

NOVA SCOTIA UTILITY AND REVIEW BOARD

IN THE MATTER OF the PUBLIC UTILITIES ACT and the MARITIME LINK ACT and the MARITIME LINK COST RECOVERY PROCESS REGULATIONS

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- and -

IN THE MATTER OF AN APPLICATION by NSP MARITIME LINK INCORPORATED for approval of an interim cost assessment

BEFORE: Peter W. Gurnham, Q.C., Chair
Roland A. Deveau, Q.C., Vice Chair
Steven M. Murphy, MBA, P.Eng., Member

APPLICANT: **NSP MARITIME LINK INC.**
Colin J. Clarke, Q.C.
Mary Ellen Greenough, LL.B.

INTERVENORS: **CONSUMER ADVOCATE**
John P. Merrick, Q.C.
William L. Mahody, Q.C.

SMALL BUSINESS ADVOCATE
E. A. Nelson Blackburn, Q.C.
Melissa MacAdam, LL.B.

INDUSTRIAL GROUP
Nancy G. Rubin, Q.C.

**MUNICIPAL ELECTRIC UTILITIES OF NOVA SCOTIA
CO-OPERATIVE**
Albert Dominie

NOVA SCOTIA DEPARTMENT OF ENERGY
Sean Foreman, LL.B.

NOVA SCOTIA POWER INC.
Brian Curry, LL.B.

PATRICK J. BATES
on his own behalf

PORT HAWKESBURY PAPER LP
James MacDuff, LL.B.

BOARD COUNSEL: S. Bruce Outhouse, Q.C.

HEARING DATES: June 12-13, 2017

FINAL SUBMISSIONS: July 14, 2017

DECISION DATE: September 11, 2017

- DECISION:**
- 1) **Board approves interim assessment, subject to deferral and refunding to customers of depreciation and deferred financing amortization costs;**
 - 2) **NSPI must holdback \$10 million in both 2018 and 2019, subject to proof satisfactory to the Board that a minimum of \$10 million per year in Maritime Link benefits are realized for NSPI ratepayers;**
 - 3) **Board is not prepared to approve final assessment until it is confident ratepayers will get NS Block, Supplemental Energy, and Nalcor Market-priced Energy;**
 - 4) **Board will convene another interim assessment hearing in early 2019; and**
 - 5) **NSPML's quarterly reports will continue.**

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1.0 INTRODUCTION

[1] This is a Decision of the Nova Scotia Utility and Review Board (Board) respecting the application of NSP Maritime Link Incorporated (NSPML or Applicant) filed on December 16, 2016, under the *Maritime Link Act*, S.N.S. 2012, c. 9 (*ML Act*), the *Maritime Link Cost Recovery Process Regulations* (N.S. Reg. 189/2012) (*ML Regulations*), and s. 64 of the *Public Utilities Act*, R.S.N.S. 1989, c. 380, for approval of an interim cost assessment and approval to commence recovery of the interim assessment from Nova Scotia Power Incorporated (NSPI) starting January 1, 2018.

[2] According to the Application filed by NSPML, the Maritime Link is scheduled for commissioning in Q4 2017 and to be in service by January 1, 2018. This timeline is effectively what was originally proposed by the Applicant in 2013 when the Board concluded, in a separate proceeding, that the Maritime Link Project (ML Project) represented the lowest long-term cost alternative for renewable electricity for Nova Scotian ratepayers.

[3] The Maritime Link is being constructed to allow the delivery of power and energy produced at the Muskrat Falls Hydro Electric Project in Newfoundland and Labrador (NL) to Nova Scotia.

[4] A total of 10 formal Intervenors responded to the Notice of Public Hearing. A number of these parties were represented at the hearing by counsel. The following Intervenors participated at the hearing: the Consumer Advocate (CA); the Small Business Advocate (SBA); a group of 12 large industrial customers represented by counsel (Industrial Group); the Municipal Electric Utilities of Nova Scotia Co-operative (MEUNSC); the Nova Scotia Department of Energy (Province or NSDOE); NSPI; Patrick J. Bates; and Port Hawkesbury Paper LP (PHP).

[5] S. Bruce Outhouse, Q.C., acted as Board Counsel.

[6] The Notice of Public Hearing was published in the Chronicle Herald and the Cape Breton Post on Saturday, December 24, 2016, and Tuesday, January 3, 2017. The hearing was held over two days on June 12 and June 13, 2017, at the Board's offices in Halifax, Nova Scotia. The parties filed written submissions and reply submissions which were completed on July 14, 2017.

[7] In the advertised Notice of Public Hearing, the public was advised that they could file submissions with the Board outlining their views regarding the Application. In response to this notification, the Board received one written submission from a member of the public. No individuals requested to speak at the evening session. Accordingly, the session was cancelled.

2.0 BACKGROUND

[8] The ML Project refers to the design, construction, operation and maintenance of the Maritime Link transmission facilities, together with related transactions involving the delivery of energy, the provision of transmission services over the Maritime Link and the enabling of transmission service through Nova Scotia, as set out in 13 agreements dated July 31, 2012, between Emera and Nalcor Energy (Nalcor), and other parties (referred to as the Nalcor Transactions). Nalcor is the provincial Crown Corporation responsible for developing and managing Newfoundland and Labrador's energy resources.

[9] The ML Project will give Nova Scotia access to energy from Phase 1 of the Lower Churchill hydroelectric development in Labrador (Lower Churchill Phase 1), being

constructed by Nalcor. In their entirety, these projects will see the development and transmission of hydroelectric power from Muskrat Falls, on the Churchill River in Labrador, to the Island of Newfoundland via the Labrador-Island Link (LIL), then through the Maritime Link to Nova Scotia and potentially beyond.

[10] Under the Nalcor Transactions, NSPML will pay 20% of the combined total capital and operating costs of Lower Churchill Phase 1 and the Maritime Link facilities (as of Decision Gate 3). In exchange, NSPI will receive 20% of the estimated energy and capacity from Muskrat Falls (20 for 20 Principle). This 20% of the energy and capacity has a term of 35 years and, when combined with the five-year Supplemental Energy (described immediately below), is called the Nova Scotia Block (NS Block). After subtracting system losses, the NS Block alone represents an approximate firm capacity of 153 MW (i.e., 170 MW less losses) of on-peak renewable electricity delivered over the Maritime Link to the Woodbine Substation in Cape Breton, N.S. Excluding Supplemental Energy, this is estimated by NSPML to be 895 GWh per year of energy (i.e., just under 1 TWh). This annual amount of energy is equal to eight to ten percent of NSPI's current electricity sales to customers. The NS Block is dispatchable, which means NSPI can schedule and optimize when the energy is to be delivered to Nova Scotia, in accordance with the contractual terms governing this arrangement.

[11] The expected service life of the Maritime Link facilities is 50 years. NSPML will own 100% of the Maritime Link facilities for the first 35 years. After 35 years, ownership of the Maritime Link facilities will transfer to Nalcor. The terms of the agreement with Nalcor provide that Nalcor will supply NSPML with an additional block of electrical energy in the first five years of operation of the Maritime Link to compensate for

this 15 year differential. This additional electrical energy is approximately 240 GWh per year and is known as Supplemental Energy. Any subsequent reference to the NS Block in this Decision includes the Supplemental Energy, unless the context requires otherwise.

[12] In terms of background information, it is helpful to briefly outline the regulatory history of NSPML in terms of the ML Project.

[13] In a Decision dated July 22, 2013, [2013 NSUARB 154] (ML Decision), the Board concluded, applying the test under s. 5(1)(a) of the *ML Regulations*, that the ML Project (with Nalcor Market-priced Energy factored in) represents the lowest long-term cost alternative for renewable electricity for ratepayers in Nova Scotia. However, in the absence of Market-priced Energy, the Board concluded that the ML Project is not the lowest long-term cost alternative.

[14] In its Compliance Filing provided to the Board on October 21, 2013, NSPML filed an Energy Access Agreement (EAA) executed by Emera, Nalcor and NSPI. The EAA was intended to satisfy the principal condition with respect to NSPI's access to Nalcor Market-priced Energy. NSPML also agreed to and accepted each of the other conditions imposed by the Board in its ML Decision.

[15] In a Supplemental Decision dated November 29, 2013 [2013 NSUARB 242] (Supplemental ML Decision), the Board held that the EAA satisfied the Nalcor Market-priced Energy condition, based on the representations and clarifications given by NSPI and NSPML, including the interpretation of the EAA. The Board noted that in any issue related to cost recovery from ratepayers by NSPI, the EAA will be interpreted in light of those representations and clarifications.

[16] As a result of the foregoing, it was contemplated at the time of the 2013 application that delivery of the NS Block (including the Supplemental Energy), together with any Nalcor Market-priced Energy, would commence to flow over the Maritime Link in the autumn of 2017: the NS Block in October 2017, Supplemental Energy in November 2017, and the Nalcor Market-priced Energy in October 2017. Based on this representation, the ML Project was determined to be the lowest long-term cost alternative for ratepayers in Nova Scotia.

[17] The *ML Act* and the *ML Regulations* also set out an approval mechanism for NSPML to seek to recover its costs from NSPI and, in turn, for NSPI to recover these costs from its ratepayers. The Legislation contemplates NSPML applying for an assessment as against NSPI, with NSPI then being entitled to recover the assessment from its ratepayers through its rates.

[18] Section 8 of the *ML Regulations* provides:

Assessment and costing approval

- 8 (1) Before receiving energy under the Nalcor Transactions, an applicant must set an assessment against Nova Scotia Power Incorporated for the recovery of all approved Project costs, and must apply to the Review Board for an approval of the assessment under Section 64 of the *Public Utilities Act*.
- (2) Nova Scotia Power Incorporated is entitled to recover through its rates any assessment approved by the Review Board in respect of the Maritime Link Project.

[19] Section 64 of the *Public Utilities Act* provides:

Approval of schedule of rates and charges of utility

- 64 (1) No public utility shall charge, demand, collect or receive any compensation for any service performed by it until such public utility has first submitted for the approval of the Board a schedule of rates, tolls and charges and has obtained the approval of the Board thereof.
- (2) The schedule of rates, tolls and charges so approved shall be filed with the Board and shall be the only lawful rates, tolls and charges of such public utility until altered, reduced or modified as provided in this Act.

[20] NSPML has proposed a forecasted interim assessment to be paid by NSPI. It suggested that this interim assessment will remain in place until the Board approves a final cost application by NSPML for the Maritime Link Project, anticipated to be brought to the Board in 2018. As noted above, construction on the Maritime Link continues, with the expected in-service date now being January 1, 2018. Once the ML Project is completed, NSPML has indicated it will apply to the Board under the *ML Regulations* for a final cost approval and final assessment as part of a detailed review of the entire completed project.

[21] It bears noting that an “anticipated assessment” for the ML Project is already included in rates being paid by customers at present. In its Decision of July 19, 2016 [2016 NSUARB 129], Matter Number M07348, for the purposes of setting NSPI’s Base Cost of Fuel and rates over the three-year Rate Stability Period (RSP) under the *Electricity Plan Implementation (2015) Act*, S.N.S. 2015, c. 31 (*EPIA*), the Board, as required by the *EPIA*, approved amounts in 2018 and 2019 for inclusion in rates to reflect the “anticipated assessment” for the Maritime Link. These amounts, inclusive of depreciation, were \$162 million for 2018, and \$164 million for 2019. In accordance with the requirements of the *EPIA*, these amounts were smoothed and included in rates over the three-year Rate Stability Period.

[22] The anticipated assessment amounts included in rates during the RSP were agreed to by the various classes of ratepayers by way of a Consensus Agreement filed in that proceeding (M07348) and approved by the Board. Those amounts also mirror the amounts reflected in the interim assessment being proposed by NSPML in this Application.

[23] These amounts for the interim assessment are comprised of the following components:

Figure 2 – Breakdown of Maritime Link Interim Assessment

Description	2018 (\$ Millions)	2019 (\$ Millions)
Depreciation	51	51
Operating & Maintenance	14	18
Debt Financing Costs	46	44
Equity Financing Costs	51	51
Total Interim Assessment	162	164

[Exhibit N-1, p. 22]

[24] As described more fully later in this Decision, in its Opening Statement at the commencement of the hearing, NSPML offered to defer the collection of the above depreciation amounts to 2020.

[25] The delay in the delivery of the NS Block was contemplated and discussed amongst NSPI and customer representatives when the RSP was finalized mid-2016. In addition to an amount to cover the interim assessment, NSPI's current approved Rate Stability Plan for 2017–2019 includes replacement power costs for 2018 (for all Fuel Adjustment Mechanism [FAM] customers) and 2019 (for the customers represented by the Consumer Advocate and the Small Business Advocate).

[26] However, NSPML's present Application is complicated by the fact that there is a delay in the completion of the Muskrat Falls Generating Station in NL, until at least 2020.

[27] As described more fully below, in June 2016, Nalcor announced a delay in the construction of the Muskrat Falls Generating Station, originally planned to be operational concurrent with the Maritime Link. The delay in its operation means that

power and energy from this facility will not flow over the Maritime Link until much later than expected, 2020 at the earliest. Moreover, this means that there will be a delay in the commencement of the NS Block, a contractually guaranteed benefit under the Nalcor Transactions allowing NSPI customers to have access to Muskrat Falls energy for a 35-year period, as well as other related benefits.

[28] The circumstances surrounding the delay in the construction of the Muskrat Falls Generating Station, and the continued uncertainty about its actual completion date, complicate the recovery of the interim assessment by NSPML because the completion and operation of the entire regional project (in both NL and Nova Scotia combined) will not deliver the expected benefits to customers in Nova Scotia on the original timeline. Nevertheless, in its Application, NSPML sought to start recovering all of its costs by way of the interim assessment, as though the Maritime Link would be fully operational as planned and the NS Block would start being delivered in late 2017, while asking ratepayers in Nova Scotia to bear all the risks and burden of the delay in NL.

