NOVA SCOTIA UTILITY AND REVIEW BOARD

IN THE MATTER OF: THE PUBLIC UTILITIES ACT

-and-


REDACTED INFORMATION REQUESTS

To: Tim Wood
Manager, Regulatory Strategy
By email: tim.wood@nspower.ca

From: The Liberty Consulting Group
Board Counsel Consultant

Responses Due: Friday, April 8, 2016

Copies: 1 electronic copy (PDF searchable)
5 hard copies

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Issued at Halifax, Nova Scotia, this 24th day of March, 2016.

Doreen Friis, Regulatory Affairs Officer/Clerk
**Request IR-1:**

Reference: With respect to the 2017-2019 Fuel Stability Plan Application, page 20, lines 1-10,

(a) Please prepare a table that identifies each change to the forecasting appendix (Appendix B) to the FAM Plan of Administration, from the version approved by the NSUARB in its order in the 2016 Base Cost of Fuel proceeding (Decision, dated November 20, 2015, in Matter No. M06962), that the Company made when preparing its 2017-2019 Fuel Stability Plan Application.

(b) Please add a column to the table that provides a brief explanation of the reason for each change.

(c) For each change, please advise whether the Company is seeking:
   i. NSUARB approval of the change, or
   ii. A temporary suspension of the provision in question, or
   iii. Recognition or acknowledgement that the change is appropriate, or
   iv. Other. Please explain.

**Request IR-2**

Reference: With respect to the 2017-2019 Fuel Stability Plan Application, page 49, lines 16-18, the Application states:

NS Power has a contract that allows for flexible supply as the relative pricing of gas and solid fuel change and this contract is reflected in the 2017 BCF.

(a) The structure of the summer-season pricing in this contract is, is it not? If not, please explain.

(b) What is the structure for pricing for the 2018 and 2019 BCF? Please explain.

(c) What is the structure for pricing for those two years? Please explain.
Request IR-3

Reference: With respect to the 2017-2019 Fuel Stability Plan Application, Appendix A OE-01A, Attachments 1, 2 and 3,

(a) What are the dates of the forward price curves used to prepare these forecasts?
(b) What price for natural gas was used in preparing these forecasts?
(c) What will be the dates of the same forward price curves used to prepare the Update scheduled to be filed in May?
(d) What price for natural gas will be used in preparing these forecasts?
(e) At the time of the Update, will there be a new forecast of when NS Power will begin to receive power under the complex of agreements governing the Maritimes Link and NS Power’s access to power under those agreements?

Request IR-4

Reference: With respect to the 2017-2019 Fuel Stability Plan Application, Appendix A OE-01B, Attachment 1, what was the date of the forward price curves used to prepare this forecast?

Request IR-5


(a) Please provide a copy of

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Request IR-6

Reference: With respect to the 2017-2019 Fuel Stability Plan Application, Appendix D (NS Power Fuel Hedging Plan), the Plan states (at page 2):

Such hedging strategies or mechanisms must be approved by the Board under the EPIA.

(a) For what "strategies or mechanisms" is NS Power seeking NSUARB approval?

(b) What is the nature of the approval being sought?

Request IR-7

Reference: With respect to the 2017-2019 Fuel Stability Plan Application, Appendix D (NS Power Fuel Hedging Plan), the Plan mentions (at page 4) the possible use of

Request IR-8

Reference: With respect to the 2017-2019 Fuel Stability Plan Application, Appendix D (NS Power Fuel Hedging Plan), the "Identification – Assessment – Mitigation & Control" framework described in the figure at the top of page 5:

(a) What are the “risk reporting metrics” mentioned under the “Assessment” step?
Request IR-9

Reference: With respect to the 2017-2019 Fuel Stability Plan Application, Appendix D (NS Power Fuel Hedging Plan), the Plan states (at the bottom of page 5)

(a) Does NS Power have objectives, and what are they, regarding what proportion to hedge:
   i. Each fuel and purchased-power commodity?
   ii. The total fuel and purchased-power portfolio?

