DECISION **2024 NSUARB 34**
M10416

NOVA SCOTIA UTILITY AND REVIEW BOARD

IN THE MATTER OF THE PUBLIC UTILITIES ACT

- and -

IN THE MATTER OF a public hearing for **NOVA SCOTIA POWER INCORPORATED'S** Fuel Adjustment Mechanism (FAM) Audit for 2020/2021 by Bates White Economic Consulting, LLC

BEFORE: Stephen T. McGrath, K.C., Chair
Roland A. Deveau, K.C., Vice Chair
Steven M. Murphy, MBA, P.Eng., Member

APPLICANT: **NOVA SCOTIA POWER INCORPORATED**
Colin J. Clarke, K.C.
Geoff Breen, Counsel
Blake Williams, Counsel

INTERVENORS: **CONSUMER ADVOCATE**
David J. Roberts, Counsel
Michael Murphy, Counsel

SMALL BUSINESS ADVOCATE
E.A. Nelson Blackburn, K.C.
Melissa MacAdam, Counsel

EASTWARD ENERGY INC.
Michael Johnston
Kristen Wilcott

EFFICIENCYONE
James R. Gogan, Counsel

INDUSTRIAL GROUP
Nancy G. Rubin, K.C.
Brianne Rudderham, Counsel

ALTERNATIVE RESOURCE ENERGY AUTHORITY
Don Regan
Aaron Long

NOVA SCOTIA DEPARTMENT OF NATURAL RESOURCES AND RENEWABLES
Daniel Boyle, Counsel

PORT HAWKESBURY PAPER LP
James MacDuff, Counsel
Melanie Gillis, Counsel

BOARD COUNSEL: William Mahody, K.C.

HEARING DATE(S): September 11-12, 2023

FINAL SUBMISSIONS: December 12, 2023

DECISION DATE: **February 21, 2024**

DECISION: **The Board disallows approximately $2 million plus interest (the exact amount to be confirmed in a compliance filing) to be credited to the FAM. NS Power is directed to file FAM Audit Action Plan updates on the implementation of the recommendations.**

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1.0 SUMMARY

[1] Nova Scotia Power Incorporated's fuel and purchased power expenses are about 40% of the utility's annual cost to supply Nova Scotians with electricity. NS Power recovers these costs under a Board approved fuel adjustment mechanism (FAM), designed with the intent that NS Power's customers pay only the utility's actual, prudently-incurred, fuel and purchased power costs.

[2] NS Power's FAM operates under a Board-approved Plan of Administration (POA). One of the requirements of the POA is that amounts charged through the FAM must be periodically audited for completeness and accuracy and to ensure that the fuel and purchased power costs were incurred reasonably and prudently. Qualified independent auditors appointed by the Board conduct these audits, which normally cover two-year periods. This decision is about the FAM audit for 2020 and 2021.

[3] The Board engaged Bates White Economic Consulting, LLC, to do the audit. Bates White filed its audit report with the Board on November 1, 2022. Bates White presented its conclusions and made 32 recommendations. Of the approximately $1.5 billion in FAM costs incurred during the audit period, Bates White recommended that the Board disallow the recovery of $3,637,096 for costs paid to an affiliate, Brooklyn Power Corporation, under a Ministerial Directive. However, this recommendation depends on whether the Board accepts NS Power's position that it had to incur these costs to comply with the Ministerial Directive.

[4] NS Power filed Reply Evidence on January 19, 2023. It accepted all of Bates White's recommendations, except the recommended disallowance, and included an Action Plan to implement the recommendations.

[5] Several Intervenors in this proceeding supported Bates White's recommended disallowance. Intervenors also raised other issues, including a recommendation to disallow costs incurred by NS Power to redispatch its generation fleet after an oil spill occurred at its Tufts Cove facility on August 2, 2018 (as well as certain operating costs related to the incident) and a recommended disallowance for the way a request for proposals (RFP) was conducted for fuel for NS Power's Port Hawkesbury Biomass facility.

[6] The Board finds that a disallowance for the costs paid by NS Power to buy energy from Brooklyn Power under the Ministerial Directive is not warranted. The Board concludes that NS Power's interpretation of its obligations was what the Minister intended. This interpretation is consistent with an interpretation offered by the Deputy Minister of Natural Resources and Renewables and recently proclaimed regulations requiring NS Power to make similar payments in 2023, 2024 and 2025 (immediately following the period covered by the Ministerial Directive).

[7] However, the Board finds that NS Power's actions contributed to the August 2, 2018, oil spill at Tufts Cove. The Board accepts that mistakes contributing to the spill date back to 1974, before NS Power owned the facility. However, in July 2018, when NS Power discovered the stub pipe that would later be the source of the oil spill, it did not remove the insulation around it to check for corrosion. NS Power made this decision despite being aware that the stub pipe would not have been inspected for a long time, and knowing that corrosion in other parts of its heavy fuel oil (HFO) piping system caused it to expand the scope of an ongoing capital project to include the removal of all pipe insulation to allow for a comprehensive pipe inspection. The Board finds NS Power's

actions were imprudent and disallows $157,921 for the additional cost of redispatching NS Power's generation fleet after the spill and approximately $1.8 million that would have been returned to customers as excess earnings but for the unnecessary uninsured operating costs that NS Power incurred as a result of the oil spill. This amounts to a total disallowance of approximately $2 million plus interest (the exact amount is to be provided in a compliance filing).

[8] To put this in context, the total disallowance, of approximately $2 million plus interest, is a very small fraction of the approximately $1.5 billion in FAM costs incurred by NS Power over the 2020 and 2021 audit period.

[9] The Board also provides directions about the following in this decision:

- NS Power is directed to file FAM Audit Action Plan updates, beginning August 31, 2024, and continuing every six months until all matters are resolved.
- The capacity value related to the Maritime Link under the Energy and Capacity Agreement and the need for Lingan 2 must be reviewed again in the next FAM audit.
- The coal supply dispute settlement agreement achieved in the fourth quarter of 2022, but related to the audit period, will be reviewed in the next FAM audit, along with NS Power's dispatch practices for the coal units affected by the below market prices under the settlement agreement.
- NS Power is directed to try to engage with other participants to undertake a study of regional joint dispatch by a single system operator and report on its efforts every six months, beginning August 31, 2024.
- The FAM auditor may, in its next FAM audit report, discuss its views on regulatory tools available to minimize the interest paid on outstanding fuel balances under NS Power's FAM.

2.0 BACKGROUND

[10] Consistent with the POA for NS Power's FAM, the Board engaged Bates White to audit NS Power's operation of the FAM in 2020 and 2021. The most recently

completed audit covered 2018 and 2019 and was the subject of a Board decision in April 2021 [2021 NSUARB 40].

[11] Section 5 of the POA addresses the audit requirements:

> **5.0 AUDIT AND OVERSIGHT**
> The amounts charged through the FAM shall be subject to periodic audit to assure completeness and accuracy and to assure fuel and purchased power costs were incurred reasonably and prudently. The results of any audit shall form part of the issues for consideration by the Board in a subsequent FAM hearing to consider the re-setting of the Base Cost of Fuel, or setting of the Fuel Adjustment Factor, or a General Rate Case at the request of NS Power or any interested stakeholder or upon Board order. Following consideration of the audit in any such hearing, the Board may make such adjustments (with interest if appropriate) to existing balances or to already recovered amounts as it may find necessary.
>
> **Audit Process**
> The Board shall provide for the conduct of a Fuel Adjustment Mechanism (FAM) audit during the Rate Stability Period as it deems appropriate. The Board shall have a qualified independent firm conduct the audit. The audit will address the financial and management/performance aspects of NS Power's fuel procurement and recovery under the FAM. The audit will include the FAM Formula, actual fuel and purchased power costs, contracts and management performance that affect the audit period from January 1 to December 31 of the years within the audit period. Audits will normally cover two-year periods or such periods as determined by the Board.
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> **Objectives and Scope of the Audit**
> The overall objective of the FAM audit will be to examine operational and managerial aspects of the fuel and energy procurement, management, and production functions and activities of NS Power, including any fuel or energy related affiliate transactions that involve these functions and activities directly or indirectly. The review will address adherence to good utility practice and consistency with the policies and procedures governing NSPI's procurement as described in the NS Power Fuel Manual.
>
> The Scope of the Audit will include a review of fuel and energy procurement, fuel management, and generation production …
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> …
>
> Prior to setting the final audit scope, the auditor shall meet with NS Power and interested stakeholders.
>
> **Timing of the Audit**
> Audits are expected to commence in February of every second year or at such time as directed by the Board. Final reports will normally be filed by July 2 of every second year or on such a date as directed by the Board. The final report will evolve from a draft report which is provided to NS Power and the Board within 30 days of the filing of the final report. The draft report should contain functional area task reports, a management summary, and include findings of operating effectiveness and efficiency, as well as any recommendations for adjustments in costs or changes in functions and activities.

...

Significant FAM Changes
Where, in the absence of a General Rate Application, an increase for any customer class of more than 10 percent compared with the rate payable in the prior year is caused by the application of the FAM procedures, the Board should consider appropriate measures to assist customers.

The Board will monitor the operation of the FAM closely and reserves the right to intervene in any circumstance where it believes an increase to a customer class is not acceptable or in the public interest and take such steps as it considers appropriate to assist such customers including deferring a part of the increase for collection in a future time period.

[FAM POA, June 27, 2019, pp. 23-25][1]

[12] Notably, the start of the audit period covered by this decision coincides with the outbreak of the COVID-19 pandemic and the implementation of pandemic restrictions, which resulted in supply chain, labour and other operational challenges. In 2020, NS Power incurred approximately $721.2 million in FAM costs and in 2021 the total FAM costs were $816.9 million. FAM costs incurred during the audit period were approximately $1.5 billion.

[13] Consistent with past audit reports, Bates White noted that NS Power was cooperative and responsive throughout the audit period. As noted in the prior FAM Audit Decision, the Board considers the conduct of the FAM Audit between the auditor and the utility to be constructive and in the best interests of all FAM customers.

[14] The Board also received positive comments about the current audit process from Intervenors:

> At the outset, the Consumer Advocate notes that the FAM Audit mandated by this Board continues to increase ratepayer confidence by providing a transparent process through which the Board not only ensures that "power rates reflect the actual cost of fuel," but also that any such "actual costs" are prudently incurred. This process further encourages and

[1] The FAM POA was revised several times since June 2019, but the passage cited was not revised through the audit period and is substantially the same as the current version of the POA. The only change to the cited passage in the current POA is a reference to the 2023-2024 GRA Period instead of the Rate Stability Period.

> incentivizes continuous improvements in NSPI's fuel purchase practices, and is a critical bi-annual exercise in that regard.
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> [Consumer Advocate, Closing Submissions, p. 1 (footnotes omitted)]
>
> NRR remains encouraged by the constructive dialogue between the parties and consultants throughout this process. Through this process and other proceedings before the Board, NRR hopes to see decreased reliance upon carbon fuel sources in line with net-zero objectives.
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> [Department of Natural Resources and Renewables Closing Submissions, p. 1]

[15] As noted above, NS Power filed an Action Plan to implement all but one of Bates White's recommendations. In its Rebuttal Evidence, Bates White considered this to be a good faith commitment to accept and implement the recommendations going forward, but it did not consider the issues resolved. Bates White noted it is important that the FAM Audit Action Plan be vetted by stakeholders, reviewed and addressed by the Board, and monitored in detail going forward to ensure NS Power follows through on its commitments and that NS Power's activities meet the spirit of the recommendations.

[16] The Board agrees that the overall audit process benefits from ongoing monitoring and reporting, and this is an approach that has been adopted over the past few audit periods. NS Power is directed to file semi-annual FAM Audit Action Plan updates, beginning August 31, 2024, and continuing every six months thereafter until all matters are resolved.

3.0 ISSUES

3.1 Brooklyn PPA

[17] NS Power has a long-term power purchase agreement (PPA) with the Brooklyn Power Corporation for its 30-MW biomass and co-generation facility in Liverpool, Queens County. The PPA was signed in 1992 and its term extends to 2028. In

2013, Renova Scotia Bioenergy Inc., a Crown corporation, sold its shares of Brooklyn Power to Emera Energy Incorporated. Brooklyn Power is therefore an affiliate of NS Power. Since the PPA pre-dates NS Power's Affiliate Code of Conduct, it operates as an exception to the Affiliate Code. However, as noted later in this section, any changes to the PPA will be subject to review for prudence for its impact on fuel costs and compliance with the Affiliate Code of Conduct.

[18] NS Power has relied on this PPA to help it meet its renewable electricity requirements, particularly following delays in receiving energy from the Muskrat Falls project. After concluding that it would not reach the renewable electricity standard for 2020, NS Power asked for relief from the Province. As described in greater detail later in this decision, the Minister of Energy and Mines issued an Alternative Compliance Plan on May 15, 2020, under the *Renewable Electricity Regulations*, which provided, in part, that NS Power must "maximize the use of dispatchable renewable electricity from its own facilities, as well as those of renewable electricity power producers in Nova Scotia (excluding COMFIT generation sources). Recognizing this additional dispatch will be burdensome on producers, Nova Scotia Power shall acquire such electricity at prices exceeding current contracts by $30/MWh". In a decision dated February 16, 2021 [2021 NSUARB 20, M09880], the Board granted NS Power a conditional exemption to the Affiliate Code so that NS Power could follow the Ministerial Directive to purchase power under this PPA at prices exceeding the current contract price by $30/MWh.

[19] A unique feature of the PPA is the obligation to pay for energy that is not produced. This was described by Bates White as follows:

> Under the Brooklyn contract, NSPI must pay Brooklyn for energy produced and for energy *not* produced. For example, if Brooklyn schedules 25 MW, but NSPI dispatches only 15

> MW, NSPI must pay one price for the 15 MW called the Capacity Energy rate, and another price for the 10 MW, the [Decremental Energy] payment rate.
>
> The calculation of the marginal cost for [the Brooklyn facility] must take into account the fact that NSPI must pay Brooklyn for each MW whether or not energy is produced from that MW. When there is no energy produced from the MW, NSPI pays the [Decremental Energy] payment rate, when energy is produced from the MW, NSPI pays the Capacity Energy rate. The marginal cost is the difference between the two: Capacity Energy rate minus [Decremental Energy] payment rate. Because NSPI must pay Brooklyn when it does not produce energy, Brooklyn's marginal cost is smaller than otherwise, increasing its dispatch. Paying Brooklyn to *not* produce energy, especially during periods when Brooklyn's marginal cost is substantially above system lambda, and given the abundant amount of excess operating reserves on NSPI's system, is not a good deal for FAM customers. This payment provision, however, is part of a long-term contract that has been in place for over 20 years and to our knowledge cannot be revised. … [Emphasis in original]
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> [Exhibit N-3, p. 265]

[20] Bates White noted that Brooklyn Power consistently reduced its Decremental Energy Bid after the Minister issued his directive. In reviewing the communications between NS Power and Brooklyn Power, Bates White was able to confirm that Brooklyn Power reduced its Decremental Energy Bid by $30/MWh to match the amount of the adder in the Ministerial Directive. Bates White noted that the lower the Decremental Energy Bid, the more likely Brooklyn Power would be dispatched, resulting in higher output from the Brooklyn facility. NS Power also provides forecasts of its dispatch requirements to Brooklyn Power instead of marginal pricing, which would give this confidential information to its affiliate.

[21] Bates White concluded that NS Power and Brooklyn Power "deviated from their contract terms without any signed agreement". In its audit report, Bates White recommended:

> Recommendation XI-6: NSPI should either (a) enforce the Brooklyn PPA as it stands or (b) pursue reasonable PPA revisions that better match how the PPA is administered.
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> [Exhibit N-5, p. 24]

[22] Some intervenors also raised concerns about the Brooklyn Power PPA and how it is administered by NS Power with its affiliate.

