **STATION AND THE NS BLOCK**

3
4 Nalcor's latest project update indicates that overall construction of the Muskrat Falls
5 Project is 97% completed³⁴ and confirms that the anticipated MFGS completion
6 schedule remains on track to commence delivering the NS Block by Q2 2020, as
7 reported by NSPML in the 2017 interim assessment proceeding. Nalcor now projects
8 completion of the third unit of the MFGS one month earlier than forecast at the time of
9 the 2017 interim assessment proceeding, being May 2020 rather than June 2020.³⁵

10
11 The specific schedule for the completion and commissioning of the first three generating
12 units of MFGS is as follows:

- 13
14 a. 1st unit: Q4 (December), 2019.
15
16 b. 2nd unit: Q1 (February), 2020.
17
18 c. 3rd unit: Q2 (May), 2020.³⁶

19
20 In its 2018 Annual Report issued April 9, 2019, Nalcor reported on the significant
21 progress it has made across all areas of the Muskrat Falls Project through 2018. Initial
22 energization of the Lower Churchill Project transmission assets was achieved in early
23 2018. In June 2018, power flowed for the first time from the existing Churchill Falls
24 Generating Station in Labrador to the island over the Labrador-Island Transmission
25 Link. Commissioning, testing and integrating into the existing electrical system is
26 ongoing.

³⁴ Muskrat Falls Project Monthly Report, March 2019, dated May 22, 2019, page 4, section 2.0.

³⁵ Muskrat Falls Project Oversight Committee, Quarterly Project Update – Period Ending December 31, 2018, at page 51.

³⁶ Muskrat Falls Project Oversight Committee, Quarterly Project Update – Period Ending December 31, 2018, at page 51.

1
2 At the time Nalcor released its first quarter results for 2019, it reported concrete
3 placement on the North Dam at the MFGS was completed with a total of 243,000 cubic
4 metres of concrete placed³⁷. The North Dam, which is the third and final dam required
5 for the generating facility, was completed and is now in operation. Also in March, the
6 intake area between the river and the upstream side of the powerhouse at MFGS was
7 filled with water³⁸. Nalcor reports work is ongoing on each of the four units in the
8 powerhouse. In Unit 1, the turbine has recently been installed and the generator will
9 soon be lowered into the unit. The turbine and generator parts are being assembled and
10 installed for Units 2 and 3 while civil work continues on Unit 4. Nalcor further reports
11 it is focused on a safe and strong finish to the Muskrat Falls Project and is on track to
12 produce first power from the MFGS in 2019³⁹.

13
14 Prior to delivery of the NS Block, NS Power, on behalf of customers, is using the
15 Maritime Link to conduct economic energy exchanges and NSPML is operating the
16 Maritime Link in conjunction with NS Power in a manner which secures for Nova Scotia
17 electricity customers reliability and operational benefits. With both provinces
18 connected electrically, customers are benefitting from improved resilience of Nova
19 Scotia's transmission system and enhanced energy options, and will continue to do so
20 for decades to come as both operators gain interconnected experience with the integrated
21 system capabilities and opportunities for mutual economic benefits.

22
23
24

³⁷ Nalcor first quarter financial results, Press Release, May 28, 2019.

³⁸ *Ibid.*

³⁹ Nalcor Energy 2018 Annual Quarterly Report, Message from CEO, page 9.

1 **5.0 REQUEST FOR RELIEF**

2
3 In consideration of the above, NSPML respectfully requests that the Board issue an
4 order pursuant to section 64 of *the Public Utilities Act* and section 8(1) of the *Maritime*
5 *Link Cost Recovery Process Regulations* and based on forecasted 2020 ML costs and
6 expenses for recovery in 2020 of a total of \$144.5 million:

7
8 (c) Setting an Interim Assessment of \$115.1 million against NS Power in 2020,
9 excluding a portion of depreciation and amortization of deferred financing
10 charges as provided for in (b) below, and approving a schedule of monthly
11 charges commencing January 1, 2020.

12
13 (d) Setting a commencement date of June 1, 2020 for the recovery of \$28.6 million
14 in depreciation and \$0.8 million of amortization of deferred financing charges,
15 with the total cost to be recovered from NS Power in time to facilitate the
16 December 1, 2020 debt principal repayment by NSPML under the ML Credit
17 Agreement, required to permit ML Financing Trust to meet its FLG
18 obligations, and maintain the approved DER of 70:30.