(b) How did NS Power decide on the objectives identified in the previous part of this question:
   i. Each fuel and purchased-power commodity?
   ii. The total fuel and purchased-power portfolio?

(c) What other objectives were considered?
   i. Each fuel and purchased-power commodity?
   ii. The total fuel and purchased-power portfolio?

(d) Please provide copies of whatever analysis documents were produced in arriving at the stated objectives.

(e) Please describe any context, such as knowledge of other firms addressing similar circumstances, that NS Power considered in arriving at the stated objectives.

(f) Is the [REDACTED] the only factor that would cause the Company to change its objectives?

(g) If the [REDACTED] is not the only factor that would [REDACTED], what are the other factors that would cause such a change?
Request IR-10

Reference: With respect to the 2017-2019 Fuel Stability Plan Application, Appendix D (NS Power Fuel Hedging Plan), the Plan states (at page 6):

Request IR-11

Reference: With respect to the 2017-2019 Fuel Stability Plan Application, Appendix D (NS Power Fuel Hedging Plan), the Plan states (at page 6):

Gains or losses from all hedging activity,

Please explain this statement.

Request IR-12

Reference: With respect to the 2017-2019 Fuel Stability Plan Application, Appendix D (NS Power Fuel Hedging Plan), the Plan states (at page 6):

This will result in some

Please explain this statement.
Request IR-14+

Reference: With respect to the 2017-2019 Fuel Stability Plan Application, Appendix D (NS Power Fuel Hedging Plan), pages 6-7, Example #1 under Cross-Commodity Hedging uses

(a)

(b)

Request IR-15

Reference: With respect to the 2017-2019 Fuel Stability Plan Application, Appendix D (NS Power Fuel Hedging Plan), Page 7, Example #2 under Cross-Commodity Hedging uses

(a)

(b) is an acceptable part of NS Power’s Fuel Stability Plan.

(c) If it does not introduce extraneous risks, please explain why not.
Request IR-16

Reference: With respect to the 2017-2019 Fuel Stability Plan Application, Appendix D (NS Power Fuel Hedging Plan), Page 10, Risk Measurement and Reporting. The first paragraph states:

NS Power will report the

Request IR-17

Reference: With respect to the 2017-2019 Fuel Stability Plan Application, page 47, lines 1-2, which price is referenced, for each season of each year of the Fuel Stability Plan.

Request IR-18


Request IR-19

Reference: With respect to the 2017-2019 Fuel Stability Plan Application, page 54, lines 5-9, the Application reports that, for COMFIT projects that have not been in service for three years, the Company will compare with those of projects that have been in service for three or more years? Please explain.
Request IR-20

Reference: Figure 28 – Breakdown of Maritime Link Anticipated Assessment:

Please provide the estimated assessment of the Maritime Link if NS Power did not start depreciation collection. Please provide any support calculations for the depreciation values in the table.

Request IR-21

Please provide the impact to FAM customers in 2018 and 2019 BCF relating to incremental fuel/PP costs if there is a delay in the Muskrat Falls project. Please provide the purchased power, coal and natural gas components of these amounts for 2018 and 2019.

Request IR-22

Please provide the detailed supporting information for purchased power imports for 2013-2020 included in the Fuel Stability filing, similar to the export details that are shown in in Appendix A, OE01O, but not included for imports.

Request IR-23

Increases in GWh and dollars for import purchased power, from $35 million in 2019 to $77 million in 2020, are noted on page 78 of the Fuel Stability filing. Please provide the MWh, cost per MWh, and total cost for each the base, supplemental and surplus purchases through the EAA for Maritime Link, and for each “New Brunswick” import supplier for both 2019 and 2020.
Request IR-24

In the Fuel Stability forecast, NS Power projects that imports from NB will be substantial, and as high as 890 GWh in 2017. NS Power has also noted to Liberty that “we assumed present capabilities on the line” for the forecasts, which would include extreme current, near-zero firm import transfer capability from NB. Please explain how NS Power would import large volumes with current NBP restrictions on firm and non-firm imports to NS. Please also provide all preliminary reports and executive summary of SNL Lavalin’s recent study in this area.