[23] The Consumer Advocate submitted:

> The Consumer Advocate states that while NSPI has acknowledged the shortcomings with the decremental energy rate, the company did not firmly commit to revise this aspect of the agreement. The Consumer Advocate therefore remains skeptical that the outcome of these "negotiations" between affiliated companies will yield any substantial improvements for FAM customers. The Consumer Advocate states that NSPI should be ordered to clarify further the nature of the revisions it is seeking.
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> In response to Undertaking U-11, NSPI confirmed that the "revised PPA should be compliant with the Affiliate Code and is subject to audit per the Affiliate Code of Conduct. NS Power agrees to provide the revised PPA to the Board if it is requested by the Board." The Consumer Advocate states that NSPI should be ordered to provide a copy of the revised PPA to the Board and to all stakeholders once available.
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> [Consumer Advocate Closing Submissions, November 1, 2023, pp. 5-6]

[24] The Industrial Group submitted:

> NSPI did not adequately administer the Brooklyn PPA in a few respects. First, NSPI did not seek nor could produce any evidence supporting Brooklyn's across-the-board $30/MWh reduction to its decremental energy bid. … Subsidies and other incentives – such as the $30/MWh in additional payments from NSPI – are not appropriately considered a decremental energy cost. Second, NSPI did not seek further support specifically for Brooklyn's reduction in its decremental energy bid change on May 28, 2020. … Third, we note that NSPI did not follow the terms of the PPA as it relates to providing Brooklyn with monthly estimates of the system marginal energy cost during both on-peak and off-peak periods for the coming year. … Indeed, NSPI identified several other clauses that the parties do not enforce regarding information exchange, including information that was supposed to be shared by Brooklyn with NSPI, such as forecasts of operating and cost characteristics of the facility.
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> [Industrial Group Submissions, November 1, 2023, p. 13]

[25] Counsel for the Industrial Group cited these concerns in support of her submission that the Board accept Bates White's recommendation for a disallowance related to the Ministerial Directive (which is canvassed in the following section of this decision). However, she did not make any submission about the negotiations between NS Power and Brooklyn Power to revise the PPA.

[26] In its closing submissions, NS Power acknowledged that the terms of the PPA are not all being followed. However, NS Power said those practices have been adopted to provide for more effective administration of the PPA. It also highlighted the importance of the PPA and its ability to flexibly dispatch the Brooklyn Power facility as a

critical part of its efforts in maximizing renewable energy to meet its compliance targets, at least until other renewable energy sources come online.

[27] In Undertaking U-7, NS Power explained that the change in ownership and control of Brooklyn Power in 2013 (when 100% of the shares were sold to its affiliate) required the consent of NS Power, but the PPA stated that such consent could not be "unreasonably withheld". Since NS Power's affiliate had the financial and technical ability to carry out the terms of the PPA, NS Power concluded it had no basis to withhold its consent.

[28] Nevertheless, NS Power accepted Bates White's recommendation and stated it would "pursue reasonable revisions of the Brooklyn PPA that better reflect its administration".

[29] In response to NSUARB IR-9. NS Power agreed to "include detail around NS Power's right to regularly review the calculation of Brooklyn's decremental energy bid." John Wilson, consultant for the Consumer Advocate, recommended that the Board require NS Power to conduct a third-party review of Brooklyn Power's production costs covering the past several years, and to seek recovery of any excess payments to Brooklyn Power identified in such a review. In her testimony, Marie MacLean, Senior Director, Energy and Risk Management, confirmed that NS Power obtained a "third–party review of Brooklyn's production costs covering the 2019 to 2021 period" (Transcript, September 12, 2023, p. 310). While this report was not prepared in time for it to be available to Bates White during the present audit, NS Power agreed that the report will be available in the next FAM audit:

> Further, while NS Power acknowledges that the pricing terms of the Brooklyn PPA are somewhat complicated, NS Power is being charged by Brooklyn Power in accordance with the Brooklyn PPA. This assurance is based on NS Power's third-party audit review rights

> under the Brooklyn PPA. This third-party review, which NS Power conducts every two years, encompasses a detailed review of Brooklyn Power's decremental energy bids. As Ms. MacLean testified , a review of the 2019-2021 period was completed in 2023 and can be reviewed as part of the next FAM Audit. Bates White noted in response to Undertaking 4 that it was provided the 2016-2018 report in connection with this FAM Audit.
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> To this end, notwithstanding the fact that the Brooklyn PPA operates as a unique exception to the Affiliate Code of Conduct, NS Power is committed to transparency in its arrangements with Brooklyn Power. This is why NS Power brought an Affiliate Code of Conduct exception application (M09880) when the Ministerial Directive was issued in 2020. NS Power will continue to be transparent with the Board in connection with any negotiated revisions or extensions to the Brooklyn PPA as would normally be required when contracting with an affiliate.
>
> In light of all this, the Board and intervenors can have confidence that the Brooklyn PPA is subject to appropriate controls and oversight, and there is no need for a further review of this contract, as suggested by John Wilson.
>
> [NS Power Closing Submissions, November 1, 2023, pp. 37-38]

3.1.1 Findings

[30] As noted above, NS Power has been purchasing energy under the Brooklyn Power PPA since the early 1990's. NS Power continued to buy energy under the identical PPA terms after control of the plant was obtained by NS Power's affiliate.

[31] However, NS Power has accepted Bates White's recommendation to pursue revisions to the PPA that "better reflect its administration".

[32] Subject to NS Power's compliance with the Ministerial Directive and legislation that requires the utility to purchase prescribed amounts of energy at prescribed prices from Brooklyn Power (a topic that is canvassed in the next section of this decision), the Board finds that NS Power was acting prudently when it procured energy under the PPA on an economically dispatched basis.

[33] NS Power is pursuing revisions to the PPA to improve the administration of the agreement. It asserts such revisions will benefit both NS Power and its ratepayers. The Board concludes that it should not interfere with the negotiation process between NS

Power and its affiliate. The prudence of any such revisions, in terms of their impact on NS Power's fuel costs, will be reviewed in a future FAM audit.

[34] Counsel for the Industrial Group stated that the PPA and any revisions should be submitted to the Board for their approval because NS Power's counterparty is an affiliate. Fuel procurement contracts are generally not approved by the Board, whether they are with an affiliate or an independent third party (on this point, see *Nova Scotia Power Incorporated and NewPage Port Hawkesbury Corp.*, 2009 NSUARB 111, paras. 28-47). There is nothing in the Affiliate Code of Conduct that requires such approval. Rather, the scope of the review in future FAM audits and Affiliate Code proceedings will be whether fuel costs under the Brooklyn Power PPA were prudently incurred, including a review of PPA revisions that might impact fuel costs or that might otherwise be contrary to the Affiliate Code of Conduct.

3.2 Purchases from Brooklyn Power under Ministerial Directive

[35] Under the *Renewable Electricity Regulations*, N.S. Reg. 155/2010, NS Power must supply its customers with an increasing amount of electricity from specified renewable sources. If NS Power is unable to meet this renewable electricity standard for longer than 12 months, the Minister of Natural Resources and Renewables may allow the utility to supply renewable electricity from other sources to make up the shortfall. The Minister may include terms and conditions when setting an alternative compliance plan.

[36] In May 2020, NS Power asked the Honourable Derek Mombourquette, Minister of Energy and Mines, who was responsible for the administration of the *Electricity Act*, S.N.S. 2004, c. 25 at the time, to exercise his discretion to approve an alternative

compliance plan. The Minister did so in a letter dated May 15, 2020 (the Alternative Compliance Plan). The Minister attached a plan to his letter that is reproduced here in its entirety:

> Recognizing delays related to the delivery of energy from the Muskrat Falls project, compounded further by additional delays related to COVID-19, the Minister of Energy and Mines is providing an alternative compliance plan for Nova Scotia Power Inc. If the company is unable to meet the Renewable Energy Standard of 40% in the calendar year 2020, Nova Scotia Power Inc. is directed to undertake the following immediately:
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> - Nova Scotia Power shall supply customers with renewable electricity in an amount equal to or greater than 40% of the total amount of electricity supplied to its customers over the three calendar years of 2020, 2021, and 2022. For greater certainty, the total amount of electricity supplied over the three years shall be at least 40% renewable.
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> - Nova Scotia Power shall also maximize the use of dispatchable renewable electricity from its own facilities, as well as those of renewable electricity power producers in Nova Scotia (excluding COMFIT generation sources). Recognizing this additional dispatch will be burdensome on producers, Nova Scotia Power shall acquire such electricity at prices exceeding current contracts by $30/MWh. Nova Scotia Power should nonetheless make an efficient use of dispatchable generation resources, including by dispatching the facilities in a manner that enables them to operate in such a way that each unit of fuel provides the most electricity, while accommodating the operational constraints of each facility. Additionally, if the renewable electricity power producer uses biomass as a fuel source, Nova Scotia Power shall only pay the additional $30/MWh where the electricity is generated using biomass by-products produced from harvesting or processing primary forest products. However, this plan does not require any biomass-fired renewable electricity generator to make itself available to produce electricity if biomass is not sufficiently available for economic generation. Nova Scotia Power shall not spend more than $7 million to comply with this provision.
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> [M09880, Exhibit N-2, p. 1]

[37] NS Power's obligation to pay a $30/MWh adder under this Alternative Compliance Plan was the subject of considerable disagreement in this proceeding. In particular, the parties debated whether the adder applied to all electricity purchased from NS Power's affiliate Brooklyn Power (who was the only non-COMFIT third-party capable of supplying dispatchable renewable electricity) or only to the amount of electricity that exceeded what would have been provided to NS Power under the contract without the Ministerial Directive.

[38] NS Power interpreted the directive as requiring it to pay the $30/MWh adder on all electricity it bought from Brooklyn Power (even for the electricity that Brooklyn Power would have supplied under the existing PPA in economic order). NS Power made the fact that it held this interpretation known as early as its application to the Board in the fall of 2020 to confirm that the payment of the $30/MWh adder to Brooklyn Power was exempt from certain pricing and documentation requirements under the Affiliate Code (see, in particular, NS Power's response to information requests from the Consumer Advocate [M09880, Exhibit N-6, CA IR-9]). The Board noted this interpretation in its decision in that proceeding (but made no finding on this point):

> NS Power appears to have taken the position that it is obliged, under the Alternative Compliance Plan, to purchase all dispatchable renewable electricity at the higher price of $30/MWh over the contract prices, until the $7 million cap is reached. This would include all megawatt hours purchased from Brooklyn Power, not just additional production.
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> [2021 NSUARB 20, para. 18]

[39] Although Bates White said the Ministerial Directive was "not fully clear on this point" and could not say "with 100% certainty what the Ministerial Directive precisely intended", it expressed misgivings about NS Power's interpretation. In its audit report, Bates White said there were two items that were difficult to dispute:

> … First, NSPI's interpretation of the Ministerial Directive was favorable for its affiliate. NSPI paid its affiliate $30/MWh extra for every MWh, not only those MWh that could be considered *additional*. Second, NSPI's interpretation does not follow sound economic principles since it artificially increased the price paid to its affiliate for output that would have been produced anyway (i.e., was in merit order). Our understanding of the Ministerial Directive was to (a) allow NSPI some reprieve in the timing of its RES requirements and (b) coax *additional* RES-compliant generation where possible, i.e., from dispatchable renewable resources like Brooklyn. Thus, a reasonable interpretation of the Ministerial Directive is that the additional $30/MWh should have been paid on output that would not have been produced but for the Directive. [Emphasis in original]
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> [Exhibit N-15, p. 327]

[40] Bates White's report goes on to note that after sharing a draft of the audit report with NS Power to review for factual errors and the redaction of confidential

information, the utility provided it with a letter, dated October 25, 2022, from the Deputy Minister of Natural Resources and Renewables to "clarify the intent of the Alternative Compliance Plan issued by the former Minister of Energy and Mines in May 2020." In her letter, Deputy Minister Gatien stated:

> The Minister recognized that requiring additional output from dispatchable renewable electricity facilities would likely impose additional costs that could not entirely be compensated through existing electricity supply contracts. The Minister directed Nova Scotia Power to make payments exceeding current contracts by $30/MWh. The Minister intended the payment of $30/MWh to apply to all energy purchased from such suppliers of dispatchable renewable electricity facilities, including energy supplied under existing contracts. This stipulation was to account for additional costs to such suppliers, both fuel and operating expenses, up to $7 million.
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> This Alternative Compliance Plan specified dispatchable renewable energy, which was the source expected to provide additional renewable energy in the near term and maximize the use of Nova Scotia resources, while balancing the potential impacts to ratepayers. Constructing new facilities or expanding existing facilities to supply additional renewable energy in the compliance period is beyond the scope of the Alternative Compliance Plan. It is clear in hindsight that the Brooklyn Generating Station is the only independent power producer that met the definition of a dispatchable renewable electricity generator.
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> [Exhibit N-11, NSPI (IG) RIR-10, Attachment p. 2]

[41] Bates White noted the Deputy Minister's letter may make its concern about NS Power paying an additional $30/MWh on output it would have received from Brooklyn Power, even absent the Ministerial Directive, a moot point, but this would be a matter for the Board to decide. Based on its review of NS Power's data, Bates White concluded NS Power paid an extra $3,637,096 to Brooklyn Power for output that it would have received anyway (i.e., in merit order) and that "provided no benefits to FAM customers, did not fit the language of the Ministerial Directive, and was avoidable by NSPI."

[42] The Consumer Advocate and the Industrial Group submitted that the Deputy Minister's clarification of the Ministerial Directive should be disregarded and that, considered in accordance with the recognized principles of statutory interpretation, the Ministerial Directive did not require NS Power to pay an additional $30/MWh for energy it would have received from Brooklyn Power in any event.

[43] Alternatively, the Consumer Advocate submitted that even if the Ministerial Directive required NS Power to pay the $30/MWh adder on all electricity purchased from Brooklyn Power, its failure to raise any concerns about this with government, given the cost that would be imposed upon ratepayers and the benefit that would be received by its affiliate, was not prudent or reasonable and warrants a disallowance of the excess costs paid to Brooklyn Power for the energy that it would have produced anyway.

[44] The Small Business Advocate appeared to acknowledge that NS Power "had limited recourse with respect to the government directive to pay an additional $30/MWh on all output from Brooklyn Power," but criticized NS Power for not proposing changes to its PPA with Brooklyn Power. The Small Business Advocate suggested NS Power should have attempted to negotiate a lower base price noting that while "Brooklyn Power could have outright rejected any attempt to reduce or amend the existing purchase price, the failure to raise the possibility does not demonstrate that NS Power is doing everything it can to protect the interests of ratepayers." The Small Business Advocate also suggested that NS Power should have asked government about a penalty for failing to meet the renewable electricity standard, suggesting that the penalty may have been cheaper than following the Alternative Compliance Plan.

[45] The Nova Scotia Department of Natural Resources and Renewables (NRR) did not comment on this issue in the submissions it filed in this proceeding.

3.2.1 Findings

[46] The Ministerial Directive is not legislation, and the Board concludes that interpreting the Alternative Compliance Plan as if it were may not, in the circumstances

of this case, serve the objective of reasonably determining the obligations that were imposed on NS Power by the Minister under the Alternative Compliance Plan. The Board finds NS Power interpreted its obligations the way the Minister intended. This interpretation is consistent with the interpretation offered by the Deputy Minister and similar obligations imposed on NS Power by recent amendments to the *Renewable Electricity Regulations* for the years 2023, 2024 and 2025 (immediately following the period covered by the Alternative Compliance Plan).

[47] The Consumer Advocate and the Industrial Group, on the one hand, and NS Power, on the other, offered different grammatical interpretations of the Alternative Compliance Plan to support their contrasting views about NS Power's obligation to pay the $30/MWh adder. While the text of the Ministerial Directive must be a fundamental consideration, a review of the *Renewable Electricity Regulations* supports the view that the Alternative Compliance Plan is an administrative decision, not legislation. As such, the text of the Ministerial Directive should not be approached assuming the same degree of precision as if it were professionally drafted legislation. Indeed, the drafting has some looseness in its language that would not likely appear in legislation, for example, in its reference to the "Renewable Energy Standard" instead of the term "renewable electricity standard" that is actually used in the *Renewable Electricity Regulations*.

[48] Sections 4 to 6B of the *Renewable Electricity Regulations* establish various renewable electricity standards through to 2030 when each load-serving entity must supply its customers (in that year and each year after) with renewable electricity in an amount equal to or greater than 80% of the total amount of electricity supplied to its

customers. The regulations assign responsibility and authority to the Minister to administer the renewable electricity standards regime.

[49] Section 9 requires the Minister to annually determine each load-serving entity's total electricity sales, the total amount of renewable low-impact electricity produced, and the amount of renewable low-impact electricity produced by independent power producers. The Minister also has the power under s. 43 to issue directions or orders to implement, administer and enforce the regulations. The Minister may issue compliance orders (s. 44) and penalties for the failure to meet renewable electricity standards (s. 47).

[50] As noted above, the Minister also has the discretion to excuse compliance with aspects of the renewable electricity standards and establish an alternative means of compliance. This authority, under which the Alternative Compliance Plan was issued, is in s.7(2) of the *Renewable Electricity Regulations*:

> **7 (2)** A load-serving entity that will be unable to meet a renewable electricity standard for longer than 12 months must apply to the Minister, who, if satisfied that the entity will be unable to meet the standard as described in subsection (1) for longer than 12 months, may permit the entity to supply enough renewable electricity from other sources to make up the shortfall on the terms and conditions determined by the Minister.

