# 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 Interim Cost Assessment Application Supplementary Evidence

**February 15, 2017** 

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# 1.0 INTRODUCTION AND APPROVAL REQUESTED

2

1

- 3 This Supplementary Evidence is being filed in support of NSP Maritime Link Inc.'s (NSPML)
- 4 December 16, 2016 Interim Cost Assessment Application (Application) for approval of an
- 5 interim assessment of the costs of the Maritime Link Project (ML or the Project) to be
- 6 assessed to Nova Scotia Power Inc. (NS Power); all as contemplated by the Nova Scotia
- 7 Utility and Review Board's (UARB or Board) approval of the Project (NSP Maritime Link
- 8 Incorporated (Re), 2013 NSUARB 154 (MO5419) (Decision)) and the Commercial
- 9 Agreements defined below.

10

- 11 The possibility of a delay in the completion of the Muskrat Falls Generating Station (Muskrat
- Falls GS) was contemplated by the Commercial Agreements and the Board's Decision. The
- 13 Board's Decision required that NSPML manage construction risk and Project schedule in a
- prudent manner and with a view to minimizing costs to Nova Scotia electricity customers. As
- the NSPML evidence demonstrates, NSPML has complied with this test set out in the Board's
- 16 Decision. After learning of Nalcor's scheduling delays, NSPML carefully considered the
- 17 Board's test and properly concluded that construction of the Maritime Link should not be
- 18 delayed a delay by NSPML would cost Nova Scotia electricity customers additional
- 19 hundreds of millions of dollars. NSPML respectfully submits that this Application for
- approval of the interim assessment of the costs of the Maritime Link should be granted.

21

- In addition to providing evidence of NSPML's prudent management of the Project to meet the
- 23 Board's test, this Supplementary Evidence provides additional information requested by the
- Board and in response to the Issues List. This evidence shows additional value over and above
- 25 that originally contemplated at the time of the Board's Decision.

26

- 27 Once the Maritime Link is operational on January 1, 2018 NS Power forecasts potential
- 28 energy flow over the Maritime Link in excess of 2 TWh with an associated estimated gross
- 29 (market/marginal) value of that energy being in excess of \$120 million between January 1,
- 30 2018 and December 31, 2019. During the period of January 1, 2018 to December 31, 2019,
- 31 Nova Scotia electricity customers will receive substantial benefits resulting from the use of

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1 the Maritime Link. A two-year delay in the start of the Nova Scotia Block of renewable 2 electricity to be supplied to Nova Scotia from the Muskrat Falls GS (NS Block) will extend 3 the period during which the benefits will flow to Nova Scotia customers. The original 35-year 4 term remains intact, and the value of renewable energy over those later two years is expected 5 to grow. NSPML's Application also maintains the electricity rates for Nova Scotia customers 6 recently set pursuant to the Board's Fuel Stability Plan Decision and Order. 7 8 In its Application NSPML confirms that it remains on schedule to provide NS Power with use 9 of the ML as of January 1, 2018, and that NSPML is seeking approval for recovery from NS 10 Power commencing January 1, 2018 of \$162 million in 2018 and \$164 million in 2019 11 (Interim Assessment).<sup>1</sup> 12 13 In its Application NSPML notes that in June 2016, Nalcor announced a delay in the completion of the Muskrat Falls GS.<sup>2</sup> As a result, there will also be a delay in the 14 15 commencement of the NS Block via the ML under the various agreements between Emera, 16 Nalcor, and the governments of Newfoundland and Labrador, Nova Scotia, and Canada 17 (Commercial Agreements). 18 19 In support of NSPML's request for approval for recovery from NS Power of the Interim 20 Assessment as of the January 1, 2018 in-service date of the ML, the evidence identifies the 21 many benefits that Nova Scotia electricity customers will realize from use and availability of the ML as of its in-service date. These benefits are in addition to the NS Block.<sup>3</sup> 22 23 24 The Board issued a Hearing Order on December 20, 2016, which included a direction that the Board would convene a preliminary hearing on January 6, 2017 to consider whether NSPML 25 26 should be directed to provide evidence in advance of the date for filing Information Requests

NSPML Interim Cost Assessment Application, December 16, 2016 page 4, lines 17-19.

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<sup>&</sup>lt;sup>2</sup> NSPML Interim Cost Assessement Application, December 16, 2016 page 5, lines 9-10.

<sup>&</sup>lt;sup>3</sup> NSPML Interim Cost Assessment Application, December 16, 2016 pages 5-6.

1 (IRs) and quantifying the benefits of the ML accruing to Nova Scotia electricity customers as 2 of January 1, 2018. On January 3, 2017 NSPML wrote to the Board, through counsel, offering 3 to file supplementary evidence in advance of the IR process respecting quantification of the 4 use and benefits of the ML as of January 1, 2018. 5 6 On January 11, 2017 the UARB issued a Final Issues List which establishes the issues that it 7 will consider in determination of NSPML's Application. 8 9 In order to assist the Board and interested parties, NSPML is filing this Supplementary 10 Evidence to provide a quantification of the use and benefits of the ML as of January 1, 2018, 11 as well as to provide information to assist in the Board's consideration of the issues as 12 subsequently defined through the Final Issues List. This Supplementary Evidence provides 13 further detail on: 14 15 a) The benefits that will accrue to Nova Scotia electricity customers from use and 16 availability of the ML between January 2018 and the date on which delivery of the NS Block commences; which is forecast to be sometime between late 2019 and mid-2020. 17 18 This Supplementary Evidence on such benefits addresses issues 2, 6, 10 and 11 on the 19 Final Issues List. 20 21 b) The consideration by NSPML of the additional costs to Nova Scotia electricity 22 customers which would have resulted from delaying completion of the ML to coincide 23 with the revised expected time frame for delivery of the NS Block, and of the 24 advisability of such a delay. This aspect of the evidence addresses issue 12 on the 25 Final Issues List. 26 27 c) The financial obligations that NSPML will incur in relation to the completed ML as of 28 January 1, 2018, and the importance of timely commencement of recovery by NSPML 29 of its costs as requested in the Application. This evidence on financing obligations 30 addresses issues 3, 4 and 5 on the Final Issues List. 31

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1	d) The implications of the overall transactional and legislative framework for recovery of
2	ML costs on considerations related to delay in recovery of all or part of the ML cost
3	assessment from NS Power. This aspect of the evidence addresses issues 6, 7, 8 and 9
4	on the Final Issues List.
5	
6	e) Updated information in respect of the current status of the Muskrat Falls GS, the
7	associated Labrador Transmission Assets (LTA) and the Labrador Island Link (LIL).
8	This status update addresses issue 11 on the Final Issues List.
9	
10	NSPML is also providing, as Appendix A to this Supplementary Evidence, the Supplemental
11	Direct Evidence of John Reed of Concentric Energy Advisors, which elaborates on the
12	ratemaking policy issues addressed in the Concentric evidence filed as Appendix B to the
13	Application, in order to assist the Board and interested parties in light of the subsequently
14	issued Final Issues List.
15	
16	NSPML has carefully and effectively managed the construction of the Maritime Link so that
17	the Project will be completed on time and within budget. As a result, the accumulation of
18	AFUDC beyond December 31, 2017, which was of concern to the Board at the time of its
19	Decision, is not required.