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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 Q1 2019

April 15, 2019

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1 **1.0 INTRODUCTION**

2

3 This is the Q1 2019 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. The construction of
4 the Maritime Link is complete, with final punch list activities and related remediation
5 items underway.

6

7 With respect to Nalcor’s assets, construction of the Labrador Island Transmission
8 Link has been completed and the energization phase of the project began in June
9 2018. The completion of Muskrat Falls continues to be forecast for Q3 2020, and the
10 Nova Scotia Block continues to be forecast by Nalcor to commence by Q2 2020.

11

12 **2.1 Gates and Milestones**

13

14 The Maritime Link was placed in-service January 15, 2018.

15

16 **2.2 Safety**

17

18 Now into the second year of operations, NSPML’s safety management system
19 continues to evolve and mature. Monitoring and oversight of inspection, maintenance
20 and remediation contractor activities continues to be a priority focus along with an
21 overarching review process for all high-risk activities. NSPML remains focused on
22 maintaining the operational record of zero injuries to staff and contractors while
23 working on NSPML’s assets and sites. The safety of the public and the workers
24 continues to be the first priority, and NSPML remains committed to a culture that
25 promotes world class safety behaviours.

26

27

1 **2.3 Commercial Activities**

2

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

5

6 **Table 1 Key Major Procurement Activities**

7

Commercial Activity	Background	Initiative Number	Status in April 2019
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	Contract Closeout is in progress.
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	The last remaining punch list items have been completed. Final documentation and system studies are being completed as well as delivery of final spare parts.

Commercial Activity	Background	Initiative Number	Status in April 2019
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	Contract closeout is in progress.
Site Preparation Services (Includes construction of access road upgrades)	The Contract was awarded to Joneljim Concrete Construction (1994) Ltd. for NS Site Preparation Services in September 2014. Contracts awarded to Marine Contractors Inc., MCI Limited Partnership for NL Site Preparation Services in September 2014.	E13-92	Closed Closed
Transmission Line Construction	E13-95 contract terminated as of late 2016. Contract replaced with E16-284 and E16-269 previously reported.	E13-95	No Change
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.	E16-284	Contract Closeout is in progress. Final Completion was achieved January 31, 2019.

Commercial Activity	Background	Initiative Number	Status in April 2019
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 Closeout remains in progress.
Transmission Line Conductors	<p>The Contract for the supply of conductors was awarded to Midal Cables in March 2015. Contract close-out in progress.</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>Contract Closeout remains in progress.</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</p>	<p>E13-156</p> <p>E13-157</p> <p>E13-158</p>	<p>Closed</p> <p>Closed</p> <p>Closed</p>

Commercial Activity	Background	Initiative Number	Status in April 2019
	<p>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 2015.</p>	E15-238	Closed
Accommodations Operations	The contract for the accommodations operations services was awarded to East Coast Catering in April 2015.	E13-89	Closed

1 **2.3.1 Land Access Agreements**

2

3 Title was acquired to the key Project sites by December 31, 2017, as required under
4 the Federal Loan Guarantee.

5

6 With final land surveys now completed, there are some new and amended easements
7 required, particularly along the transmission and grounding lines. NSPML continues to
8 actively pursue these easements, the majority of which are now in place. These
9 easements do not impact the ability of the project to complete contract closeouts or to
10 operate according to plan. NSPML expects the majority of the outstanding easements
11 to be in place by Q3 2019.

12

13 **2.3.2 Funding**

14

15 The IE Certificates allow for Project costs to be paid from the proceeds of the
16 Maritime Link Construction Loan under the payment terms of the Material Project
17 Documents and the Maritime Link Credit Agreement. There have been no further
18 draw certificates since February 2018.

19

20 **2.3.3 Joint Development Agreements**

21

22 NSPML continues to work with Nalcor and NS Power to finalize the remaining
23 operational agreements arising from the Formal Agreements with Nalcor. Please refer
24 to Attachment 1 for details on the status of these Agreements, which indicate four
25 Agreements 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 - The remaining engineering activities
9 covering the review and acceptance of the last few engineering drawings are
10 expected to be completed in Q2 2019. The outline covering the last remaining
11 study for short circuit protection in the system has been agreed to with ABB,
12 and the associated system models have been developed. The study is planned
13 to be completed in 2019.