Request IR-25

The EAA for the Maritime Link establishes a market test and RFP process to provide a competitive situation for Surplus Energy from Muskrat Falls versus other market alternatives. NS Power has modeled these market alternatives as priced at the “Mass Hub” pricing. Again, NS Power has noted to Liberty that “we assumed present capabilities on the line” for the Fuel Stability forecasts, which would include extreme current, near-zero firm import transfer capability from NB. Please explain how market alternatives from New England, New Brunswick or other sources are valid comparative and pricing options if current NB/NS import transfer capability restrictions are assumed to continue into the 2017-2019 Fuel Stability period and beyond.

Request IR-26

Please explain why Surplus Energy options are priced at [redacted] in 2017-2020, rather than the [redacted] that was previously agreed to be appropriate for the 2016 BCF.
Request IR-31

NS Power is currently rebuilding a 138Kv line to NB as a replacement 138 Kv line. Please explain why this line re-build is not a higher-capacity 345Kv line, which was the previous plan to improve import and export transfer capability with New Brunswick.

Request IR-32

Regarding the Forecasting appendix (Appendix B) to the FAM Plan of Administration,

(a) Please prepare a table that identifies each change, from the version approved by the NSUARB in its order in the 2016 Base Cost of Fuel proceeding (Decision, dated November 20, 2015, in Matter No. M06962), that the Company made when preparing its 2017-2019 Fuel Stability Plan Application.

(b) Please add a column to the table that provides a brief explanation of the reason for each change.

(c) For each change, please advise whether the Company is seeking:

   i. NSUARB approval of the change, or
   ii. A temporary suspension of the provision in question, or
   iii. Recognition or acknowledgement that the change is appropriate, or
   iv. Other.

Request IR-33

Reference: With respect to the 2017-2019 Fuel Stability Plan Application, Appendix A OE-01K, Attachment 1, Pages 1-4,

(a) Please provide supporting documents for forecasting solid fuel prices for 2017-2019 open tonnage requirements.

(b) With respect to the open volumes for LSL and LSH pricing, an indication was given. Is the indication as required in the FAM POA Revised Appendix B, Fuel Forecasting Methodology, page 6, Section 3.2.1?

   i. If an indication is not , should NS Power to be used for
forecasting coal prices for the relevant timeframe to comply with the FAM POA?

ii. Or is a Change to the Fuel Forecasting Methodology required?

iii. Please confirm that [removed] to determine the forecasted solid fuel price.

Request IR-34

Reference: With respect to the Fuel Manual Revision 9 Appendix B, Page 25, Section 1.3 Approved Market Prices:


(b) Please explain the use of differing sources for forecasting solid fuel prices?

Request IR-35

Reference: With respect to the 2017-2019 Fuel Stability Plan Application, page 42, lines 8-9:

(a) How much [removed] is planned for each year of stability plan?

(b) What is the source of [removed] pricing?

Request IR-36

Reference: With respect to the 2017-2019 Fuel Stability Plan Application, page 44, lines 6-7:

(a) Should SO2 annual tonnage numbers be changed on Figure 15, page 43?
Request IR-37

Reference: With respect to the 2017-2019 Fuel Stability Plan Application, Appendix A OE-01J, Attachment 1, Pages 1,

(a) Please provide a recent copy of the P & L Report for solid fuel hedge performance.

Request IR-38

Reference: With respect to the 2017-2019 Fuel Stability Plan Application; page 14, lines 23-26; page 14, lines 33-34; and page 19, lines 26-28 which reference the FAM Plan of Administration (POA)

(a) Please explain what changes and/or modifications, if any, will be made to the current POA to accommodate the requirements of the referenced legislation.