[51] In this case, the Alternative Compliance Plan is the "terms and conditions determined by the Minister" in exercising the authority to permit NS Power to supply renewable electricity to make up for a shortfall that was anticipated in 2020. It is not legislation, but a discretionary decision made by the Minister in exercising a key role in administering the renewable electricity standards regime under the *Renewable Electricity Regulations.*

[52] In its February 2021 decision, the Board relieved NS Power of its obligation to follow certain sections of its Affiliate Code of Conduct to the extent it was required to purchase dispatchable renewable electricity to meet the Alternative Compliance Plan and

to the extent that such electricity must be purchased from Brooklyn Power. The Board commented that the Alternative Compliance Plan was "akin to a Regulation" to be interpreted "in the normal course" based on statutory interpretation principles and the *Interpretation Act*:

> [30] Additionally, the Board is accustomed to interpreting Legislation and Regulations. In doing so, the Board follows the directions of Superior Courts that the words of an Act (or Regulations) are to be read in their entire context and in their grammatical and ordinary sense harmoniously with the scheme of the Act, the object of the Act, and the intention of the Legislature (for example *Sparks v. Holland*, 2019 NSCA 3).
>
> [31] The Board also follows the Rules set out in the *Interpretation Act*. The document the Board may be called upon to interpret is the Alternative Compliance Plan, which is akin to a Regulation. As such the Board would, in the normal course, rely primarily on that document.
>
> [2021 NSUARB 20, p. 11]

[53] These comments are not determinative of the approach the Board must take in interpreting the Ministerial Directive in this case. In its earlier decision, the Board was not called upon to interpret the Alternative Compliance Plan but contemplated that it may be called upon to do so in the future. The comments about the Board's approach to interpreting the Alternative Compliance Plan in that proceeding were not necessary for the Board's determination in that matter (which is also referred to as *obiter dicta*). The interpretation of the Ministerial Directive is squarely before the Board in this case and the Board must answer it based on the facts and circumstances as it finds them in this proceeding. The Board agrees with Bates White that the Ministerial Directive is not "fully clear." Moreover, the Board considers it would be unreasonable to ignore the circumstances that suggest an intention in the administrative decision that may not be expressed in the text of the Alternative Compliance Plan issued in May 2020 as precisely as if it were legislation.

[54] The Consumer Advocate and the Industrial Group suggest the Board should disregard the Deputy Minister's October 2022 letter. It was noted that a former Minister issued the Alternative Compliance Plan and that the current Deputy Minister was not in her role at that time, so her ability to speak to the former Minister's intention was limited and she was in no position to offer "an after-the-fact interpretation of legislative intent" about the Ministerial Directive issued by Minister Mombourquette in May 2020.

[55] While it is true the Ministerial Directive was issued by a former Minister and that the current Deputy Minister was not in her current role at the time, there remains a degree of continuity between the two to be considered. The common law has for some time recognized that Ministerial functions are, by necessity, frequently carried out by officials in their department. This is commonly referred to as the *Carltona* principle and has been recognized by the Supreme Court of Canada:

> 13 …Although there is a general rule of construction in law that a person endowed with a discretionary power should exercise it personally (*delegatus non potest delegare*) that rule can be displaced by the language, scope or object of a particular administrative scheme. A power to delegate is often implicit in a scheme empowering a minister to act. As Professor Willis remarked in "*Delegatus Non Potest Delegare*" (1943), 21 Can. Bar Rev. 257 at 264:
>
> > ... in their application of the maxim *delegatus non potest delegare* to modern governmental agencies the Courts have in most cases preferred to depart from the literal construction of the words of the statute which would require them to read in the word 'personally' and to adopt such a construction as will best accord with the facts of modern government which, being carried on in theory by elected representatives but in practice by civil servants or local government officers, undoubtedly requires them to read in the words 'or any person authorized by it'.
>
> 14 See also S. A. De Smith, *Judicial Review of Administrative Action*, 3rd ed., at p. 271. Thus, where the exercise of a discretionary power is entrusted to a Minister of the Crown it may be presumed that the acts will be performed not by the Minister in person, but by responsible officials in his department: *Carltona Ltd. v. Commissioners of Works*, [1943] 2 All E.R. 560. The tasks of a Minister of the Crown in modern times are so many and varied that it is unreasonable to expect them to be performed personally. It is to be supposed that the minister will select deputies and departmental officials of experience and competence, and that such appointees, for whose conduct the minister is accountable to the legislature, will act on behalf of the minister, within the bounds of their respective grants of authority, in the discharge of ministerial responsibilities. Any other approach would but lead to administrative chaos and inefficiency. It is true that in the present case there is no

> evidence that the Attorney General of British Columbia personally instructed Mr. McDiarmid to act on his behalf in appealing judgments or verdicts of acquittal of trial courts but it is reasonable to assume that the "Director, Criminal Law" of the province would have that authority to instruct.
>
> [*R. v. Harrison*, [1977] 1 S.C.R. 238, paras. 13-14]

[56] The *Renewable Electricity Regulations* explicitly address the Minister's ability to authorize a departmental representative to exercise the Minister's powers and authority, and to undertake the Minister's responsibilities (s. 43(3)).

[57] Additionally, in her work on administrative law, Sara Blake highlights that even in instances where a Minister makes a decision, it may be assumed that the Minister was supported by their staff in doing so:

> Powers conferred on a Minister are typically exercised by officials in the department. "The tasks of a Minister of the Crown in modern times are so many and varied that it is unreasonable to expect them to be performed personally." This is not really delegation. A decision of an official is the decision of the Minister in the sense that the Minister is responsible to Parliament for the decision. The official who exercises the Minister's power must be in the same ministry and need not be independent of the Minister. The Minister need not give guidance to officials as to the appropriate exercise of the Minister's authority.
>
> However, if the statute prescribes which official is to exercise the Ministerial power or authorizes a decision by "a person [designated] by the Minister", no other official may exercise the power. If the Act intends that the power be exercised by the Minister personally, it may not be exercised by an official. This legislative intention is indicated by statutory expressions such as "in [the Minister's] sole discretion". A party who has a right of appeal from an official to the Minister is entitled to have the appeal decided by the Minister and not by another official. Approval of by-laws and regulations may require the personal attention of the Minister. Even where the Minister must exercise the power personally, the "legwork" may be done by staff.
>
> [*Administrative Law in Canada*, 7th ed., pp. 165-166]

[58] The offices of the Minister and Deputy Minister changed in the two and a half years between the issuance of the Alternative Compliance Plan by Minister Mombourquette and Deputy Minister Gatien's letter about the interpretation of the plan in the FAM audit report. However, it is reasonable to assume that some of the staff who assist with the administration of the *Renewable Electricity Regulations* are the same and would have provided similar advice and assistance to Minister Mombourquette to develop

the Alternative Compliance Plan and to Deputy Minister Gatien in the preparation of her letter.

[59] The Industrial Group submitted that the Board should be cautious about any use of the Deputy Minister's letter since intervenors in this proceeding have not been provided with an opportunity to cross-examine the author of the letter. While this is a fair point, the letter was included in the record for this matter very early in the proceeding. Although somewhat extraordinary in proceedings before the Board, this letter could have been the subject of information requests to the Deputy Minister (with leave of the Board or consent under s. 15(3) of the *Board Regulatory Rules*) or testimony under a subpoena. That said, the consistency of the Deputy Minister's interpretation with the amendments to the *Renewable Electricity Regulations* made a couple of months later causes the Board to place somewhat more weight on the Deputy Minister's letter than it otherwise might.

[60] Section 6AA was added to the *Renewable Electricity Regulations* in December 2022*:*

> **Renewable electricity standard 2023**
>
> 6AA (1) In each of the calendar years 2023, 2024 and 2025, NSPI must acquire at least 135 GWh of dispatchable renewable electricity from a renewable low-impact electricity generation facility located in the Province.
>
> (2) NSPI must meet the renewable electricity standard in subsection (1) by continuing to meet the requirements in clauses 6A(2)(a), (b) and (c) and any alternative compliance plans already in force.
>
> (3) In meeting its obligation under subsection (1), NSPI
>
> (a) may only acquire dispatchable renewable electricity from a biomass generation facility if the electricity is produced from secondary waste by-products that result from the processing of untreated organic material; and
>
> (b) must pay $30/MWh for all dispatchable renewable electricity acquired from a biomass generation facility in addition to any price specified in any existing power purchase agreement, up to a maximum of $4.05 million per year.

[61] This amendment requires NS Power to acquire a minimum amount of dispatchable renewable electricity and to pay a $30/MWh adder on any contract price for it up to $4.05 million each year in 2023, 2024, and 2025. The payment of the adder on all dispatchable renewable electricity under such contracts, as opposed to incremental purchases to satisfy the regulatory directive to acquire dispatchable renewable electricity, is consistent with NS Power's interpretation of its obligations under the Ministerial Directive and the clarification offered by Deputy Minister Gatien. Viewed from the perspective of that interpretation, the new regulations essentially extend NS Power's obligation under the Ministerial Directive for the next three years. The Board finds this consistency to be a compelling reason to conclude that NS Power's interpretation of the Ministerial Directive is correct.

[62] The Consumer Advocate and the Industrial Group contrasted the clarity of the new regulations, and the specific use of the word "all" in s. 6AA(3)(b), to the language used in the Alternative Compliance Plan to emphasize that the change in the choice of words in the regulations must mean that something else was intended under the Ministerial Directive. For the reasons discussed previously, the Board does not place much weight on this argument. While the recent amendments to the *Renewable Electricity Regulations* are clearly legislation, the Alternative Compliance Plan is not. The Board finds that contrasting the language of the carefully drafted regulations (particularly after the ambiguity of the Alternative Compliance Plan was highlighted) with the earlier administrative decision is of limited use.

[63] The Board also finds that the recent amendments seriously undercut the strength of the arguments advanced by the Consumer Advocate and the Industrial Group

about NS Power's interpretation of the Ministerial Directive leading to "absurd results" because it offered no benefit to FAM customers, as it was inconsistent with "sound economic principles," and did not maximize the amount of renewable electricity available to NS Power to meet its renewable electricity standards requirements. However one characterizes the results under NS Power's interpretation of the Ministerial Directive, the presumption that they were not intended is highly questionable given the consistency of NS Power's interpretation of its obligations under the Ministerial Directive and the obligations imposed upon it under the regulatory directive in the recent amendments.

[64] Likewise, the recent regulatory amendments undermine the Consumer Advocate's alternative argument that NS Power should have raised concerns with government about the payment of the $30/MWh adder to Brooklyn Power for all renewable electricity provided and that its failure to do so warrants a disallowance. Any concerns along these lines would have been quite apparent to government by the time it amended the *Renewable Electricity Regulations* so it seems quite unlikely that these concerns would have changed the government's intention to pursue the objectives it sought under the Ministerial Directive.

[65] Finally, regarding the Small Business Advocate's arguments, the Board sees no merit in the speculative suggestion that NS Power should or could have successfully renegotiated the PPA to offset the adder imposed under the Ministerial Directive. Furthermore, the Board simply rejects the assertion that NS Power should have explored the possibility of paying a penalty rather than complying with the renewable electricity standards provisions under the *Renewable Electricity Regulations* (including the alternative compliance provisions). NS Power must follow the law.

[66] The Board finds that NS Power properly interpreted its obligations under the Ministerial Directive and there is no justification for disallowing the recovery of costs paid to Brooklyn Power due to the mandatory $30/MWh adder on all dispatchable renewable electricity provided by that facility.

3.3 Maritime Link - Similar Value / Capacity Value

[67] Under an Acceleration Agreement, the NS Block began flowing over the Maritime Link on August 15, 2021. However, due to delays in the commissioning of the Muskrat Falls Project in Newfoundland and Labrador, there were under-deliveries of the NS Block to NS Power. Bates White concluded that Nalcor's undelivered Base and Supplemental Blocks only totaled 294.0 GWh and 66.4 GWh, respectively, for a total under delivery of 360.43 GWh for the audit period (Conclusion XI-12). It also reached the following two conclusions:

> **Conclusion XI-13:** NSPI's methodology for tracking the undelivered NS Block quantities is reasonable and we found no discrepancies in NSPI's final reported data. NSPI's methodology for valuing the undelivered quantities is generally reasonable, as it tracks the timing of the deliveries and the cost of the replacement energy that NSPI needed to procure to meet load in light of the undelivered quantities. The cost of that replacement energy is the reasonable basis for the valuation of the quantities Nalcor will deliver at a later date to make up for the undelivered quantities. There is one piece of the NS Block value proposition that will not be delivered with the makeup volumes contemplated by NSPI; that is, the long-term capacity value of the NS Block will not be made up under NSPI's planned approach. This value is conservatively estimated at the carrying cost of Lingan 2. **(Recommendation XI-3)**
>
> **Conclusion XI-14:** NSPI has not reached an agreement with Nalcor on the valuation of the undelivered NS Block quantities, the classification of the undelivered quantities as either Block A Undelivered Energy or Block B Undelivered Energy, or the precise valuation of the makeup energy that Nalcor will provide to make up for the undelivered quantities. NSPI expressed confidence that Nalcor and NSPI will reach agreement soon and that to date, Nalcor has not disputed the total quantity of deliveries and underdeliveries being tracked by NSPI. Nevertheless, until NSPI and Nalcor have agreed to a methodology of valuing undelivered energy and valuing and tracking replacement energy, the risk that the parties will not come to a reasonable agreement remains. It is NSPI that should take the

> risk of contractual negotiations with Nalcor, not ratepayers, who are owed a "similar value" for the missing energy. **(Recommendation XI-4)**
>
> [Exhibit N-3, pp. 335-336]

[68] Accordingly, Bates White recommended that NS Power consider pursuing the long-term capacity value of the undelivered quantities of NS Block from Nalcor, conservatively estimated at the carrying cost of Lingan 2. It also made the following recommendation for reporting the valuation and classification of the undelivered NS Block:

> **Recommendation XI-4:** NSPI should update the Board on its progress to come to a final agreement with Nalcor regarding the valuation of the undelivered NS Block quantities, the classification of the undelivered quantities as either Block A Undelivered Energy or Block B Undelivered Energy, and the precise valuation of the makeup energy that Nalcor will provide to make up for the undelivered quantities. The update should include the quantities and value of the undelivered quantities to date, as well as the quantities and value of any makeup energy provided to date. Such data should include supporting calculations to encourage transparency. NSPI should continue updating the Board quarterly on this issue until both (a) NSPI and Nalcor come to such a final agreement and (b) all makeup quantities have been delivered.
>
> [Exhibit N-3, p. 337]

[69] Bates White noted that most of the undelivered NS Block was not re-delivered in the audit period in this matter (i.e., the NS Block started August 15, 2021). NS Power expects that most of it should be re-delivered during the 2022-2023 audit period (with the remainder delivered in 2024). Bates White will use the tracked information to review the transactions. In questioning by the Board, Vincent Musco, of Bates White, explained the nature of the review in the next audit:

> So I think that's what we think would be proper, and that's the process that NSPI has laid out; that they're tracking that exact value, that exact replacement value, and they're going to pursue a similar value.
>
> Now, if it's -- I think that affords NSP, you know, a small amount of leeway in not showing a penny-for-penny replacement value, but not much. You know, it has to be similar. It has to truly be a similar value as what was missing. And if it's not, I think it would be reasonable for any Delta to be captured -- or to be the responsibility of shareholders to pay for, not customers.
>
> [Transcript, September 11, p. 156]

[70] When asked by the Board about the pace of re-deliveries, with delivered amounts of the NS Block and Make-up Energy being almost 150% of monthly contractual amounts in the spring of 2023, Mr. Musco said that the "similar value" standard would still apply to the re-deliveries despite the high volumes received:

> **A.** (Musco) Yes, absolutely. There has to be -- again, that similar value threshold comes up and NSP's going to have to show why that is met. And a simple, you know, just, you know, trying to expedite as many megawatt hours as possible regardless of -- you know, without consideration to the value of those megawatt hours, that's not -- that's probably going to fall short of the similar value provision.
>
> [Transcript, September 11, 2023, pp. 164-165]

[71] In his pre-filed evidence, Mr. Wilson stated that the Board should require NS Power to "make FAM customers whole on a cost basis" for shortfalls in NS Block deliveries if it had negotiated contracts that increased costs for replacement power, even after replacement on a MWh-for-MWh basis:

> Q: Does NS Power agree that FAM customers should be made whole on a cost basis for shortfalls in NS Block deliveries?
>
> A: No. NS Power states that "NS Power is tracking the replacement of undelivered MWhs on a MWh-for-MWh basis and on a cost basis. Given the contractual language in the Energy and Capacity and Acceleration Agreements, it is unlikely that reference to "similar value" can be paraphrased to "made whole on a cost basis". Please refer to NSUARB IR-7."
>
> Yet in NSUARB IR-7(c), NS Power responds to the question "Is there an agreed upon definition of 'similar value' for the purposes of re-deliveries?" as follows:
>
> > NS Power tracks the value of makeup energy by comparing the replacement energy costs when it should have been delivered, to the value of the energy it offsets when it is redelivered at a future date. For valuation purposes, NS Power applies the FIFO method when comparing the value of makeup energy to the undelivered energy.
> >
> > In this response, NS Power defines "similar value" to be "the value of…replacement energy costs." This is in contrast to its response to CA IR-4 which is unsupportive of making customers "whole on a cost basis."
>
> Bates White also disagrees in large part with NS Power's response to CA IR-32, stating:
>
> > It appears to Bates White that the question seems to ask: does "similar value" in the Energy and Capacity Agreement necessarily mean "made whole on a cost basis," which would imply a dollar for dollar replacement value of all makeup energy delivered to replace undelivered quantities.