14

15 • Overland Transmission - The remaining light detecting and ranging (LIDAR)
16 field surveys for NL lines have been completed and accepted by NSPML. The
17 NL drawings and Power Line Systems Computer Aided Drafting & Design
18 (PLSCadd) software package used for transmission line modelling and design,
19 are expected to be completed in Q2 of 2019.

20

21

22 **2.5 Submarine Cables**

23

24 Contract Final Completion Certificate was signed February 5, 2018 and the internal
25 contract closeout is in progress. The first planned survey and inspection of the subsea
26 cable installation across the Cabot Strait has been completed.

27

28 There were two findings during this survey that required more detailed inspection
29 activities and further investigation following the survey:

30 • Occurrences of seabed mobility were observed over approximately a two
31 kilometre section of each cable near Cape Ray, NL. Planning for continued

1 monitoring and any required remediation continues to be under evaluation. No
2 immediate remediation is required.

- 3
- 4 • The survey also identified an occurrence of cable contact from a dragged object
5 in the deep water section of the submarine cable crossing. The cable
6 manufacturer, Nexans, has assessed that the damage is superficial in nature
7 with only minor abrasion evident to the outer polyester yarn. Event
8 investigation will continue into 2019.

9

10 Work planning for 2019 considers the output of the 2018 survey and will continue in
11 early 2019 in preparation for any remediation work.

12

13 Other marine related activities initiated in 2018 include:

- 14
- 15 • Initiation of a real time vessel monitoring system using Automatic
16 Identification System (AIS) tracking to monitor and report any abnormal vessel
17 traffic near the cables.
 - 18
 - 19 • A fisheries assessment was initiated to update operational understanding of any
20 emerging or changing fishing related risks, which has identified a potential
21 emerging fishery that will be monitored to determine if further cable protection
22 will be required in the future.
 - 23
 - 24 • Ice monitoring equipment was deployed nearshore Point Aconi to commence a
25 process of long-term data collection to inform operations of changing local ice
26 conditions.

27

28 The final report from the survey is currently being completed. As directed by the
29 UARB in its letter of October 22, 2018 following the Quarterly Report for Q3,
30 NSPML will file the report from the survey, once completed, in the subsequent
31 Quarterly Report.

32

1 A full survey is planned for both submarine cables in 2019.

2
3 Routine preventative maintenance of the termination and transition sites and related
4 land based protection, in terms of visual inspection and monitoring, continues on a
5 regular recurring basis. Visual inspections include site inspections, access road
6 conditions, fencing, land cable berms and any related items.

7 8 **2.6 Converters and Substations**

9
10 The Construction of the Converters and Substations was completed with the
11 conclusion of system testing and the Maritime Link placed in-service on January 15,
12 2018. All punch list items have now been completed.

13 14 **2.7 Transmission Lines**

15
16 The remediation work on the transmission lines access and right-of-way has been
17 completed. Completion of the final remaining repairs on some hardware components
18 of the NL HVDC line is underway.

19
20 NSPML is working with design engineers to reroute a short section of the NL HVAC
21 line near Southwest Brook, required due to soil erosion on the hillside near the base of
22 three structures. It is anticipated that the work will be complete in 2019.

23
24 NSPML initiated a planned inspection program for the Maritime Link overhead
25 transmission lines, with a 100% ground survey completed during the spring and
26 summer of 2018. This work will continue into 2019.

27
28 The overhead transmission system is generally performing well through the first year
29 of operations with no significant reliability impacts experienced. Corrective
30 maintenance requirements were identified in the 2018 inspection program. Corrective
31 work was either completed in 2018 or scheduled for completion in early 2019. The
32 root cause analysis for two specific issues associated with accessory components

1 continues and will extend into 2019 with the planned continuation of the transmission
2 inspection program.

3 4 5 **2.8 Independent Engineer**

6
7 During construction of the Maritime Link, the Independent Engineer (IE) team
8 completed several site visits and project inspections, at various stages in each province
9 and provided reports to Canada, all of which have been provided to the UARB in
10 earlier Quarterly Reports. NSPML has entered into a contract with the IE related to the
11 Operations phase of the Maritime Link, as per the Federal Loan Guarantee
12 requirements. Site visits will continue to occur routinely and the IE will provide
13 annual confirmation to Canada and the Collateral Agent that the assets are being
14 operated and maintained appropriately.

