NON-CONFIDENTIAL

Request IR-61:

Exhibit N-1, p. 31, line 5

(a) Please describe how "Reserve Sharing" is impacted by a delay in the commissioning of the Muskrat Falls Generating Station and the LIL.

(b) What residual "Reserve Sharing" exists before the commissioning of the Muskrat Falls Generating Station and the LIL?

(c) In the past five years, how many violations of the NERC Disturbance Control Standard have occurred in relation to the Nova Scotia Power System Operator?

(d) If the answer to question (c) is no violations, please describe how potential violations were avoided in the past and how the commissioning of the Maritime Link would provide any material benefit to NSPI customers.

Response IR-61:

(a) The "Reserve Sharing" is covered by a reserve sharing agreement between the NS Power System Operator (NSPSO) and the Newfoundland and Labrador System Operator (NLSO), and is not tied directly to Muskrat Falls. The two entities have agreed to share reserve on a 50-50 basis for the contingency loss of a generator on either system deliverable within ten minutes from the initiating phone call. The reserve sharing is used to recover from the loss of the unit within the 15 minutes required by NERC Standard BAL-002-2 Disturbance Control Standard – Contingency Reserve for Recovery from a Balancing Contingency Event.

(b) Upon Maritime Link being placed in service, NSPSO and NLSO can take advantage of the quick recovery from the loss of a generation unit in either Nova Scotia or Newfoundland. The "Reserve Sharing" can begin as soon as the Maritime Link is in service. The two provinces can share ten minute operating reserves to allow for quick recovery of the contingency loss of a generation unit in either area. The NERC Standard, which is applicable in Nova Scotia, requires that the energy be replaced for the loss of a generator in 15 minutes. Therefore, the sharing of reserve can contribute to recovering energy sooner and reducing the likelihood of a failure to meet the NERC Disturbance Control Standard, BAL-002-2.

(c) In the past five years, NSPSO has had no violations of the NERC Disturbance Control Standard.

(d) Potential violations were avoided in the past by relying on a similar reserve sharing agreement with the NB Power System Operator (NBP-SO). NS Power has an interconnection agreement with NBP-SO which includes reserve sharing. The Maritime Link will provide a benefit to NS Power customers by increasing the likelihood that NSPSO will continue to meet its obligations under both the NERC Standards and the NPCC Directory 5. The NERC Standard outlines the requirement to be compliant within the 15 minute recovery period, while the NPCC Regional Reliability Reference Directory # 5, Reserve, states that punitive measures are to be implemented in response to a failure of not meeting the 15 minute time limit. If NSPSO were to not recover within the 15 minute limit, the amount of ten minute operating reserve to be carried as fully synchronized reserve would increase from the current value of less than 25 percent of ten minute reserve up to 100 percent. This would significantly increase generation costs to fulfill the synchronized reserve penalty requirement.

NON-CONFIDENTIAL

Request IR-62:

Exhibit N-3, p.34, line 26

NSPML or Mr. Reed indicate the interim funds are needed from ratepayers to keep the financing costs reasonable. Does NSPML believe the financing costs required for the project, if not covered in part by the ratepayer, would be material? Please quantify.

Response IR-62:

Yes, the financing costs for the Maritime Link asset would be material if not covered by an assessment authorized to be charged to NS Power. As shown in the Interim Assessment Application, at page 22, Figure 2 of NSPML's evidence, the financing costs are $97 million for 2018 and $95 million for 2019. NSPML would have no means, on its own, of meeting these costs without the Board's approval to set an interim assessment against NS Power for access to the Maritime Link. Upon Commissioning, NSPML does not have an ability to borrow additional debt to service financing costs, so absent revenues received from NS Power via the Interim Assessment, the only source of funds would be shareholder equity on which the shareholder would reasonably expect to earn a fair return.

NON-CONFIDENTIAL

Request IR-63:

Exhibit N-3, p. 9 states, "NS Power is confident that significant benefits will accrue for both Nova Scotia and Newfoundland and Labrador customers during this period."

(a) Please clarify why assignment of costs to NS ratepayers should occur when the commercial terms for this interim period are not scheduled to be finalized until Q4 2017[1].