3.0 ISSUES

[29] This matter raises the following issues:

- Will the Maritime Link deliver energy to Nova Scotia ratepayers as originally contemplated? If the answer is no, is the Maritime Link used and useful?
- Should there be a reduction in the interim assessment as a consequence of delayed delivery of the NS Block?
- Should the Board approve the deferral of certain costs related to the Maritime Link Project?
- What interim assessment should the Board set against NSPI respecting the amounts requested by NSPML for 2018 and 2019?

- Should the Board approve the accounting policy amendments requested by NSPML?
- When should the Final Assessment hearing be held, and what should the scope of that hearing be?
- What reporting requirements should apply to NSPML?

4.0 Will the Maritime Link deliver energy to Nova Scotia ratepayers as originally contemplated? If the answer is no, is the Maritime Link used and useful?

4.1 Delayed delivery of NS Block

[30] Nalcor has advised NSPML that construction of the Muskrat Falls Generating Station will not be completed on the timeline that was originally scheduled. Some background is required to set the context for the discussion and analysis in this Decision.

[31] On June 24, 2016, Nalcor held a press conference to announce construction delays respecting the Muskrat Falls Generating Station. Concurrently, Nalcor officials also contacted NSPML to notify them of the delay. According to NSPML, this was the first it learned of expected changes to the completion date for the Muskrat Falls Generating Station that would delay the commencement of the NS Block until Q3 2019 – Q2 2020. Further, Nalcor announced that the projected costs of Lower Churchill Phase 1 would increase from \$7.4 billion, calculated at the time of sanction, to \$11.4 billion (including financing and other costs): see Exhibit N-8, NSUARB IR-55.

[32] Consequently, the construction delay in Muskrat Falls will result in a delay in the delivery of the NS Block and Nalcor Market-priced Energy over the Maritime Link. Accordingly, when it is completed as scheduled in late 2017, the Maritime Link will not

deliver energy to Nova Scotia ratepayers as originally contemplated in the Board's 2013 approval of the ML Project and the Nalcor Transactions.

[33] The Board observes that the announced cost overruns experienced by Nalcor on the Lower Churchill Phase 1 will have no impact whatsoever on Nova Scotian ratepayers. The maximum cost of the total project was fixed under the Nalcor Transactions as of the Decision Gate 3 capital cost estimate. Under the "20 for 20 Principle", the portion of the maximum combined cost of the Lower Churchill Phase 1 and Maritime Link attributable to NSPML was capped at \$1.5554 billion. Any subsequent cost overruns related to Muskrat Falls are borne by Nalcor and its ratepayers, not NSPML and its ultimate ratepayers.

[34] Upon being notified by Nalcor of the delay in completion of the Muskrat Falls Generating Station, and the resulting delay in delivery of the NS Block and Nalcor Market-priced Energy, NSPML considered delaying completion of the Maritime Link to coincide with the delivery of the NS Block. It also assessed the associated costs and benefits of such a delay.

[35] In its Supplementary Evidence, NSPML outlined the analysis of its response to this delay:

...
NSPML concluded that deferring the Maritime Link by two years would result in an increase in the capital cost of the Project of hundreds of millions of dollars and risk successful completion of the Project by 2020, thereby ensuring the Project would significantly exceed the budget approved by the UARB as noted in the table below.

NSPML also recognized that deferring the ML to coincide with the completion of Muskrat Falls would preclude Nova Scotia customers from receiving the benefits associated with using the Maritime Link in the interim period. Those benefits, as forecasted by NS Power, are noted above and quantified in Confidential Attachment B.

Further, given the requirement to continue paying interest on the debt under the Federal Loan Guarantee (FLG), intentionally deferring the completion of the Project and the resultant commencement of revenue recovery for the ML would create financing

challenges and the requirement to arrange additional debt beyond the current amount of low-interest FLG debt secured as well as additional equity.

In aggregate, NSPML concluded that delaying completion of the ML to align its in-service date with a January 2020 availability of the NS Block would result in incremental costs to Nova Scotia electricity customers of between \$398 million and \$533 million, as summarized in the table below.

...

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.

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

...

As detailed in this Supplementary Evidence, having carefully considered the option of delaying completion of the ML and the test directed by the Board, NSPML determined that it would be most cost effective to continue with construction and completion of the ML to the budget and schedule approved by the Board. In light of the complexity of managing the staging and construction of the ML, as explained in the Application and elaborated on in this Supplementary Evidence, delay of completion of the ML would have resulted in significantly higher costs to Nova Scotia customers and would have been an imprudent course for NSPML to have taken. Considering the facts outlined above (which were not and could not have been before the UARB at the time of its ML Decision) prudent management of construction of the Project dictates that NSPML stay on course for completion for January 1, 2018.

[Exhibit N-3, pp. 15-20]

[36] Accordingly, NSPML proceeded with the construction of the Maritime Link on the original timeline. Thus, the Maritime Link will be completed at least two years before Nalcor is able to deliver the NS Block and Market-priced Energy from Muskrat Falls.

[37] NSPML is requesting the approval of an interim cost assessment as against NSPI and approval to commence recovery of that assessment from NSPI starting January 1, 2018, as originally contemplated.

[38] Given these circumstances, the first issue the Board must address is whether the Maritime Link will be "used and useful" when it is commissioned in late 2017.

4.2 Position of the Intervenor

[39] Generally, referring to relevant provisions of the *Public Utilities Act*, the Intervenor questioned whether the Maritime Link will be “used and useful” upon its commissioning in the fall of 2017, despite the anticipated two year delay or more in the delivery of the NS Block, by Nalcor, over the Maritime Link. Further, the Intervenor submitted that the risk of the delay should be apportioned as between NSPML and NS ratepayers as the Board deems “just and reasonable”.

[40] The Board was referred to sections 30 and 45 of the *Public Utilities Act*.

[41] The issue of whether the Maritime Link is “used and useful” is addressed by the Board in this part of the Decision. The submission of the Intervenor that the risk of delay should be apportioned as the Board considers “just and reasonable” is considered later in this Decision, in Section 5.

[42] It is a tenet of public utility regulation that a utility cannot recover the cost of an asset from its ratepayers unless the asset is “used and useful” in supplying the regulated service to its ratepayers. The issue which arises in the present matter is whether the Maritime Link is “used and useful” if it is not fulfilling the purpose for which it was constructed, i.e., the delivery of the NS Block, the Supplemental Energy, and Nalcor Market-priced Energy.

[43] In his Opening Statement at the hearing, the CA specifically alleged that the “used and useful” test was not met:

The Consumer Advocate submits that in the circumstances of this project and of the requested Application the rate imposition sought for is, as requested, unreasonable. That conclusion is supported by several considerations.

- The imposition of the rates do not meet the used and useful criteria. The parties may [be] able to debate the applicability of that criteria but there is no debate that imposing rates associated with power that will not be delivered to customers for two or more years does give rise to the objection that ratepayers are not getting value for money

and in many cases may never have an opportunity to receive the power for which they are now being asked to pay rates in the years 2017, 2018 and 2019. Reference is made to the analogy of the cost of building a large warehouse of which only a small corner is providing value to the ratepayers.

...

NSPML advances the argument that simply by having access to the Maritime Link will provide sufficient benefit to ratepayers that the concern as to used and useable can be satisfied. It is the response of the Consumer Advocate that here is entirely inadequate evidence defining and supporting such ancillary benefits to enable the Board to be satisfied that the interests of the ratepayers are thereby sufficiently protected.

Further any extrinsic benefits that may materialize would have materialized in any event and the ratepayers would have been entitled to the benefits of them regardless. [Emphasis added]

[Exhibit N-30, pp. 2-3]

[44] The “warehouse analogy” referenced by the CA was explained by his consultant Paul Chernick, of Resource Insight, Inc. in his prefiled testimony. In it, he identified the application of the “used and useful” test:

V. Ratemaking Implications

Q: How do you suggest the Board should approach the question of whether NSPML should recover the full assessment for the Maritime Link in 2018 and 2019, given the delay in the benefits of the project?

A: I suggest that the Board approach that issue by applying the used-and-useful standard, which limits cost recovery to assets that are in service and useful to customers.

Q: How would you apply that standard to the Maritime Link Interim Assessment for 2018 and 2019?

A: Once power starts flowing over the Maritime Link, it will be used. It will also be useful, to some extent. However, the Maritime Link will be much less useful than it would have been if the overall project (including Muskrat Falls and the LIL) had been completed at the same time as the Maritime Link, as originally projected.

If the Maritime Link were completed in January 2018, but were only able to carry 50 MW, rather than the planned 500 MW, it would be only partially useful and only partial cost recovery would be appropriate. Treating usefulness as a binary, in which assets are either fully useful or not at all useful, would produce absurd results. If NS Power builds a large warehouse and uses it to store a handful of tools, the building would be used and at least slightly useful, but it would not be much more valuable to ratepayers than an empty unused building.

Q: Is it appropriate to reduce NSPML’s cost recovery in 2018 and 2019, simply because the benefits in those years are less than the costs of the Maritime Link?

A: No. When the Board approved the Maritime Link agreements, it was aware that costs would exceed benefits in 2018 and 2019, so denying NSPML full recovery of the difference would not be appropriate. Cost recovery for capital-intensive projects, such as the Maritime Link, is front-loaded due to the operation of utility accounting, in which the base for computing return starts with the full investment, falling by the amount of inflation each subsequent year. In contrast, the benefits of a capital investment is often back-loaded. In the case of the Maritime Link, the benefits will rise in 2020, when the hydro import will help meet the scheduled increase in the Renewable Energy Standard.

In contrast, I propose that the Board reduce recovery proportional to the reduction in the Maritime Link benefits due to the absence of the NS Block, subject to constraints on meeting coverage ratios.

Q: How might the Board compute the portion of the Maritime Link that is used and useful?

A: One approach would be to compare the benefits or value of the Maritime Link, under the actual conditions, to the benefits that the line would have provided had Muskrat Falls and the NS Block been in place in 2018 and 2019, and allowing NSPML to recover that proportion of the total costs in those years. ...

This computation does not reflect the previously expected net cost of the Maritime Link in 2018 and 2019, nor any effects of changes in projected loads, fuel prices, or any other factors since the Board's approval of the Maritime Link arrangements, other than NSPML's inability to deliver the NS Base and Supplemental Blocks.

[Exhibit N-14, pp. 19-21]

[45] The SBA's consultant, John Athas, of Daymark Energy Advisors, also considered the "used and useful" test:

A. My assessment of the Maritime Link for the period from its commercial date of operation on January 1, 2018 until when the Nova Scotia Block commences focuses on these areas: Whether the Maritime Link meets the Used and Useful criteria during the period and whether NSPML exercised good judgement in the planning for such a delay. There is little doubt that the 'used' element of the criteria will be met when the Maritime Link is energized and Nova Scotia Power would then transact power across the line. The Useful element considers whether an asset has value, i.e., the benefits are greater than the costs. There certainly is value when each year the benefits are greater than the costs, however often, as is the case with the Maritime Link and the Nalcor agreements, initially they were expected to have a net costs for a few years followed by many years where costs are lowered by the existence of the agreements and the line. The establishment of longer term benefits is commonly taken as establishing an asset as useful.

However, as shown in Figure 1 of Mr. Reed's testimony, the benefits that accrue to the Maritime Link are produced by the Nalcor agreements resulting in the delivery of the Nova Scotia Block power. The start of the delivery of the Nova Scotia Block power is unknown given the uncertainty in the completion of the Muskrat Falls project. It is this uncovered risk that needs to be addressed in ratemaking and revenue recovery. I will discuss later that there is a substantial shortfall of benefits prior to the delivery of the Nova Scotia Block power.

Q. How did you apply the used and useful test in the case of the Maritime Link?

A. Per NSPML, the Maritime Link will be energized on January 1, 2018. Since the project will be operational, it will be utilized to transfer energy between the two regions meeting in effect the used part of the used and useful test. Since this attribute of the project meets the used aspect of the test, I focused my evaluation on the useful component or the economic test that compares the market and reliability benefits obtained by the project with its cost. If the cost exceeds the value obtained by the benefits, then the project fails the economic test and all or portion of the cost should not be recovered by NSPML. Since NSPML provided the cost of the Maritime Link to be recovered for the 2018-2019 period, I focused on assessing the reasonableness of the reliability and market benefits as provided by the Company in the Application and the Supplemental Evidence.

...

Q. Did the Company project the benefits of the project for the years 2018 and 2019 that will flow to Nova Scotia ratepayers?

A. No. NSPML and Nova Scotia Power estimated the benefits that would be created for the combined NS Power and Nalcor systems in the Supplementary Evidence. There have been transactions discussed that would indicate how much of the benefits would be captured for NS Power ratepayers. There is only the inference that perhaps half the benefits would flow to Nova Scotia ratepayers. It is unclear as to what transaction must occur to capture the benefits. Even though commercial negotiations have been initiated, they have not concluded leaving a significant amount of uncertainty on how the estimated benefits will flow through the ratepayers in both regions. This uncertainty, although identified by the Company, has not been fully examined. Also, the Company has not identified any hourly benefits where the benefit is positive but de minimis, making it difficult to capture through a transaction. [Emphasis added]

[Exhibit N-12, pp. 11-13]

[46] Mr. Athas had concerns about how NSPML conducted its benefits analysis, including the methodology for estimating some of the items included in the High and Low benefits cases, both in quantitative and qualitative terms. In addition to concerns about double-counting some benefits, the limited value of reserve sharing, and other concerns, he concluded:

Under the NSP Scenario Low/High the Implied Costs of the Maritime Link Project are High and the Gross Energy Value is low, resulting in an underestimate of \$[Redacted] million. In this case, even after incorporating all the benefits estimated by the Company, the Maritime Link fails to pass the useful test. The Company did not address such a scenario in its Application or in the Supplemental Evidence. As a result, I believe the High and Low cases analysis did not fully capture all the potential outcomes of the two-year period and it included a significant amount of discretion that may have skewed the results in the Company's favor.