> Bates White would expect that the value (in dollars) of the makeup energy to be materially similar, but not necessarily exactly match the value (in dollars) of the undelivered quantities.
>
> [Exhibit N-21, pp. 16-17]

[72] NS Power submitted that Mr. Wilson was equating "similar value" and "making FAM customers whole on a cost basis" for NS Block under-deliveries under the Energy and Capacity Agreement (ECA) with the notion of "equivalent economic value" that is required for rescheduled delivery of Market-priced Energy under s. 3.6 of the Energy Access Agreement (EAA). In its Rebuttal Evidence, it stated:

> As stated above, the subject matter referred to by Mr. Wilson relates to a specific circumstance relating to the purchase and sale of market energy under the EAA. Similar language or obligations are not found in the ECA where, for ease of reference, "similar value" reference to redelivery is primarily covered in Schedule 5, Section 5 (b)(iii)(D) of the ECA which reads as follows:
>
> > Similar Value – The Base Energy will be delivered during the corresponding periods of Peak Hours and Off-Peak Hours which had been scheduled for the original deliveries of such Energy.
>
> The issue with Mr. Wilson's reliance on contractual language from the EAA and the Board's decision relating to that agreement is that NS Power's witnesses, as well as the Board in that portion of its Decision, are referencing market energy purchases pursuant to the EAA and relating to a specific contractual clause. The ECA does not have similar language. The language in the ECA has redelivery obligations highlighted by the "Similar Value" language set out above. Mr. Wilson is asking the Board to look at specific rights relating to a unilateral curtailment of market under the EAA energy and inject that language into a separate agreement relating to NS Block curtailments where that agreement (the ECA) does not have such contractual language. The ECA provides protection for receipt of the most valuable attribute and that attribute that underscored the original justification for Nova Scotia's participation in the Muskrat Falls Project – that being receipt of 100 percent of the contracted non-emitting energy.
>
> The Board has been clear that the scope of the FAM Audit includes "the risks of prudently administering the re-deliveries of this energy under the Acceleration Agreement and the Energy and Capacity Agreement." These issues arose only when the AA made effective Nalcor's obligations relating to the deliveries under the ECA and EAA in August 2021. NS Power has implemented detailed procedures relating to the acceptance of re-deliveries of energy under the ECA and delivery of energy under the EAA. These procedures, as described in the response to NSUARB IR-7 and in detail in the Audit Report on page 310, demonstrate that NS Power is intent on making sure that energy redeliveries are scheduled for times and market circumstances that provide NS Power's customers with similar value to that which would have existed if the deliveries had been made without any delay.
>
> [Exhibit N-26, pp. 21-22]

[73] During the hearing, when asked about Bates White's testimony about the meaning of "similar value", Ms. MacLean of NS Power again referred to the provision in Schedule 5, Section 5 (b)(iii)(D) of the ECA, and said:

> So in the redelivery of undelivered energy, which we refer to as makeup energy when it's redelivered, in the administration of the makeup energy, we are following that definition of Similar Value and we are also striving to -- working with Nalcor, the system operator, to ensure the delivery of all of the megawatts owed.
>
> In addition, as explained in our responses to audit recommendations, we are reporting, as required by the Board, what the cost of the undelivered energy is and the value of the makeup energy, which, as Bates White have noted, they're in agreement with that methodology. And we're also tracking that.
>
> We don't -- there is not a provision in the agreements for a keep-whole remedy, or a dollar-for-dollar obligation, which we have also stated through our response to the audit. But we are doing that tracking.
>
> ...
>
> We don't have a remedy in the contract, or I should say a definition in the contract, that says that there is a requirement for a make-whole provision. However, we do agree that while there may be gains and losses while we're receiving that makeup energy, that over time there should be an amount of recovery that's close to the value. So we are continuing to monitor that to see if that is the case, and plan to perform a forecast at this stage, now that we are getting more material amounts of makeup energy.
>
> [Transcript, September 12, 2023, pp. 299-302]

[74] In his Closing Submission, the Consumer Advocate stated:

> ...the Consumer Advocate wishes to highlight that any issues pertaining to the prudence of NSPI's management of the Maritime Link and any replacement energy received, both in the 2020-2021 audit period, and in the next audit period (2022-2023), remains subject to Board review and potential disallowance in the next FAM Audit.
>
> [Consumer Advocate, Closing Submissions, November 1, 2023, p. 2]

[75] In Undertaking U-12, NS Power explained that Lingan 2 continues to be required on the Nova Scotia system to manage peak load conditions even with the receipt of full NS Block. It stated this was discussed in NSPML's Rebuttal Evidence filed on November 25, 2021, in the 2022 cost assessment application. NS Power added that because of "the forced outage at Brooklyn Power and the scheduled outages associated with the Life Extension and Modernization project at the Wreck Cove Generating Station,

Lingan 2 was placed in cold reserve and available on 2 weeks' notice, if required, to provide firm capacity and to maintain an adequate Planning Reserve Margin during the 2022/2023 winter season". Thus, it submitted that the delay in the delivery of the NS Block did not influence or prevent the retirement of Lingan 2. It also noted that it was able to meet all operating reserve obligations without purchasing or installing additional capacity.

[76] In its Reply Evidence, NS Power accepted Recommendation XI-4 and said it would provide the information in its quarterly reports, starting with the Q1 2023 report by May 31, 2023. It also "agreed generally" with Recommendation XI-3, stating:

> ...NS Power considers all of its legal rights and obligations and will pursue remedies in accordance with legal obligations (if available) and the best interests of customers. Specific matters in relation to the Muskrat Falls project and associated contracts are considered privileged.
>
> [Exhibit N-5, p. 24]

3.3.1 Findings

[77] As of the date of hearing, NS Block re-deliveries were ongoing and NS Power was still in negotiations with Nalcor about the valuation and classification of the re-deliveries. The Board considers it premature to comment on contractual negotiations that are still underway between NS Power and Nalcor. However, in addressing the value of NS Block re-deliveries in NSPML's application for approval of its final project costs, the Board stated:

> [68] However, the risks of prudently administering the re-deliveries of this energy under the Acceleration Agreement and the Energy and Capacity Agreement is now upon NS Power. The Board considers that the FAM Audit process is the appropriate forum to review the economic value received by ratepayers from transactions involving the re-delivery of the NS Block, Supplemental Energy, and Nalcor Market-priced Energy.
>
> [Board's *Final Project Costs* Decision, 2022 NSUARB 18, para. 68]

[78] Further, in its recent decision about the disposition of the NSPML holdback, the Board reiterated that all fuel related costs, including those related to energy received from the Muskrat Falls project, are subject to review in the FAM audit:

> [26] …The Board has previously noted that "all fuel related costs remain subject to review in the FAM Audit, including replacement energy costs, the value of Make-up Energy, and the administration of the [Energy and Capacity Agreement] and the [Energy Access Agreement] contracts". The Board expects NS Power to administer these contracts in the best interests of ratepayers…
>
> [Board Decision, 2024 NSUARB 17, para. 26]

[79] Accordingly, the Board considers that issues about "similar value" and "capacity value" are appropriately considered in the FAM audit. Much of the review of "similar value" may be enlightened by the result of negotiations between NS Power and Nalcor which were still ongoing at the time of the hearing (about 20 months after the end of the audit period under review). The impact on fuel costs from the resolution of this issue will be considered in the next audit period, including for both 2020-2021 and for 2022-2023.

[80] The Board accepts NS Power's submission that the under-deliveries of the NS Block has not resulted in a loss of capacity value for the audit period under review. The Board directs that the issue of capacity value related to the Maritime Link and the need for Lingan 2 be reviewed again in the next FAM audit.

3.4 Tufts Cove Oil Spill

[81] On August 2, 2018, NS Power's Tufts Cove Generation Station (TUC) experienced a HFO leak on a 6" lateral attachment to the Unit 1 and 2 fill line. The Tufts Cove HFO System extends 700 feet along the Dartmouth side of Halifax Harbour and the leak resulted in roughly 5,000 liters of oil entering Halifax Harbour, and another 19,300

liters being contained in TUC systems. NS Power was charged under s. 40(2) of the *Fisheries Act*, R.S.C. 1985, c. F-14, for depositing or permitting the deposit of a deleterious substance into water frequented by fish in violation of s. 36(3) of the *Fisheries Act*. In June 2022, NS Power pled guilty to the offence and was fined $175,000 and added to an environmental offence registry.

[82] During the 2019 Matter M09156 (TUC HFO Piping Refurbishment) proceeding, the Board requested that NS Power submit a copy of the spill's root cause analysis (RCA). At that time, NS Power claimed litigation privilege related to the spill and consequently did not provide the RCA. In its August 2019 decision in that Matter, the Board directed NS Power to make the RCA available for a future FAM audit. The analysis had still not been submitted when the Board issued its April 6, 2021, decision about the 2018-2019 FAM audit. As such, in its 2018-2019 FAM audit decision, the Board stated:

> …the Tufts Cove root cause analysis is currently subject to an assertion of litigation privilege by NS Power. NS Power has agreed that until it can produce it, the Tufts Cove oil spill issue will remain open for purposes of the audit. In Undertaking U-1, Bates White agreed to review the root cause analysis and make any recommendation it feels appropriate to the Board.
>
> [Board Decision, M09548, p. 38]

[83] NS Power provided a copy of the RCA to Bates White for review during the 2020-2021 FAM audit. The utility's analysis was also provided in response to NSUARB IR-1.

3.4.1 Timeline of Events

[84] A timeline of the events leading up to and following the oil spill is summarized as follows:

- **March 5, 2018**: NS Power files a capital approval application for CI 51808, "TUC HFO Piping Refurbishments" with the Board under Matter M08573. The project included

the replacement of pipe supports on the HFO piping system at TUC, as well as the replacement of insulation at support locations as required. Since insulation was to be removed at pipe supports to facilitate support inspections, the project work also included inspection, ultrasonic testing, guided wave radar, and non-destructive examination to assess the condition of the piping and to check for any localized corrosion affecting the pipe support attachments. The work was intended to be complete by November 2018 to comply with a directive from Nova Scotia Environment.

- **April 4, 2018**: The Board approves CI 51808 in NS Power's requested amount of $1,293,933.
- **July 2018**: By July 12, 2018, NS Power had completed work stripping insulation from certain sections of pipe, including the main 10" fill line for Tufts Cove Units 1 and 2 ("TUC 1&2 Main Fill Line"). The TUC 1&2 Main Fill Line, which carries HFO from storage tanks on site to Units 1 and 2, was stripped of its insulation as part of the work scope in CI 51808. During this time, NS Power identified a six-inch, vertical "stub pipe" in need of replacement that connected to the TUC 1&2 Main Fill Line. The work to replace the stub pipe was scheduled to start the week of August 6, 2018.
- **August 2, 2018**: Work to replace a valve on the TUC 1&2 Main Fill Line began at 08:00 and continued to 13:45, when work was completed. The TUC 1&2 Main Fill Line was isolated to complete the valve replacement. The combination of high ambient temperature on August 2, 2018, and the fact that the insulation on the TUC 1&2 Main Fill Line had been removed, resulted in the pipe experiencing thermal expansion. With the system isolated for maintenance, the thermal expansion of the HFO increased the

pressure in the system to 150 pounds per square inch gauge (psig), almost twice the maximum pressure of the pipe during normal operations. The high pressure caused the activation of a pressure relief valve.

With the work completed, the isolation valves were reopened for the TUC 1&2 Main Fill Line, and the line was inspected and was found to have no leaks. However, 135 minutes later, at 16:00, HFO was identified on the water near the Tufts Cove Unit 1 circulating water intake. By 16:15, NSPI had identified the source of the leak as the 6" stub pipe located on the TUC 1&2 Main Fill Line, isolated the leak and activated its emergency response plan. This is a formal emergency plan that is practiced through table-top exercises and actual deployments every year (the last exercise before the incident was October 2017). The event also resulted in TUC Unit 1 being removed from service due to oil entering the circulating water system.

- **August 30, 2018**: Wayland Engineering issues a report entitled "Failure Investigation of Tufts Cove Bunker C Oil Line Pipe," which was included as an appendix to NS Power's RCA, which was issued at a later date. The Wayland Engineering Report, which was intended to provide an opinion on the mechanisms responsible for the leak, concluded that the "physical, chemical, and metallurgical evidence" suggested that the Stub Pipe had failed due to a "general corrosion process" which caused "deterioration of the external surface material." The corrosion, according to Wayland Engineering, was "the result of the ingress and retention of water within the insulation cavity" which likely resulted "from a breech in the external waterproofing layer of cladding."
- **January 29, 2019**: The RCA is completed.

- **April 1, 2019**: NS Power files an application with the Board for an "Authorization to Overspend" (ATO) related to CI 51808 "TUC HFO Piping Refurbishments" under Matter M09156. As part of the application, NS Power explained that, as part of the original work scope, insulation was removed from piping and revealed evidence of corrosion under insulation (CUI), which negatively impacts pipe wall thickness and increases the potential for leaks in the piping. NS Power therefore increased the scope of work to include removal of all pipe insulation to allow for comprehensive pipe inspection, refurbishment work based on the results of the inspection, and outfitting the piping system with new insulation and cladding. The ATO sought an additional $2,220,692 for Board approval.
- **August 14, 2019**: The Board approves the ATO for CI 51808, for a total approved project amount of $3,460,625. In its decision, the Board noted that "NS Power assured the Board that neither the activity nor the timing associated with pipe refurbishment related to the current ATO application was the cause or source of the August 2018 oil spill."