(b) There were additional costs of the delay (related to fuel replacement) built into the Fuel Stability Plan. Which of the benefits being identified in this Application does NSPI <u>need</u>?

(c) How does NSPML intend to quantify and track the benefits that have been estimated in this Application prior to realization of the 20 for 20 arrangement?

Response IR-63:

(a) *The Electricity Plan Implementation* (2015) *Act* (EPIA) mandated NS Power apply to the Board for approval of a Fuel Stability Plan for the calendar years 2017, 2018 and 2019 and that such Fuel Stability Plan included a forecast of cost amounts to be recovered in respect of the anticipated Maritime Link assessment. The Board approved NS Power's Fuel Stability Plan and NS Power is collecting the costs of the Maritime Link in accordance with the NSUARB's Decision. The benefits described in NSPML Interim Cost Assessment Application Supplementary Evidence, Confidential Appendix B do not occur until the Maritime Link goes into service on January 1, 2018 and will serve to partially offset total costs to customers.

[1] Exhibit N-3, p. 8, line 27 – p. 9, line 1

NON-CONFIDENTIAL

(b) None of the benefits described in the Supplementary Evidence were factored into the revenue requirement set out in the Base Cost of Fuel and the cost of a delay in the Muskrat Falls Project construction will be partially offset by the benefits that will accrue to customers by having the Maritime Link operational prior to delivery of the NS Block.

(c) The estimated benefits of having the Maritime Link in-service on time could be quantified and tracked through NS Power’s Fuel Adjustment Mechanism (FAM) and communicated through the regular FAM reporting.

NON-CONFIDENTIAL

Request IR-64:

Exhibit N-3, p. 11, lines 2-5

What does NSPML identify as "not material" impacts or restrictions?

Response IR-64:

NSPML has not identified any non-material impacts or restrictions on the use of the Maritime Link during the period between a January 1, 2018 and the delivery of the NS Block that would affect realization of the benefits of use and availability of the Maritime Link to NS Power as referenced or represented in Exhibit N-3, p. 11, lines 2-5.

NON-CONFIDENTIAL

Request IR-65:

Exhibit N-3, p. 14, j)

NSPML indicated there would have been additional costs related to key individuals not being retained:

(a) Please identify which key positions are no longer required once the asset is placed "in service" and the associated savings.

Response IR-65:

(a) The NSPML Interim Cost Assessment Supplementary Evidence (page 14, (j)) deals with the situation where NSPML delayed construction work to align with the delivery of the NS Block. In that scenario, certain key project management positions would have been retained while others would have been released and recalled when construction resumed. There would be costs associated with releasing and reacquiring personnel in these positions.

Once the Maritime Link is in service, construction personnel will no longer be required and operational personnel will be in place. At present, during the construction period, there are approximately 130 full-time equivalent personnel on the project management team. The associated costs are part of the Project's construction budget of $1.577 billion. The number of full-time equivalent personnel during operations is forecasted to be between 10 and 15. The associated cost is included in the operations and management cost included in the interim assessment application. Therefore, the cost of personnel during operations will be considerably less than during this peak period of construction.

PARTIALLY CONFIDENTIAL

Request IR-66:

Exhibit N-3, p. 15, lines 13-16

NSPML explains that a delay of the ML would preclude NS customers from receiving benefits.

(a) Are NS customers the only benefactor of the ML until the NS Block comes online?

(b) If not, who else benefits and what contributions towards cost are they making?

Response IR-66:

(a-b) The primary beneficiaries of the ML prior to the NS Block are the customers of NS Power and Nalcor. The respective contributions are contained in the associated commercial agreements between the parties that were reviewed and approved as the lowest cost option to ensure RES compliance, in accordance with the *Maritime Link Act*. The 20 for 20 principle – NSPML building the Maritime Link in exchange for 20 percent of the Lower Churchill Falls energy – was the value exchange between NSPML and Nalcor. The benefits described in NSPML Interim Cost Assessment Application Supplementary Evidence, Confidential Appendix B are incremental to the benefits of the Nova Scotia and Supplemental Blocks. [redacted] NSPML Interim Cost Assessment Application Supplementary Evidence, Confidential Appendix B.