...

The Company identified a reasonable set of items that will provide benefits to the ratepayers in Nova Scotia through the operation of the Maritime Link. However, even if the analysis appears sound, it fails to consider extreme cases such as when the implied cost

will be higher than the benefit and disregards uncertainties related to the negotiations of the sharing of the described benefits with Nalcor. The analysis also does not provide information on how the reserve sharing and the regulation communication will be conducted between the two regions that may have different and individual regulations rules and system requirements.

This means that we clearly do not know the amount of the cost we are asking ratepayers to incur in 2018 and 2019, since the benefits to offset some of those costs may be fleeting. [Emphasis added]

[Exhibit N-12, pp. 15-18]

[47] In the end, however, despite claiming its failure to meet the “used and useful” test, Mr. Athas did not recommend denying NSPML’s cost recovery at this point. Instead, he recommended a FAM true-up after the costs are known and requiring NSPML to report in 2019 and 2020 on the actual benefits achieved. These recommendations were pursued by the SBA at the hearing and those issues are addressed later in this Decision.

[48] The “used and useful” test was also considered by the Board Counsel’s consultants Robert M. Fagan and Tyler Comings of Synapse Energy Economics Inc. (Synapse).

[49] Synapse concluded that the Maritime Link will not be “used and useful” when it is commissioned, by reason of the delayed delivery of the NS Block and Nalcor Market-priced Energy:

...Differentiating between the Maritime Link Project—which includes the transactions that flow energy to Nova Scotia—and the Maritime Link itself, is the critical context in which an assessment of “used and useful” must be made. Utility assets are not generally put into rate base - thus enabling a return on invested equity - until they are considered “used and useful.” This standard has been applied to mean that the asset must provide sufficient benefits to ratepayers. The Maritime Link Project was not approved to allow for potential shared savings on economy energy exchange between Newfoundland and Nova Scotia, yet NSPML’s application in this case relies primarily on exactly this benefit in requesting commencement of cost recovery for its share of the Maritime Link Project. Thus there exists a disconnection between the request for cost recovery, and the commencement of benefits that should be aligned with such requests.

[Exhibit N-13, p. 6]

In this section, we analyze whether the Maritime Link Project should be considered “used and useful.” This is a common phrase in utility regulation that is used by regulators in determining which assets should be in rate base, and as result, which costs should be passed through to ratepayers. Subject to the Public Utilities Act, the Board establishes what is in rate base in Nova Scotia based on the “the value of the physical assets of the utility which are ‘used and useful’ in furnishing a particular service to the public.” This is different from a prudence determination whereby a utility was deemed to have made a reasonable investment decision—at the time of that decision. Determining if an asset is used and useful depends on whether it is providing sufficient benefits to ratepayers. There is ambiguity and leeway in the phrase. As one review [Hoecker, James. “Used and Useful”: Autopsy of a Ratemaking Policy. Energy Law Journal. Vol 8:303. 1987] of “used and useful” precedent claimed:

Used and useful, as a legal demarcation, rests upon judgments about the appropriate timing of benefits relative to the incurrence of costs and the eligibility of certain types of investments for rate base or cost of service treatment.

After a review of the Interim Assessment and estimate of the additional costs to ratepayers due to the Maritime Link Project’s delay, we conclude that the Maritime Link Project will not be used and useful until the NS Block is available—2020 at the earliest. ...

[Exhibit N-13, pp. 22-23]

Q Should the Maritime Link Project be considered used and useful as of January 1, 2018?

A No. The ML Project includes the Muskrat Falls plant, which is not providing power until 2020 at the earliest. However, even this date is not certain. A further delay in the NS Block—the critical benefit of the ML Project—would further delay a determination of whether the Project should be considered “used and useful.” Therefore, an assessment at this time should be considered preliminary and subject to change given the timing of the NS Block.

[Exhibit N-13, p. 30]

[50] In addition to not being what was originally contemplated when the ML Project was approved, Synapse stated that the delayed delivery of the NS Block and Nalcor Market-priced Energy will impact NS ratepayers in at least two ways:

Our focus is analysis of the costs to ratepayers of the delay in the commencement of delivery of capacity and energy from the Muskrat Falls Plant to Nova Scotia. Delay of delivery means that NSPI must produce or import sufficient incremental energy to offset the delayed NS Block and delayed delivery of Supplemental Energy. It also means that benefits to ratepayers from the first 30 months of Surplus Energy availability are lost, and those benefits were a critical component of the Board’s approval of the Maritime Link Project. NSPML has not conducted an analysis of such costs; ...

[Exhibit N-13, p. 5]

[51] As a result of the foregoing, Synapse noted the Board could consider a number of approaches to mitigating the potential harm to ratepayers, by effectively denying a portion of the total cost recovery requested by NSPML. That issue is discussed later in this Decision.

[52] Board Counsel consultants Morrison Park Advisors (Morrison Park) did not discuss the “used and useful” test.

4.3 NSPML’s position

[53] NSPML asserted that the Maritime Link will be “used and useful” when it is commissioned in late 2017, despite the delayed delivery of the NS Block.

[54] NSPML engaged John J. Reed, Chairman and CEO of Concentric Energy Advisors, Inc. Mr. Reed concluded that Intervenor evidence attempted to re-evaluate the “economics as they exist at the end of the project as opposed to when the project was initially considered and approved by the Board” [Transcript, June 12, 2017, p. 115], with the purpose of disallowing recovery of the ML Project Costs by NSPML.

[55] In its Closing Brief, NSPML submitted:

After considering the Consultants’ proposals Mr. Reed characterized them as seeking “to impose an after-the-fact rationalization of a cost disallowance, basing the disallowance entirely on how they say the economics of the project have turned out (at least, what they now expect to occur over a 35-year process), without regard to the Board’s prior approval of the ML, or NSPML’s performance in its development.”...

[NSPML Closing Brief, p. 40]

[56] Mr. Reed strongly opposed the imposition of an “economic used and useful” test in this instance, as he said was being suggested by the Intervenors’ expert witnesses:

...Because of events that are entirely outside the control of NSPML and that Synapse and MPA say have caused the undertaking to be less valuable their view as measured (selectively), in the short term, for electricity customers, these witnesses seek to have the Board transform its traditional used and useful standard into one which adds an after-the-fact economic test as yet another hurdle that must be cleared before the investor is able to recover its costs.

Q7. HAS THIS APPROACH BEEN USED BY REGULATORS IN THE PAST?

A7. Almost never. This is not the first time that regulators have been asked to change the rules for cost recovery after the fact, and this concept of an “economic” used and useful standard is not entirely unprecedented. As I will show, however, it is far outside the norm for public utility regulation. It has been adopted in the past by only three of 52 regulatory jurisdictions in the U.S., of which two have now effectively reversed their precedent and one has softened it to exclude “public interest” projects. The economic used and useful approach has been widely criticized as an inequitable, unworkable and inefficient approach to ratemaking.

...

Q9. WHERE HAS THE CONCEPT OF ECONOMIC USED AND USEFUL BEEN APPLIED?

A9. The concept of economic used and useful was developed in the utility industry in the mid-1980s, amid prudence reviews for nuclear power plants where the ultimate costs for the facilities had dramatically exceeded forecasted costs. In many nuclear power plant cost recovery cases, basic prudence reviews were used to determine which costs utilities could put into rate base and which were determined to be based on poor management decisions and therefore disallowed. In a very few stand-out cases, public utility commissions determined that additional costs should be disallowed because the investment had turned out to be uneconomic, rather than imprudent, and therefore an asymmetrical risk sharing between ratepayers and shareholders was imposed after-the-fact. The states which have used this approach in the past included Kansas, Massachusetts and Vermont.

[Exhibit N-28, Appendix C, pp. 6-8]

[57] After reviewing these few instances where the “economic used and useful” test has been applied, Mr. Reed concluded:

Q13. WHAT IS YOUR CONCLUSION REGARDING THE ECONOMIC USED AND USEFUL PRINCIPLE?

A13. It is ironic and informative that other regulators that have considered the appropriateness of the economic used and useful standard have largely either rejected it or replaced it with a pre-approval process that provides greater certainty with regard to the recoverability of the return on and of capital investments. Of course, a pre-approval approach is what the Board relies on today. To adopt any form of an after-the-fact economic review in Nova Scotia would represent a retreat from what other regulators have worked to build as a more effective approach to utility ratemaking.

The adoption of an economic used and useful standard by the Board would allow cost disallowances whenever load unexpectedly changed, or fuel prices unexpectedly changed, or even when environmental or tax policies unexpectedly changed, if these changes resulted in an investment ending up being less attractive than when first undertaken. Such a review could occur after an asset was fully built, or even years after it was built, without any opportunity for the utility to earn an above-cost return when more favorable circumstances arise. This imposition of asymmetrical, unknowable and unquantifiable risks on investors is inefficient and highly inequitable. The risk premium that would have to be

built into debt and equity costs to accommodate such an asymmetrical risk profile would be very high, and would significantly increase costs to consumers.

[Exhibit N-28, Appendix C, pp. 13-14]

[58] Thus, NSPML submitted that the Maritime Link will be “used and useful” when it is commissioned in late 2017.

4.4 Findings

[59] As noted in “Energy Law and Policy”, by G. Kaiser and B. Heggie (Carswell, 2011), at p. 201:

In traditional rule-making, cost recovery was available only when the utility could meet two conditions: first, the costs were prudently incurred; and second, the project was used and useful.

[60] In the Board’s opinion, under the current circumstance and absent any imprudence, it would be difficult to arbitrarily deny NSPML recovery of its prudently incurred costs if the Maritime Link is “used and useful”, even if only to some partial extent. The Board notes it may need to consider in the future, absent the anticipated bargain, what value or balance of the asset should be included in rate base, securitization or other regulatory options.

[61] The threshold issue to be determined in this proceeding is whether the Maritime Link will be “used and useful” when it is commissioned in late 2017. If it is not, NSPML should not recover any assessment of rates from NSPI and ratepayers until such time as it is “used and useful”.

[62] In considering this issue, the Board observes that no Intervenor claimed that NSPML was imprudent in its decision to continue with the construction of the Maritime Link in the face of Nalcor’s announced delay in completion of the Muskrat Falls Generating Station.

[63] As noted earlier in this Decision, NSPML concluded that its prudent course was to proceed with the completion of the Maritime Link as originally scheduled. NSPML determined that delaying completion of the Maritime Link to align its in-service date with a January 2020 availability of the NS Block would result in incremental costs to Nova Scotia electricity customers of between \$398 million and \$533 million (described more fully later), due at least in part to the renegotiation of construction contracts that were already in place and work commenced. This includes Allowance for Funds Used During Construction (AFUDC) for the Maritime Link which could climb from the \$230 million approved by the Board in its 2013 Decision to approximately \$430 million. Upon capitalization of the Maritime Link, these incremental costs of delaying would attract additional depreciation expense and return on capital through the useful life of the Maritime Link. Moreover, additional financing costs would continue throughout the operations phase.

[64] Taking all of the above circumstances into account, despite the delayed delivery of the NS Block, the Board is unable to find any imprudence in NSPML's decision to proceed with the completion of the Maritime Link on the originally scheduled timeline. In making this finding, the Board is aware that while carrying costs will not be capitalized as AFUDC, ratepayers are still being asked to cover these carrying costs as a result of the two year delay.

[65] The Board notes here that this finding is limited to the issue of prudence in deciding to complete construction of the Maritime Link. The issue of whether NSPML prudently incurred the costs of constructing the Maritime Link (including construction and

contract costs, management costs, financing costs, etc.) are not the subject of this proceeding and will be canvassed in the final assessment proceeding to be held later.

[66] The Board now turns to the issue of whether the Maritime Link will be “used and useful” when it is commissioned in late 2017, at least two years before the NS Block can be delivered over the Maritime Link.

[67] Kaiser and Heggie, *supra*, at p. 202, state that boards and other regulatory authorities have been given “considerable latitude” in determining whether assets are “used and useful” with respect to a utility’s ability to recover its costs for the construction of assets. As an example, they refer to the judgment of the Alberta Court of Appeal in *Alberta Power Limited v. Alberta Public Utilities Board*, 1990 ABCA 33 (CanLII), leave to appeal refused (1990), 110 A.R. 399 (note), 110 A.R. 400 (note) (S.C.C.). In *Alberta Power*, that Board considered whether certain transmission assets were “used and useful” and could be included in rate base, applying the rate base methodology set out in s. 82 of the *Public Utility Board Act*, R.S.A. 1980, c. P-37, which provided:

82(1) In fixing just and reasonable rates, tolls or charges or schedules of them, to be imposed, observed and followed thereafter by an owner of a public utility, the Board shall determine a rate base for the property of the owner of a public utility used or required to be used to provide service to the public within Alberta and on determining a rate base it shall fix a fair return on the rate base.

[68] The Alberta Public Utilities Board denied the inclusion of certain assets into rate base because it found that the assets were not required, including a tie-line between Saskatchewan and Alberta. The Board concluded that the tie-line was being used to provide additional reserve capacity to Saskatchewan, applying the “used and useful” test:

[45] The phrase “**used or required to be used**” is well known in the field of utility regulation.

[46] Much of the argument before us was directed to a consideration of whether that expression is conjunctive or disjunctive. More significantly, it was directed to the proposition that if an asset is in fact “**used**” then any need that it be “**required**” disappears.