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1	2.0 BENEFITS FROM THE ML AS OF JANUARY 1, 2018		
2 3	As noted in NSPML's Application <sup>4</sup> , and as evidenced by NS Power in its 2016 Fuel Stability	fx/	
4	Plan application <sup>5</sup> , Nova Scotia electricity customers will realize immediate benefits from the		
5	use and availability of the ML when it comes into service. Many of these benefits are	Č	
6	quantifiable, and some are qualitative.		
7	quantifiable, and some are quantative.		
8	To assist the Board and interested parties, NS Power has provided an estimated quantification	on	
	To assist the Board and interested parties, NS Power has provided an estimated quantification	ЛП	
9	of the potential benefits referenced in the Application. Confidential Appendix B to this		
10	Supplementary Evidence quantifies those benefits under four categories:		
11			
12	a) Exported energy to Newfoundland and Labrador.		
13			
14	b) Imported energy from Newfoundland and Labrador.		
15			
16	c) Optimization of NS Power generation assets.		
17			
18	d) Enhanced reliability.		
19			
20	The methodology, assumptions and the results of the modelling performed by NS Power to		
21	quantify these potential benefits is considered commercially sensitive and is therefore		
22	delivered on a confidential basis. Modelling of the potential benefits was based on the best		
23	information available to NS Power at this time.		
24			
25	Discussions between NS Power and Nalcor have commenced for the purposes of maximizin	ıg	
26	the value to be achieved through the Maritime Link for the benefit of our respective		
	customers. At present, NS Power and Nalcor are targeting finalization of associated		

<sup>4</sup> NSPML Interim Cost Assessment Application, December 16, 2016, pages 27-31.
 <sup>5</sup> NSUARB M07348, NS Power Reply Evidence and Fuel Refresh, May 27, 2016, pages 21-24.

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1	commercial terms in early Q4 2017. Discussions to date have been positive, with conceptual		
2	alignment on the general areas that will create value for our customers. Greater certainty will		
3	be achieved upon successful completion of commercial terms; however, NS Power is		
4	confident that significant benefits will accrue for both Nova Scotia and Newfoundland and		
5	Labrador customers during this period.		
6			
7	Given that the details of the analysis of potential savings to customers is considered		
8	confidential, but wanting to provide context of the potential, NS Power forecasts in excess of		
9	2 TWh of energy will flow over the Maritime Link between January 1, 2018 and December		
10	31, 2019. The estimated gross (market/marginal) value of that energy is forecast to be in		
11	excess of \$120 million, which energy will serve to offset higher cost energy with the		
12	difference between the two making up the majority of the bottom line value to		
13	customers. The estimated net (or bottom line) potential value of this energy flow to customers		
14	is set out in Confidential Attachment B. This information is confidential because it is		
15	commercially sensitive as the associated negotiations have not concluded.		
16			
17	As described in NSPML's Application and further detailed and quantified in Confidential		
18	Appendix B, the following reliability benefits are anticipated to be provided when the ML		
19	comes into service: <sup>6</sup>		
20			
21	a) Significant flexibility and optionality for meeting energy, capacity and environmental		
22	compliance requirements, at costs moderated by enhanced competitive market		
23	efficiencies.		
24			
25	Upon completion of the ML, the LTA and the LIL, both forecast for completion in the		
26	first half of 2018, NS Power will have a greatly enhanced interconnection to		
27	competitive electricity markets in Ontario, New York, New England, Quebec and New		

<sup>6</sup> NSPML Interim Cost Assessment Application, pages 29 to 30.

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1	Brunswick in addition to being connected to Newfoundland and Labrador. This
2	favourable position in the resulting transmission loop will provide additional market
3	opportunities to NS Power, as well as a strengthened bargaining position relative to its
4	future counterparties.
5	
6	b) Enhancement of the reliability of the NS Power system (as recognized by the UARB
7	in its ML Decision <sup>7</sup> ), including specifically through:
8	
9	i) Voltage support
10	ii) Automatic Generation Control (AGC)/Regulation
11	iii) Reserve Sharing
12	iv) Emergency Energy
13	v) Security Energy
14	vi) Further reliability benefits that could be obtained through further collaboration
15	such as ML operation in frequency response mode to support the Nova Scotia
16	system during system contingencies
17	
18	It should be noted that many of the same attributes will also benefit the island of
19	Newfoundland's system and improve reliability within the design and capital costs for the
20	Maritime Link.
21	
22	Increased interconnection capacity was recognized as a "practical benefit from reliability and
23	transmission management perspectives" by Morrison Park Advisors (MPA) in their
24	assessment of the risk/benefit balance to Nova Scotia electricity customers of the ML,
25	included as part of their fairness opinion provided to the Board during the ML approval
26	proceeding. <sup>8</sup>
27	
	<sup>7</sup> 2013 NSUARB 154 (M05419), page 133, paragraph 433

<sup>8</sup> 2013 NSUARB 154 (M05419), page 133, paragraph 433.

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1 On its Final Issues List the UARB has included issue 11: Potential impacts or restrictions on 2 use of the Maritime Link during the interim period. There are no material impacts or 3 restrictions on use of the ML during the period between a January 1, 2018 in-service date and 4 the delivery of the NS Block that would affect realization of the benefits of use and availability of the ML to NS Power as detailed above during this period. The availability of 5 6 the Muskrat Falls GS, the LTA and the LIL has been taken into account and forms the basis 7 for the estimated quantification of the potential benefits of exported energy to Newfoundland 8 and Labrador. 9 10 At the time of negotiation of the Commercial Agreements, the parties contemplated and 11 addressed the fact that there could be an "interim period" during which some of the 12 components of the Nalcor and NSPML projects are in service and others are not. 13 14 During such an "interim period": 15 a) Nalcor will have access to firm transmission rights on the ML following the 16 commercial operation date of the ML. Given the geographic location of the parties, 17 18 Nova Scotia and Newfoundland and Labrador are logical energy transaction 19 counterparties during the interim period. 20 21 b) There is an interconnection operators' agreement in place, which addresses voltage 22 support, reserve sharing, emergency energy, security energy, and the further reliability 23 benefits referred to above, to the mutual benefit of both parties.

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1	3.0	NSPML CONSIDERATION OF DELAYING ML COMPLETION
2		
3	Follow	ving notification of the now expected delay in delivery of the NS Block NSPML
4	consid	ered the potential for delay of completion of the ML to coincide with NS Block
5	delive	ry, and the costs and benefits of such a delay.
6		
7	In mak	ring its decision to continue with construction without delay, NSPML considered the
8	benefi	ts that will be provided by the ML once in service and also considered the following
9	import	ant factors:
10		
11	a)	All major construction contracts had been awarded totaling more than \$1 billion.
12		Delaying the agreed upon completion dates included in these contracts would result in
13		various cost increases associated with contract renegotiation, warranty provisions,
14		materials handling, insurance, mobilization and demobilization.
15		
16	b)	Construction labour agreements had been finalized with terms providing labour
17		continuity and compensation rates through to December 2017. Extending the Project's
18		construction period would add risk for escalating labour rates beyond 2017.
19		
20	c)	NSPML and its contractors had incurred approximately \$759 million in the
21		construction of ML to June 30, 2016. These costs would continue to attract AFUDC
22		during an extended construction period.
23		
24	d)	Manufacturing of the subsea cables began in July, 2015 in order to be ready for
25		scheduled installation <sup>10</sup> , was proceeding well, and the necessary specialized vessels for
26		the cable installation were committed for 2017. It should be noted that NSPML's
27		contract with Nexans precludes NSPML from suspending the cable work once

 $^9\,$  NSPML Quarterly Report Q3 2016, October 15, 2016, Section 3, Table 3, page 18 of 20.  $^{10}$  NSPML Quarterly Report Q2 2016, June15, 2016, Section 2.6, page 10 of 16.