NON-CONFIDENTIAL

Request IR-67:

Exhibit N-3, p. 16, "Cost of Delay"

Please identity whether these figures are the additional costs net of costs NSPML still has to pay. If not, please provide an assessment of various costs NSMPL will still incur annually and in total for the anticipated delay of 20 for 20 first power.

(a) As an example, $200 million labelled as AFUDC although once in service it would not be "capitalized" as AFUDC, aren't customers still paying this? Please explain.

Response IR-67:

(a) The amounts in N-3 are additional costs, above the already budgeted construction and financing costs that NSPML has forecast. These additional costs would have been incurred if NSPML had delayed construction to align with the NS Block.

The $200 million is an estimate of the *additional* costs of financing the project (both during construction, as AFUDC, and during operations, as financing costs) if the project was delayed. These costs are not being paid as NSPML decided not to delay, to avoid customer costs.

Please refer to NSUARB IR-53 Attachment 1 (Partially Confidential).

NON-CONFIDENTIAL

Request IR-68:

Exhibit N-3, p. 8, line 27 – p. 9, line 1

NSPML indicated depreciation will cover return of debt and equity, however, analysis supporting the calculations[1] does not show rate base decrease through the 2017-2019 period. Please explain how the rate base / regulated capitalization will be drawn down.

Response IR-68:

NSPML has reflected a reduction in Property, Plant and Equipment resulting from the annual depreciation charge in each of 2018 and 2019. The recovery of rate revenues to be used to fund debt principal payments, beginning in 2020, and return of shareholder equity will be invested on behalf of customers in Permitted Investments as defined in the ML Credit Agreement.

Rate base will begin to be reduced as debt principal is repaid and equity is returned. In the interim assessment calculations, it is assumed that the debt to equity ratio of 70:30 will be maintained. Consequently, equity will begin to be returned to the shareholder in a manner consistent with the timing of debt principal repayments, beginning in late 2020.

[1] Appendix C, M07348 IR-17

NON-CONFIDENTIAL

Request IR-69:

Exhibit N-3, p. 23, lines 26-27

NSPML states failure to obtain the revenues would breach a covenant.

(a) Would the cost flow actually have to be categorized as Revenue? Please explain.

(b) Could it be deferred revenue? Please explain.

Response IR-69:

(a-b) The ML Credit Agreement requires NSPML to maintain both a Prospective and Retrospective Debt Service Coverage Ratio (“DSCR”) of 1.40. These terms are defined in the ML Credit Agreement which is attached to NSUARB IR-9. Section 4.1 of the FLG Term Sheet, attached as Appendix 4.03 to the 2013 initial assessment, addresses this issue. Section 10.25 of the ML Credit Agreement provides additional details with respect to maintaining this ratio.

The DSCR is calculated as Base Cash Flow divided by Total Debt Service.

Base Cash Flow is defined as Liquidity Reserves (if any) plus Maritime Link Project Revenues less all Cash Operating Costs.

Liquidity Reserves are effectively funds held on deposit in a segregated account which is different from the DSRA.

Maritime Link Project Revenues is defined as "revenues collected from Nova Scotia Power Inc. under the cost-recovery framework imposed by the Nova Scotia Utility and Review Board."

Total Debt Service is essentially defined to include all interest and scheduled principal payments.

Therefore, yes, the cash flow from NS Power would have to be recognized as "revenue" unless a sufficient Liquidity Reserve Account was on hand. NSPML cannot borrow Additional Debt (other than drawing upon a $10 million operating line of credit, which NSPML expects to use for unexpected cash requirements) for the purposes of funding a Liquidity Reserve Account. Consequently, the Liquidity Reserve Account would likely be funded by equity on which the shareholder would reasonably expect to earn a return.

The ML Credit Agreement does not dictate the accounting for the receipt of such revenues however NSPML's view is that deferred revenue is not "revenue" by its nature of having been deferred for GAAP purposes.

NON-CONFIDENTIAL

Request IR-70:

Exhibit N-3, p. 24, lines 4-5

"Returning equity capital to the shareholder on a timely basis is in the best interest of customers as it reduces the base on which future return on equity is calculated."