15 16 **2.9 Status of Nalcor Project and Muskrat Falls**

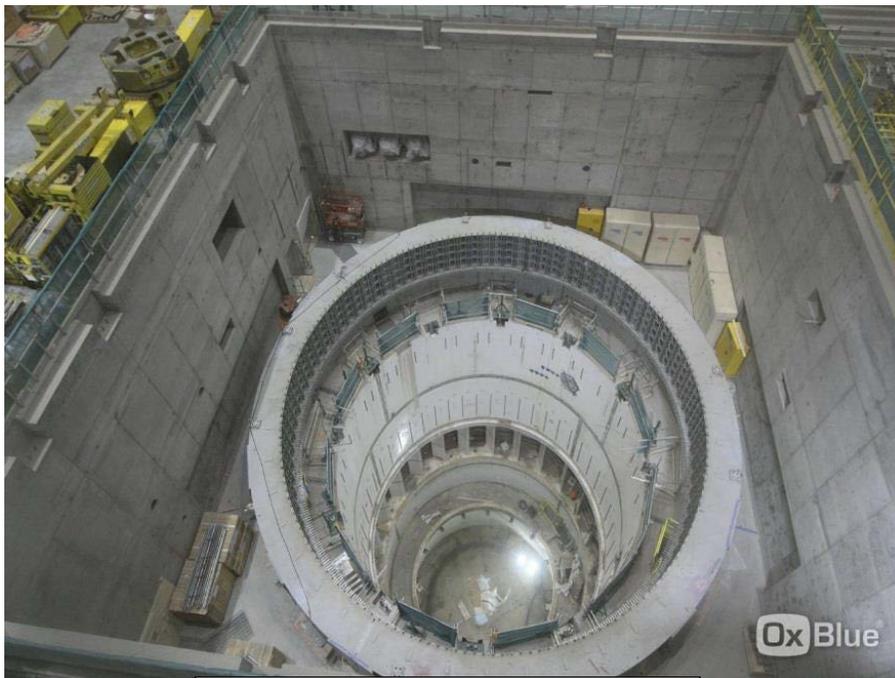
17
18 Nalcor's projected date for first power for Muskrat Falls Generation continues to be
19 Q4 2019, with full power projected for Q3 2020. The Nova Scotia Block of energy
20 from Muskrat Falls continues to be projected by Nalcor for Q2 2020, no later than
21 when the third of four generation units is projected to be commissioned.

22
23 The latest report from Nalcor, published on March 18, 2019 indicates the following
24 progress as of January 2019:

- 25
26
- Overall construction progress of all components of the Muskrat Falls Project at
27 the end of January 2019 reached just over 97 percent complete.
 - The Muskrat Falls Generating Facility reached 93 percent complete.
- 28
29
30

- 1 • Both the Labrador-Island Transmission Link and the transmission line
2 connecting Churchill Falls to Muskrat Falls remain at over 99 percent
3 complete.

4
5 Nalcor continue to provide updates consistent with the start of the NS Block as noted
6 and plan to have the Labrador-Island Link bipole operation in-service prior to first
7 commercial power. During Nalcor's Annual General Meeting held on April 9, 2019,
8 Nalcor's Chief Executive Officer, Stan Marshall, advised that the cost and schedule
9 for completion of Muskrat Falls have remained the same since June 2017.



13

Unit 1 in the Muskrat Falls Powerhouse



View looking upstream at the Muskrat Falls generating facility

For the Muskrat Falls Generating Facility, key recent activities include:

- Decommissioning of the upstream cofferdam was completed and the North Dam was placed into service.
- Civil work continued on the Intake, Powerhouse, and Spillway. In the Intake, concrete finishing for Bays 4 and 5, of a total of 12 Bays, has commenced.
- Preservation work on the turbine and generator components continued along with continuation of Unit 1 runner and rotor assembly in the South Service Bay.
- Continuation of work on the balance of plant activities for architectural, electrical and piping work.

- 1 • Continuation of work on the hydro-mechanical equipment in the powerhouse;
2 Units 3 and 4 have been handed over to Pennecon Heavy Civil Ltd. for Stage 7
3 concreting.