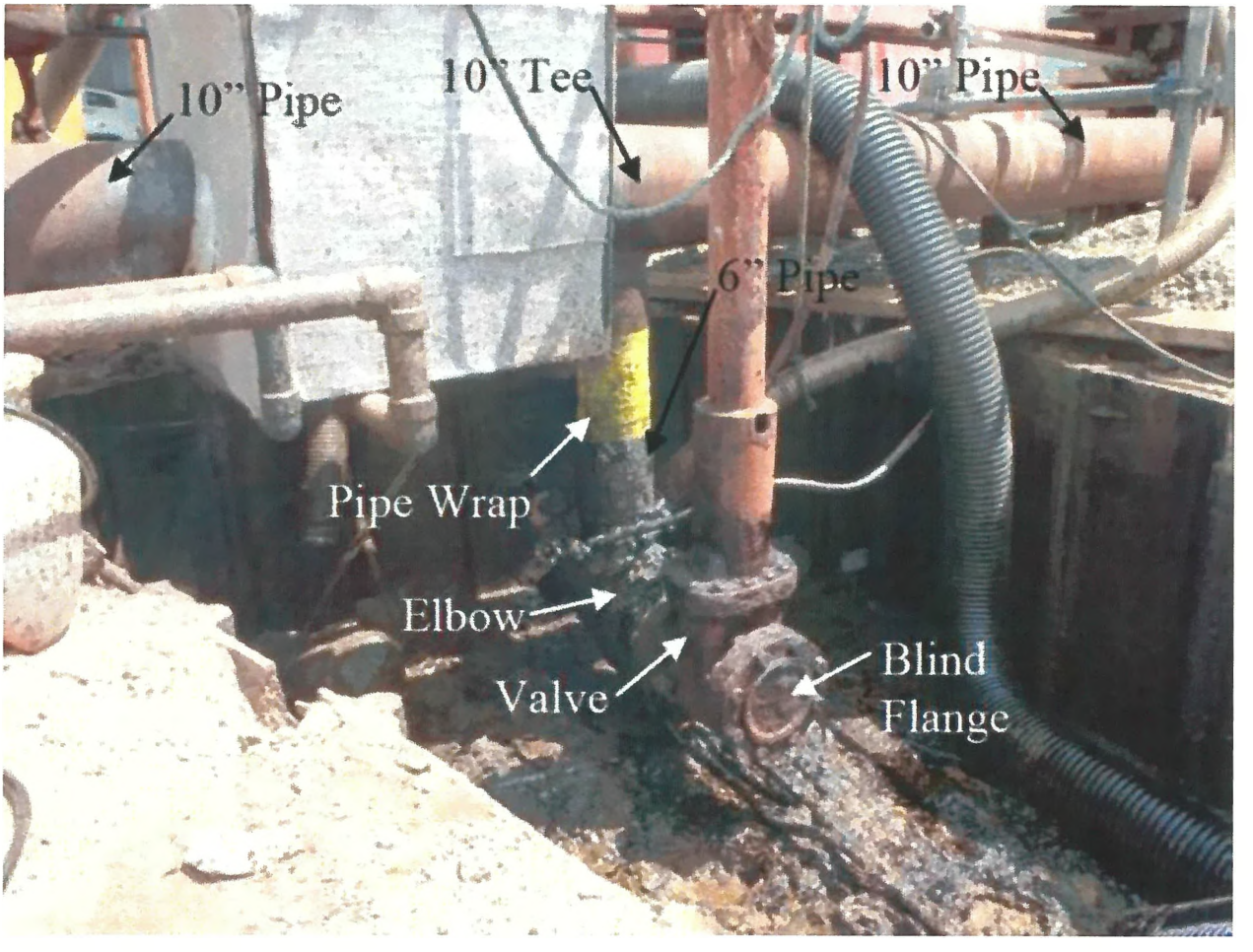
3.4.2 Root Cause Analysis

[85] The RCA identified the primary cause of the HFO pipe leak as CUI on the stub pipe connected to the TUC 1&2 Main Fill Line. This CUI resulted from the ingress of water through a breach in the insulation cladding. In addition, the RCA noted that the fill lines on TUC HFO Tanks 1&2 did not have check valves installed as originally designed, resulting in backflow from the tank during the pipe leak. This design resulted in a larger amount of oil being released into the environment.

[86] As noted by Bates White:

> The stub pipe was no longer used but abandoned-in-site. It was an original piece of equipment that was the fill point for offloading barges in Halifax Harbor. Oil would flow from the barges into a line ending at the Stub Pipe, where it would connect to the TUC 1&2 Main Fill Line. However, in 1974, the Stub Pipe line was made obsolete when a new wharf unloading pier was constructed to allow larger marine vessels to unload at the plant. The Stub Pipe line was decommissioned, cut (hence, "stub"), and capped with a blind flange. The Stub Pipe was then insulated and covered by a steel plate, which was done to minimize fall hazard of the trench where the Stub Pipe resided.
>
> [Exhibit N-15, p. 228]

[87] A photo of the stub pipe and the TUC 1&2 Main Fill line was presented on page 7 of the RCA and is reproduced as follows (the section of the pipe that leaked is shown in yellow "pipe wrap"):



[88] The RCA also noted that the physical arrangement, available engineering documentation and the status of NS Power's Risk Based Inspection (RBI) program

deployment contributed to the 6" stub pipe condition not being assessed. Specifics of these contributing factors included:

- The engineering drawings used to complete past inspections did not include the Stub Pipe where the failure occurred.
- When the Stub Pipe was decommissioned in 1974, the mechanical drawings were not updated to show where the piping changes were made.
- During decommissioning, the Stub Pipe was covered with a steel plate preventing any future visual confirmation that the line existed.
- Also during decommissioning, the steam tracing conduit that reached Halifax Harbour was left in place allowing a path for oil to escape from the trench to the harbour during the event.

[Exhibit N-15, pp. 229-230]

[89] Further, in 2010, NS Power implemented a Thermal Maintenance Practice (TMP-390) for managing its petroleum piping. This practice employed maintenance activities guided by the American Petroleum Institute (API), specifically API-570 (Piping Inspection Code: In-Service Inspection, Rating, Repair, and Alteration of Piping Systems), to manage the integrity of the company's HFO system. These activities included daily inspections, engineering visual inspections, and non-destructive testing of the piping system. In 2017, NS Power initiated the development of an RBI Program guided by API-580 (Recommended Practice for Risk-based Inspection) to further advance HFO system condition and criticality assessments. In July 2018, NS Power had yet to fully develop or deploy its RBI program. However, the company was in the process of an HFO System assessment/inspection at TUC that was applying the principles of the RBI program ahead of the formal program development. In doing so, NS Power identified the stub pipe and scheduled it for replacement starting the week of August 6, 2018. As summarized by Bates White, the RCA noted the following:

- NSPI was in the process of deploying RBI for HFO piping that started in 2017; had the RBI program been fully deployed earlier, the Stub Pipe would have been identified and schedule for removal prior to August 2018 when the incident occurred.

- HFO piping that is not situated in containment and is not visible would have a higher risk profile under the RBI program. Full deployment of the RBI program would have triggered a high priority full inspection of the Stub Pipe before return to service due to the consequence of a leak at this location.

[Exhibit N-15, p. 230]

3.4.3 FAM Audit Findings

[90] In its FAM audit report, Bates White stated that it is clear past mistakes, some of which extend back to 1974 and pre-date NS Power, contributed to the cause of the TUC oil spill. As it relates to NS Power's more recent decision-making, Bates White indicated that the timing of the company's RBI program is relevant. NS Power noted that the RBI program was implemented on high priority systems first. In its FAM audit report, Bates Whites found this to be a reasonable explanation for why NS Power did not start work on the TUC HFO system until 2018. Nonetheless, Bates White noted that this explanation does not address the timing and sequencing of work done at TUC or NS Power's decision not to fully implement RBI when inspecting the TUC HFO piping system.

[91] As noted in the RCA, the combination of the high ambient temperature on August 2, 2018, with the direct heat from the sun on the uninsulated pipe, resulted in the thermal expansion of HFO. With the system isolated, the thermal expansion of the fluid increased the pressure in the system to 150 psig, resulting in the thinned wall of the stub pipe failing. Bates White's FAM Audit report questioned the seasonal timing of the TUC HFO piping refurbishment work during the hottest time of the year in early August. NS Power explained that it conducts maintenance work during off-peak seasons, including spring and summer. While recognizing this maintenance scheduling was appropriate, Bates White also noted the risk of thermal expansion of oil is increased

during times of higher temperatures. Bates White suggested that a better time to conduct this work would have been when the risk of higher temperatures was lower.

[92] Bates White's FAM audit report also highlighted the costs that were caused by the TUC oil spill. Bates White stated that the direct cost of the lost oil and environmental cleanup costs were insurable events that were addressed in their prior audit report and did not accrue to FAM customers. However, Bates White noted that a cost of redispatch also occurred in the aftermath of the oil spill. This cost resulted from TUC 1 being taken offline until August 31, 2018, and TUC 2 and 3 being reduced to minimum load on August 2, before returning to normal service. The reduced output from these units required replacement energy, and over the intervening hours and days, NS Power took various steps to ensure reliability, including dispatching the diesel-fueled combustion turbines, increasing output from Brooklyn Power, burning HFO at solid fuel plants, and invoking industrial load shedding.

[93] Bates White only received the TUC oil spill RCA in September of 2022, and therefore did not attempt to calculate the cost of redispatch in advance of the FAM audit report filing on November 1, 2022. However, this cost was addressed through the filing of post-hearing undertakings and submissions. The actual cost of this redispatch is addressed in a subsequent section of this decision. Nevertheless, Bates White did not recommend a disallowance related to the cost of redispatch:

> … To be clear, we are not recommending a disallowance. We only do so when we have strong confidence that NSPI acted imprudently. Here, we lack the evidence to make that claim, but reiterate that NSPI's actions – particularly those of its predecessor from decades ago – were suboptimal and could have prevented the issues encountered on August 2, 2018.
>
> [Exhibit N-15, p. 232]

[94] In response to the Industrial Group's IR-47a), Bates White stated that in the above context, suboptimal means less than the highest standard of quality." Further, in response to the Industrial Group's IR-47e), Bates White agreed that a series of "suboptimal actions" can support a finding of imprudence or a disallowance.

3.4.4 Hearing

[95] The issue of the TUC oil spill was canvassed in more detail during the FAM audit hearing. Some of what the Board believes to be the most relevant lines of questioning are summarized as follows.

[96] Ms. Rubin questioned Bates White on the relevancy of past mistakes made by NS Power that were identified in the audit report as contributing factors to the cause of the oil spill:

> Q. Okay. Perhaps I could get you to turn to your conclusion, Roman numeral IX-28 of Exhibit N-15, which is on page 239, PDF 253? Okay. And I'll just give you a moment to review that.
>
> A. (Musco) Yes, I've reviewed it.
>
> Q. Okay. And you list a number of mistakes, you describe them, with respect to the maintenance and review of the Stub pipe. Is it your understanding that the older mistakes made do or do not relate to the prudence analysis of NSPI today during the audit period?
>
> A. (Musco) I think this is a particularly complicated issue because of the timing of some of the items that were identified in the Root-Cause Analysis and in our review of the Root-Cause Analysis and of the entire incident. We -- our goal here was to be thorough and to provide an explanation that showed all of the identified issues when they occurred, such that the Board could understand that this was not an issue that was driven by a single decision at some point in time, but rather was the consequence of a number of decisions and actions that dated back almost 50 years.
>
> Q. Your comment is that, "Mistakes were made that extend back to 1974, a time which predates anyone at NSPI today (and predates NSPI itself)."
>
> Is there any significance of the distinction that you're making here that it was not a private company at the time?

A. (Musco) We're pointing out -- that's just a factual statement, that, you know, again, recognizes the unique aspect of this particular issue. Most of the issues we deal with in this audit are discrete to the time period at issue. This one is certainly not. And so again, it being -- in attempting to provide the most thorough and useful explanation for the Board, we thought that it was worth noting that they do extend back to 1974 and does predate current personnel and the current corporate structure of Nova Scotia Power.

Q. Okay. But you're not making any legal interpretation regarding the responsibility of Nova Scotia Power prior to privatization versus after?

A. (Musco) No.

Q. All right. You're just making an observation about the timeline of these mistakes being made?

A. (Musco) Correct.

[Transcript A, September 11, 2023, pp. 106-108]

[97] The Board had a number of questions for NS Power. The first question referenced NS Power's response to the Industrial Group's IR-35 where the company provided a list of all the uninsured costs associated with the TUC oil spill. The Board asked the NS Power panel if any of those costs has been put through the FAM, and thereby paid for by customers. NS Power responded that these costs were not incurred by customers. Instead, they were paid and expensed by the company, thereby lowering NS Power's regulated earnings in the years the costs were expensed, between 2019 and 2022. NS Power also stated that it had no overearnings in that period (i.e., the company did not earn over 9.25%). The Board then asked if these costs had not been expensed whether the company would have had overearnings in those years. NS Power did not have information readily available at the hearing to answer this question. As such, the company was asked to provide an undertaking to confirm whether NS Power had excess non-fuel revenues in each of 2019, 2020, 2021 and 2022, and to confirm whether there would have been excess non-fuel revenues for each of these years had the expenses noted in response to IG IR-35a-b) [Exhibit N-19] not occurred.

[98] NS Power filed its response in Undertaking U-13. In the Undertaking, the company noted that the table in response to IG IR-35 should have referenced 2018-2022 as the years the uninsured operating costs were incurred, not 2019-2022. NS Power then stated that it had excess non-fuel revenues of $3.1 million and $0.7 million in 2018 and 2019, respectively, which were returned to customers through the FAM. The company also stated that $2.5 million of the pre-tax expenses noted in response to IG IR-35 were recorded in its 2018 Annual Regulated Financial Statements. Had these expenses not occurred, excess non-fuel revenues would have increased by $1.7 million ($2.5 million net of the associated tax). Another $0.1 million of the pre-tax expenses noted in response to IG IR-35 were recorded in 2019. Had these expenses not occurred, excess non-fuel revenues would have increased by $0.1 million ($0.1 million net of the associated tax). NS Power had no excess non-fuel revenues in 2020, 2021, or 2022. Therefore, no excess non-fuel revenues would have resulted had the remaining $0.2 million of the pre-tax expenses noted in response to IG IR-35 not occurred.

[99] The Board also asked NS Power to describe the procedures it undertook prior to inspecting the stub pipe before 2017. In response, NS Power stated:

> A. (MacIntosh)…But I think it's important to go back about why the Stub Pipe wasn't assessed, and that was due to the actions in 1974 where a couple of critical items weren't identified. So the drawings weren't up to date with that Stub Pipe. And that's why it wasn't being assessed as part of our inspection practices aligned with API 570. If the drawings were correct and it was decommissioned appropriately in 1974 with the drawings updated, then we would have been in a better position to assess the pipe.
>
> Q. (Murphy) So is it really, in effect, that you weren't really aware that the Stub Pipe was there?
>
> A. (MacIntosh) Correct.
>
> [Transcript, September 12, 2023, pp. 524-525]

[100] The Board then asked NS Power to describe where the metal plate was installed over the stub pipe such that it hid the stub pipe from view. NS Power responded

that the plate covered the entirety of the trench area in which the stub pipe was located. NS Power further noted that the presence of such a metal plate over a trench in the TUC HFO pipe gallery is an anomaly. Figure 3 of the RCA also showed a 10" tee between the TUC 1&2 main fill line and the stub pipe. The NS Power witness panel confirmed that this tee extended from the fill line down through the metal plate into the stub pipe trench. The panel also confirmed that the section of tee pipe extending into the plate would have been visible to pipe inspection personnel. Similarly, the panel confirmed that a valve stem extended from the stub pipe up through the plate. The section of valve stem above the metal plate would have also been visible to pipe inspection personnel.

[101] The FAM audit report referenced NS Power's 2019 ATO application related to TUC HFO Piping Refurbishments, under Matter M09156. The 2019 application was entered as Exhibit N-40 in the current matter. The Board asked the NS Power panel to confirm the scope of work associated with the ATO application:

> Q. (Murphy)…Correct me if I'm wrong. I'm going to give you my understanding of what this says, but basically, if I recall, the original application for this HFO pipe replacement was, the intent was not to remove insulation from all this piping; it was to remove it at certain locations, pipe supports and whatnot, but as the work was undertaken, there was evidence that there was some corrosion under the insulation in certain parts. Let's call it CUI. And as a result, Nova Scotia Power had to expand the work a bit in order to fully ascertain, I guess, how much CUI was occurring. And as a result, you can see by the first bullet, Nova Scotia Power removed all:
>
> > ...insulation from the piping system to complete a comprehensive inspection, including 100 percent visual inspection combined with extensive ND[I] [Non-Destructive Examination, I think] to identify all such areas of CUI.
>
> You see that?
>
> A. (MacIntosh) Yes, sir.
>
> Q. So can you confirm with me, as part of that work for the HFO piping at Tufts Cove, that all the insulation was removed from the HFO piping?
>
> I'm not talking about the stub piping at this particular point. I'm just talking about the HFO pipe.

A. (MacIntosh) So this is -- this paragraph is describing events also after the event of August 2nd, 2018.

Q. Fair enough.

A. (MacIntosh) So when -- if you look at the timeline when this project -- when the spill occurred, the company was in the process of executing this work.

Q. But I guess my question is, was the insulation removed -- regardless if it was before the spill or after the spill, was the insulation removed from all that HFO piping to look for CUI, as CUI was identified as a concern for a lot of this piping?

A. (MacIntosh) Yes, that's my understanding.

[Transcript, September 12, 2023, pp. 533-535]

[102] Page 228 of the FAM audit report states that when NS Power identified the stub pipe for removal in July 2018, the company noted that it had no reason to expect the stub pipe to be in danger of imminent failure. Further, based on limited visual inspection, the company considered the insulation surrounding the stub pipe to be intact. As a result, NS Power did not remove the insulation to inspect the stub pipe itself. The Board questioned the NS Power panel about this decision:

Q. (Murphy)...So I guess prior to that particular point in time, Nova Scotia Power had confirmed -- it's my understanding -- that there was piping throughout this pipe gallery area that was experiencing corrosion under insulation. Is that correct?

A. (MacIntosh) I'm not sure. I'd have to take that as an undertaking.

Q. Well, if we just go back to that past exhibit, it certainly seems to suggest there was evidence of corrosion under insulation in much of the piping.