(b) To the extent changes are contemplated:
   i. Identify the relevant sections within the instant filing where the proposed changes to POA are contained: and,
   ii. If not included in the instant filing, explain when such proposed changes to the POA will be submitted for Board review and approval.

Request IR-39

Reference: With respect to the 2017-2019 Fuel Stability Plan Application, page 17, lines 4-7, the Application states, "any under- or over-recovery (and associated interest) for the Rate Stability Period will be adjusted as part of the 2020 FAM filings, ensuring that customers will continue to pay only the actual cost of fuel during the Rate Stability Period".

(a) Will interest be calculated on a cumulative basis? For example will 2017 under- or over-recovery balances accumulate interest through the end of 2019 to be reflected in 2020 FAM filing?

(b) And similarly, will 2018 and 2019 activity balances accumulate interest through the end of 2019 to be reflected in 2020 FAM filing?
Request IR-40


(a) Please explain what changes and/or modifications, if any, will be made to the NS Power’s accounting policies and procedures, process narratives, etc. to accommodate the requirements of the referenced legislation.

(b) Please explain what changes and/or modifications, if any, will be made to the NS Power’s internal accounting systems, i.e., chart of accounts, reporting and tracking procedures, as well as internal audit procedure requirements.

(c) To the extent changes are contemplated:
   i. Identify the relevant sections within the instant filing where the proposed changes are contained: and,
   ii. If not included in the instant filing, explain when such proposed changes will be submitted for Board review and approval if required.

Request IR-41

Reference: With respect to the 2017-2019 Fuel Stability Plan Application the discussion regarding Maritime Link depreciation policy and asset placed in service, at page 10 line 22 to page 11, line 10:

(a) Please explain, the associated ratemaking values for the Maritime Link reflected in the FAM cost, i.e., depreciation values, rate of return value components, to include timing such as 1/1/2018 and all of 2019 as suggested.

(b) Please explain, how slippage in timing, i.e., something later than 1/1/2018 will be handled through the instant application process.

(c) To the extent such differences in estimated versus actual cost are material, if at all, please explain how such matters would be handled under the proposed application process;

(d) How would NSPI determine what a material difference would be?
Request IR-42

Reference: With respect to the 2017-2019 Fuel Stability Plan Application, can NS Power point to the evidence where it addresses that the activity under the application will be subject to:

(a) Routine Internal and External Audit, i.e., annual or bi-annual
(b) NSPI's plan for normal reporting of FAM activity over the three-year period, i.e., monthly, quarterly, and annually, if any.

Request IR-43

Reference: With respect to the 2017-2019 Fuel Stability Plan Application, at page 76, lines 13 to 27, more specifically the discussion of the Board approved 70/30 debt to equity ratio and 9% rate of return on equity component for the Maritime Line:

(a) Please provide supporting data related to the approved 70/30 debt to equity ratio.
(b) Please provide supporting data related to debt cost rate.
(c) Please provide supporting data related to equity cost rate.
(d) Please provide and/or confirm the overall rate of return percentage used to support the FAM cost claim;
(e) Please provide the rate base values and resultant rate of return revenue claim in for 2018, 2019, and 2020 included in the FAM cost.

Request IR-44

Reference: With respect to the 2017-2019 Fuel Stability Plan Application, at page 64, line 14 to Page 65, line 8, more specifically the discussion of the AFUDC claim in the instant application for the Maritime Link:

(a) Please provide supporting data related to the claimed AFUDC rate.
(b) Please provide supporting data related to the AFUDC value for the Maritime Link in service value reflected in the FAM cost claim, by year.

Request IR-45

Reference: With respect to the 2017-2019 Fuel Stability Plan Application, page 93, lines 5-17, pertaining to excess earnings:

(a) Please provide the amount of excess earnings for 2015, if any, included in the instant application.
(b) Please provide the amount of excess earnings for 2016, if any, included in the instant application.
(c) Please confirm Liberty’s understanding that there are no projected excess earnings included in the application for 2017, 2018, and 2019.
(d) For discussion purposes, please explain how excess earnings would be handled if realized in 2017, 2018, and 2019. For example, accumulated and then applied against 2020 overall true cost consideration, or something more current if such values were material.
(e) Please explain if excess earnings, if any, in 2017, 2018, and 2019 would accrue interest; and, if so would interest be calculated on a cumulative basis?