Please identify how and when NSPML will account for the drawdown of equity and debt given NSPML is requesting payment from NSPI the 1st of each month.

Response IR-70:

Debt repayments are made semi-annually starting in 2020 [please refer to NSUARB IR-15 Attachment 1, which is BDO IR-15 relating to AFUDC Policy (M07254)]; proportionate amounts of equity are anticipated to be returned to the shareholder at approximately the same time in order to maintain the 70:30 debt to equity ratio.

NSPML's request to receive monthly revenues from NS Power on the beginning of each month was to enable a regular and predictable transfer of funds between the two companies and to enable payment of operational costs. Please refer to NSUARB IR-37.

NON-CONFIDENTIAL

Request IR-71:

Exhibit N-3, p. 25, lines 9-13

In theory, NSPML's return would be higher if the Board reduces depreciation:

(a) **Please quantify, annually for 2018 and 2019, the increased return if the Board does not permit depreciation.**

(b) **Please quantify, annually for 2018 and 2019, the increased return if the Board were to direct depreciation over 37 versus 35 years.**

Response IR-71:

(a) Please refer to NSUARB IR-47(b).

(b) Please refer to NSUARB IR-32(e) and (f).

NON-CONFIDENTIAL

Request IR-72:

Exhibit N-3, p. 32, lines 22-25

What does the FLG requirement iii) "that the Project be financed at the lowest net present value for the benefit of Nova Scotia customers" mean?

Response IR-72:

Please refer to NSUARB IR-21.

NON-CONFIDENTIAL

Request IR-73:

Exhibit N-3, p. 28, lines 7-9

(a) The cost increase associated with the two year delay of the NS Block is described as “moderate”. Please provide NSPML’s position on when such costs warrant assignment or cost sharing to the shareholder.

(b) What risks did NSPML identity in its initial application (M05419) to warrant a 9% rate of return?

Response IR-73:

(a) In accordance with cost of service ratemaking principles, the costs of utility service are borne entirely by customers unless the Board makes a finding that the utility was imprudent. In respect of the Maritime Link, NSPML has managed the project prudently to deliver the asset on time and on budget, including saving a significant amount of money for customers by not attempting to delay completion of the Maritime Link to align with the NS Block.

(b) NSPML’s initial application for approval of the Maritime Link was based upon cost of service ratemaking principles, in which NSPML sought an allowed return on equity of 9.1 percent, with that rate of return re-determined periodically through a formula. The Board authorized an allowed return of 9.0 percent, which was based on NS Power’s allowed return at the time. The expert evidence filed by NSPML, as well as the Board’s expert, is available on the UARB website. NSPML’s evidence on the cost of equity in the original application noted that the financing plan for the Maritime Link Project, which included an unusually high degree of leverage and a relatively low return on equity, was made possible by the use of strict debt covenants and the favorable terms of the Maritime

NON-CONFIDENTIAL

Link Cost Recovery Process Regulations. These terms were found to provide much lower rates than would have been achievable under conventional financing, and to have mitigated the fundamental business risks of the Project, which included providing the equity investor with a reasonable degree of assurance. NSPML's risk was described as being analogous to the expected market returns for relatively low-risk utilities under FERC jurisdiction in the United States, and for rate-regulated electric utility transmission projects in Alberta and Ontario. The UARB approved NSPML's current ROE and NSPML has relied upon the Board's approval, consistent with standard cost of service ratemaking principles, in investing in and constructing the Maritime Link. NSPML urges the Board not to depart from the long-standing cost of service ratemaking principles on which the Maritime Link was approved, the stability of which is critical for both investors and customers.

NON-CONFIDENTIAL

Request IR-74:

Exhibit N-3, p. 37 b)

NSPML requests the Board direct NSPML to file final Maritime Link costs for approval following commissioning, once the final costs for the Project are known.

(a) What delays is NSPML expecting related to this process?

(b) Is NSPML aware of accounting policy requirements that require overspend to be considered unregulated until filed/and/or approved by the Board under various scenarios related to project management?

(c) Does NSPML anticipate not being able to comply with the Rate Base policy?