A. (MacIntosh) Yes, but at which timeframe? That 100 percent complete visual inspection was not completed prior to the event.

Q. I understand that.

A. (MacIntosh) Yeah.

Q. But there was certainly evidence of corrosion under insulation, and it was a concern. And my question is once Nova Scotia Power identified the Stub Pipe for removal, why didn't they take the insulation off to confirm whether there was any corrosion? Because it's my understanding that, you know, the cause of the failure was corrosion on that Stub Pipe.

A. (MacIntosh) That's correct.

Q. So why wasn't the insulation removed if there was -- prior to that particular point in time, there was evidence of other corrosion on their insulation occurring on other pipes in the same vicinity?

A. (MacIntosh) And that part, in fact, I don't know. I can't confirm that.

Q. You don't know the answer?

A. (MacIntosh) No, sir.

[Transcript, September 12, 2023, pp. 537-538]

3.4.5 Cost of Redispatch

[103] NSUARB IR-1c) asked NS Power to provide a calculation of the cost of redispatch associated with the TUC oil spill. In response NS Power indicated that it had not completed such a calculation and could not complete the calculation under the timeline to respond to the IR. However, in response to NSUARB IR-11c), the company committed to filing the calculation prior to the submission of opening statements. NS Power filed the calculation, complete with supporting materials, as Exhibit N-27 on August 31, 2023. The calculation determined that the cost of redispatch related to the oil spill was $157,921.

[104] The methodology and assumptions used by NS Power in its calculation of the cost of redispatch were the subject of many questions at the hearing. In addition, during the hearing, Bates White confirmed that it did not have enough time in advance of the hearing to properly assess NS Power's calculation. The Industrial Group, therefore, asked NS Power for an Undertaking to provide Bates White with the working papers used to develop Exhibit N-27, along with any other documents used to assist in completing the analysis. NS Power filed its response as Undertaking U-10 [Exhibit N-41] on October 4, 2023.

[105] The Industrial Group asked Bates White to provide a written assessment of NS Power's calculation of the simulated incremental dispatch costs resulting from the TUC oil spill, including all caveats and assumptions, supplemented by whatever additional evidence followed from the questioning of NS Power and any undertakings from NS Power. Bates White filed its response as Undertaking U-5 [Exhibit N-42]. In its analysis, Bates White identified what it termed a "fatal flaw" in NS Power's calculation. Instead of selecting the highest cost resources as the contributors of replacement energy, Bates White stated that NS Power selected the lowest cost resources. Bates White described this as "nonsensical" and having the effect of understating the redispatch cost associated with the TUC oil spill. As such, Bates White recommended that NS Power recalculate its estimated redispatch cost using highest cost resources, consistent with economic dispatch principles. Bates White also sought clarity on why NS Power's average hourly cost of generation is lower than what is suggested by its day-ahead marginal cost data for the month of August 2018. Finally, Bates White noted that Brooklyn Energy's costs and output should be included in the analysis to increase confidence in the cost estimate.

[106] On November 17, 2023, after closing submissions and replies to closing submissions, NS Power filed a revised Undertaking U-10 [Exhibit N-43]. In its letter accompanying the filing, NS Power indicated that it had corrected errors in its original U-10 spreadsheets which prevented Bates White from verifying the accuracy of the company's calculated cost of replacement energy due to the TUC oil spill. The company also noted that it had, in fact, selected the highest cost resources in its original analysis and that the estimated cost of redispatch remained as $157,921.

[107] Bates White reviewed NS Power's refiled U-10. In an updated response to Undertaking U-5, filed on December 4, 2023, Bates White stated that the refiled U-10 addressed the "fatal flaw" concern, and confirmed that NS Power had, in fact, used the highest cost resources as the contributors of replacement energy. However, Bates White identified other additional areas of concern related to hourly PHP generation data, generators used beyond availability, typographical errors, usage of Brooklyn Power for replacement, and the average hourly cost of generation.

[108] In its supplemental closing submission and response to the Industrial Group's supplemental closing submission, NS Power addressed each of Bates White's additional areas of concern. The company noted that the errors that led to these concerns were made in preparing data for review and did not impact the actual redispatch cost analysis itself. NS Power re-confirmed that the redispatch cost associated with the TUC oil spill is correctly calculated as $157,921.

3.4.6 Findings

3.4.6.1 Was there imprudence?

[109] Bates White concluded that the oil spill was primarily caused by actions or inactions, dating from 1974 up until when the oil spill occurred. With regards to actions dating back to 1974, these included decisions to not remove the stub pipe when it was decommissioned, failure to update the HFO system mechanical drawings to show where the stub pipe piping changes were made, covering the stub pipe with a steel plate to prevent any future visual confirmation that the line existed, and the decision not to remove the steam conduit from the stub pipe trench. In its closing submission, NS Power stated that it:

> ...recognizes that these historical actions were carried out by individuals acting on behalf of its predecessor. However, with the passage of over 50 years, no current NS Power personnel had any involvement in those actions. Further, there is no evidence as to accepted standards during that time period upon which one might assess this historical prudence. In these unique circumstances, where the current NS Power organization or personnel have no connection to the historical actions taken which contributed to this incident, NS Power submits that Bates White has correctly assessed that NS Power should not be deemed to have acted imprudently.
>
> [NS Power Closing Submission, p. 23]

[110] With regards to more recent NS Power decisions, Bates White noted that the risk of thermal expansion of oil is increased during times of higher temperatures. As such, Bates White suggested the work on the TUC 1&2 main fill line that helped create conditions leading to the oil spill could have been done at a better time when the risk of higher temperatures was lower. Nonetheless, Bates White stated that NS Power''s approach to completing the work during off-peak season was reasonable. The Board agrees.

[111] Bates White also questioned the company's more recent decision to not fully implement RBI when inspecting the TUC HFO piping system. In July 2018, NS Power was applying the principles of RBI, in advance of formal program development, while completing TUC HFO piping refurbishments. In doing so, NS Power identified the stub pipe for replacement. As noted in the company's closing submission, NS Power's operations team assessed the stub pipe and assigned a medium severity risk level as there was no evidence of potential failure. The stub pipe was designated to be replaced only a week after the oil spill, but not due to any known corrosion. Rather, the stub pipe was set to be removed due to the inherent risks associated with unutilized stub pipes.

[112] Considering the above, NS Power submitted that its conduct in managing the TUC HFO system was prudent, notwithstanding the oil spill, and that no disallowance of costs is warranted. For the reasons that follow, the Board disagrees.

[113] In its closing submission, NS Power acknowledged that there were costs associated with the TUC oil spill. However, the company also noted that the standard for a disallowance for these costs remains imprudence. The Board agrees. Therefore, in determining whether a disallowance of costs related to the TUC oil spill is warranted, the Board must find that NS Power acted imprudently.

[114] As noted by Ms. Rubin in her closing submission, in 2005 the Board adopted the following definition of the prudency test to assess whether a utility in Nova Scotia is entitled to recover its costs:

> … The standard for determining prudency of a utility's fuel procurement practices is well established. As stated by the Illinois Commerce Commission, "prudence is that standard of care which a reasonable person would be expected to exercise under the same circumstances encountered by utility management at the time decisions had to be made....Hindsight is not applied in assessing prudence....A utility's decision is prudent if it was within the range of decisions reasonable persons might have made. ... The prudence standard recognizes that reasonable persons can have honest differences of opinion without one or the other necessarily being imprudent.
>
> [Board Decision, 2005 NSUARB 27, para. 84]

[115] In its reply to closing submissions, NS Power added that the Board's 2005 decision also stated:

> While the Board recognizes that the definition of imprudence varies somewhat among the jurisdictions cited, there are several fundamental principles which are common. These include:
>
> - Were the utility's decisions reasonable in the context of information which was known (or should have been known) at the time?
> - Did the utility act in a reasonable manner and use a reasonable standard of care in its decision-making process?
> - The imprudency test should relate to the circumstances at the time in question and not to hindsight.
>
> [Board Decision, 2005 NSUARB 27, para. 89]

[116] Bates White has not recommended a disallowance, claiming a lack of evidence to make a finding of imprudence. Nonetheless, Bates White did conclude that

NS Power's actions prior to the spill were suboptimal, and it could have prevented the issues encountered during the August 2, 2018 spill. Bates White also agreed that a series of "suboptimal actions" can support a finding of imprudence or a disallowance. With respect to Bates White's characterization of "suboptimal actions", NS Power noted that the term "suboptimal" reflects that a party acted to some standard below perfection. In its closing submission, the company says the fact that a party did not act perfectly is materially different from a prudence assessment. However, in this context, the Board is drawn to the following hearing testimony from Bates White's Mr. Puga:

> A. (Puga) Well, if you go back to what you deem imprudent actions, which is, shall we say, an analysis of what a good manager would have done, what information they had at hand, I think there was information that was not available to the managers making the decision in proceeding with the maintenance in the summer. If -- and that's a lot of "ifs", if the installation for that pipe Stub would have been replaced and would have been removed and, you know, there had been any knowledge that there was a severe corrosion on the pipe that had significantly reduced the strength the pipe, perhaps then a different decision would have been made. But that information was not available to those making those decisions because the RBI had not been completed.
>
> And as Mr. Musco mentioned, this was the -- a consequence of many decisions that were made along the road, way before the current manager -- management was in place, and for which we were not able to really reinvestigate because it happened so long ago. So it would be very difficult to know what information was known when each of those contributing factors were -- took place based on decisions made at the time. And so a retroactive prudence review of facts back decades would have been impossible to conduct. And so the more recent actions by NSPI, in our view, were not a clear indication of imprudent management.
>
> [Transcript A, September 11, 2023, pp. 178-179]

[117] Mr. Puga's testimony references two main issues. One related to NS Power decisions made a long time ago, and whether an imprudence finding can be made based on those decisions. In this regard, the Board agrees with Mr. Puga that a retroactive prudence review of the decisions made in 1974 with the benefit of hindsight would be inappropriate. The other issue referenced by Mr. Puga relates to the more recent decisions made by NS Power about the TUC HFO system. Mr. Puga notes some information was simply not available for current NS Power management to make well-

informed decisions. He also notes that if the information was available, perhaps different decisions would have been made.

[118] However, that notwithstanding, the Board finds that there was, in fact, information available to current NS Power management about the stub pipe and its potential condition that should have resulted in different decisions. In July 2018 when NS Power discovered the stub pipe, it was in the midst of completing work associated with the TUC HFO piping refurbishment project. While conducting this work, the company encountered corrosion under insulation (CUI) along certain sections of the HFO pipe. As a result, NS Power expanded the scope of the project to remove all insulation from the HFO piping and complete comprehensive inspections, including 100% visual inspection of the piping, to identify all areas of CUI that needed to be addressed. However, when NS Power discovered the stub pipe, it opted not to remove the insulation covering the pipe to check for CUI.

[119] During the hearing, NS Power indicated that the decision to remove the insulation from all the HFO piping and complete 100% visual inspection for CUI had not been implemented prior to the August 2, 2018 oil spill. However, in NSUARB IR-7 under Matter M09156, NS Power was asked if the removal of all HFO pipe insulation was in response to the TUC oil spill. NS Power responded:

> The inspection scope and insulation removal/replacement was driven by findings of corrosion under insulation identified during the piping support replacement work as noted in the ATO application. Based on these findings and risk, additional inspection activities, including ultrasonic thickness testing and 100 percent visual inspection with the piping insulation removed, were required to mitigate risk of corrosion under insulation. The scope of this work was not affected by the Tufts Cove oil leak; however, due to the leak, NS Power expedited the completion of the risk-based inspection and insulation removal/replacement. [Emphasis Added]
>
> [M09156, Response to NSUARB IR-7]

[120] Based on this response, it appears clear to the Board that the decision to remove the insulation from all the TUC HFO piping was made in advance of the August 2, 2018 oil spill. Nonetheless, when the stub pipe was discovered in July 2018, NS Power did not remove the surrounding insulation to check for CUI, despite having knowledge of CUI evidence in other areas of the HFO piping system.

[121] In the Board's opinion, this decision by NS Power was poor utility practice. NS Power has stated that it was unaware of the existence of the stub pipe prior to July 2018 (a claim that will be discussed below). The Board finds it inexplicable that NS Power would not have removed the insulation from a stub pipe when it discovered CUI in other HFO piping in 2018. Given NS Power's claim that it was not aware of its existence, it should have appreciated that the stub pipe had not been inspected for many years and potentially for more than 40 years. This is particularly disconcerting given NS Power had identified the stub pipe for removal based on the inherent risk of an unutilized stub connection in a trench without containment. The Board believes good utility practice and reasonable decision making obliged NS Power to remove the insulation from the stub pipe and check for CUI. Had this been done, the company would have seen corrosion on the stub pipe and, acting prudently, it should have addressed the issue before completing the work that eventually led to the HFO spill.

[122] NS Power has also taken the position that up until July 2018 it was unaware the stub pipe existed. This is based on the fact that mechanical drawings for the HFO system were not updated when the stub pipe was decommissioned in 1974. This was also confirmed by Jonathan MacIntosh, Director, Enterprise Asset Management, during hearing testimony.

[123] However, as correctly pointed out by the Industrial Group in its closing submission, the claimed absence of outward evidence did not excuse NS Power from taking appropriate steps to investigate actual field conditions. In fact, as confirmed during NS Power panel hearing testimony, there were clearly visible indicators of the presence of some form of HFO piping in the trench where the oil leak originated. These included the presence of a metal plate over the top of the trench, which NS Power agreed would be considered an anomaly in the HFO pipe gallery. There was also a tee pipe that extended from the TUC 1&2 main fill line down through the metal plate and into the trench. And there was a valve stem that extended up from the trench, through the metal plate, into the area above the trench. Presumably all these elements were in place when the stub pipe was originally decommissioned.

[124] As such, between 1974 and 2018 any NS Power staff or contractor, including pipe inspection personnel, working in the vicinity of the stub pipe would have seen these elements and given them cause for further investigation. So, while the stub pipe was not shown on the HFO system drawings, the Board finds that there was clearly visible physical evidence on site that the stub pipe was there to be discovered had reasonable due diligence been undertaken by NS Power. The Board also notes that FAM audit report Conclusion IX-28 implies that Bates White understood the stub pipe to be neither visible nor contained. As noted by Ms. Rubin, this conclusion does not appear to account for the fact that while the stub pipe itself may not have been visible, it was there to be discovered.

[125] In its closing submission, NS Power states:

> NS Power recognizes that, with the benefit of hindsight, and as correctly pointed out in questioning by Member Murphy, the stub pipe could have been earlier identified and inspected if a thorough inspection of the area around (and largely concealing) the pipe had

> been carried out. However, in the context of thousands of decision points to be made, the stub pipe, like many other minor components of the piping, had not been identified for a detailed inspection or replacement based on risk. NS Power management followed good utility practice, with the information that was available. Without accurate engineering drawings identifying the stub pipe and more importantly the conduit in the trench that allowed oil to enter the harbour, it is reasonable that NS Power management had not taken any different actions during this event.
>
> [NS Power Closing Submission, p. 25]

[126] The Board takes issue with much of this statement. NS Power cannot simply throw its arms up in the air and claim ignorance by asserting that it did not know the stub pipe existed because it was not shown on engineering drawings. As noted previously, there was clearly visible physical evidence that some type of HFO piping existed below the anomalous metal plate that warranted further investigation. Despite NS Power's contention that it followed good utility practice, the Board finds that it was poor utility practice to simply ignore this physical evidence between 1974 and 2018. In fact, the Board finds it would have been good utility practice to investigate this physical evidence, which would have identified the presence of the stub pipe. Good utility practice would then have involved NS Power updating its engineering drawings to show the abandoned in place stub pipe. This should have occurred well before 2018.

[127] The Board also notes that, before 2017, NS Power used maintenance activities guided by the American Petroleum Institute (API), specifically the API-570 piping inspection code, to manage the integrity of the HFO system at TUC. API-570 calls for daily inspections, engineering visual inspections, and non-destructive testing of the HFO piping system. The code applies to all HFO piping that has been placed in service. However, as noted in the FAM audit report:

> Process piping systems that have been retired from service and abandoned in place are no longer covered by this "in-service inspection" Code. However abandoned in place piping may still need some amount of inspection and/or risk mitigation to assure that it does not become a process safety hazard because of continuing deterioration.
>
> [Exhibit N-15, p. 226]

[128] The Board has already concluded that had NS Power employed good utility practice, the company would have discovered the stub pipe well before 2018 and updated its engineering drawings accordingly. At that point the presence of the stub pipe would have been known to HFO pipe inspection personnel. Following the API-570 code, the Board believes good utility practice would then have resulted in occasional inspections of the stub pipe prior to 2017, and addressing any related safety concerns.