[47] The case law, and common sense, dictate that there may be assets included in a rate base which are not in actual use such as standby equipment, and the phrase is often used disjunctively to recognize that situation. On the other hand, mere use is not sufficient to burden consumers with the cost. Clearly the consumer need not bear all the costs of an asset which is used if, for example, it reflects an imprudent expenditure. Assets unnecessarily used are not, simply by use, put into the rate base. Without putting too fine a point on interpretation we conclude that even if an object is used it must also be required. If it is not in actual use, it must nonetheless be required. The expression may be construed both disjunctively and conjunctively. We are supported in that view by American case law as well as by a consideration of the object of utility rate regulation.

[48] There are many decisions in the United States dealing with this terminology and a similar expression "**used and useful**".

[49] The phrase "**used and useful**" has come to import a measure of flexibility in determining when assets may be brought into the rate base. "**Used and useful**" may be viewed as both conjunctive and disjunctive: Used and Useful: Autopsy of a Ratemaking Policy, (1987), 8 Energy Law Journal 303.

[50] The object of these kinds of provisions is to recognize the need of utility operators to acquire property in advance of actual need while, at the same time, recognizing that ratepayers need only pay a return on that property from which they have a reasonable guarantee of receiving service: **Central Maine Power Company v. The Public Utilities Commission et al.** (1981) 433 Atl. R. (2nd) 331 (Supreme Court of Maine).

[51] Once the interpretation is determined, whether a particular item is to be brought within the rate basis is essentially a question for the judgement of the board which does not involve a question of jurisdiction or law: **B.C. Hydro and Power Authority v. The West Coast Transmission Co. Ltd. et al.** (1981), 36 N.R. 33 at 56. [Bolding in original, underlined emphasis added]

[*Alberta Power*, paras. 45-51]

[69] With respect to the specific issue of the tie-line between Alberta and Saskatchewan in that case, the Appeal Court found:

[53] This is a line which supplies the Saskatchewan Power Corporation with power generated in Alberta. It connects the Alberta Interconnected System (A.I.S.) with the Saskatchewan Power Corporation (S.P.C.) facilities. S.P.C. is to pay the carrying costs of this line until the end of 1994. The line may be used to generate revenue for the Alberta system as a whole, to provide an alternative inter-provincial connection to that with B.C. Hydro and to give flexibility.

[54] Alberta Power Limited claims that it comes within the concept in s. 82 because the tie provides benefits and is used or required to be used to obtain those benefits.

[55] The board did not err in deciding that the property was neither used or required to be used to provide service to the public within Alberta. There may be some benefit to the public within Alberta but that does not, on itself, justify the bringing of the asset into the rate base at this time.

[56] This is a classic example of the need for the regulatory agency to balance interests between utility investors and the consumers. No question of law therefore arises on this point. [Emphasis added]

[*Alberta Power*, paras. 53-56]

[70] Another decision noted by Kaiser and Heggie, *supra*, is *British Columbia Hydro & Power Authority v. Westcoast Transmission Co.* (1981), 36 N.R. 33 (Fed. C.A.); leave to appeal refused (1981), 37 N.R. 540n (S.C.C.). In that case, B.C. Hydro, a customer of Westcoast Transmission, opposed tolls before the National Energy Board (NEB), in part because it asserted certain assets that were included in rate base were not “used and useful”. Again, the authors note that the Court provided “considerable discretion” to the NEB. In confirming the NEB’s decision, the Court stated:

The question of what items should be included in a rate base is one for the judgment of the Board. In reaching that judgment, the Board is without doubt entitled to use as a guide, if it sees fit, the test of the present use or usefulness of the items sought to be included in providing utility service. But there is no rule of law that such a test must be used or followed or that it is the only principle that can be applied. Nor does it follow that the use of other principles in determining a rate base will result in tolls that are not just and reasonable. There is accordingly, in my opinion, no basis for regarding these objections as raising questions of law or jurisdiction on which the Court should or might properly intervene.

[*Westcoast Transmission*, para. 55]

[71] The Board considered the “used and useful” principle in a case involving NSPI and its application to include in rate base the Point Tupper Marine Terminal (PTMT) located at the site of the Point Tupper Generating Station on the Strait of Canso: see *Re NSPI*, 2008 NSUAR 74. NSPI initially built the terminal without Board approval and subsequently applied to include it in rate base. NSPI’s application proposed the inclusion of the cost of the original project, together with carrying costs incurred since the time the terminal began operation in early 2005. The Board concluded:

[39] In addition, it is clear from long-established principles of public utility regulation that the Board must be satisfied that costs to be borne by ratepayers as a result of capital expenditures by a utility (or, in this case, the transfer of an asset to a utility) are prudent, fair and justifiable and provide a necessary service to ratepayers at the lowest reasonable cost.

[40] Based on this premise, there are two questions to be addressed in this case—does the inclusion of PTMT in rate base meet the criteria set out above and, if so, at what value?

[41] The Board finds that it is appropriate to include PTMT in rate base. In coming to this conclusion, the Board wishes to make it very clear that it in no way considers its January 22, 2004 letter to NSPI regarding its plan to construct the PTMT as a 'precedent' for this approval, despite the apparent reference to that assumption in NSPI's May 16, 2008 written response, as noted earlier in this decision. In the Board's view, no acceptance or approval for the construction of PTMT by NSPI as an unregulated asset was given by the Board, either explicitly or implicitly, in its letter of January 22, 2004. The Board had no authority to approve actions undertaken by the unregulated component of NSPI. It indicated it did not "oppose" the project, but that can hardly be viewed as a future endorsement of same. The Board's letter, a larger excerpt of which is set out earlier in this decision, clearly indicates that it would review "...the transaction, and its related cost..." should a future application be made. In the Board's view, its letter sets a higher standard for approval than the "...valuation for inclusion..." process which NSPI has described.

[42] Instead, the Board's finding that it is appropriate to include PTMT in rate base is based on the fact that the Board is satisfied that PTMT is a used and useful asset. The Board agrees with NSPI that the provision of a second terminal for unloading solid fuel supply destined for the Point Tupper and Trenton generating plants constitutes a reasonable and justifiable addition to NSPI's assets. In view of NSPI's reliance on coal and the importance of the long-term, uninterrupted operation of these two generating facilities, the ability to have a secure terminal in proximity to these two stations, is a significant benefit to ratepayers. While the Board acknowledges the possible impact of current and future environmental regulatory standards on coal-burning plants, the practical reality is that coal will continue to fuel these generators for the foreseeable future, as the costs and time to replace them with other reliable energy sources will be both significant and lengthy.

[43] The Board understands the argument of participants that PTMT has not been fully utilized, either with respect to its ability to handle large volumes of coal, or its ability to accommodate bulkers. They take the position that, as a result of this under-utilization, PTMT's capacity and costs exceed any benefit which could be derived from it, since much of NSPI's coal continues to come from traditional sources in smaller, self-unloading vessels.

[44] However, the Board is of the view that, while it is correct that these attributes have not yet been fully utilized, this does not eliminate the potential benefit they bring to ratepayers. Both the higher volume storage capability, and PTMT's ability to accommodate bulkers and self-unloading vessels, provide NSPI, and consequently its customers, with leverage to seek out the lowest-cost coal in a global marketplace, and motivate traditional suppliers to compete more aggressively for NSPI's business. Both of these factors are important advantages NSPI would not otherwise have. As recent events have made clear, the only 'certainty' in what will happen to fuel costs in the future is that there is no 'certainty'. Consequently, it cannot be fairly said that the supply options available as a result of the design of PTMT do not result in a benefit to customers.

[45] It is in this context that the Board finds that PTMT can appropriately be included in rate base as it is satisfied that PTMT does provide a benefit to ratepayers. Does that benefit justify the inclusion of the total original project cost and carrying costs since 2005—the \$42.13 million valuation proposed by NSPI? In the Board's view, the answer to that question is clearly 'no'. [Emphasis added]

[Re NSPI, paras. 39-45]

[72] NSPML submits that the commissioning of the Maritime Link will provide significant benefits to NS ratepayers immediately, despite the absence of the NS Block.

[73] As discussed more fully later in this Decision, NSPML outlined the four general areas where NSPI and its ratepayers will benefit from the commissioning of the Maritime Link at least two years before the delivery of the NS Block. Those four areas are: 1) exported energy to Newfoundland and Labrador; 2) imported energy from Newfoundland and Labrador; 3) the optimization of NSPI generation assets; and 4) enhanced reliability of NSPI's system.

[74] While the Intervenors questioned the quantification of such benefits, they did not generally challenge the fact that these benefits may exist. Instead, their expert witnesses focused their evidence on providing means to calculate the differential loss caused by the delay in receiving the NS Block. Board Counsel consultants Morrison Park and Synapse, as well as the CA's consultant Mr. Chernick, suggested methods to determine how the "costs" of the delay could be apportioned as between NSPML and NSPI ratepayers.

[75] However, in the end, no party submitted to the Board that cost recovery should be absolutely denied because of NSPML's failure to satisfy the "used and useful" test.

[76] In particular, the Board notes Mr. Chernick's Opening Statement at the hearing, wherein he qualified his earlier pre-filed testimony in relation to the application of the "used and useful" test. His conclusion was that principles of equity should apply in the apportionment of the risks of delay, as opposed to a refusal of cost recovery based on whether the Maritime Link will be "used and useful" in late 2017:

So the question to the Board is: who should bear the loss of the Maritime Link when it is physically complete, but unable to provide the energy for which it was built? NSPML asserts that the NS Power ratepayers should pay all the costs of the Maritime Link in this period; the intervenors and the Board's experts all take the position (to one extent or another) that NSPML and its parent Emera should absorb some of the costs.

NSPML has repeatedly attempted to reframe the central issue as one of prudence, or whether the so-called "economic used-and-useful" standard should be applied. These arguments are red herrings. No party has investigated the prudence of NSPML and Emera in reviewing Nalcor's plans and progress; given the schedule in this proceeding and the complex corporate structures of Nalcor and Emera, reviewing NSPML's ability to affect the construction of Muskrat Falls or foresee the delays in time to optimize Maritime Link construction. The issue is not whether market conditions (fuel prices, NS Power load, renewable standards, market power prices, transmission to other market, costs of new generation) has made the Maritime Link uneconomic. The Maritime Link was never expected to be economic in 2018 or 2019. No evidence filed in the case argues that cost recovery should be reduced due to market conditions.

While the NSPML Rebuttal (at 57) asserts that I posited "that the UARB must match costs recovered with benefits realized in 2018 and 2019," I did nothing of the sort. I recognize that the Maritime Link was expected to provide benefits that were less than the costs in 2018 and 2019, and I thus computed an adjustment to reflect the decline in the resources expected to be delivered in those years (from the original Muskrat Falls schedule to the NSPML's current expectations).

My testimony, and that sponsored by other parties, maintains that cost recovery should be reduced until the Maritime Link can perform as promised. If the NS Block starts flowing in 2020 and NS Power can access economy power, I would support allowing full cost recovery for the Maritime Link from that date forward.

Ultimately, the split of the Maritime Link costs between NS Power ratepayers and NSPML shareholders is a matter of equity, and hence of the Board's judgment. ... [Emphasis added]

[Exhibit N-31, pp. 1-2]

[77] As noted earlier, and discussed more fully later in this Decision, NSPML provided evidence to outline how it considered the Maritime Link will be "used and useful", even in the absence of delivery of the NS Block.

[78] The Board concurs with NSPML that there is no legal precedent for the proposition that its cost recovery should be denied because the Maritime Link is only partially useful, or simply because it is being used for purposes other than what was originally anticipated.

[79] The Board accepts NSPML's evidence that several benefits may accrue to NSPI and its ratepayers from the use of the Maritime Link when it comes into operation on January 1, 2018. While delivery of the NS Block is delayed for at least two years, NSPI and its ratepayers may be able to make use of the Maritime Link immediately, and therefore receive various benefits from its use. In that sense, the Maritime Link will be useful to ratepayers. While the immediate benefits from the Maritime Link will not be as originally contemplated in the short term, it will be useful, at least to some extent.

[80] The Board notes in passing that NSPML asserted Mr. Chernick and Synapse were wrong when they claimed that the ML Project (including the availability of the NS Block) was not completed as promised. NSPML suggested that it had completed what it had undertaken to do, i.e., the Maritime Link itself. In the Board's view, however, the intent was clear and unequivocal from the outset. The Maritime Link was built primarily to deliver the NS Block generated at Muskrat Falls to Nova Scotia. It is important not to lose sight of that fact.

[81] The Intervenors argued they were not applying an after-the-fact "economic used and useful" test, as claimed by NSPML. Had the consultants been applying the "economic used and useful" test in the traditional sense of the "used and useful" standard, the consultants would have requested that NSPML's recovery of costs for the ML Project be totally denied until the NS Block was being delivered. They did not pursue this result. Instead, they submitted that only a portion of the cost recovery be allowed, based on "equity" or what is "just and reasonable" in the circumstances, an entirely different ratemaking consideration. As Mr. Chernick and Mr. Reed noted, it was never contemplated that the Maritime Link would be economic in 2018 or 2019 in any event.

[82] Taking all of the above into account, the Board finds that the Maritime Link will be “used and useful” when it comes into operation.

[83] The Board notes here that full cost recovery may be subject to other ratemaking principles, such as whether the recovery is “just and reasonable.” However, that issue is canvassed later in this Decision.

5.0 Should there be a reduction in the interim assessment as a consequence of delayed delivery of the NS Block?

[84] As noted in its original submission, NSPML asked for an interim assessment of \$162 million in 2018 and \$164 million in 2019.