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manufacturing had commenced. Given the highly specialized nature and long lead times associated with the manufacture and installation of the submarine cables, and the contractual preclusion for delay, delaying the cable manufacturing and planned installation schedule would have resulted in additional costs and added schedule uncertainty even assuming the ability to renegotiate the Nexans contract. In the ML Cost of Delay analysis noted below, it was assumed that due to the nature of this contract this scope of work would proceed as planned even under a delayed scenario.

e) The HDD (horizontal directional drilling) work had been successfully completed in Newfoundland and Labrador, and the contractor was in the process of mobilizing its crew and equipment to complete its scope of work in Nova Scotia. Given the fact that the HDD contractor's highly specialized crew and equipment was mobilized and at site during the optimal summer weather period, it was clear that this work had to proceed in 2016 in order to avoid significant additional costs under that contract. In the ML Cost of Delay analysis noted below, it was assumed that this scope of work would proceed as planned even under a delayed scenario.

f) ABB and its subcontractors were very active at all major sites and in manufacturing of specialized components to be installed in the converter stations and switchyards and delay would have resulted in significant additional costs, including those required to fund demobilization, and schedule uncertainty.

g) Studies were well advanced on coordinating impacts on the two affected utilities, NS Power and Newfoundland and Labrador Hydro, with respect to outage dates and commissioning of the ML. Any change would require significant re-work and additional costs and planning in respect of outage dates and commissioning.

h) In conjunction with Surety companies and their third party consultant, NSPML was in the final stages of replacing Abengoa S.A. (Abengoa) with a different contractor to complete the DC transmission lines and of negotiating the receipt of Letter of Credit and Performance Bond proceeds on behalf of customers. Any delay in concluding

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1		these arrangements would potentially have resulted in leverage being lost in contract
2		negotiations with the new transmission lines construction contractor. In the ML Cost
3		of Delay analysis noted below, it was assumed that even under a delayed scenario,
4		NSPML would have completed its work in replacing Abengoa and collecting the
5		Letter of Credit and Performance Bond proceeds on behalf of customers.
6		
7	i)	PowerTel crews and equipment were fully mobilized and progressing well in nearing
8		completion of the two grounding lines and were advancing well on the AC
9		transmission line in Newfoundland and Labrador, and delay would have resulted in
10		significant additional costs, including those required to fund demobilization, and
11		schedule uncertainty.
12		
13	j)	NSPML's Project Management team was in place and advancing on all works. Delay
14		of the Project would result in additional cost to extend the engagement of key
15		personnel and risk that required Project resources would not be available to support the
16		ongoing work of the Project if key individuals could not be retained.
17		
18	k)	Key stakeholders including affected land owners, fisheries groups, adjacent
19		communities, labour unions (with associated labour agreements) and local suppliers,
20		all of whom were fully engaged and preparing for the final 16-20 months of
21		construction, would be impacted by delay. Revised schedules for previously planned
22		activities could be significantly disruptive to such stakeholders. Changes to contracts
23		and commitments to these stakeholders would have caused additional cost to the
24		Project.
25		
26	The in	applications of delay in the remaining scopes of work were considered in the following
27	major	categories:
28		
29	a)	Construction/commercial costs arising from delaying major contractors (excluding the
30		subsea cable contractor as it was determined that this work would have to proceed
31		pursuant to the contract as noted above).

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1 b) Costs arising from maintaining key Project Management team members. 2 3 c) Financing costs associated with the additional capital costs noted in (a) and (b) above 4 as well as additional financing costs associated with extending the AFUDC period by 5 two years (i.e. to pay interest on the FLG debt and finance return on equity during this 6 interim period). 7 8 NSPML concluded that deferring the Maritime Link by two years would result in an increase 9 in the capital cost of the Project of hundreds of millions of dollars and risk successful 10 completion of the Project by 2020, thereby ensuring the Project would significantly exceed 11 the budget approved by the UARB as noted in the table below. 12 13 NSPML also recognized that deferring the ML to coincide with the completion of Muskrat 14 Falls would preclude Nova Scotia customers from receiving the benefits associated with using 15 the Maritime Link in the interim period. Those benefits, as forecasted by NS Power, are noted 16 above and quantified in Confidential Attachment B. 17 18 Further, given the requirement to continue paying interest on the debt under the Federal Loan 19 Guarantee (FLG), intentionally deferring the completion of the Project and the resultant 20 commencement of revenue recovery for the ML would create financing challenges and the 21 requirement to arrange additional debt beyond the current amount of low-interest FLG debt 22 secured as well as additional equity. 23 24 In aggregate, NSPML concluded that delaying completion of the ML to align its in-service 25 date with a January 2020 availability of the NS Block would result in incremental costs to 26 Nova Scotia electricity customers of between \$398 million and \$533 million, as summarized 27 in the table below. 28

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# **Cost of ML Delay - \$M (nominal dollars)**

Cost Category	Description	Low	High
Project Management	Insurance, maintaining NSPML Project	<b>\$19</b>	\$40
	team at reduced levels, demobilization		
	and remobilization of Project team		
Construction	Contractual commitments during	<b>\$69</b>	<b>\$108</b>
	suspensions, demobilization and		
	remobilization of prime contractor and		
	sub-contractors, site security and		
	preservation, and escalation of		
	contract costs		
Financing	Financing costs (debt and equity)	\$110	\$185
	relating to additional Project		
	Management and Construction costs		
	(as noted above). These additional		
	financing costs would begin during		
	construction and extend throughout the		
	operations phase to coincide with the		
	depreciation.		
Sub Total	Additional construction and related	<b>\$198</b>	\$333
	financing costs associated with a		
	delay		
Additional AFUDC	Additional financing costs would result	\$200	\$200
during construction	from a delay in collection of rate		
and financing costs	revenues by two years. These costs		
during the operations	would be incurred during construction		
phase due to delay	(and capitalized as AFUDC) and as		
	well extend throughout the operations		
	phase as the additional debt and equity		
	requirements are repaid.		
Total		\$398	\$533

3

Upon capitalization of the Project, these incremental costs of delaying completion of the ML

attract additional depreciation expense and return on capital through the useful life of the ML.

6

9

5

7 Further, the resulting AFUDC for the Project would climb from the \$230 million approved by

8 the UARB in its ML Decision to approximately \$400 million. In addition, additional financing

costs would continue throughout the operations phase as shown in the table above, resulting in

a material adverse impact on Nova Scotia electricity customers' rates.