4

5 **2.10 Status of Benefits to NS Power Customers**

6

7 Customer benefits received to date will be reported by NS Power with its Quarterly
8 Fuel Adjustment Mechanism Report.

3.0 UPDATED COST SUMMARY

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

Table 2 provides an updated cost summary for the Maritime Link, which includes actual costs incurred as of December 31, 2018 and forecasted costs for the remainder of the Project's construction activities.

NSPML continues to track and report all costs, actual and forecast, consistent with the methodologies used in the cost forecast represented in the Maritime Link Project Application. Project costs include fully allocated costs for the entire Project Management Team, including contractors, employees, executives dedicated to the project, and NS Power seconded employees at affiliate mark-up rates according to the Affiliate Code of Conduct. All costs provided are in Canadian dollars.

Actual AFUDC has been tracked and recorded monthly up to December 31, 2017 and totals approximately \$209 million as of that date, which is below the \$230 million amount estimated at the time of filing of NSPML's Application.

Table 2 Updated Cost Summary for the Maritime Link Project

Description	Actual Costs										Estimate to Completion	Total Project Estimate at Completion (A)
	2011-2013	2014	2015	2016	2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Total Project to Date		
Emera NL Project Management Costs	44,379	42,315	24,599	25,639	32,721	4,207	3,628	4,026	3,928	185,441	5,286	190,727
Nalcor Project Support Costs	-	15,232	425	438	257	(33)	(110)	7	-	16,216	285	16,501
Construction and Engineering Initiatives	14,975	167,980	259,750	403,871	478,216	(7,403)	(1,934)	5,194	3,513	1,324,162	6,160	1,330,322
Environmental Approval	2,651	4,378	1,082	1,623	7,090	58	625	687	45	18,238	197	18,436
Submarine and related	3,359	83,797	74,439	54,213	115,511	19	(5,939)	10	13	325,422	-	325,422
Converters, structures, and other ancillary equipment	1,517	48,747	106,195	227,643	157,614	(513)	2,811	900	2,199	547,113	3,942	551,055
AC and DC Transmission	7,448	31,057	78,035	120,392	198,001	(6,967)	569	3,597	1,256	433,389	2,021	435,410
Total	59,354	225,527	284,774	429,948	511,194	(3,229)	1,584	9,227	7,441	1,525,819	11,732	1,537,551
Escalation										-	32,454	32,454
Contingency										-	7,349	7,349
Grand Total	59,354	225,527	284,774	429,948	511,194	(3,229)	1,584	9,227	7,441	1,525,819	51,535	1,577,354

1
2

3
4

1 **Total Actual Project Costs at end of Q4 2018 Compared to Previous Forecast**

2
3 The total actual project capital costs incurred during Q4 2018 of \$7,441,000 are
4 detailed below:

- 5
6 • Emera NL Project Management Costs of \$3,928,000: Project management
7 costs continue to be incurred as work advances relating to closing out of
8 contracts, procuring and managing remediation and punch list activities, and
9 ensuring appropriate documentation are in place for project closeout and
10 regulatory purposes. NSPML has segregated these capital costs from costs
11 relating to operating and maintenance activities and have expensed such
12 operating and maintenance costs accordingly.
- 13
14 • Nalcor Project Support of \$0: This reflects Nalcor services relating to
15 construction activities.
- 16
17 • Environmental Approval (EA) of \$45,000: This reflects the cost of EA
18 monitoring and finalization of EA related compensation.
- 19
20 • Submarine and related activities of \$13,000: This reflects security services for
21 the spare submarine cable.
- 22
23 • Converters, structures, and other ancillary equipment of \$2,199,000: This
24 reflects the cost of NLH and NS Power system upgrades and modifications, as
25 well as the construction of material spares buildings in both provinces.
- 26
27 • AC and DC Transmission of \$1,256,000: This reflects the costs of punch list,
28 remediation and transmission line inspection activities.

29
30 The Project remains within budget.