[85] In its Opening Statement, NSPML recommended an adjustment to defer depreciation expenses totalling \$51 million in each of 2018 and 2019, and agreed to a further adjustment to defer a financing amortization expense of \$1.5 million in each of 2018 and 2019. Accordingly, NSPML’s request is a reduced interim assessment of \$109.5 million for 2018 and \$111.5 million for 2019.

[86] The additional costs to ratepayers (before consideration of any benefits) in 2018 and 2019 are these amounts plus any replacement fuel costs required because the NS Block is not available.

[87] NSPML argued that a delay in the construction of the Muskrat Falls Generating Station does not result in any cost burden to NSPI customers. Based on what NSPML says are reasonable assumptions, it forecasts a net present value benefit for customers between \$17 million and \$75 million by the end of the term of the NS Block. NSPML attributes part of that benefit to receiving two additional years of power from the NS Block post-2019 when renewable energy requirements are at a higher threshold and

renewable energy is forecasted to be more valuable in a carbon constrained environment, which Nova Scotia is expected to be.

[88] The Intervenors and Board Counsel consultants believe there is a burden to NSPI customers and recommend the Board lower the amount of the assessment to take that into account.

5.1 Positions of the Parties

5.1.1 NSPML

[89] NSPML argued that the potential for delaying completion of the Muskrat Falls Generating Station was well canvassed during the 2013 hearing and it was accepted that there would be a mismatch between costs and benefits of the Maritime Link in the early years. In its Brief, NSPML stated:

Rather to address the concern expressed by the Chair that the ML would be completed on time and then sit, unused, while NSPML earned AFUDC, the UARB determined that in order to address the concern raised by MPA [Morrison Park] regarding the potential for “a considerable increase in net cost for the Nova Scotia ratepayer” resulting from a delay in the availability of MFGS, the parameters for earning AFUDC would be specifically constrained. In particular, the UARB directed the following standards for evaluation in this Interim Assessment Application of NSPML’s entitlement to recover all of its Project Costs:

(a) Decision paragraph 331:

Ensuring only the prudent costs of the ML Project investment and related expenses are passed on to NS Power and its ratepayers will be a particular focus of the Board in the future.

(b) Decision paragraphs 356-357:

The Board...agrees that cost overruns are a serious concern for ratepayers...The Board approves a variance of \$60 million in prudently incurred costs as requested by NSPML. The Board expects NSPML to have strict controls during the design and construction phase of the ML Project to keep its costs within the approved envelope. While the Board will consider any additional request for cost overrun approval, the prudence test will be applied in rendering its Decision.

(c) Decision Paragraphs 335-338:

Elsewhere in this Decision, the risks of cost overruns are addressed in terms of approved cost of the ML Project and the \$60 million variance approval sought by NSPML.

However, the risks related to construction delays remain... The Board accepts MPA's evidence that these risks fall entirely on Nova Scotian ratepayers. This is an unreasonable allocation of risk for this project.

Accordingly, the Board expects NSPML to 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.** [Emphasis added by NSPML.]

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 [Newfoundland].

NSPML understood, and understands, from the foregoing passages that the standards by which the UARB would assess NSPML's Project Costs for recovery in its assessment against NS Power are: **prudent management of the ML construction schedule and the Project Costs so as to minimize total costs of the ML Project to ratepayers.** As noted by Mr. Janega in the Company's Opening Statement: [Emphasis added by NSPML.]

The Board determined that NSPML would be judged on the traditional standard of prudence in the construction of the Maritime Link, and specifically instructed and NSPML should manage project construction:

...while remaining mindful of the total impact on costs in order to minimize costs to ratepayers.

In particular, as can be seen from Paragraph 337 of the Approval Decision (the second last paragraph excerpted above), the Board recognized MPA's concern that the risks of delay would fall entirely on Nova Scotia Ratepayers, determined that such risk allocation would, unconstrained, not be reasonable, and then provided sound direction to address this concern.

The UARB did not create "additional incentive" for NSPML "by a mechanism affecting [NSPML's] AFUDC rate or rate of return on equity," as MPA suggested. It did not adopt a "cost-sharing" mechanism.

[NSPML Closing Submission, pp. 28-30]

[90] NSPML argued that by maintaining the in-service date of December 31, 2017, NSPML minimized AFUDC and operating costs. It stated, unchallenged by Intervenor, that the approved schedule avoided costs to Nova Scotia electricity consumers of between \$398 million and \$533 million in additional construction, financing and carrying costs. These costs are more particularly detailed as follows:

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

[Exhibit N-3, p. 16]

5.1.1.1 ML Project Legislation

[91] NSPML argued that the *ML Act* and *ML Regulations* were designed to provide certainty and predictability with respect to the recovery of costs:

- (b) The legislative direction that, once the ML Project is approved, NSPML;
 - (i) is “entitled” to recover “all costs incurred in connection with the ML Project”;
 - and
 - (ii) is to set an assessment against NS Power for the recovery of “all approved project costs”.

This Application by NSPML for authorization of an assessment against NS Power is the second of these two steps, pursuant to which, subject to validation of the prudence of NSPML's management of construction of the ML, NSPML expects to be authorized to commence recovery of its Project Costs, as approved in the Approval Decision, in order to meet its financial obligations as of January 1, 2018.

[NSPML Closing Submission, p. 16]

[92] NSPML submitted that the ML Legislation indicates that costs are recoverable based on project approval, as distinct from the more conventional ratemaking standard that costs are recovered in connection with assets used and useful in the furnishing of the service to the public.

5.1.1.2 Economically Used and Useful Test

[93] As noted earlier, based on the evidence of John Reed, NSPML argued that what the Intervenors and Board Counsel consultants were advocating is a discredited, after-the-fact, economic rationalization embedded in what has been referred to as the "economic used and useful principle". Mr. Reed, in his various submissions, canvassed the history of the principle, both in the U.S. and Canada, and noted that it has been adopted by only 3 of the 52 regulatory jurisdictions in the U.S. and that two of those have now effectively reversed their precedent. NSPML stated:

- (a) Such an approach would create an untenable regulatory and economic situation. Utilities could never fully know whether their actions are reasonable or where their shareholders may be exposed to asymmetric risks.
- (b) Such an approach promotes neither greater efficiency in the provision of utility services nor equity. Instead it allows a "second bite of the apple...while relegating economic, legal, and established regulatory principles to the dustbin."
- (c) Such an approach would create financing barriers for utility projects, thereby jeopardizing the ability of utilities to provide service in an efficient manner.
- (d) Such an approach could, and has in fact, led to the utility investor experiencing severe financial distress.
- (e) Such an approach would penalize investors for prudent investments that are, or had been, reasonably expected to yield net present value benefits over their lifetime, that are not excessive in scope, and that are still in service, but whose costs may exceed market prices at a particular moment in time. In this way the

approach may discourage utilities from making least-cost investments that fail, or might after the fact and at any given time fail, a short-term market cost-effectiveness test.

- (f) A pre-approval approach, such as that already used by the UARB in general, and such as that more particularly directed in the special purpose legislation providing the regulatory framework for the ML Project in particular, recognizes the fact that utilities must plan to meet needs, and thus must take risks that other service providers need not take. For large projects subject to uncertainty associated with appreciable lead times, the pre-approval of risk and reward balance provides incentives to efficiency while shielding utilities from risks over which they have little or no control.

As noted by Mr. Reed, those U.S. utility regulators which experimented with the economic used and useful concept have largely replaced it with a pre-approval process that provides greater certainty with regard to the recoverability of the return on and of capital investments. Of course, a pre-approval approach is what the UARB relies on today, is what the ML specific regulatory framework directs, and is what has taken place in respect of the ML Project through the comprehensive Approval Process and resulting clear and considered Approval Decision. Mr. Reed cautions that:

To adopt any form of an after-the-fact economic review in Nova Scotia would represent a retreat from what other regulators have worked to build as a more effective approach to utility ratemaking.

The adoption of an economic used and useful standard by the Board would allow cost disallowances whenever load unexpectedly changed, or fuel prices unexpectedly changed, or even when environmental or tax policies unexpectedly changed, if those changes resulted in an investment ending up being less attractive than when first undertaken. Such a review could occur after an asset was fully built, or even years after it was built, without any opportunity for the utility to earn an above-cost return when more favorable circumstances arise. This imposition of asymmetrical, unknowable and unquantifiable risks on investors is inefficient and highly inequitable. The risk premium that would have to be built into debt and equity costs to accommodate such an asymmetrical risk profile would be very high, and would significantly increase costs to consumers.

[NSPML Closing Submission, pp. 50-51]

5.1.2 Industrial Group

[94] The Industrial Group argued that the Board's powers, under the *Public Utilities Act*, allow it to set a just and reasonable return, which the Industrial Group stated includes the concept of fairness and equity, allowing the Board to apportion, as between shareholders and ratepayers, the risk which has materialized, that is the Maritime Link will be in service in 2018, but the NS Block will not be available. In its Closing Submission, the Industrial Group stated:

Under the **Public Utilities Act**, the Board has the power to determine the value of the property of a utility:

30(1) The Board may at any time, with the assistance of such engineers, accountants, valuers, counsel and others as it deems wise or advisable to employ, inquire into and determine the extent, condition and value of the whole or any portion of the property and assets of any public utility used and useful in furnishing, rendering or supplying a particular service to or for the public, as of the date to be fixed by the Board.

(2) The Board shall determine the value of such property and assets on the basis of the prudent original cost thereof or by such other method as the Board may from time to time prescribe, deducting therefrom the amount of the accrued depreciation of such property and assets as determined by the Board. [Emphasis added by Industrial Group]

The Board may fix the return the utility is entitled to earn annually:

45(1) Every public utility shall be entitled to earn annually such return as the Board deems just and reasonable on the rate base as fixed and determined by the Board for each type or kind of service furnished, rendered or supplied by such public utility ...

(2) Such return shall be an addition to such expenses as the Board may allow as reasonable and prudent and properly chargeable to operating account, and to all just allowances made by the Board and according to this Act and the Rules and Regulations of the Board. [Emphasis added by Industrial Group]

The Industrial Group observes that the **Public Utilities Act** uses a different language when focusing on the allowed return versus a utility's expenses or rate base. The allowed return is "as the Board deems just and reasonable". In contrast, when determining the value of the property of the utility, in addition to the requirement that it be "used and useful"; its value is set on the basis of the "prudent original cost" or such other method as the Board prescribes (s.30(2)); likewise, in setting the rate base and determining the value of the physical assets, the Board is to include organization expenses and construction overheads "prudently expended" (s.42(2)).

The Industrial Group respectfully submits that the linguistic distinction is not an idle one and it is within the Board's authority to adjust NSPML's return and set it based on what is "just and reasonable", absent a finding of imprudence.

[Industrial Group Closing Submission, pp. 3-4]

[95] The Industrial Group canvassed two recent Supreme Court of Canada cases being: *ATCO Gas and Pipelines Ltd. v. Alberta (Utilities Commission)*, [2015] 3 SCR 219; and *Ontario (Energy Board) v. Ontario Power Generation Inc.*, [2015] 3 SCR 147. The Industrial Group argued that the core bargain of the ML Project was cash for energy and since ratepayers are not getting access to the NS Block until 2020, the core

bargain has not been fulfilled. The Industrial Group argued that the Board's focus should be on equitably apportioning the risk premium attached to the rate of return and, in the circumstances, the rate of return should be adjusted proportionate with the risk premium over the cost of debt while ensuring that NSPML continues to meet its obligations under the Federal Loan Guarantee (FLG). A specific amount was not recommended.

5.1.3 Consumer Advocate

[96] Mr. Chernick, on behalf of the CA, framed the question for the Board as who should bear the loss of the Maritime Link when it is physically complete but unable to provide the energy for which it was built. He rejected NSPML's allegation that he applied the so-called "economic used and useful" test. He argued the issue is not whether market conditions made the Maritime Link uneconomic, but rather he advocated that cost recovery be reduced until the Maritime Link can perform as promised. He recommended the assessment be set to recover NSPML's operating costs and maintain debt service requirements required by the loan guarantee, but nothing more.

[97] The CA argued that since the Application places all the cost and consequences of delay onto ratepayers, the proposed assessment fails the necessary test of being just and reasonable and must, in fact, be reduced, not just redistributed over time.

[98] The CA stated that the concept of prudently incurred costs is not the issue in this proceeding. Rather, the question is: what, if anything, should be done by the Board to offset the burden to ratepayers of the power that has been contracted for? The CA argued the concept of prudence is simply a methodology available to the Board to assist it in resolving issues, but does not preempt the fundamental criteria under the *Public*

Utilities Act of ensuring a rate structure is just and reasonable. Relying on the *Atco* and *Ontario Energy Board* cases cited above, the CA stated:

In reaching its conclusion, this Board must decide on a rate which is just and reasonable for consumers and just and reasonable for the utility. In making this assessment, the Board has wide discretion to fashion a remedy which results in just and reasonable rates. In exercising this discretion, considerations relating to prudence are relevant – but they do not represent a legal rule. There is no legislated or prescriptive formula mandating that a certain methodology be adopted. The test is one of outcome – is the result fair and reasonable?

[CA Closing Submission, p. 6]

[99] The CA presented options for the Board to consider:

There is acceptance that the terms of the Federal Loan Guarantee should not be jeopardized by any sharing. One fair mechanism would be the approach proposed by Mr. Chernick, updated to reflect the deferral of depreciation: to set the assessment for 2018 and 2019 at the minimum level of funding for the FLG from the proposed assessment (recognizing the deferral of depreciation) and leave NSPML to absorb the remaining costs. For 2018, that amount would be \$111 million (proposed assessment) – \$78 million (FLG minimum) = \$33 million. Since the proposed assessment would include \$51 million in equity return, the shareholders would still receive a profit of \$18 million on the Maritime Link, even as ratepayers cover both the expected frontloading of the Maritime Link costs and a substantial loss due to the delay in delivery of the Nova Scotia Block. Compare the confidential estimate of the foregone benefit of the Nova Scotia Block (Evidence of Paul Chernick, p. 18, line 13) to the NSPML estimate of the value of the Maritime Link in 2018 and 2019 (*ibid.*, p. 17, line 24). The computation for 2019 would be similar.