1	NSPML was cognizant that the net impact on rates of accumulation of AFUDC was a concern
2	expressly considered and addressed by the UARB in its ML Decision. 11 In the Decision the
3	Board directed NSPML as follows [paragraphs 337-338 – emphasis added]:
4 5 6 7 8 9	the Board expects NSPML to prudently manage the ML Project construction timetable in a manner consistent with the construction schedule of other components of the Nalcor Transactions (including the Muskrat Falls Generation Station, the LTA and the LIL), while remaining mindful of the total impact on costs in order to minimize costs to ratepayers.
10 11 12 13 14 15 16 17 18	Further, the Board approves the accumulation of AFUDC up to and including December 31, 2017 or the in-service date of the Maritime Link, whichever is sooner. At that point, the Board will, applying the test of prudence, review the management of the construction risks by NSPML. The Board will make a decision whether AFUDC will continue beyond that date based on how NSPML has managed the construction scheduling within the scope of the ML Project and the related phases in NL.
19	This determination by the Board arose from consideration of evidence presented by Morrison
20	Park Advisors (MPA), retained by Board Staff to provide a fairness opinion regarding the ML
21	and related Nalcor projects. In its evidence MPA addressed the construction risk associated
22	with the ML, considering both the risk of Project cost overruns and the risk of delay in
23	completion of the ML and/or related upstream infrastructure. MPA noted the electricity
24	customer is largely protected from Project overruns between a potential regulatory approval
25	and confirmation of the cost of the Project established at Decision Gate 3 (DG3). However,
26	electricity customers remain responsible for any delay in the Commercial Operation Date
27	(COD) of the Project, cost overruns over the DG3 estimate and cost overruns in the event of
28	the delay of the construction of the Muskrat Falls GS and associated transmission assets.
29	MPA questioned whether there should be an apportionment of the COD risk through a risk
30	sharing mechanism. <sup>12</sup>
31	

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 $<sup>^{11}</sup>$  2013 NSUARB 154 (M05419), pages 104-107, paragraphs 332-338.  $^{12}$  M05419, Exhibit M-46, p.73, as quoted in the 2013 NSUARB 154 (M05419) at paragraph 333.

1	MPA's witness, Mr. Colaiacovo, elaborated on this concern during the ML approval		
2	proceeding in an exchange with the Hearing Panel Chair. 13 In particular, Mr. Colaiacovo		
3	addressed the scenario where the Maritime Link is built on time and on budget; however, for		
4	whatever reason, an upstream portion of the Muskrat Falls project or related transmission		
5	facilities is not completed on-time. The risk in such a scenario was noted to be that the ML		
6	would continue to accumulate costs in the form of AFUDC although no electrons would be		
7	flowing. In the circumstance where the ML was built and ready to receive power and energy		
8	but couldn't get it because upstream assets were not completed on-time, it was noted that the		
9	Board might consider, for example, the possibility that AFUDC may not continue to		
10	accumulate.		
11			
12	The MPA's views on this point seemed to assume that delaying the completion of the ML		
13	might be an effective way to manage the "construction cost risk" associated with the		
14	circumstance in which the ML is completed on time and on budget, but the upstream Nalcor		
15	generation assets to be built for use in conjunction with the ML are delayed. In practice that		
16	assumption has not proven out. In fact, as shown above, delaying the completion of the ML		
17	would, in fact, significantly increase the cost of the Project. This is why the Board's decision		
18	to require NSPML to manage the construction schedule to minimize costs to NS Power		
19	customers was, respectfully, the right decision. That is the directive that NSPML has followed		
20	in managing the ML Project.		
21			
22	As this Supplementary Evidence explains, the transmission connection between Nova Scotia		
23	and Newfoundland and Labrador itself creates significant value for Nova Scotia customers.		
24	Further, managing completion of the ML to align ML commercial operation with the now		
25	expected timing for completion of Muskrat Falls GS and delivery of the NS Block would		
26	significantly increase the overall costs to Nova Scotia electricity customers of the ML, and		
27	would not be in their best interests.		

<sup>13</sup> M05419 Transcript, June 6, 2013, pages 2580-2582.

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1			
2	In an exchange with the Panel Hearing Chair, MPA's witness, Mr. Walker, explained the need		
3	for balance in risk sharing mechanisms in the form of both positive and negative incentives. 14		
4	He indicated that in order to finance the Project in the marketplace, there would be a need to		
5	secure attractive returns in order to attract capital to the Project. He further noted that in order		
6	to attract market capital, if there is going to be a penalty in scenarios where the Project is not		
7	delivered on time, there must also be incentives in place for circumstances where risk is		
8	appropriately managed. Mr. Walker concluded that if a downside is imposed upon the		
9	Company, there should also be an upside opportunity.		
10			
11	The Board did not implement the suggested risk sharing mechanism that MPA proposed.		
12	Instead the Board stated its expectation for NSPML to:		
13			
14 15 16 17 18 19	prudently manage the ML Project construction timetable in a manner consistent with the construction schedule of the other components of the Nalcor Transactions (including the Muskrat Falls Generation Station, the LTA and the LIL), while remaining mindful of the total impact on costs in order to minimize costs to ratepayers." <sup>15</sup>		
20	As detailed in this Supplementary Evidence, having carefully considered the option of		
21	delaying completion of the ML and the test directed by the Board, NSPML determined that it		
22	would be most cost effective to continue with construction and completion of the ML to the		
23	budget and schedule approved by the Board. In light of the complexity of managing the		
24	staging and construction of the ML, as explained in the Application 16 and elaborated on in this		
25	Supplementary Evidence, delay of completion of the ML would have resulted in significantly		
26	higher costs to Nova Scotia customers and would have been an imprudent course for NSPML		
27	to have taken. Considering the facts outlined above (which were not and could not have been		

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M05419 Transcript, June 6, 2013, page 2583.
 2013 NSUARB 154 (M05419), page 106, paragraph 337.
 NSPML Interim Cost Assessment Application, December 16, 2016, pages 19-21.

Project dictates that NSPML stay on course for completion for January 1, 2018.			
It appears to NSPML that the discussions of alternative risk sharing arrangements during the			
ML approval hearing were premised on the assumption that delaying completion of the ML to			
align with a delay in availability of the NS Block could be a cost effective approach to risk			
management by NSPML. NSPML is conscious that the UARB could not have had evidence			
on this point available to it at the time. This Supplementary Evidence provides evidence on			
this point, quantifying the costs that would be incurred in order to delay the ML to align its			
completion with delayed availability of the NS Block, and the benefits that will accrue to			
Nova Scotia electricity customers by virtue of use and availability of the ML as of its in-			
service date of January 1, 2018, regardless of immediate availability of the NS Block. NSPMI			
was always aware that its management of the construction schedule and construction costs			
would be subject to a review by the Board if there were to be a delay in ML or any upstream			
assets. NSPML understood that management of the ML Project construction timetable in a			
manner consistent with the construction schedule of the upstream assets, while remaining			
mindful of the total impact on costs in order to minimize costs to customers, would be the			
criteria against which NSPML would be measured. NSPML accepted that responsibility and			
has managed the construction of the ML to meet the Board's test.			
In considering the construction risk that has now crystallized - completion of the ML prior to			
availability of the NS Block - the Board provided the direction to NSPML to prudently			
manage the ML construction timetable, as noted above, and further provided as follows: 17			
Further, the Board approves the accumulation of AFUDC up to and including December 31, 2017 or the in-service date of the Maritime Link, whichever is sooner. At that point, the Board will, applying the test of prudence, review the management of the construction risks by NSPML. The Board will make a			
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \			

<sup>17</sup> 2013 NSUARB 154 (M05419), pages 106-107, paragraph 338.