Request IR-46

Reference: With respect to the 2017-2019 Fuel Stability Plan Application, page 56, Figure 23 and lines 7-11:

(a) NS Power notes that one of the primary drivers for the increase in imports is the price of imports relative to other alternatives from 2017-19. The table displays the forecast cost of the imports, but not of the “other alternatives”. Please describe the alternatives.
(b) What are the expected or forecast prices for those alternatives?
Request IR-47

Reference: With respect to the 2017-2019 Fuel Stability Plan Application, page 56, Figure 23:

(a) What portion of the forecast imports are derived from cooperative dispatch with New Brunswick Power?
(b) What amount of savings can be attributed to cooperative dispatch with New Brunswick power, per year?
(c) Are these savings net of any costs associated with coordinated dispatch?
(d) If not, please estimate those costs.

Request IR-48

Reference: With respect to the 2017-2019 Fuel Stability Plan Application, page 54, lines 23-26:

(a) NS Power notes that it is required to run the PHB facility as a must run facility. How does PHB compare on a dispatch cost ($ per MWh) basis to other alternatives, either internal generation or other import options?
(b) What is the cost or benefit of PHB, in $ per year, relative to other options when run in must-run mode?

Request IR-49


(a) What is the expected annual volume in MWh of energy provided to PHP through the LRT?
(b) How does this compare to recent historical levels of the last three years?

Request IR-50

(a) The load forecast is a critical input to the PLEXOS runs that produce energy production forecasts and fuel consumption projections. Please provide an estimated time period for producing revised PLEXOS runs based on revised load forecasts.

**Request IR-51**

Reference: With respect to the 2017-2019 Fuel Stability Plan Application:

(a) Please explain how and why PLEXOS caps annual exports, and any relationship to emissions limits.

(b) Since Plexos can manage the optimization of emissions within its dispatch, why is this done and how is it implemented?

**Request IR-52**

Reference: With respect to the 2017-2019 Fuel Stability Plan Application, page 78, Figure 31. The chart shows a significant reduction in generation by NS Power-owned generating units:

(a) Please describe the ramifications of this outlook on the supply curve, particularly with respect to retirements.

(b) Please describe the transmission issues and limitations

(c) Please describe the operating mode of any specific units.

**Request IR-53**

Reference: Page 14 of the 2017-2019 Fuel Stability Plan Application contains the statement that, “The Fuel Stability Plan proposed by NS Power complies with both the legislative requirements of the EPIA and the requirements of the FAM Plan of Administration (POA), except where those requirements require modification in order to accommodate the requirements of the legislation.
Please provide here in one consolidated location:

(a) A list of each requirement of the POA that required such modification
(b) A narrative description of the modification made
(c) Sufficient information to identify fully any changes in calculation bases.

**Request IR-54**

Reference: Page 18 of the 2017-2019 Fuel Stability Plan Application contains the statement that: “Any trued-up amounts will be reconciled at the end of the Rate Stability Period, and any under- or over-recovery (and associated interest) for the Rate Stability Period will be adjusted as part of the 2020 FAM filings, ensuring that customers will continue to pay only the actual cost of fuel during the Rate Stability Period.”

Please provide:

(a) The basis for calculating such interest that NS Power considers to be appropriate
(b) The rationale for proposing that basis.

**Request IR-55**

Reference: Page 48 of the 2017-2019 Fuel Stability Plan Application contains the statement that, “Based on public information, NS Power is forecasting that Deep Panuke will cease production after the winter of 2017-2018. This is consistent with public announcements on this project.”