If the Board wishes to burden customers even more heavily for the Muskrat Falls delay, the Board could reduce the portion borne by shareholders, such as by splitting the net amount between ratepayers and shareholders. For 2018, the shareholder portion would be \$33 million ÷ 2 = \$16.5 million, a return of about 6% on the \$560 million in reject equity (Exhibit N-1, page 26, line 11). Again, a similar calculation could occur for 2019.

[CA Closing Submission, p. 16]

5.1.4 Small Business Advocate

[100] The SBA argued, based on the evidence of his witness John Athas, that the analysis of how much by way of benefit is realized from using the Maritime Link should wait until 2019 so an actual accounting and after the fact adjustment (i.e., true up) can be done.

5.1.5 MEUNSC

[101] The MEUNSC essentially supports the proposal to reduce NSPML's rate of return.

5.1.6 Board Counsel Witnesses

[102] Synapse argued that NSPI ratepayers are unfairly exposed to the full harm of the Maritime Link Project if cost recovery proceeds based on NSPML's original Application. They cite the uncertain benefits to ratepayers in 2018 and 2019 because of uncertain price and volumes for economic energy exchange with Newfoundland and the substantial cost of replacement power. They emphasized that the replacement power costs identified by NSPML exclude the additional costs associated with a delayed benefit of Nalcor Market-priced Energy and recommended denying cost recovery for a portion of the total cost recovered while still meeting the minimum requirements to meet the Federal Loan Guarantee.

[103] Morrison Park used what they described as an industry standard methodology, Levelized Unit Energy Costs (LUEC). They estimated that the LUEC for on time delivery of the ML Project was approximately \$154 per megawatt hour and the LUEC for delivery two years later was \$170 per megawatt hour. They argued that the core bargain, cash for energy, will not be achieved until the NS Block appears in 2020. In Morrison Park's opinion, it is unfair to say that the ML Project is fully in service just because the transmission line happens to be available.

[104] Morrison Park reiterated an opinion provided in 2013 that placing the full risk of the project delay on Nova Scotia ratepayers and sharing none of that risk with NSPML was unreasonable. Morrison Park concluded:

In 2013, the Board stated clearly that if the Project was delayed beyond 2017, it would review the situation and determine how AFUDC would be managed until the Project was in-service. Today, NSPML is proposing that the Link be placed into service, but payments be made as if the Project were in-service. However, the Project will not be in-service. From a financial point of view (as measured by LUEC calculations), placing the Link into service in 2018 while the Project is delayed would have a very similar effect on ratepayers as accumulating AFUDC at its full pre-2018 rate. As a result, we believe that the Board should consider what financial arrangements should be in place during the delay period, in the same way that it would have considered the arrangements for AFUDC. In particular, the rate of return on equity for NSPML during the delay period should be a focus for attention.

If the Link is declared to be in-service, then debt terms and conditions become practical constraints on the Board's flexibility to determine financial arrangements during the period of delay. If the Link is not declared to be in-service, then debt terms and conditions may not be constraints, but ongoing costs of the Project will be. In either case, the Board should consider these practical issues.

As we did in 2013, we would recommend to the Board that it consider implementing incentive arrangements for NSPML and its related companies. If NSPML is required to share in the burden of Project delay, then we suggest that the Board consider offering NSPML and its related companies the opportunity to earn back that burden through new proposals that would be advantageous to Nova Scotia ratepayers. Creating an extra incentive for such future projects would be valuable if as a result new ways were found to benefit Nova Scotia ratepayers that might otherwise not have come about, and hence provide further opportunities to offset the cost of the Project delay.

[Exhibit N-11, pp. 27-28]

5.2 Findings

[105] The Board set out the test it intended to apply with respect to delay in its

July 22, 2013 Decision, at paragraph 336 through 338:

[336] However, the risks related to construction delays remain, as identified by Morrison Park. The Board accepts their evidence that these risks fall entirely on Nova Scotian ratepayers. This is an unreasonable allocation of risk for this project.

[337] Accordingly, the Board expects NSPML to 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.

[338] 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. [Emphasis added]

[106] NSPML's argument that it thoroughly canvassed the possibility of delay in the 2013 hearing is a bit of revisionist history. The issue was brought to the Board and put in issue by Board Counsel consultant Morrison Park and NSPML was required to respond. NSPML did not lead evidence in chief on the point. As outlined by the passage cited by the Industrial Group, NSPML sought to minimize those concerns. Ms. Rubin stated:

Had NSPML not provided such optimistic assurances and minimized the risk of non-delivery of energy for two years (and potentially longer), the outcome of the decision to approve the Link may well have been different. And, while that decision is not to be revisited now, certainly all participants proceeded in reliance on the representation that the risk of a material mismatch was unlikely and would be managed.

[Industrial Group Reply Submission, p. 2]

[107] However, in that hearing, the Board was apprised of the risk of delay by Morrison Park and dealt with it in the passage noted above. The prudence of the various expenditures made by NSPML in the construction of the Maritime Link is not being reviewed in this proceeding. As noted earlier, as acknowledged by NSPML at the hearing, during the final assessment hearing it is open to parties to question these costs. So, for example, if NSPML, in the view of a party spent too much on the cabling contract, that is still open for review. However, NSPML's management of the construction timetable, having been apprised in 2016 of the delay in Muskrat Falls, is the subject of this proceeding.

[108] As noted earlier in this Decision, no party has alleged imprudence on the part of NSPML in completing the Maritime Link in 2017. Indeed, the Board observes that the management of construction of a challenging project by Mr. Janega and his colleagues continues to be on time and on budget.

[109] No party questioned NSPML's calculation of the extra AFUDC financing costs had NSPML delayed the project.

[110] NSPML argued that by 2014 the die was cast. Having made contractual commitments to the cable provider and others, there was no economic way to unscramble the eggs and delay the Maritime Link for two years.

[111] NSPML stated:

The complexity of the ML Project is further illustrated in NSPML's Supplementary Evidence. In describing the considerations taken by NSPML regarding whether to delay completion of the ML Project to coincide with the availability of the NS Block, that evidence illustrates the complexity of planning and co-ordinating, and adjusting, the timing for very long-lead time special purpose components and highly specialized global service providers. In discussing the planning and scheduling complexities with counsel for the Industrial Group during the oral portion of the hearing, Mr. Janega explained:

When we locked down the cable contract and the converter contract, those schedules and the conditions were to take advantage of opportunities for the supply windows for the manufacturing windows and contract terms that in the instance of the cable we had no ability to alter that schedule.

So by 2016, even after the transmission contract was awarded in 2015 and Nalcor was advancing, manufacturing of the cables had begun, manufacturing of components for the converters had, and the schedules were being locked in for subsequent work for us. But we did, to the best of our ability, defer work that could push – could be pushed out to take advantage of that.

In subsequent testimony Mr. Janega elaborated:

If we had cancelled a contract there would be commercial terms that we would be subject to. We had, during, during the discussions on the cable, actually considered whether or not there were options to defer from 2016 to '17.

In the end we actually included that as the base plan for the contract instead of paying a premium per se to try and retain flexibility. Most of that was driven by the manufacturing slots.

Once you pick your manufacturing date because these are very long lead items, both the converters and the cables, that you're pretty much stuck with it. You may be able to store things, put them in a warehouse, pay the carrying costs, but you're not likely to get out of the contract unless you pay significant exit fees and damages.

[NSPML Final Submission, pp. 10-11]

[112] Mr. Janega reinforced this in an exchange with Board Counsel:

MR. OUTHOUSE: Okay. But when I read that statement on page 29, it leaves me with the impression that you were caught by surprise, or I should say NSPML was caught by surprise, at the Nalcor announcement in June of 2016 that there was going to be essentially a two-year delay.

MR. JANEAGA: Disappointment perhaps is a better word than surprise. But we had no indication at that time that there was a potential two-year delay on the project. But in the middle of 2015 Nalcor did announce and told us that they were reviewing the contracts, predominantly associated with the construction of the powerhouse and the spillway and that they were concerned with the contractor's ability to continue to perform that work.

But at the time they provided us that information we had already finalized our three major contracts. We had advanced work and commitments around the cables that were -- we were not able to turn back. But we did watch to see for opportunities for us to delay other works, anything that had not been started or that was nearing completion of design. We did, in a couple of instances, defer some of the work to take advantage of the reduced carrying cost of those.

[Transcript, pp. 240-241]

[113] However, as noted earlier, NSPML forcefully argued that there is no burden to ratepayers as a result of the delay. Indeed, NSPML argued that electricity customers are in a position to benefit from alignment of the Muskrat Falls power with Nova Scotia's clean energy requirements which take effect in 2020. As noted earlier, NSPML forecasted a range of net present value benefits of between \$17 million and \$75 million. Part of the benefit calculated by NSPML includes the deferred depreciation and financing cost which is not a reduction in overall cost, simply a deferral to more properly match the benefit with cost. However, if NSPML is correct, there is no burden or loss to ratepayers.

[114] An important component of the proposed benefit is NSPML's and NSPI's assurance that there will be an opportunity for economic energy exchanges with Newfoundland and other benefits permitted by the use of the Maritime Link in 2018 and 2019. NSPML described these benefits under four broad categories:

- a) export energy to Newfoundland and Labrador;
- b) import energy from Newfoundland and Labrador;
- c) optimization of NSPI's generation assets; and

d) enhanced reliability.

[115] NSPML and NSPI provided an estimated quantification of the benefits which, unfortunately, is confidential in order to preserve NSPI's ability to negotiate these economic energy transactions with Newfoundland. NSPML and NSPI stated:

Given that the details of the analysis of potential savings to customers is considered confidential, but wanting to provide context of the potential, NS Power forecasts in excess of 2 TWh of energy will flow over the Maritime Link between January 1, 2018 and December 31, 2019. The estimated gross (market/marginal) value of that energy is forecast to be in excess of \$120 million, which energy will serve to offset higher cost energy with the difference between the two making up the majority of the bottom line value to customers. The estimated net (or bottom line) potential value of this energy flow to customers is set out in Confidential Attachment B. This information is confidential because it is commercially sensitive as the associated negotiations have not concluded.

As described in NSPML's Application and further detailed and quantified in Confidential Appendix B, the following reliability benefits are anticipated to be provided when the ML comes into service:

- a) Significant flexibility and optionality for meeting energy, capacity and environmental compliance requirements, at costs moderated by enhanced competitive market efficiencies.

Upon completion of the ML, the LTA and the LIL, both forecast for completion in the first half of 2018, NS Power will have a greatly enhanced interconnection to competitive electricity markets in Ontario, New York, New England, Quebec and New Brunswick in addition to being connected to Newfoundland and Labrador. This favourable position in the resulting transmission loop will provide additional market opportunities to NS Power, as well as a strengthened bargaining position relative to its future counterparties.

- b) Enhancement of the reliability of the NS Power system (as recognized by the UARB in its ML Decision), including specifically through:

- i) Voltage support

- ii) Automatic Generation Control (AGC)/Regulation

- iii) Reserve Sharing

- iv) Emergency Energy

- v) Security Energy

- vi) Further reliability benefits that could be obtained through further collaboration such as ML operation in frequency response mode to support the Nova Scotia system during system contingencies

It should be noted that many of the same attributes will also benefit the island of Newfoundland's system and improve reliability within the design and capital costs for the Maritime Link.

[Exhibit N-3, pp. 9-10]

[116] On the issue of making what would be a reduction in cost recovery, the Board has determined to apply the test imposed by the Board in its 2013 Decision. In the face of no allegation of, or finding of, imprudence on the part of NSPML in response to the Muskrat Falls delay, the Board finds that, with regard to this interim assessment Application only, it would be inappropriate to arbitrarily reduce NSPML's cost recovery.

[117] The Board is persuaded by the evidence of Mr. Reed that to do so would not be consistent with regulatory precedent. No other expert was able to satisfactorily answer the question put to them by the Board whether it was open to the Board to reduce recovery absent a finding of imprudence. The Board does not see the *Atco* or *Ontario Energy Board* cases as altering the prudency test that the Board applied in 2013.

[118] However, the Board accepts, as noted by Morrison Park, Synapse and the Intervenors, that NS ratepayers are not getting what they bargained for. In 2013, the Board found that was an unreasonable allocation of risk.

[119] Critical to NSPML's Final Argument is its submission that the delay in delivery of the NS Block does not result in a burden to Nova Scotia customers based on reasonable assumptions. Those assumptions involved recalculating some of the work done by Synapse and Morrison Park.

[120] Also, important to this evidence is NSPML's assertion of the usefulness of the Maritime Link for the benefit of ratepayers for the reasons outlined above. The Board believes it appropriate, and just and reasonable, to take steps to ensure NSPML and NSPI achieve the promised benefit.

[121] A conservative estimate of the benefit of the Maritime Link based on all of the evidence, without any accounting for the deferrals, is a minimum annual benefit of \$10 million for the ratepayers of NSPI. The benefits to be achieved from the use of the Maritime Link are those outlined in paragraph 114 above. In order to incent the achievement of those conservatively estimated benefits and to, in a modest way, take account of the risks outlined in paragraph 336 of the 2013 Board ML Decision, NSPI is directed to hold back \$10 million from the assessment in each of 2018 and 2019. At the end of each year, NSPML and NSPI are directed to provide proof satisfactory to the Board that a minimum of \$10 million per year in benefits has been achieved. If the \$10 million in benefits is achieved, the Board will direct NSPI to pay the \$10 million to NSPML. If the \$10 million in benefits is not achieved, then NSPI is to pay, on the direction of the Board, only that portion of the \$10 million that is achieved and the balance will be refunded to ratepayers through the FAM. NSPI and NSPML have suggested the benefits could be significantly more than \$10 million. Of course, NSPML and NSPI are obliged to realize any and all benefits over \$10 million per year that are prudently achieved in the interests of ratepayers.