1 **4.0 COST FLOW**

2

3 As per Enerco U-31, section 2.2, please refer to Table 3 below for the cost flow of the
 4 Maritime Link.

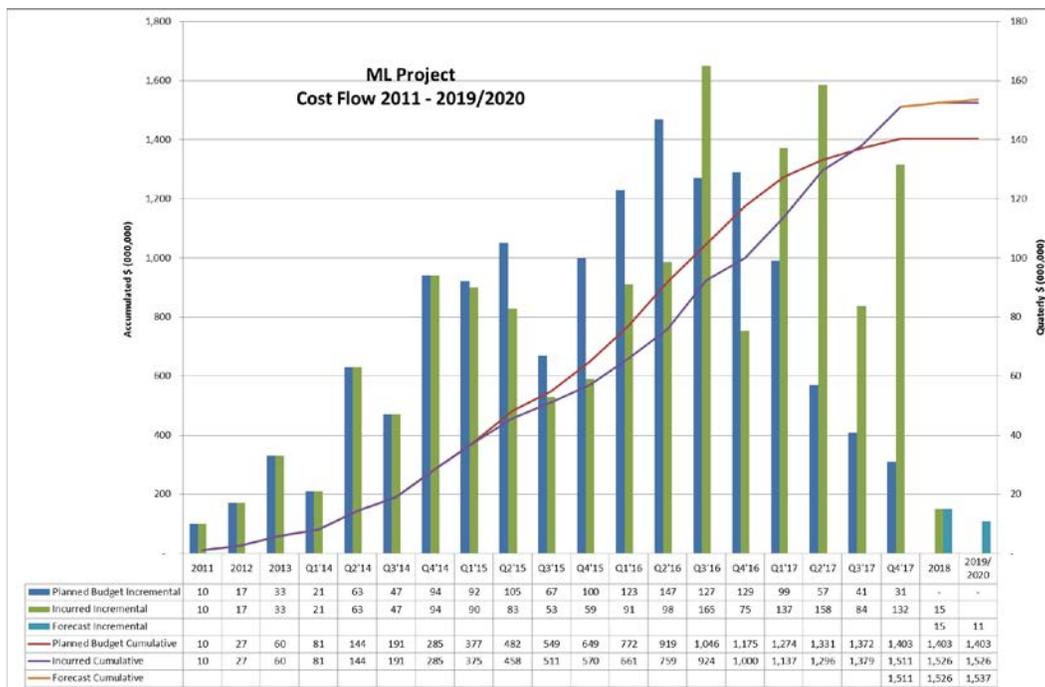
5

6 The remaining budget includes forecasted costs relating to completing documentation
 7 and close out payments to contractors, remediation costs, as well as regulatory and
 8 environmental requirements relating to the construction aspect of the project. Certain
 9 of these costs are expected to take place in 2019/2020 and may require further draws
 10 on remaining budgeted contingency and escalation balances. The total forecast of base
 11 capital spending, escalation, and contingency amounts for the project remains at or
 12 below \$1.577 billion.

13

14

15 **Table 3 Maritime Link Cost Flow**



16

17

1 **5.0 INTERIM ASSESSMENT FINANCIAL UPDATE 2018**

2

3 With the Maritime Link placed in-service on January 15, 2018, NSPML continues to
4 receive monthly revenues from NS Power pursuant to the Board's November 2, 2017
5 Order. NSPML forecasts its 2019 operating and maintenance, debt and equity
6 financing costs to be within the amounts budgeted for the year. The actual costs in
7 2018 were as reported in NSPML's audited financial statements recently filed with the
8 UARB.

Operating Agreement Requirements Arising from the Formal Agreements

	Agreement	Parties	Description	Formal Agreement Source	Status
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 2019
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)	Expect completion in 2019
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)	Expect completion in 2019
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)	Expect completion in 2019
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

Proposed Monthly Assessment for the Maritime Link (2020) *
(Millions of dollars)

	Assessment for items not deferred	Assessment for depreciation	Assessment for amortization of deferred finance charges	Total assessment
January	\$9.6			\$9.6
February	\$9.6			\$9.6
March	\$9.6			\$9.6
April	\$9.6			\$9.6
May	\$9.6			\$9.6
June	\$9.6	\$4.1	\$0.1	\$13.8
July	\$9.6	\$4.1	\$0.1	\$13.8
August	\$9.6	\$4.1	\$0.1	\$13.8
September	\$9.6	\$4.1	\$0.1	\$13.8
October	\$9.6	\$4.1	\$0.1	\$13.8
November	\$9.6	\$4.1	\$0.1	\$13.8
December	\$9.6	\$4.0	\$0.2	\$13.8
	<hr/> \$115.1	<hr/> \$28.6	<hr/> \$0.8	<hr/> \$144.5 <hr/>

*Costs prior to application of holdback.