[129] NS Power has also emphasized what it believes to be the importance of the "conduit in the trench that allowed oil to enter the harbour". In its closing submission the company stated:

> To be clear, regardless of pipe conditions, the oil entered the harbour from a completely unknown and unanticipated steam line conduit that provided direct access from the trench to the water. The oil offloading barge steam conduit, which was hidden inside the trench, provided direct access for oil leaking from the stub pipe to enter Halifax harbour. Unbeknownst to NS Power, the conduit had not been decommissioned properly in 1974. If the risks of the steam conduit were known, NS Power would have deployed additional controls to mitigate the consequence of a potential leak. As noted in the RCA, there was no awareness of this steam conduit by the management, engineering, or operations team at the time of the event due to the actions of previous management in 1974. The previous management did not properly decommission the oil barge offloading point by leaving an unutilized steam conduit that was not visible as it was hidden underground in the covered trench. This steam conduit was also not documented in any engineering drawings.
>
> If it was not for the unknown steam conduit it is logical that the oil leaking from the stub pipe would not have entered the harbour and would have been identified by plant personnel during the operational checks on August 2nd, 2023 as the oil would be visually observed on the trench cover well before any overflow to the harbour.
>
> [NS Power Closing Submission, pp. 24-25]

[130] The Board finds this emphasis to be overstated and somewhat of a "red herring". To be clear, it was not the conduit that caused the leak of HFO – it was the deficient stub pipe. Regardless of the presence of the conduit, the leak would have still

occurred, and the Board has concluded that this was a result of poor utility practice by NS Power. Further, between 1974 and 2018, if NS Power had investigated the clear physical evidence that suggested the presence of HFO piping in the trench, the company would not only have uncovered the stub pipe but may have found the conduit, at which time it could have been addressed. Finally, the Board finds it speculative for NS Power to suggest that had the conduit not been present, the HFO would not have entered the harbour. Without the conduit in place, the leaked HFO may have also simply leached into the surrounding ground and still required cleanup efforts and costs and may not have been discovered until later.

[131] The Board finds that NS Power's actions were imprudent in the context of information which should have been known at the time and should have caused it to investigate further. Therefore, the Board finds that a cost disallowance related to the TUC HFO spill is warranted.

3.4.6.2 What is an appropriate amount for a disallowance?

[132] The Industrial Group submitted that costs associated with the TUC oil spill should not be borne by ratepayers if the Board finds that these costs were incurred as result of imprudent actions by NS Power. This extends not only to the costs of redispatch, but also the operating costs, which would have otherwise been returned to FAM customers as excess earnings, and additional capital costs under ATO M09156.

[133] NS Power confirmed that none of the costs associated with spilled oil, clean-up or the *Fisheries Act* fine were borne by FAM customers. Instead, they were paid and expensed by the company, thereby lowering NS Power's regulated earnings in the years

the costs were expensed, between 2018 and 2022. However, in Undertaking U-13, the company confirmed that it had excess non-fuel revenues of $3.1M and $0.7M in 2018 and 2019, respectively, which were returned to customers through the FAM. NS Power had no excess non-fuel revenues in 2020, 2021 and 2022. The company also stated that $2.5 million of the pre-tax uninsured operating expenses associated with the TUC oil spill were recorded in its 2018 Annual Regulated Financial Statements. Had these expenses not occurred, NS Power's excess 2018 non-fuel revenues would have increased by $1.7 million ($2.5 million net of the associated tax). The company also noted that another $0.1 million of the pre-tax uninsured operating expenses associated with the TUC oil spill were recorded in 2019. Had these expenses not occurred, NS Power's excess 2019 non-fuel revenues would have increased by $0.1 million ($0.1 million net of the associated tax).

[134] Ms. Rubin correctly notes that since 2007, through various mechanisms, excess earnings by NS Power have been applied for the benefit of ratepayers. During the 2018-2019 period, those funds were applied directly to the FAM. In this matter, NS Power would have returned over-earnings to customers of approximately $1.8 million if it had not incurred uninsured operating costs associated with the TUC oil spill. As such, the Board directs NS Power to credit approximately $1.8 million plus interest to the FAM for the benefit of customers.

[135] As for the cost of redispatch resulting from the TUC oil spill, the Board is satisfied that NS Power has properly calculated the cost to be $157,921. The Board directs NS Power to credit this amount plus interest to the FAM for the benefit of customers.

[136] On a separate point related to the cost of redispatch, NS Power made a number of mistakes in preparing related data for review by Bates White. This resulted in several unnecessary reviews by Bates White, and refiling of undertakings by both Bates White and NS Power. In its supplemental closing submission, the Industrial Group indicated that while it understands human errors occur, it would have expected heightened care by NS Power when providing data for audit review purposes. The Board agrees and expects NS Power to be more rigorous when reviewing and submitting data to the Board and parties in the future.

[137] The Industrial Group has also suggested that a careful review be completed of the costs incurred under the TUC HFO Piping Refurbishment project (M09156). The intent of this review would be to confirm whether any costs of the project were incurred as a result of imprudent actions by NS Power associated with the TUC oil spill. NS Power has submitted that the evidence in M09156 was consistent with the RCA on the cause of the oil spill. NS Power also asserted that it accurately stated there were no costs associated with the oil spill included in CI 51808 (M09156). The Board has reviewed the evidentiary record of M09156 and accepts this assertion.

[138] In summary, the Board directs NS Power to credit approximately $1,957,921 plus interest to the FAM for the benefit of customers. NS Power is directed to calculate the exact amounts for overearnings and interest in a compliance filing.

3.5 Port Hawkesbury Biomass Procurement Process

[139] NS Power's biomass supply contract was set to expire on March 31, 2020, so the utility started a procurement process in January 2020. This occurred in the context

of the closure of the Northern Pulp mill in Pictou County. Northern Pulp was the primary purchaser of wood chips and bark from sawmills. The mill closure had a significant negative impact on both the forestry industry and sawmills in the province.

[140] On January 17, 2020, NS Power issued a Request for Expressions of Interest in Negotiations (RFI) for the supply of biomass fuel from Nova Scotia sawmills, including for sawmill chips, sawmill bark, surplus pulpwood chips, and chips from other unmerchantable wood. NS Power has been using an external procurement manager to handle the procurement process since its biomass plant was commissioned in 2013. It said it proceeded this way because the procurement manager had knowledge of the biomass market, which involved a range of suppliers offering a variety of biomass products. A number of sawmills were successful in the procurement.

[141] However, NS Power concurrently negotiated a new biomass fuel supply contract with the procurement manager, which was not invited to participate in the RFI. Thus, while the procurement manager was reviewing offers from the sawmills who responded to the RFI, it negotiated a biomass fuel supply contract of its own with NS Power.

[142] Bates White had concerns with this procurement process:

> By allowing [the procurement manager] to review the offers from sawmills to NSPI for fuel that in many cases is a direct competitor to [the procurement manager's] fuels, NSPI provided [the procurement manager] with a competitive advantage that goes against best practices in competitive procurement. By seeing the prices being offered by sawmills, [the procurement manager] was not subject to the competitive pressure faced by suppliers who must make their offers with no knowledge of the number of suppliers with which they are competing, or the prices and quantities those competitors may offer. Instead, [the procurement manager] had a complete picture of how much supply NSPI was to procure, at what prices NSPI would find acceptable, and the quality of the fuel that was procured. This would allow [the procurement manager] to tailor an offer that was most advantageous to [the procurement manager].
>
> [Exhibit N-15, p. 98]

[143] However, Bates White did not recommend a disallowance:

> …we remain unconvinced that the pricing ultimately received from [the procurement manager] in bilateral negotiations is equal to or lower than the prices [the procurement manager] would have offered in a competitive procurement setting against alternative suppliers. Because we cannot credibly estimate what [the procurement manager's] offer prices would have been in that competitive procurement, and because any non-price advantages associated with [the procurement manager's] supply are difficult to quantify, we are not putting forth an estimate of damages associated with this concern or recommending a disallowance. Instead, we are providing recommendations that NSPI not allow a vendor to see commercially sensitive data of that vendor's competitors, and that future procurements of biomass fuel include [the procurement manager]. [Recommendations IV-2 and IV-3]
>
> [Exhibit N-15, p. 102]

[144] At the hearing, Mr. Musco further explained Bates White's reasons for not recommending a disallowance:

> A. (Musco)… if we were recommending a disallowance, we would want to definitively show that there were positive costs, incremental costs to FAM customers associated with the particular outcome or the particular concern that we identified. And since we could not do that here, we did not recommend a disallowance and relatedly did not put forth any estimate of what those potential costs could be.
>
> [Transcript A, September 11, 2023, p. 36]

[145] NS Power accepted both Recommendations IV-2 and IV-3. Nevertheless, it defended its actions in the biomass supply procurement process. It noted that it had always engaged an external procurement manager in prior biomass fuel procurements because the manager knew the biomass market and its participants. NS Power stated that it was: "most efficient to have a single manager who has ties with harvesters, trucking companies, chipping companies, and able to manage upwards of 15,000 trucks per year of biomass from different industries coming into the site" (see Ms. MacLean's testimony, at p. 250). NS Power also believed that suppliers were skeptical of dealing with NS Power and the procurement manager introduced a liaison or link between NS Power and the market participants. Finally, NS Power did not agree with Bates White's view that the procurement manager's forest chips were similar in quality to the sawmills' chips.

[146] Ms. MacLean testified about the differences between the biomass fuel provided by the procurement manager compared to that provided by the sawmills, and their impact on pricing:

> Q. Does Nova Scotia Power agree with the conclusion that the procurement manager had a competitive advantage as a result of acting as procurement manager in this process?
>
> A. (MacLean) No, they did not have a competitive advantage. And I can explain that. So we explain not only to the individual sawmills, which was the unique thing from what we had done in the past by speaking directly to them, but we also were dealing directly with the [blank] supplier who also had, through their own processes, byproduct. A different kind of byproduct than from the sawmills, but it did consist of forest chips and fuel wood chips. So we work with the whole suite of participants in the RFI, as well as with [blank] supplier to have them understand that we were going to take away their numbers and do some rigorous analysis on different blends and quantities to determine whether or not the pricing and volume and quality that they were offering was going to be sufficient enough; low enough, basically, low enough in cost to achieve the goal of a solid amount of dispatch from the biomass plant.
>
> So that individual that you referenced, the procurement manager, they had to go away and work on their pricing, as well as the sawmills did.
>
> ...
>
> (MacLean) You need to know more than just a price. It has to do with the actual mix of these very different biomass fuels that were being offered by the sawmills and by [blank] supplier. And the actual mix, which consists of low-grade bark and then different types of chips, those mixes, and at the prices they were offered, would all achieve quite a different outcome in terms of dispatch price. ... Their biomass is very different from a sawmill biomass. Their biomass is produced from harvesting low-grade forest stems. And so their costs that they would have to recover to work for them would be payment of what's called stumpage fees, then the harvesting cost, then the transportation cost, the chipping costs, and then the in-yard handling. So all of those costs, they would need to get a high enough price that they could at least cover those costs. That was what their value proposition was.
>
> The sawmills have a very different value proposition because their product is a waste chip that's automatically produced by milling logs to make lumber.
>
> So while the supply manager certainly would have industry knowledge of typical pricing from a sawmill, they could not use that information to come up with the appropriate price that they could offer. They just had to sharpen their pencil and work with us to get the price low enough.
>
> ...
>
> A. (MacLean) They have a different quality, especially in terms of moisture. The sawmill chips that are created in making lumber are milled from the outside of the tree trunk, where there's just naturally more moisture in the tree trunk circulation system. There's more moisture on the outer part of the trunk. Whereas when [blank] is harvesting in the forest low-grade trees, and they're chipping the entire stem, and so it mixes to,

> generally speaking, a lower moisture content, and that makes material difference in the final price of the product, and it also affects the amounts we would use in the blend.
>
> [Transcript, September 12, 2023, pp. 253-260]

[147] The Consumer Advocate stated that Bates White's findings warranted a disallowance. He submitted that NS Power's adoption of Bates White's recommendations about the biomass fuel supply procurement should be viewed "as tacit acknowledgement by NSPI that its process was substandard and in need of improvement". He added:

> …The Consumer Advocate does not agree with Bates White that such a disallowance can only be based upon definitive proof that NSPI's process resulted in higher costs than would have been obtained in a competitive procurement process. Rather, the Consumer Advocate states that in a circumstances such as this, where NSPI's substandard practices are ultimately the reason why it is not possible to "definitively" measure the costs, then some other reasonable substitute can and should be used. Otherwise, NSPI would stand to benefit from its own imprudent and flawed process.
>
> In determining whether a disallowance is warranted, the Board can be guided by certain commercial realities and economic principles, and assume that NSPI would have obtained lower prices had it utilized a competitive process with respect to the procurement manager.
> …
>
> [Consumer Advocate, Closing Submissions, November 1, 2023, p. 4]

3.5.1 Findings

[148] NS Power accepted Bates White's recommendations about the procurement manager's involvement in the biomass fuel procurement process. In its Reply Evidence, it said it would amend its Fuel Manual to prevent a vendor from having access to commercially sensitive data of that vendor's competitors. It also committed to including the procurement manager in future procurements of biomass fuel. Indeed, it had done so in a later procurement in October 2022.

[149] The Board accepts NS Power's evidence that the utility had always engaged an external procurement manager in prior biomass fuel procurement processes

and concludes this is reasonable because of the procurement manager's knowledge of the market and its participants.

[150] While the Board accepts Bates White's conclusion that some aspects of the procurement process did not represent best practices, it does not consider that a disallowance should be ordered in this instance. The concerns were mainly about the involvement of the procurement manager in reviewing the sawmills' responses to the RFI and concurrently negotiating with NS Power for a biomass fuel supply contract of its own with knowledge of the sawmills' bids. However, Bates White could not conclude that these concerns caused incremental costs for FAM customers. Further, the Board accepts NS Power's evidence that the pricing for the procurement manager's biomass fuel is effectively lower than the sawmills' pricing when it is adjusted for moisture content. Further, the procurement manager would not have known how the various moisture contents and blends would have affected the dispatch price of the products.

3.6 Port Hawkesbury Biomass Dispatch

[151] Bates White's Recommendation X-6 is for steps to be taken to improve the modelling of the Port Hawkesbury Biomass unit. In Conclusion X-10, it noted that it was unable to make any findings about whether the biomass unit was dispatched economically during the audit period, given the imprecise and incorrect nature of the modelling.

[152] In its Reply Evidence, NS Power accepted Bates White's Recommendation and noted that it has implemented three of the four recommended modelling

improvements and expected the fourth recommended improvement, the codification of the energy balance process, to be implemented by the end of 2023.

[153] In his evidence, Mr. Wilson noted that it is still unclear whether NS Power is prudently managing the biomass unit. He recommends that the Board direct further investigation by a qualified expert in biomass plant operations, and that the resulting evidence should be used to "determine whether the recent operations of the unit have been prudent, including estimating any appropriate disallowances." In its Rebuttal Evidence, NS Power stated that this review would be unnecessary and duplicative because the implementation of the audit recommendations provides the needed clarity on the operation of the biomass unit.

[154] In its closing argument, the Consumer Advocate noted that the actions NS Power has and is taking are prospective in nature and will not provide any insight about the past performance of the unit. The Consumer Advocate maintained that this review "could yield further valuable insights not only retrospectively but prospectively." In its closing submission, the Industrial Group supported this recommendation and requested the Board "reserve its findings in relation to the economic dispatch of the PHB unit." The Small Business Advocate stated:

> ...The SBA looks forward to the implementation of items in Recommendation X-6 in time so that a determination of whether PH Biomass is being dispatched economically will be available for the FAM Audit covering the 2024 period forward.
>
> [Small Business Advocate Closing Submission, p. 2]

[155] In its closing submission, NS Power stated that it would provide a "back-cast" to show how the economics of dispatching the biomass unit would have been affected by incorporating natural gas in the dispatch pricing during the audit period. It

further noted that it has committed to the recommendations that will allow it to demonstrate the efficient operation and dispatch of the unit going forward.

3.6.1 Findings

[156] The Board considered the cost versus the benefit of directing a third-party review of the 2020-2021 dispatch of the biomass unit. While the Board believes there might be value in conducting such a review, as highlighted by the Consumer Advocate, it is not convinced that the value gained in completing such a review for the 2020-2021 period would be worth the cost of completing the investigation. The Board is satisfied that, once the audit recommendations have been implemented, Bates White will be in a position to better assess the economics of the unit going forward. Should this prove not to be the case in the 2022-2023 audit, the Board will reassess the prospect of a third-party review.