Response IR-74:

(a) NSPML is not currently anticipating delays related to this process.

(b) NSPML understands that Accounting Policy 1520 – Rate Base, sections 06 – 09, addresses the issue of overspend relating to Construction Work In Progress and Plant in service. NSPML continues to report that the Maritime Link is on budget and thus does not anticipate that it will overspend beyond what the UARB has approved for Construction Work in Progress.

(c) No. Please refer to response to NSUARB IR-25.

NON-CONFIDENTIAL

Request IR-75:

Exhibit N-3, Appendix A, p. 3

Mr. Reed speaks to a "modest" increase in front-end loaded costs, please itemize specifically what costs has Mr. Reed relied upon to determine the increase is modest?

Response IR-75:

The cited portion of Mr. Reed's Supplemental Evidence references his Direct Evidence at page 21. In his Direct Evidence at page 21, he describes the degree of front-end loading that the Project was expected to have before the NS Block was delayed, and presents a chart of that front-end loading in Figure 1. When Mr. Reed refers to a modest increase in the degree of front-end loading, he is speaking of an amount that is not disproportionate to the amount of front-end loading that was originally contemplated. The costs that he has relied on are the costs presented in Figure 1, and the delivered costs of power presented at page 17 of his Direct Evidence.

NON-CONFIDENTIAL

Request IR-76:

Exhibit N-3, Appendix A, p. 7

Mr. Reed speaks of market demands that effective and fair regulation by the regulator will allow timely recovery of, and a return on, all of the investments that were prudently incurred.

(a) Does Mr. Reed understand the Board is not determining prudence in this proceeding?

(b) Is it fair to state the market and equity investors were prepared for delays on such a project related to the timing of recovery and return of their investment and will not be harmed, materially, by a two-year delay?

Response IR-76:

(a) Yes.

(b) No. There has been no suggestion that the investors were, or should have been, prepared to accept a delay in their return on or of capital, associated with a delay in the delivery of power from the NS Block. As the Board made clear in its approval of the Maritime Link, NSPML was responsible for prudently managing its project, and for achieving the budget, schedule and AFUDC accrual that had been authorized by the Board. NSPML expects to fulfill all of those mandates. Investors in NSPML would be materially and unjustly harmed if their return on and of capital was delayed or diminished given that NSPML has acted prudently and will have met all of its mandates. NSPML, and its investors, are entitled to a reasonable opportunity to achieve the approved compensatory return on, and the return of, prudently invested capital. If NSPML sought higher after-the-fact returns because its construction of the Maritime Link was ahead of schedule, or came in under the approved budget, the Board would be fully justified in rejecting such a revision to the originally-anticipated ratemaking process. Similarly, ten years from now, if the value of the NS Block power is far higher than currently anticipated, NSPML would have no sound basis for seeking a higher return because the power supply portion of the overall Project had turned out better than expected. Under cost-based ratemaking, the standards for achieving recovery of and return on prudent investments is well understood, and those standards do not hinge on how well, or poorly, the economics of a 35-year power supply contract turn out, especially where the power supply itself is not an undertaking of the regulated utility.

NON-CONFIDENTIAL

Request IR-77:

Exhibit N-3, Appendix B

(a) Please clarify how NSPML is handling its Affiliate Code obligations as it relates to information sharing with NSPI? And vice versa?

(b) Which of these items does NSPI identify as a need or issue within the Fuel Stability Plan? Or otherwise?

Response IR-77:

(a) NSPML and NS Power comply with their respective Codes of Conduct, which are the same. NSPML provides publicly available information to NS Power and vice versa. NS Power employees involved in the Interim Cost Assessment Proceeding have signed confidentiality undertakings identical to those signed by any other intervenor in the Proceeding, providing those employees with access to the confidential information filed in this matter.

(b) Please refer to part (a) and Industrial Group IR-5(c). The Company's Fuel Stability Plan did not include any of the benefits from Appendix B. As such, any benefits of the Maritime Link will accrue to reduce the 2020 fuel cost, if all other factors remain as is.

NON-CONFIDENTIAL

Request IR-78:

Exhibit N-3, Appendix B

(a) Please confirm the gross benefit presented on page 33 of $120 million is services from the 2nd column of the table on page 2 of Appendix B.