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1 2 3	NSPML managed the construction scheduling within the scope of the ML Project and the related phases in NL.
4	The costs of deferral of completion of the ML and the benefits to Nova Scotia electricity
5	customers of the use and availability of the ML as of January 1, 2018, all as outlined in
6	NSPML's Application and discussed in greater detail in this Supplementary Evidence,
7	together support maintaining the in-service date of the ML and commencement of recovery by
8	NSPML of the requested Interim Assessment as of January 1, 2018. Accordingly, the
9	accumulation of AFUDC beyond December 31, 2017, the circumstance which was of concern
10	to the Board at the time of its ML Decision, is not required.
11	
12	As stated in the $Application^{18}$ , completion of the $ML$ is forecast to be achieved on time, within
13	budget, and within the AFUDC amount set by the UARB in its ML Decision, all reflecting
14	continued proper management of the Project by NSPML, in the best interests of Nova Scotia's
15	electricity customers.
16	
17	Further comment on the regulatory policy considerations which support NSPML's request for
18	approval of recovery of the Interim Assessment as of January 1, 2018 is provided in the
19	Supplemental Direct Evidence of Mr. Reed, filed as Attachment A to this Supplementary
20	Evidence. In Mr. Reed's opinion, NSPML's Application and this Supplementary Evidence
21	demonstrate that NSPML has met the standards for execution of the ML Project set for it by
22	the Board, as outlined above. Mr. Reed concludes 19 that NSPML has effectively and
23	appropriately managed the ML Project's construction timetable, while being mindful of
24	customer impacts, and it has demonstrated its reasonable expectation of achieving commercial
25	operation of the ML by December 31, 2017 such that AFUDC need not be accumulated
26	beyond the date already approved by the Board.

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<sup>&</sup>lt;sup>18</sup>NSPML Interim Cost Assessment Application, December 16, 2016, page 22, line 10-14. <sup>19</sup> NSPML Interim Cost Assessment Application Supplementary Evidence, Appendix A, page 10.

#### 1 4.0 NSPML FINANCING OBLIGATIONS AND REVENUE RECOVERY 2 As detailed in NSPML's Application and this Supplementary Evidence, NSPML has managed 3 4 the planning and construction of the ML so as to minimize costs and maximize benefits to 5 Nova Scotia electricity customers. In particular, in light of the costs that would have resulted 6 from delay of completion of the ML to coincide with the now expected timing for delivery of the NS Block, as detailed above, NSPML has maintained vigilance on its ML Project 7 8 execution schedule and expects to have the Project in service by January 1, 2018, as initially 9 planned and financed. 10

10 11

Once the ML is completed and placed in service as of January 1, 2018, NSPML will incur the following costs, as summarized in the Application:<sup>20</sup>

13 14

15

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a) Operating and maintenance costs forecast to cost an average of \$16 million per year during each of the first two years of operation, for expenditures on maintenance, insurance, inspection, vegetation management, supervision of assets and similar items, all as detailed in NS Power's Base Cost of Fuel proceeding. (All of these costs were outlined in IR-17(b) filed with NS Power's Responses to Nova Scotia Utility and Review Board Information Requests in connection with NS Power's 2017-2019 Fuel Stability Plan Application in M07348, which is attached to this Supplementary Evidence as Appendix C.)

22

23

24

25

b) Debt servicing, interest and financing costs forecast to amount to approximate an average of \$46 million per year over each of the first two years of operation. These are the costs addressed in issue 3 on the Final Issues List. These costs include:<sup>22</sup>

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<sup>&</sup>lt;sup>20</sup> NSPML Interim Cost Assessment Application, December 16, 2016, page 22, Figure 2, and pages 22-26

<sup>&</sup>lt;sup>21</sup> NSPML Interim Cost Assessment Application, December 16, 2016, page 24.

<sup>&</sup>lt;sup>22</sup> NSPML Interim Cost Assessment Application, December 16, 2016, pages 24-25.

1	i) Net interest costs of approximately \$42-44 million per year (\$45.5 million payable
2	in interest net of revenues on cash balances held) payable on the debt incurred to
3	finance the ML; and
4	
5	ii) Deferred financing charges of approximately \$1.5 million per year (on account of
6	recovery over the life of the Project of approximately \$55 million of costs incurred
7	in relation to interest rate hedging, banking commissions, fees for the Independent
8	Engineer acting for Canada, legal and other external service fees of Canada and
9	NSPML, and trustee service costs).
10	
11	c) Equity financing costs of approximately \$51 million per year in 2018 and 2019, to
12	cover the cost of the equity capital invested during the ML construction phase (i.e. to
13	pay the return on invested capital).
14	
15	d) Capital cost recovery via depreciation, totaling \$51 million per year in 2018 and 2019,
16	to cover return of the debt and equity capital invested in the Project. Of this total
17	amount of annual depreciation, and in accord with the 70/30 debt to equity ratio under
18	which the Project is financed, 30% of these amounts cover the return of equity to
19	shareholders, and 70% of these amounts cover the return of principal on the bonds
20	issued under the FLG to support the financing of the Project.
21	
22	It is important to note that pursuant to the FLG, NSPML is required to maintain a minimum
23	Debt Service Coverage Ratio (DSCR) covenant of at least 1.4 times its total debt service
24	costs. This provides an important and standard coverage for the guarantor and bondholders
25	that NSPML as the borrower is collecting rate revenues in excess of its operating and
26	maintenance and debt servicing costs. Failure to obtain the expected revenues would put
27	NSPML in breach of this important covenant.
28	
29	The annual depreciation expense of \$51 million per year in 2018 and 2019 referred to under
30	sub-paragraph (d) above, is included in the Interim Assessment and enables a return of debt
31	and equity capital. This is an expense that is included in utility revenue requirement once a

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1 utility asset becomes used and useful, which as detailed above will occur as of January 1, 2 2018 when the ML achieves commercial operation. At this point, NSPML will cease accrual 3 of AFUDC and include the ML Project's costs, including a return on and of capital, in the 4 Interim Assessment. Returning equity capital to the shareholder on a timely basis is in the best 5 interest of customers as it reduces the base on which future return on equity is calculated. 6 7 The return of invested capital of \$51 million per year in 2018 and 2019 referred to in sub-8 paragraph (c) above, is discussed in Concentric's Supplemental Direct Evidence filed as 9 Appendix A to this Supplementary Evidence. In that Supplemental Direct Evidence Mr. Reed 10 emphasizes the consideration of equity financing costs as an essential cost to be included in 11 the revenue requirement of a utility, just like operating costs, interest costs and depreciation, 12 and discusses the importance of timely recovery of this return on invested capital, both to the 13 ongoing financial integrity of the ML Project, and to the ability to finance future capital investment on terms favourable to utility customers.<sup>23</sup> 14 15 16 In his Direct Evidence (filed as Appendix B to the Application) Mr. Reed canvassed the 17 critical link between the ratemaking framework for the ML Project (as a large, government 18 supported energy infrastructure project) and the availability and cost of capital for this Project, and others.<sup>24</sup> Mr. Reed further noted in his Supplemental Direct Evidence attached as 19 20 Appendix A to this Supplementary Evidence that MPA in their report for the Board in the ML 21 approval proceeding, Review of the Fairness, from a Financial Perspective, of the Maritime Link Project to the Ratepayers of Nova Scotia<sup>25</sup>, recognized these capital attraction concerns, 22 23 and assumptions by equity investors that effective and fair regulation will allow recovery of and return on their investments.<sup>26</sup> 24

25

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<sup>&</sup>lt;sup>23</sup> NSPML Interim Cost Assessment Application Supplementary Evidence, Appendix A, February 15, 2017, pages 5-7 and 11-12.