Please:

(a) To the extent that such public information includes more than what footnote 13 indicates, provide it
(b) To the extent that NS Power has non-public information bearing on the issue, provide it.
Request IR-56
Reference: Page 48 of the 2017-2019 Fuel Stability Plan Application discusses alternate supply from “TransCanada system in Ontario and shipped across multiple pipelines or sourced from the Algonquin system.”
Please:
(a) Identify all currently known alternatives that would provide for increased supply into Nova Scotia to the extent they have the potential to be in service before 2020
(b) Provide all information NS Power has regarding their announced in-service dates,
(c) Provide and describe NS Power’s views on how and how much they would influence supply into Nova Scotia
(d) Provide and describe NS Power’s views on the likelihood that such alternatives will come into service before 2020.

Request IR-57
Please:
(a) Provide what 23 years were used to generate the rolling average for each year from 2017 through 2019
(b) Explain why the forecasted amounts vary for each of those years.

Request IR-58
Reference: Figure 20 on page 51 of the 2017-2019 Fuel Stability Plan Application.
(a) Please explain in detail the basis for calculating biomass forecasts as shown in Figure 20.
Request IR-59


Please:

(a) Provide a table reconciling actual output versus the “Annual Net Output provided by each COMFIT developer”

(b) Provide a description of the methods regarding and derivation of the actual percentage factors shown.

Request IR-60

Reference: Page 57 of the 2017-2019 Fuel Stability Plan Application contains the statement that, “The methodology used for the forecast of the Rate Stability Period assumes that all imports from 2017 through 2019 are imports under the Joint Dispatch Agreement with New Brunswick Power rather than Maritime Link energy.”

Please:

(a) Describe whether, should it continue, the agreement would permit any other form of import

(b) If so, describe the sources, nature, and potential amounts of such imports.

Request IR-61

Reference: Page 80 of the Fuel Stability Plan Application contains the statement that, “Any conflict or inconsistency between this summary and the contents of the Plan is unintentional and the contents of the Plan would prevail.”

Given that both are documents intended to give clear guidance to the activities of Company personnel, please:

(a) Explain whether NS Power is in any respect unaware of how the two documents conflict or are inconsistent

(b) Describe each case where NS Power is aware of any conflict or inconsistency
(c) Explain how NS Power will provide sufficient instruction and guidance to employees in how to act with respect to matters covered by the documents.

Request IR-62

Reference: Page 82 of the Fuel Stability Plan Application contains the statement that, “F&PP forecast assumptions are defined and validated based on the POA (fuel costs, load, outages, etc.) with deviations documented where required.”

(a) Please provide documentation for each such deviation.

Request IR-63

Reference: Page 82 of the Fuel Stability Plan Application contains the statement that, “Fuel forecasts are entered into Allegro ETRM (Energy Trading and Risk Management) software to provide risk reporting metrics allowing NS Power to focus on key risks.”

Please:

(a) Identify each such key risk
(b) Provide the metrics that will support such focus.

Request IR-64

Reference: Page 83 of the Fuel Stability Plan Application contains the statement that, “Where cost effective, hedges are executed to reduce the overall portfolio level risk.”

(a) Please describe in detail how cost effectiveness of each hedging measure will be determined and documented.

Request IR-65

Reference: Page 84 of the Fuel Stability Plan Application contains the statement that, “NS Power may enter into a hedge using underlying products that are not the exact physical commodity being hedged, but are highly correlated with this commodity.”

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(a) Please explain in detail how correlation will be measured (quantitatively where applicable) and documented.

Request IR-66

Reference: Page 84 of the Fuel Stability Plan Application contains the statement that, “This section provides a brief outline of some of the key hedging mechanisms expected to be used during the Rate Stability Period. However, it is not meant to be an exhaustive list, and other products or mechanisms may be used by NS Power.”

(a) Please explain how and by whom and through what documentation the list of available mechanisms will be created, controlled, documented, and monitored.

Request IR-67

Please provide a table of all the locational basis that will be considered with respect to Natural Gas hedging.

Request IR-68

Please provide a description of all currency risk considerations with respect to fuel hedging.