[122] The Board is puzzled by the submissions of NSPML concerning the distinction between the *Maritime Link Act and Regulations* and the *Public Utilities Act*. Specifically, NSPML referred to sections 4 and 8 of the *Maritime Link Cost Recovery Process Regulations* for the proposition that once the Maritime Link Project is approved, NSPML:

- a) is “entitled to recover” all costs incurred in connection with the ML project;
- and

- b) is to set an assessment against NS Power for the recovery of “all approved project costs”.

[123] Section 45 of the *Public Utilities Act* says every public utility **shall** be entitled to annually earn such return as the Board deems just and reasonable ... such return **shall** be in addition to such expenses as the Board may allow as reasonable and prudent.

[124] NSPML acknowledged that its cost recovery is subject to the validation of prudence. It is not clear to the Board what distinction NSPML is making and the Board, in this Decision, and in future decisions, does not consider itself restrained in any unique way, by the ML Legislation, from determining prudent expenditures and just and reasonable rates.

6.0 Should the Board approve the deferral of certain costs related to the Maritime Link Project?

[125] As noted earlier, the Maritime Link interim assessment amount proposed in NSPML’s application included an amount of \$51 million for depreciation expense collection in both 2018 and 2019.

[126] However, collection of Maritime Link depreciation over the NS Block delivery delay period presented intergenerational equity concerns for the Board and the Intervenors. These concerns primarily related to existing NSPI customers paying for the Maritime Link during the two year delay period without receiving the benefit of the NS Block over that time, while future customers who might not pay for the Maritime Link in the final two years of the 35-year flow of the NS Block would receive the associated power benefits. In addition, at the request of the Board, NSPML proposed a further interim

assessment adjustment to defer a financing amortization expense of \$1.5 million in each of 2018 and 2019.

[127] In response to these concerns, NSPML proposed depreciation and deferred financing amortization cost recovery as follows:

- (a) Defer approximately \$51 million in depreciation expense from each of 2018 and 2019;
- (b) Defer approximately \$1.5 million in deferred financing amortization expenses from each of 2018 and 2019;
- (c) Seek the Board's approval to permit exceptions to NSPML's Accounting Policies to permit NSPML's Interim Assessment to be reduced by these amounts in each of years 2018 and 2019;
- (d) Request NS Power to provide a credit to customers after the end of each of 2017, 2018, and 2019, returning to customers the amount of depreciation and deferred financing amortization expenses that would otherwise have been paid to NSPML. The NS Power credit to customers would include approximately \$4-5 million in interest which is a cost that has not been budgeted by NS Power.

NS Power's customer credit would be similar to the recent 2016 AA/BA FAM Credit, and funds would be returned to customer classes based upon the same FAM cost of service principles upon which the funds were collected. With the Board's approval, NS Power would return these funds to customers annually through a one-time, on-bill credit.

Depreciation and deferred financing amortization cost recovery by NSPML would commence in 2020 and would continue for 33 or 35 years, depending upon further consultation with customer classes and ultimately approval by the Board as part of the Final Cost Assessment Application to be brought by NSPML.

[NSPML Closing Submission, pp. 66-67]

[128] Thus, NSPML offered to defer the collection of Maritime Link depreciation to 2020, when the NS Block is scheduled to start delivery. Cost recovery of the deferred financing amortization expenses would begin in 2020, when the NS Block is scheduled to start delivery. Accordingly, NSPML reduced its proposed Maritime Link interim assessment by \$52.5 million in each of 2018 and 2019, resulting in revised assessment amounts of \$109.5 million for 2018 and \$111.5 million for 2019.

[129] NSPI proposed to return these deferred collections, including interest, to ratepayers. The proposed on-bill credit would return 2018 and 2019 Maritime Link

depreciation and deferred financing amortization amounts being collected from NSPI ratepayers through the RSP (see para. 21). NSPI would refund these over-collected amounts to the various FAM classes as shown in Exhibit N-34 and Response to Undertaking U-3.

[130] In addition, as explained by NSPI's Mr. Sidebottom during his testimony:

...the amount of the credit will build up as cash held by NS Power until it is remitted to customers at the end of each of 2017, 2018 and 2019, which will have the effect of reducing rate base during those periods and, in turn, reducing earnings potential to NS Power.

[NSPML Closing Submission, pp. 67-68]

[131] With respect to the timeframe over which depreciation expenses would be recovered, NSPML presented two options. One option entails recovery over a 33-year period (from 2020 to 2052) to align with the duration of the FLG. The other option involves recovery over a 35-year period (from 2020 to 2054) to match the duration of the NS Block.

[132] In response to Undertaking U-6, NSPML indicated that recovery of deferred financing costs is collected through recovery of amortization expense over the life of the FLG bonds. As such, under NSPML's proposed deferral of deferred financing amortization expenses, these costs would be recovered over a 33-year period (from 2020 to 2052).

[133] Furthermore, during his testimony, Brian Rendell of NSPML suggested that Maritime Link depreciation expense be recovered over 33 years (from 2020 to 2052). This would allow recovery of these costs to align with the duration of the FLG. It would also result in a lower cost to customers as compared to a recovery period of 35 years. However, Mr. Rendell also stated that NSPML would be open to discussions with customer groups regarding extension of the depreciation period to 35 years, to coincide with the duration of the NS Block. NSPML proposed that it would be appropriate to review

the issue and determine the length for the cost recovery period when NSPML's Final Cost Assessment Application is brought before the Board.

[134] NSPML also contended that return of Maritime Link depreciation and deferred financing amortization costs of \$52.5 million plus interest in each of 2018 and 2019 will largely offset the NS Block replacement energy costs already included in NSPI rates during the RSP:

The proposed deferral will largely offset the near term impact of the delay in availability of MFGS already included in customer rates. As explained in NSPML's Rebuttal Evidence, the June 2016 announcement by Nalcor of the expected delay in MFGS was made prior to NS Power's FSP order issued in November, 2016. Following the Nalcor announcement, NS Power engaged with its customer representatives in discussion about whether its FSP should be updated. Following those discussions, and at the request of the customer representatives, NS Power sought amendment of its FSP to include replacement power costs for 2018 and 2019, in addition to the forecast of NSPML's Interim Assessment already included in the FSP as filed.

In the result, NS Power's FSP includes replacement power costs for 2018 (for all customers) and 2019 (for the customers represented by the Consumer Advocate and the Small Business Advocate), as well as the NSPML Interim Assessment costs brought forward in this Application.

The proposed deferral of depreciation and deferred financing amortization costs, and the credit back to those customers of \$105 million plus interest in the result, will largely offset the foregoing replacement power costs included in NS Power's FSP and customers rates.

[NSPML Closing Submission, pp. 68-69]

6.1 Position of the Intervenors

[135] None of the Intervenors objected to NSPML's proposal to reduce its requested Maritime Link interim assessment for each of 2018 and 2019 by deferring the commencement of depreciation to 2020, when the NS Block is scheduled to start delivery. However, the CA did state:

The delay in recovery of the depreciation would be entirely offset by increased interest and return. Ratepayers would pay less for Maritime Link in 2018 and 2019, but would pay more from 2020 on. This reallocation of the burden between current and future ratepayers reduces the inequity for current customers, but still leaves 100% of the risk on ratepayers.

[CA Closing Submission, p. 15]

[136] With respect to the period over which depreciation expenses would be recovered, the Industrial Group suggested that confirmation of the appropriate timeframe is required before the first proposed on-bill depreciation and deferred financing amortization credit is refunded in March 2018. Additionally, both the Industrial Group and the MEUNSC preferred recovering these costs over a 35-year period. The Industrial Group noted that while the net present value for this option is higher than the 33-year depreciation period option, the rate impact each year is lower. The MEUNSC stated that increasing the cost recovery period by two years would not increase the annual expense and better match the period under which any customer benefits of the Maritime Link will be incurred.

[137] None of the Intervenor's objected to NSPML's proposal to defer recovery of deferred financing amortization costs in each of 2018 and 2019, with such recovery beginning in 2020 (when the NS Block is scheduled to start delivery) and continuing for 33 years to 2052.

[138] Similarly, none of the Intervenor's objected to NSPML's proposal for NSPI to return the 2018 and 2019 depreciation and deferred financing amortization costs collected through the RSP, with interest, to customers via an annual on-bill credit after the end of each of 2017, 2018 and 2019. The CA noted that one advantage of the credit proposal is the refund payment weighting toward 2020 may serve to further smooth the spike in rates expected that year when the RSP ends. The Industrial Group suggested that the annual credits be issued no later than the first quarter of each of the following years.

6.2 Findings

6.2.1 Deferral of Depreciation Expenses

[139] The Board finds that NSPML's proposal to defer the collection of Maritime Link depreciation expenses adequately addresses the intergenerational equity concerns that were raised in evidence and argument. However, at this point, delivery of the NS Block by 2020 cannot be assured. The Board will convene another interim assessment hearing in early 2019 to deal with the commencement of depreciation (see Section 9 of this Decision).

[140] The Industrial Group submitted that NSPML's proposed annual depreciation credit for 2017, 2018 and 2019 be refunded to customers no later than the first quarter of each of the following year. Thus, the Industrial Group suggested that confirmation of the appropriate timeframe over which depreciation expenses will be recovered is required before March 2018. NSPML, however, did not agree with this suggestion:

The issue of whether to depreciate the ML over the 35-year period during which the NS Block will be delivered to Nova Scotia customers, or over 33 years in order to minimize overall costs to Nova Scotia customers by aligning the depreciation expense with the requirements of the FLG does not need to be determined by the UARB in order to approve NSPML's customer bill credit proposal. The appropriate ML depreciation period is best determined when NSPML's Final Cost Assessment Application is brought before the Board, at which time NSPML will know the final costs to be depreciated, will be prepared to make a final recommendation and will provide alternatives on which customer representatives will be better able to fully consider and provide input.

[NSPML Reply Argument, p. 29]

[141] NSPML's proposed depreciation credit proposal for 2017, 2018 and 2019, is intended to return Maritime Link depreciation amounts being collected from NSPI customers through the RSP. The Board agrees with NSPML that a decision to confirm the appropriate timeframe over which depreciation expenses will be recovered is not necessarily linked to NSPML's depreciation credit proposal. However, the Board does

not agree that the appropriate depreciation period is best determined when NSPML's Final Cost Assessment Application is brought before the Board, when final Maritime Link costs are known. Instead, when deciding upon a suitable depreciation period, the Board considers it more important to align the timeframe with the period over which NS Block benefits will be received. As a result, the Board agrees with the Industrial Group and the MEUNSC, and finds that the Maritime Link depreciation expense is to be recovered over a period of 35 years. This will match the depreciation period with the delivery duration of the NS Block.

6.2.2 Deferral of Deferred Financing Amortization Expenses

[142] Recovery of Maritime Link deferred financing costs is collected through amortization over the life of the FLG bonds. Payment of principal on the FLG bonds is scheduled to start in 2020 and end in 2052. Therefore, the Board finds that NSPML's proposal to defer the collection of Maritime Link deferred financing amortization expenses until 2020 is appropriate. The Board orders that the cost recovery period for these expenses shall be 33 years, starting in 2020 and ending in 2052.

6.2.3 Customer Credit of Deferred Amounts

[143] Through the RSP, NSPI customer rates for 2017, 2018 and 2019 include allowances to cover 2018 and 2019 Maritime Link depreciation and deferred financing amortization expenses. Thus, NSPML's proposed deferral of these costs beyond 2019 would require that these amounts being paid by customers through the RSP be refunded. The Board finds NSPML's proposal to request NSPI to provide a credit to customers after the end of each of 2017, 2018, and 2019, returning to customers the amount of

depreciation and deferred financing amortization expenses, plus interest, that would otherwise have been paid to NSPML, is appropriate, and orders that it be implemented.

[144] The Board further orders that NSPML and NSPI credit administration expenses are not to be deducted from the refunds provided to customers.

[145] The Industrial Group suggested that the annual credits be issued no later than the first quarter of each of the following years. However, NSPML noted:

... NSPML stated that NS Power's credit mechanism would be similar to the recent 2016 AA/BA, which the Board directed to be refunded to customers by April 30, 2017. NS Power will endeavour to deliver the credit as early in the following each year as it can, given the administrative processes involved, and respectfully requests some timing flexibility in that respect.

[NSPML Reply Argument, p. 29]

[146] Given the NSPML proposed credit mechanism is intended to be similar to the Board approved FAM AA/BA credit mechanism, the Board orders that the Maritime Link depreciation and deferred financing amortization credits be refunded to customers by April 30 of each year.

[147] NSPML and NSPI are directed to submit a Compliance Filing to the Board describing the proposed credit mechanism. The Compliance Filing is to be submitted to the Board by October 16, 2017, and it is to include the following:

1. A description of how the credits for the over-collected depreciation and deferred financing amortization amounts will be returned to the various FAM classes;
2. Identification of the specific dollar amounts that will be returned to the various FAM classes for each of 2017, 2018 and 2019;
3. A description of how NSPI will make customers aware of the credit; and
4. A description of how customers who have left NSPI's system, but who are eligible for the credit, will be contacted and how their associated credits will be refunded. This particular description is also to identify how any unclaimed refunds will be addressed.

7.0 What interim assessment should the Board set against NSPI respecting the amounts requested by NSPML for 2018 and 2019?