<sup>&</sup>lt;sup>24</sup> NSPML Interim Cost Assessment Application, December 16, 2016, Appendix A, pages 6 to 14.

<sup>&</sup>lt;sup>25</sup> M05419, Exhibit M-46, Evidence of Morrison Park Advisors Inc., pages 67-68.

<sup>&</sup>lt;sup>26</sup> NSPML Interim Cost Assessment Application Supplementary Evidence, Appendix A, February 15, 2017, pages 5-7.

- 1 In his Supplemental Direct Evidence Mr. Reed explains why the proper inclusion of
- 2 depreciation expense in the ML Project is a function of the Project having achieved
- 3 commercial operation, and is further supported by the fact that the Project will be used and
- 4 useful as of the commencement of commercial operation. <sup>27</sup> Mr. Reed concludes that there is
- 5 no basis, in fact or policy, to depart from the well-established regulatory principles governing
- 6 the return of capital, which match the accounting principles that NSPML, NS Power, the
- 7 Board and the financial markets have relied on for many years.

8

- 9 Absent the recovery of depreciation expense in the Interim Assessment, NSPML's rate base in
- the form of equity capital would not be reduced commencing in 2018, and the cost to Nova
- Scotia electricity customers of the return on rate base over the life of the Project would, as a
- 12 consequence of deferral of this reduction, be higher than it is designed to be under the ML
- financing plan and NS Power's Fuel Adjustment Mechanism (FAM).

2017, page 13.

<sup>&</sup>lt;sup>27</sup> NSPML Interim Cost Assessment Application Supplementary Evidence, Appendix A, February 15,

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1	5.0 ML ASSESSMENT WITHIN OVERALL NOVA SCOTIA ENERGY PLAN	
2	FRAMEWORK	
3		
4	NSPML's Application outlines the relationship between this Application and NS Power's	
5	Fuel Stability Plan. <sup>28</sup> It is specifically noted that Nova Scotia's <i>Electricity Plan</i>	
6	Implementation Act (EPIA) contemplates a "phase in" of recovery from Nova Scotia	
7	electricity customers of ML costs through "early inclusion or deferral" of the anticipated	
8	NSPML assessment in NS Power's rates. <sup>29</sup>	
9		
10	In accord with the EPIA, the Fuel Stabilization Plan approved by the UARB for NS Power for	or
11	the three year period commencing January 1, 2017 provides for recovery of ML costs of \$16	52
12	million for 2018 and \$164 million for 2019. <sup>30</sup>	
13		
14	In keeping with this legislation, customers of NS Power have an annual stable average rate	
15	increase of 1.5 percent on January 1 of each of 2017, 2018 and 2019 which includes payment	ıts
16	for the ML. These price increases are at a level consistent with what was anticipated at the	
17	time that the ML was approved.	
18		
19	NSPML's Application seeks to recover exactly the same amount that NS Power is already	
20	recovering from customers through its Rate Stability Plan. NSPML has committed by its	
21	original Evidence to file a Final Cost Application as soon as possible in 2018, and to provide	•
22	for any adjustment in the final capital cost Assessment.	
23		
24	Issues 7, 8 and 9 on the Final List suggest a consideration of adjustment of the rate smoothing	ıg
25	mechanism implemented through NS Power's approved FAM and supported by the alignment	nt
26	of this Interim Assessment with that FAM.	
	20	
	<ul> <li>NSPML Interim Cost Assessment Application, December 16, 2016, pages 13-16.</li> <li>EPIA, sections 4(4) and (5).</li> <li>2016 NSUARB 129 (M07348).</li> </ul>	

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1 A variance in the amount paid to NSPML by NS Power, as compared to the amount NS 2 Power is collecting from customers, would change the basis of the Board-approved agreement 3 between NS Power and customers relating to the Fuel Stability Plan. 4 5 If NSPML recovers less than what was assumed would be paid to NSPML when the forecast 6 of the ML assessment was calculated and less than what is requested in this Application, NS 7 Power's FAM will have over-recovered from NS Power's customers. Such over-recovery 8 would result in significant FAM interest being incurred during the rate stability period and 9 owing to customers in 2020, which would not have been incorporated into NS Power's 10 financial models on which the decision to resolve the BCF rates was made. 11 12 NSPML does not believe that adjustment should be made to NS Power's FAM, as doing so would negatively impact stability by reducing NS Power rates now only to increase them 13 14 more dramatically later. 15 16 The Fuel Stability Plan, NSPML's Interim Assessment, and the mechanisms for incorporating 17 the NSPML Interim Assessment into the Fuel Stability Plan as provided for in the legislation 18 and as incorporated into the settlement of NS Power's Fuel Stability Plan application, and 19 ultimately endorsed by the Board, are all interrelated. Taken together, these plans and 20 mechanisms provide certainty and stability for customers and the utility as well as the 21 financial markets including debt rating agencies. Approval of NSPML's requested Interim 22 Assessment for recovery from NS Power commencing January 1, 2018 is an important 23 component in delivering this expected certainty and stability. 24 25 Recovery of the Interim Assessment by NSPML commencing in January 2018 is consistent 26 with the Project-specific legislation outlined in the Application. That legislation has 27 effectively harmonized the ratemaking treatment of the ML with the objectives of having the

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1 ML developed in a timely and cost effective manner so as to maintain predictable and stable rates for customers.<sup>31</sup> 2 3 4 In his direct evidence filed as Appendix B to NSPML's Application, Mr. Reed noted that the 5 current cost recovery profile for the ML was approved by the UARB in its ML Decision<sup>32</sup>, 6 and concluded that the cost recovery profile so approved should be implemented as initially 7 contemplated. Mr. Reed cautioned that the Board should avoid changes to the payment terms 8 by imposing an alternative form of short-term ratemaking in an attempt to curb a moderate 9 change that arises from a two-year delay in the availability of the NS Block. In his Supplemental Direct Evidence filed as Appendix A to this Supplementary Evidence, Mr. Reed 10 advises that the further analysis of costs and benefits provided in this Supplementary Evidence 11 reinforces his earlier conclusions.<sup>33</sup> 12 13 14 NSPML has also noted in its Application that the 35-year term for delivery of the NS Block will not start to run until the date on which delivery of the NS Block is commenced. 15 Assuming a 2020 in service date for the 3<sup>rd</sup> Muskrat Falls GS unit and thus commencement of 16 delivery of the NS Block, the renewable energy thereunder provided would be available to NS 17 18 Power for an additional two years after 2052, when it is anticipated that power and carbon costs would both be higher than will be the case in 2018 and 2019 (the first two years initially 19 20 planned for delivery of the NS Block). 21 22 The Commercial Agreements, comprised of 13 formal contracts between Emera and Nalcor, which the Board confirmed to be reasonable and comprehensive<sup>34</sup>, provide for the delivery of 23 24 the 35-year NS Block to commence not later than commercial operation of the third of four <sup>31</sup> NSPML Interim Cost Assessment Application, December 16, 2016, page 28, lines 11-15. <sup>32</sup> NSPML Interim Cost Assessment Application, Appendix B, December 16, 2016, pages 21-22.

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<sup>&</sup>lt;sup>33</sup> NSPML Interim Cost Assessment Application Supplementary Evidence, Appendix A, February 15, 2017, page 3.