(b) Is this total and corresponding Appendix B figures totals based on the full January 1, 2018 to December 31, 2019 period.

(c) Does the current timing of the LIL impact these calculations? if so, please revise Appendix B estimates to reflect a July 2018[1] to December 31, 2019 period.

Response IR-78:

(a) The gross benefit "in excess of $120 million" reflects the summation of the minimum of $60 million forecasted for each of the two years as presented in NSPML Interim Cost Assessment Application Supplementary Evidence, Confidential Appendix B.

(b) The totals are for each of 2018 and 2019.

(c) NS Power assumes that the Labrador-Island Link will be in service at the beginning of Q2 2018, and therefore the current timing of the Labrador-Island Link does not impact these calculations.

[1] Exhibit N-1, Appendix C identified Q2 2018 completion

NON-CONFIDENTIAL

Request IR-79:

Exhibit N-3, Section 3.0

NSPML identifies costs and benefits on the front end of the delay.

(a) Please identify all costs and benefits in the final two years of the project which would not previously be NS ratepayer costs or benefits.

(b) If maintaining the asset for additional years is NSPML's responsibility, what protection(s) exists to ensure Nalcor does not delay the "20 for 20" arrangement further, given it appears there are no costs or restrictions[1] in the period prior to the "20 for 20" arrangement's first power.

Response IR-79:

(a) The benefits that will accrue to Nova Scotia customers in the final two years of the Project include the continued delivery and receipt of the NS Block at a time when the value of that renewable energy is expected to be significantly higher than current values. In the final two years, post 2052, NSPML anticipates that power and carbon costs would both be higher than will be the case in 2018 and 2019 (the first two years planned for delivery of the NS Block). Nova Scotia customers will also benefit from the use of the Maritime Link in those two years as it relates to the reliability and system benefits generally associated with the Maritime Link. NSPML will be responsible for operating and maintenance costs of the Maritime Link during the final two years of the NS Block. The benefits are expected to exceed the costs.

[1] Exhibit N-3, p. 11 "no material impacts or restrictions"

(b) Nalcor is incented to complete Muskrat Falls and related transmission projects for its own domestic requirements and also to service its financing costs under its Federal Loan Guarantee (FLG). In terms of contractual protections, the FLG imposes completion guarantees on both Nalcor and Emera thus protecting Nova Scotia customers from completion risk. In addition, any unplanned, non-seasonal discontinuance or cessation of development activities by Nalcor for a single continuous period greater than 120 days, excepting force majeure events, constitutes an event of default under the Commercial Agreements. Such a suspension of either the Labrador-Island Link or the Muskrat Falls Plant, entitles NSPML to claim specified "compensation damages". Please refer to section 8.6 of the Energy and Capacity Agreement.

NON-CONFIDENTIAL

Request IR-80:

Exhibit N-3, Section 3.0

NSPML has provided the cost of delaying the ML portion to align with NS Block delivery.

(a) **Please identify the additional costs NSPML is incurring related to the delay of the NS Block delivery.**

(b) **Is NSPML requesting ratepayers cover the full cost that has materialized related to the risk of delay associated with the portions of the project not managed by NSPML?**

Response IR-80:

(a-b) The costs identified by NSPML in Exhibit N-3, Section 3.0 are costs that have been avoided by not delaying construction of the Maritime Link to align with the delivery of the NS Block.

The delay in the start of the NS Block creates incremental operation and maintenance costs in the final two years of the delivery of the NS Block which is a matter to be addressed at a future proceeding. NSPML believes that the increased value of the renewable NS Block in those years will provide net value for Nova Scotia customers in those years.

The commercial agreements imposed responsibility on each party, NSPML and Nalcor, to manage their respective work scopes with no cost sharing relating to a delay by either party. NSPML mitigated Nova Scotia customers’ cost exposure through the commercial agreements by limiting Nova Scotia’s exposure on capital costs of the projects not controlled by NSPML. The Federal Loan Guarantee also imposes completion guarantees on both Nalcor and Emera thus protecting Nova Scotia customers from completion risk.