[148] Having regard to the findings above, the Board sets the interim assessment for 2018 at \$109.5 million, and for 2019 at \$111.5 million, subject to the annual \$10 million holdback as described in paragraph 121. In its Compliance Filing, NSPML and NSPI are to provide a proposed schedule of monthly charges, and when and how those charges will be invoiced. That issue was not canvassed at the hearing and while not likely to be controversial, the Board wishes to have that information before issuing its Order. The interim assessment represents a reduction of \$52.5 million (plus whatever portion of the \$10 million holdback is not earned) in each of 2018 and 2019 from the original interim assessment sought by NSPML.

8.0 Should the Board approve the accounting policy amendments requested by NSPML?

[149] NSPML requested Board approval of revised accounting policies, 5300 – Depreciation and Amortization Expense and 5800 – Financing Charges, related to delaying depreciation and amortization of costs. NSPML explained such changes are necessary to permit the delay of the start of depreciation and amortization of the balances if the related expenditures are placed in service.

[150] The Board notes exceptions to accounting principles and policies occur regularly without rewriting the Board approved accounting policy. The Board's direction on deferring recovery of the expenditures is clear from this Decision. The Board does not consider deferring the accounting for depreciation or amortization expenses creates any exceptional circumstance. For both cash flow and accounting purposes, the depreciation

and amortization expenses, that would otherwise be incurred, in 2018 and 2019 shall be deferred.

[151] The Board believes including its direction in the Order is sufficient and retains jurisdiction related to the accounting for all costs in a future assessment.

9.0 When should the Final Assessment hearing be held, and what should the scope of that hearing be?

[152] The Board is concerned about the significant delays in construction of the Muskrat Falls Generating Station and NSPML's apparent lack of insight on what is happening at Muskrat Falls. Essentially, NSPML appeared to learn about the two year delay contemporaneous with it being announced publicly, yet at the same time its representatives sit on joint committees with representatives of Nalcor dealing with the Project. This lack of insight is troubling to the Board.

[153] NSPML indicated that it wants to have the Final Assessment hearing during 2018. The Board is not prepared to hold the Final Assessment hearing until it knows that the NS Block is being delivered in accordance with the original bargain. This will enable the Board to reserve whatever regulatory options may be available to it in the event of further unfortunate news.

[154] The Board will convene another interim assessment hearing in early 2019 to deal with the following:

1. Continuation of the interim assessment, if necessary, after 2019 including any necessary adjustment to the interim assessment pending delivery of the NS Block;
2. The commencement date of payment of depreciation;

3. The status of the Muskrat Falls Generating Station and the status of the NS Block.

[155] However, the Board is not prepared to approve the final assessment until it is confident the ratepayers will get what they bargained for – the NS Block, Supplemental Energy and Nalcor Market-priced Energy.

10.0 What reporting requirements should apply to NSPML?

[156] In its Order dated December 5, 2013, regarding approval of the Maritime Link Project (M05419), the Board directed the following reporting requirements:

NSPML must file detailed reports with the Board (including NSPI where appropriate), on a semi-annual basis, on June 15 and December 15 each year, commencing December 15, 2013. Quarterly updates must also be filed on April 15 and October 15. The reports shall follow the directions outlined in Schedule “A” attached.

[157] In order for the Board and stakeholders to maintain visibility on the status of the Muskrat Falls Generating Station and its impact on Nova Scotia ratepayers, NSPML is directed to continue filing quarterly reports, amended as appropriate to recognize the physical completion of construction activities. In addition, the quarterly reports are to include an accounting of all transactions related to this project, cash flow analysis, and a separate section describing and quantifying the financial and other benefits realized for ratepayers from the Maritime Link prior to delivery of the NS Block and Nalcor Market-priced Energy.

11.0 COMPLIANCE FILING

[158] The interim assessments approved in this Decision are effective January 1, 2018 and January 1, 2019, respectively. However, it is noted that in accordance with the

requirements of the *EPIA*, these amounts were smoothed and included in rates over the three-year Rate Stability Period. In its Compliance Filing, NSMPL and NSPI are to provide a proposed schedule of monthly charges from NSPML to NSPI, and when and how those charges will be invoiced.

[159] Moreover, NSPML and NSPI are directed to set out in their Compliance Filing how they intend to conduct the proposed credit mechanism respecting the depreciation and deferred financing amortization credits to be refunded to customers by April 30 of each year.

[160] NSPML and NSPI are directed to file the Compliance Filing no later than October 16, 2017. The Interveners must provide comments, if any, no later than October 26, 2017.

12.0 SUMMARY OF BOARD FINDINGS

Application by NSPML

[161] NSP Maritime Link Incorporated (NSPML) filed an application under the *Maritime Link Act*, the *Maritime Link Cost Recovery Process Regulations*, and s. 64 of the *Public Utilities Act*, for approval of an interim cost assessment and approval to commence recovery of the interim assessment from Nova Scotia Power Incorporated (NSPI) starting January 1, 2018.

[162] The Maritime Link is scheduled for commissioning in Q4 2017 and to be in service by January 1, 2018. This timeline is effectively what was originally proposed by NSPML in 2013 when the Board concluded, in a separate proceeding, that the Maritime

Link Project represented the lowest long-term cost alternative for renewable electricity for Nova Scotian ratepayers.

Delay in completion of the Muskrat Falls Generating Station

[163] In June 2016, Nalcor announced a delay in the construction of the Muskrat Falls Generating Station, originally planned to be operational concurrent with the Maritime Link. The delay in its operation means that power and energy from this facility will not flow over the Maritime Link until much later than expected, 2020 at the earliest. Moreover, this means there will be a delay in the commencement of delivery of the NS Block, Supplemental Energy and Nalcor Market-priced Energy over the Maritime Link.

[164] In its Application, NSPML sought to start recovering all of its costs by way of the interim assessment, as though the Maritime Link would be fully operational as planned and the NS Block would start being delivered in late 2017, while asking ratepayers in Nova Scotia to bear all the risks and burden of the delay in NL.

Was NSPML prudent in completing the Maritime Link on schedule?

[165] NSPML concluded that its prudent course was to proceed with the completion of the Maritime Link as originally scheduled. NSPML determined that delaying completion of the Maritime Link to align its in-service date with a January 2020 availability of the NS Block would result in incremental costs to Nova Scotia electricity customers of between \$398 million and \$533 million, due at least in part to the renegotiation of construction contracts that were already in place and work commenced.

[166] The Board observes that no Intervenor claimed that NSPML was imprudent in its decision to continue with the construction of the Maritime Link in the face of Nalcor's announced delay in completion of the Muskrat Falls Generating Station.

[167] Taking all of the above circumstances into account, despite the delayed delivery of the NS Block, the Board is unable to find any imprudence in NSPML's decision to proceed with the completion of the Maritime Link on the originally scheduled timeline. In making this finding, the Board is aware that while carrying costs will not be capitalized as Allowance for Funds Used During Construction (AFUDC), ratepayers are still being asked to cover these carrying costs as a result of the two year delay.

Will the Maritime Link be "used and useful" when in service on January 1, 2018?

[168] NSPML outlined the four general areas where NSPI and its ratepayers will benefit from the commissioning of the Maritime Link at least two years before the delivery of the NS Block. Those four areas are: 1) exported energy to Newfoundland and Labrador; 2) imported energy from Newfoundland and Labrador; 3) the optimization of NSPI generation assets; and 4) enhanced reliability of NSPI's system.

[169] The Board accepts NSPML's evidence that several benefits may accrue to NSPI and its ratepayers from the use of the Maritime Link when it comes into operation on January 1, 2018. While delivery of the NS Block is delayed for at least two years, NSPI and its ratepayers may be able to make use of the Maritime Link immediately, and therefore receive various benefits from its use. In that sense, the Maritime Link will be useful to ratepayers. While the immediate benefits from the Maritime Link will not be as originally contemplated in the short term, it will be useful, at least to some extent.

[170] In the Board's opinion, under the current circumstance and absent any imprudence, it would be difficult to arbitrarily deny NSPML recovery of its prudently incurred costs if the Maritime Link is "used and useful", even if only to some partial extent. The Board notes it may need to consider in the future, absent the anticipated bargain,

what value or balance of the asset should be included in rate base, securitization or other regulatory options.

[171] The Board finds that the Maritime Link will be “used and useful” when it comes into operation.

Should delayed delivery of NS Block cause a reduction in the interim assessment?

[172] NSPML argued that a delay in the construction of the Muskrat Falls Generating Station does not result in any cost burden to NSPI customers.

[173] On the issue of making what would be a reduction in cost recovery, the Board has determined to apply the test imposed by the Board in its 2013 Decision. In the face of no allegation of, or finding of, imprudence on the part of NSPML in response to the Muskrat Falls delay, the Board finds that, with regard to this interim assessment Application only, it would be inappropriate to arbitrarily reduce NSPML’s cost recovery. The Board is persuaded by the evidence that to do so would not be consistent with regulatory precedent.

[174] However, the Board accepts that NS ratepayers are not getting what they bargained for. In 2013, the Board found that was an unreasonable allocation of risk.

[175] The Board notes NSPML’s submission that the delay in delivery of the NS Block does not result in a burden to Nova Scotia customers based on reasonable assumptions, and its assertion of the usefulness of the Maritime Link for the benefit of ratepayers.

[176] The Board believes it appropriate, and just and reasonable, to take steps to ensure NSPML and NSPI achieve the promised benefit.

[177] A conservative estimate of the benefit of the Maritime Link based on all of the evidence, without any accounting for the deferrals, is a minimum annual benefit of \$10 million for the ratepayers of NSPI. In order to incent the achievement of those conservatively estimated benefits and to, in a modest way, take account of the risks outlined in paragraph 336 of the 2013 Board ML Decision, NSPI is directed to hold back \$10 million from the assessment in each of 2018 and 2019. At the end of each year, NSPML and NSPI are directed to provide proof satisfactory to the Board that a minimum of \$10 million per year in benefits has been achieved. If the \$10 million in benefits is achieved, the Board will direct NSPI to pay the \$10 million to NSPML. If the \$10 million in benefits is not achieved, then NSPI is to pay, on the direction of the Board, only that portion of the \$10 million that is achieved and the balance will be refunded to ratepayers through the FAM. NSPI and NSPML have suggested the benefits could be significantly more than \$10 million. NSPML and NSPI are obliged to realize any and all benefits over \$10 million per year that are prudently achieved in the interests of ratepayers.

Deferral of depreciation expense and financing amortization expense

[178] As noted in its original submission, NSPML asked for an interim assessment of \$162 million in 2018 and \$164 million in 2019.

[179] In its Decision of July 19, 2016 [2016 NSUARB 129], Matter Number M07348, for the purposes of setting NSPI's Base Cost of Fuel and rates over the three-year Rate Stability Period under the *Electricity Plan Implementation (2015) Act (EPIA)*, the Board approved the above amounts in 2018 and 2019 for inclusion in rates to reflect the "anticipated assessment" for the Maritime Link.

[180] At the start of the hearing, NSPML recommended an adjustment to defer depreciation expenses totalling \$51 million in each of 2018 and 2019, and agreed to a further adjustment to defer a financing amortization expense of \$1.5 million in each of 2018 and 2019. Accordingly, NSPML's revised request is a reduced interim assessment of \$109.5 million for 2018 and \$111.5 million for 2019.

[181] NSPML's proposed deferral of these costs beyond 2019 would require that these amounts being paid by customers through the Rate Stability Period be refunded.

[182] None of the Intervenors objected to NSPML's proposal for NSPI to return the 2018 and 2019 depreciation and deferred financing amortization costs collected through the Rate Stability Period, with interest, to customers via an annual on-bill credit after the end of each of 2017, 2018 and 2019.

[183] The Board orders that the Maritime Link depreciation and deferred financing amortization credits be refunded to customers by April 30 of each year, plus interest. It further orders that NSPML and NSPI credit administration expenses are not to be deducted from the refunds provided to customers.

[184] The Board finds that the Maritime Link depreciation expense is to be recovered over a period of 35 years. This will match the depreciation period with the delivery duration of the NS Block.

[185] Recovery of Maritime Link deferred financing costs is collected through amortization over the life of the Federal Loan Guarantee bonds. Payment of principal on the bonds is scheduled to start in 2020 and end in 2052. The Board orders that the cost recovery period for these expenses shall be 33 years, starting in 2020 and ending in 2052.

Interim Assessment

[186] The Board sets the interim assessment for 2018 at \$109.5 million, and for 2019 at \$111.5 million, subject to the annual \$10 million holdback as described above.

Final Assessment Hearing

[187] The Board is concerned about the significant delays in the construction of the Muskrat Falls Generating Station and is not prepared to approve the final assessment until it is confident the ratepayers will get what they bargained for - the NS Block, Supplemental Energy and Nalcor Market-priced Energy.

[188] The Board will convene another interim assessment hearing in early 2019 to deal with the following:

1. Continuation of the interim assessment, if necessary, after 2019 including any necessary adjustment to the interim assessment pending delivery of the NS Block;
2. The commencement date of payment of depreciation;
3. The status of the Muskrat Falls Generating Station and the status of the NS Block.

NSPML's reporting requirements

[189] NSPML is directed to continue filing quarterly reports. The quarterly reports are to include an accounting of all transactions related to this project, cash flow analysis, and a separate section describing and quantifying the financial and other benefits realized for ratepayers from the Maritime Link prior to delivery of the NS Block and Nalcor Market-priced Energy.

[190] An Order will issue accordingly.

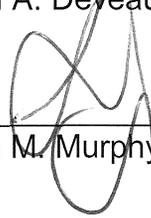
DATED at Halifax, Nova Scotia, this 11th day of September, 2017.



Peter W. Gurnham



Roland A. Deyeau



Steven M. Murphy