<sup>&</sup>lt;sup>34</sup> 2013 NSUARB 154; M05419; UARB Decision, In the Matter of the *Maritime Link Act* and In the Matter of an Application by NSP Maritime Link Incorporated for approval of the Maritime Link Project; July 22, 2013, at paragraph 377.

- 1 generating units at Muskrat Falls GS. The Commercial Agreements also ensure that Nova
- 2 Scotia customers do not participate in cost overruns on the components of the Lower
- 3 Churchill Project that are being constructed by Nalcor in Newfoundland and Labrador.

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# 1 6.0 UPDATE ON NALCOR PROJECTS 2 3 Nalcor has publically reported that: 4 5 a) Significant construction milestones for tree clearing and tower erection have been achieved for the transmission assets in Labrador and on the Island of Newfoundland<sup>35</sup>. 6 7 which supports completion to Nalcor's revised project schedule which it announced on June 24, 2016. 8 9 10 b) Installation and protection of the submarine cable system was completed by the end of 2016, marking the completion of the Strait of Belle Isle submarine cable crossing.<sup>36</sup> 11 12 13 c) Concrete pouring and placement activities continue along with formwork and rebar placement at the hydro facility.<sup>37</sup> 14 15 16 d) In December, 2016, Nalcor announced that it reached terms with its contractor Astaldi on the completion of work at the hydro facility.<sup>38</sup> 17 18 e) In January 2017, Nalcor announced that remediation work was continuing on the 19 20 temporary cofferdam and resumed raising water levels for the creation of the Muskrat Falls reservoir.<sup>39</sup> 21 22 35 Lower Churchill Project Monthly Report - November - Page 4

(https://muskratfalls.nalcorenergy.com/wp-content/uploads/2017/01/Nov-2016-LCP-Monthly-Benefits-Report-final.pdf).

36 Ibid.

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<sup>&</sup>lt;sup>37</sup> Ibid.

<sup>38</sup> CBC, December 21, 2016 (http://www.cbc.ca/news/canada/newfoundland-labrador/nalcor-astaldimuskrat-falls-powerhouse-1.3906951).

VOCM, January 27, 2017 (http://vocm.com/news/cofferdam-holding-as-muskrat-falls-reservoirraised-nalcor/).

1	As noted above, on June 24, 2016, Nalcor announced a revised project schedule. Under the
2	revised schedule transmission lines and associated infrastructure are now scheduled to be
3	completed and in service mid-2018, first power from Muskrat Falls is expected in fall 2019,
4	and full power from Muskrat Falls expected by mid-2020.
5	
6	NSPML understands that Nalcor's plans to have the Labrador Transmission Assets (HVAC
7	connections) between Muskrat and Churchill (LTA) completed in 2017 and the Labrador
8	Island Link (LIL) completed in early 2018 remain on track.
9	
10	Nalcor has not provided any further formal project updates, but has indicated that there could
11	be an update by mid-2017. <sup>40</sup>
12	
13	Based on this updated schedule, NSPML currently expects commencement of delivery of the
14	NS Block not later than delivery of the 3 <sup>rd</sup> Muskrat Falls GS unit sometime between late 2019
15	and mid-2020. <sup>41</sup>
16	
17	

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<sup>&</sup>lt;sup>40</sup> St. John's Telegram November 1, 2016 (<a href="http://www.thetelegram.com/news/local/2016/11/1/q-a-with-stan-marshall-4676934.html">http://www.thetelegram.com/news/local/2016/11/1/q-a-with-stan-marshall-4676934.html</a>).

stan-marshall-4676934.html).

All Nalcor Press release: June 24, 2016 (https://muskratfalls.nalcorenergy.com/wp-content/uploads/2013/03/News-Release MF-Project-Update 24Jun2016.pdf).

1	7.0 ADDITIONAL CONSIDERATIONS AND CONCLUSION
2	
3	The ML is an integral part of Nova Scotia's plan to meet renewable electricity standards for
4	which the province has established a requirement for 2020 to be at 40 percent and to enable
5	the reduction of carbon emissions, through the reduction in dependence on coal fired
6	electricity generation.
7	
8	In the fall of 2016, the federal government announced tighter restrictions on coal fired
9	generation. 42 The Government of Canada and the Province of Nova Scotia also announced
10	their commitment to negotiate a new equivalency agreement on the accelerated coal-phase out
11	plan. <sup>43</sup> The ability of Nova Scotia to meet emission reduction requirements potentially as far
12	out as 2050 is heavily dependent on the ML and the utility's ability to work closely with
13	Newfoundland and Labrador and other extra-provincial sources of energy to displace coal
14	fired generation. In a planned manner, this helps manage the cost of compliance through
15	increased optionality created by the new interconnection and further increases the importance
16	and potential economic benefit of the ML to Nova Scotia and Newfoundland and Labrador
17	electricity customers.
18	
19	The significance of the ML for Nova Scotia has been supported by the federal government on
20	two fronts. First, the recognition of the investment in promoting a lower carbon future for NS.
21	Second, with the support of federally guaranteed debt to finance the Project construction
22	through the FLG. The FLG was provided with three requirements: i) that the Project enables a
23	lower carbon future for Nova Scotia; ii) that the ML be a regionally beneficial project; and iii)
24	that the Project be financed at the lowest net present value for the benefit of Nova Scotia
25	customers. All three requirements remain in place and today the carbon reduction benefits and
26	the regional benefits of the Project are growing.

<sup>42</sup> Government of Canada News Release, November 21, 2016 (<a href="http://news.gc.ca/web/article-en.do?nid=1157989">http://news.gc.ca/web/article-en.do?nid=1157989</a>).

<sup>43</sup> Ibid.

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1	In July	y, 2013, the UARB conditionally approved the ML Project and the Commercial
2	Agree	ments. As part of that approval, the UARB directed NSPML to prudently manage the
3	ML Pı	roject construction timetable in a manner consistent with the construction schedule of
4	the oth	ner components of the Nalcor transactions, while remaining mindful of the total impact
5	on cos	ts in order to minimize costs to ratepayers.
6		
7	This S	upplementary Evidence demonstrates NSPML's actions in fulfillment of the Board's
8	directi	ons on prudent construction management. As a result of the continued proper
9	manag	gement by NSPML of the ML Project for completion on time and within budget:
10		
11	a)	Nova Scotia electricity customers will avoid between \$398 million and \$533 million
12		of incremental capital costs, additional financing costs and incremental AFUDC which
13		would have resulted from a delay in the Project to align with the availability of the NS
14		Block.
15		
16	b)	Between January 1, 2018 and December 31, 2019, potential energy flow over the
17		Maritime Link is forecast to be in excess of 2 TWh with an associated estimated gross
18		(market/marginal) value of that energy being in excess of \$120 million (with the
19		estimated net value of this energy flow to NS Power customers as set out in
20		Confidential Attachment B), and additional qualitative benefits to the Nova Scotia
21		electricity system.
22		
23	Mr. Re	eed, in his Supplemental Direct Evidence filed as Appendix A to this Supplementary
24	Evider	nce concludes that NSPML has done everything that the Board asked of it in its 2013
25	ML D	ecision. <sup>44</sup>
26		

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 $<sup>^{\</sup>rm 44}$  NSPML Interim Cost Assessment Application Supplementary Evidence, Appendix A, February 15, 2017, page 10.

- 1 NSPML has appropriately managed the execution of the ML Project with consideration of the
- 2 UARB's original decision at a cost of \$1.52 billion, a variance not to exceed \$60 million,
- 3 completion by December 31, 2017, and consequent limitation of AFUDC to no more than
- 4 \$230 million. The costs of a delay would have resulted in several hundreds of millions of
- 5 dollars in additional costs, and prevented Nova Scotia electricity customers from attaining the
- 6 economic and reliability benefits of the timely utilization of the ML.

Mr. Reed further concludes that:<sup>45</sup>

The Board's approval of the ML Project assured investors that not only the government and the [ML] Project's sponsors were behind the project, but that it had the support of the Nova Scotia regulator as well. Emera, as the direct investor, and Emera's stockholders as the ultimate source of the equity capital, undoubtedly understood the prudency and AFUDC risks, and by virtue of choosing to make an equity investment it can reasonably be inferred that they believe that NSPML could appropriately manage the cost and schedule of the ML Project. It is my opinion that the outcome of those risks has not led to any basis for delaying or denying NSPML's return on and of the capital that it has invested.

In his Direct Evidence filed as Appendix B to the Application, Mr. Reed considers the regulatory and ratemaking policy applicable to harmonization of the desire for development of government supported, large-scale renewable energy infrastructure like the ML with the ratemaking treatment of these types of projects. Mr. Reed concludes that it is important for regulators to exercise their discretion in order to provide a level of certainty and timeliness in cost recovery which: i) helps keep financing costs reasonable; and ii) addresses an important premise for contractual commitments, financing terms and the willingness of project sponsors to undertake the development of the Project.<sup>46</sup>

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<sup>&</sup>lt;sup>45</sup> Ibid, page 11.

<sup>&</sup>lt;sup>46</sup> NSPML Interim Cost Assessment Application, Appendix B, December 16, 2016, pages 9-12.

1 In the context of the ML Project in particular, Mr. Reed considers the stand-alone 2 development of the ML Project, in accord with the provisions of the FLG, and the consequent 3 importance of approval of the Interim Assessment in order to allow NSPML timely revenue recovery in order to cover its costs<sup>47</sup>, including its cost of equity financing.<sup>48</sup> Mr. Reed 4 expresses concern that cash flow shortfalls in the early years of the ML Project could be 5 6 detrimental to NSPML's ability to meet the repayment terms for the FLG, and to preserve the 7 70/30 debt/equity ratio that currently underlies the ML Project, noting that shortfalls in 8 revenues could have to be made up by using more expensive sources of capital to fund under-9 collections or deferrals.<sup>49</sup> 10 11 Mr. Reed's evidence also considers that: 12 13 a) the evidence before the Board at the time of the ML approval provided a perspective of the variation in benefits across the lifespan of the project<sup>50</sup>, and it appears from the 14 Board's approval of the ML Project that it was prepared to accept the profile of the 15 ML Project's cost recovery benefits as expected in 2013;<sup>51</sup> 16 17 18 b) a two year delay in the NS Block, when viewed over the 35-year life of the ML Project does not materially change the degree of front-end loading of costs already accepted 19 by the UARB in its ML Project approval;<sup>52</sup> and 20 21 22 c) the Board has also approved the smoothing of NS Power's ML Project Assessment 23

costs, as included in NS Power's Fuel Stability Plan, which was proposed pursuant to

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<sup>&</sup>lt;sup>47</sup> Ibid, pages 14-15. <sup>48</sup> NSPML Interim Cost Assessment Application Supplementary Evidence, Appendix A, February 15, 2017, pages 11-12.

<sup>&</sup>lt;sup>49</sup> NSPML Interim Cost Assessment Application, Appendix A, December 16, 2016, pages 21-22.

<sup>&</sup>lt;sup>50</sup> NSPML Interim Cost Assessment Application, Appendix B, December 16, 2016, page 18.

<sup>&</sup>lt;sup>51</sup> Ibid. page 21.

<sup>&</sup>lt;sup>52</sup> Ibid, page 19 and NSPML Interim Cost Assessment Application Supplementary Evidence, Appendix A, February 15, 2017, page 3.

1	the Nova Scotia government's mandate for electricity rate stabilization in general <sup>53</sup> ,
2	and a consequent form of "rate phase-in" of ML Project costs in particular. <sup>54</sup>
3	
4	Mr. Reed concludes that the Board should avoid changes to the payment terms by imposing
5	an alternative form of short-term rate making in an attempt to curb the moderate change that
6	arises from a two-year delay in the availability of the NS Block. <sup>55</sup>
7	
8	The delivery by NSPML of the ML on time and within budget, and the approval by the
9	UARB of the Interim Assessment requested in this Application for payment effective January
10	1, 2018, will support and preserve the legislative and regulatory program for smoothing of the
11	rate impact on Nova Scotia customers of recovery of the costs of the ML.
12	
13	NSPML has carefully and effectively managed the construction of the Maritime Link in a
14	prudent manner and with a view to minimizing costs to Nova Scotia electricity customers as
15	required by the ML Decision. Delaying the completion of the Maritime Link in order to align
16	delivery with the timing of the delayed NS Block would have added hundreds of millions of
17	dollars in cost for customers over the life of the Project, including through the accumulation
18	of AFUDC. In addition, such a delay would have cost Nova Scotia electricity customers the
19	loss of many of the benefits they will receive when the Maritime Link is delivered to
20	customers on January 1, 2018. The evidence filed makes it clear that it is in the best interest of
21	customers to have the Maritime Link completed and in use on January 1, 2018. A two-year
22	delay in the start of the NS Block will add two years of use of the ML; during which
23	additional benefits will flow to Nova Scotia electricity customers. These benefits are in
24	addition to and independent of the benefits that will be realized upon the commencement of
25	the NS Block and greater than those modeled and contemplated at the time of the ML
26	Decision. This Application seeks to recover exactly the same amount that NS Power is already

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<sup>2017,</sup> page 14. <sup>55</sup> NSPML Interim Cost Assessment Application, Appendix B, December 16, 2016, page 22.

1	recovering from customers through its Rate Stability Plan which is designed to provide
2	certainty and stability for Nova Scotia customers. Approval of NSPML's Interim Assessment
3	ensures the maximum overall benefit to Nova Scotia customers. For the reasons stated above
4	and in the Application and this Supplementary Evidence, NSPML respectfully requests
5	approval of the Application as filed.
6	
7	Both NSPML and NS Power are committed to providing full transparency and answering the
8	Board's questions about the construction and use of the ML. During this Interim Assessment
9	Application, information requests about the NS Power analysis of benefits should be directed
10	to NSPML and NSPML will obtain answers to those questions directly from NS Power and
11	file the responses with the Board at the time that other IR responses are filed. This approach is
12	the same process that was used during the Project approval application.
13	
14	NSPML respectfully requests that the Board:
15	
16	a) Issue an order pursuant to section 64 of the <i>Public Utilities Act</i> and section 8(1) of the
17	Maritime Link Cost Recovery Process Regulations, setting an Interim Assessment
18	against Nova Scotia Power in the amounts of \$162 million for 2018 and \$164 million
19	for 2019, as outlined herein and consistent with NS Power's BCF, on the basis that NS
20	Power will have use of the ML, and approving a schedule of monthly charges payable
21	by NS Power to NSPML commencing January 1, 2018; and
22	
23	b) Direct NSPML to file final Maritime Link costs for approval following
24	commissioning, once the final costs for the Project are known.

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