[157] The Board also notes that one of the objectives of a FAM audit is to promote continuous improvement in the utility's fuel-related processes. There may be instances in which the utility should have acted differently, but the Board does not disallow costs. In such instances, the FAM audit process provides for continuous improvement in the fuel-related processes going forward.

3.7 Organization of Biomass-related Material in Audit Report

[158] Mr. Wilson recommended that Bates White consider consolidating the biomass-related material in a single section of the audit report because the cross-references in different sections of the report made it difficult to follow. Bates White agreed

with this recommendation and indicated that it plans to organize the discussion of biomass fuel in a separate chapter in future reports.

3.7.1 Findings

[159] The Board agrees with this approach.

3.8 Coal Supply Force Majeure

[160] NS Power had a contract with a supplier for coal for the Lingan plant. In the 2018-2019 audit report, Bates White recommended that NS Power continue to pursue damages for "contract underperformance" and provide a complete report to the Board of the outcome of these efforts, including proof that these funds had been returned to ratepayers. The legal dispute remained ongoing while Bates White was conducting the current audit review and it repeated this recommendation in its audit report (see Recommendation IV-1).

[161] In 2020, the supplier shut down the mine and declared a force majeure. NS Power did not accept this force majeure declaration. NS Power sought damages against the supplier under the terms of the supply agreement.

[162] In its Reply Evidence in this matter, NS Power advised that it resolved the contractual dispute in Q4 2022, including "a cash payment plus a coal supply agreement priced below the market alternative and will be available to review in the next FAM Audit."

[163] In his evidence, Mr. Wilson submitted:

> First, I would expect that the next FAM Audit would include a review of the cash payment and the benefit provided by the below-market coal supply agreement to verify that the settlement reasonably reflected the substantial damages from the force majeure event.

> Second, I would expect the next FAM Audit to review NS Power's dispatch practices with respect to this agreement.
>
> [Exhibit N-21, p. 24]

[164] During the hearing, NS Power confirmed its understanding that the settlement agreement will be reviewed during the next FAM audit. In his closing submissions, the Consumer Advocate accepted this disposition on the first point raised by Mr. Wilson. However, he reiterated the concern about the dispatch practices related to this agreement and submitted:

> …that the Board encourage NSPI to dispatch its coal units on the basis of a replacement price that excludes the benefit of the below-market price available for a limited supply of fuel. To the extent that NSPI's dispatch practices have departed from this standard, the Board should encourage NSPI to adjust the FAM balance to reflect the impact of below-marginal cost dispatch of affected units.
>
> [Consumer Advocate Closing Submissions, November 1, 2023, p. 10]

3.8.1 Findings

[165] The Board directs that the settlement agreement be reviewed in the 2022-2023 FAM audit. The Board understands that this review will include, as always, a review by the auditor of NS Power's dispatch practices and their potential impact on ratepayers.

[166] Mr. Wilson's second concern about dispatch practices is canvassed below.

3.9 Nova Scotia Coal Supply and Dispatch of Coal Units

[167] NS Power's disclosure that it had resolved a commercial dispute with a coal supplier that included, in part, a coal supply agreement at a price below the market alternative prompted questions from the Consumer Advocate about how this lower priced coal might factor into the way it dispatched its coal units. In response to information requests from the Consumer Advocate, NS Power noted that when a contract is in place for domestic coal, the domestic coal price in the contract is used for the domestic blend

portion of the plant dispatch price. NS Power said that these contracts are normally multi-year arrangements and in place until the domestic mine closes, so it viewed the domestic contract price for the domestic portion of the blend as the best dispatch price. NS Power also noted that domestic coal is usually the lower cost component of the blend, so including it in the dispatch price assures that the generation units which consume domestic coal are dispatched to facilitate maximum contract volumes [Exhibit N-10, CA IR-2; Exhibit N-18, CA IR-13(d)].

[168] Bates White also responded to questions from the Consumer Advocate on this topic. Bates White recommended that NS Power dispatch its fleet based on the unit's marginal cost, which would include the market price for fuel as an input and as such, it recommended that the market price to buy more coal should be used rather than the book value of the coal already in inventory [Exhibit N-17, CA IR-29].

[169] Mr. Wilson recommended that the Board encourage NS Power to dispatch its coal units on the basis of a replacement price that excludes the benefit of the below-market price available for a limited supply of domestic coal. He further recommended that, to the extent that NS Power's dispatch practices have departed from this standard, the FAM balance should be adjusted to reflect the impact of below-marginal cost dispatch on affected units [Exhibit N-21, p. 25].

[170] In its Rebuttal Evidence, NS Power generally agreed with Mr. Wilson's points, but considered there were unique circumstances associated with the physical management of domestic coal supplies. NS Power emphasized that its approach "maximizes the benefits of domestic coal for customers." It also submitted that the unit commitment resulting from this approach was likely close to that resulting from using

dispatch pricing fully based on imported alternative fuel and produced sample calculations to try to demonstrate this point. NS Power also emphasized a need to manage the delivery of local coal, which occurs daily, usually to a specific generating plant nearby. NS Power said that domestic coal is delivered in relatively small amounts which cannot be interrupted given the need to meet trucking commitments and fixed operating costs for the mine owner. Therefore, NS Power submitted that actual consumption of domestic coal needs to generally match forecasted contract quantities. It said, "the approach to including the domestic price in the blended dispatch cost helps preserve the quantities of domestic coal it will purchase for customers, keeping the local mine viable by adhering to negotiated delivery terms."

[171] At the hearing, Bates White said it found that NS Power's response to Mr. Wilson in its Rebuttal Evidence was reasonable. However, Bates White suggested that the next audit should look at the issue to assess how these resources were dispatched and that NS Power must justify deviations from a replacement cost approach.

[172] In response to a question from the Consumer Advocate at the hearing, Bates White implied that its concerns in this area had more to do with the recent settlement than a historical problem:

> Q. Okay. And I would just ask generally, what is the panel's response to Nova Scotia Power's explanation for not following this recommendation? And I would note, I also understand from the evidence that Bates White agrees with Mr. Wilson's recommendation here.
>
> A. (Musco) Yeah, so I think we can confirm our agreement that the resources in question continue to be dispatched on replacement costs. You know, we see that as a consistent approach that we've seen for NSPI's coal-fired generation, and we think that should continue, regardless of the outcome of any settlements that impact coal supply arrangements.
>
> [Transcript A, September 11, 2023, pp. 32-33]

[173] Bates White was also asked about the potential impact of s.48(1) of the *Public Utilities Act* on this assessment. That provision states:

> **Resources to be used**
>
> **48 (1)** Notwithstanding anything contained in this Act or any enactment, Nova Scotia Power Incorporated may in the operation of its generation and transmission plant or like facilities take steps to maximize the use of indigenous Nova Scotia resources, and the Board shall, where an application is made to the Board to determine the revenue requirement of the Company, include in such requirement the cost of such use. [Emphasis added]

[174] When asked whether this provision could be a relevant factor to consider in the assessment, Bates White said:

> A. (Musco) It certainly could be. Again, to the extent that the coal source in this case is properly categorized as an indigenous Nova Scotia resource, it seems reasonable that this would be certainly something that could be pointed to by NSPI as saying why they, you know, made any sort of adjustments to a dispatch or unit commitment decision. But of course, we would look at in detail and explore it with NSPI, and potentially others, you know, Board staff included, if needed.
>
> [Transcript A, September 11, 2023, pp. 173-174]

3.9.1 Findings

[175] The evidence in this proceeding does not support a finding that there is cause for any concern about NS Power's past coal unit dispatch practices. The concern expressed by Bates White appears to be that NS Power would take an inconsistent approach because of the pricing under the settlement agreement. The Board accepts that it would be appropriate to consider that issue in the next FAM audit, bearing in mind the apparent flexibility offered to NS Power in s. 48(1) of the *Public Utilities Act* to "maximize the use of indigenous Nova Scotia resources."

3.10 Regional Joint Dispatch

[176] In his evidence, Mr. Wilson recommended that the Board direct NS Power to communicate with neighboring utilities to determine whether they would be willing to

conduct a study of regional joint dispatch by a single system operator. Mr. Wilson said this could reduce costs and that building a system to optimize dispatch across the currently diverse neighbouring systems could yield greater benefits for all. Mr. Wilson noted that Bates White supported a study of regional joint dispatch based on the FAM auditor's response to an information request from the Consumer Advocate:

> **Consumer Advocate Request IR-8:**
>
> With reference to Ch. X, does Bates White recommend that NSP enter into a joint dispatch agreement with one or more neighboring utilities to cut costs through system efficiencies and to provide additional scale to justify fully staffing market and operations staff through the weekend? If Bates White is unable to answer this question, should it be studied and, if so, how?
>
> **Bates White's Response:**
>
> Dispatch by a single system operator can increase efficiencies and Bates White generally supports their use. We have not included a recommendation that NSPI enter into a joint dispatch agreement as the question describes it. Bates White has long supported the study of a more regional, automated dispatch. To study the benefits of dispatch by a single system operator, a regional study would be required involving multiple provinces. The study would need to review, at a minimum, potential constructs, legal requirements and hurdles, infrastructure needs, personnel requirements, and cost and pricing mechanisms, among others. The provinces would with need to agree to perform such a study or be required to do so.
>
> [Exhibit N-6, BW (CA) RIR-8]

[177] In its Rebuttal Evidence, NS Power agreed that regional joint dispatch may provide a benefit but expressed a number of concerns:

> While NS Power is likely to benefit from comprehensive regional joint dispatch, this is not the case with other utilities which are well interconnected and for whom a relatively small benefit of regional joint dispatch optimization is outweighed by a significant risk regarding utilization of their resources for their benefit. This risk stems from the regulatory and contractual complexities inherent in regional joint dispatch arrangements. Moreover, the variations in provincial regulatory frameworks and air emissions reduction policies create an imbalance, as regions with stricter regulations may derive a disproportionate advantage from regional joint system dispatch. This perceived benefit imbalance contributes to the reluctance of some parties to participate in regional dispatch optimization.
>
> As part of the proposed Atlantic Loop initiative, NS Power is engaged in ongoing discussions with regional counterparts regarding the necessary forms of regional dispatch optimization to fully leverage the benefits of the project. These discussions have provided insights into the willingness of counterparties to engage in regional joint dispatch. At this stage of the Atlantic Loop conversations and negotiations, a directive to mandate further discussions and studies on the possible benefits of regional joint dispatch optimization by

> a single system operator could hinder the progress of the ongoing regional conversations and negotiations.
>
> [Exhibit N-26, NS Power Rebuttal Evidence, pp. 27-28]

[178] In its closing submission, it also suggested that a study into regional joint dispatch at this time would be of limited use because of uncertainties about the ultimate generation mix and intertie capabilities in the next ten years. As such, it felt a study conducted today would soon be moot.

3.10.1 Findings

[179] The Board appreciates that regional joint dispatch by a single system operator would not be easy and is somewhat of a Pandora's Box. A successful arrangement would need to produce benefits for all jurisdictions involved. But the prospect of ignoring something that could be a benefit because pursuing it would be hard does not sit well. As much as this era of energy decarbonization and transformation creates uncertainties, it also creates opportunities. Targets for the shuttering of coal plants, development of renewables and the achievement of a net-zero greenhouse gas economy are looming closer every day. In waiting for the perfect time to act, one may find that time has already passed.

[180] Clearly the Board cannot mandate the cooperation of all the parties who would be necessary to successfully undertake a reasonable study of a more regional approach to dispatch. All it can do is ask NS Power to try. To that end, the Board directs NS Power to provide it with reports on its efforts to engage other participants to undertake the study recommended by Mr. Wilson. These reports are to be filed every six months, beginning August 31, 2024.

3.11 Demand Response and Time-varying Rates

[181] One of the recommendations in Mr. Wilson's evidence was that the effectiveness of demand response and critical peak pricing dispatch be evaluated as part of the FAM Audit. He recommended that NS Power compare the forecast impact of demand response and time-varying rates against actuals after each peak-load event.

[182] In its Rebuttal Evidence, NS Power stated that it believes the recommendations are "premature and redundant". NS Power highlights its Final Report on the Time Varying Pricing Pilot, the Final Report on the Smart Grid Nova Scotia Pilot, and EfficiencyOne's annual Evaluation Reports. It also stated that "the performance and design of the E1 demand response programs and TVP are already being assessed through various Evaluation, Measurement and Verification (EM&V) processes overseen by the NSUARB" [Exhibit N-26, p.30]. NS Power further noted that, given the early stages of development of the programs, the impact on FAM costs is immaterial, but that it may be appropriate to revisit the issue in the future.

3.11.1 Findings

[183] The Board agrees with NS Power that these programs are being evaluated through other Board processes, and that, at this time, there would be limited value to assessing them through the FAM audit.

3.12 Confidentiality

[184] Bates White's audit report included redactions that were requested or approved by NS Power on the basis that the information was confidential. Under s.12(3)

of the *Board Regulatory Rules*, the "burden of satisfying the Board that a document should be held in confidence is on the party claiming confidentiality."

[185] Immediately after Bates White filed its audit report, the Board raised concerns about redactions of a proposed disallowance amount for NS Power's purchases from its affiliate Brooklyn Power. Following its review, NS Power responded that this amount was inadvertently redacted in the final version of the audit report and NS Power was not seeking confidential treatment of that amount. As a result, various references to the amount on six pages of the report could be made public. NS Power's review also revealed nine other unrelated instances in which redactions could be reversed and the information made public.

[186] Counsel for the Industrial Group also raised further concerns at that time of other redactions in the audit report about substantive issues, submitting that "the basis for the claimed commercial sensitivity is not apparent, or the information is already public knowledge. Additionally, there are inconsistent claims for confidentiality". Following further review, NS Power agreed that several redactions challenged by the Industrial Group could also be removed.

[187] In her closing submissions, counsel for the Industrial Group reiterated her concerns about what she described as "excessive redactions" in Bates White's audit report:

> As a final point, the Industrial Group notes that the process for confidentiality review as between NSPI and BW has improved but excessive redactions remain a concern. These were previously outlined by the Industrial Group in its earlier confidentiality submissions. Most of the objections to confidentiality redactions were addressed voluntarily by NSPI or at the request of the Board but public trust in the regulation of NSPI remains an important consideration when reviewing and implementing redactions to the FAM Audit report (and NSPI filings). Disclosure and transparency in the administration of the FAM is critical for ensuring a meaningful audit process and public confidence in the regulatory process. There is significant public interest in the openness of information contained in the FAM Audit; redactions ought to be made only where absolutely necessary.

> It is respectfully requested that the Board reiterate the importance of making the contents of the FAM Audit and proceedings, as public as possible, and reiterating the importance of NSPI making requests for confidentiality only where necessary.
>
> [Industrial Group Submissions, November 1, 2023, p. 22]

[188] Ms. Rubin's confidentiality concerns persisted through to the very end of the submissions when she outlined an example that highlighted the issue:

> As a final point, in its November 1st submissions, the Industrial Group raised an ongoing concern with respect to confidentiality. In NSPI's submissions of November 1st, filed simultaneously with Intervenors, in Section 6 regarding biomass efficiency NSPI inexplicably redacted all references to Port Hawkesbury Paper ("PHP") as the other party to the co-generation Port Hawkesbury Biomass Facility, the recipient of process steam and the party to the energy balance process. The fact that PHP is the entity is widely known and was the subject of a public record in the Board-approved capital work order and associated agreements for the PHP project.
>
> NSPI subsequently included the name of PHP in its Reply Submissions but this highlights the Industrial Group's concern that each redaction needs to be carefully considered and only applied where it meets the test of necessity, and that complacency in this responsibility by NSPI be avoided. We again request the Board provide directions, reminding NSPI of its obligations and the importance of transparency.
>
> [Industrial Group Supplemental Closing Submissions, December 11, 2023, p. 3]

3.12.1 Findings

[189] In a prior FAM audit proceeding, the Board noted that "an open and transparent examination of the prudence issue is critical to the regulatory process and is needed in order to maintain confidence in the regulator". It added:

> [58] The Board believed in 2007, and believes now, that there is a public interest in ensuring disclosure and transparency and in having a meaningful audit process. If the meaningful audit process is shielded from the public there is not disclosure and transparency with respect to the administration of the FAM.
>
> [Board Decision, 2012 NSUARB 137 (M04972), para. 58]

[190] The Board is mindful that some of the information referenced in the audit report and the evidence in this matter is commercially sensitive and the redaction of this information actually protects ratepayers by ensuring that NS Power can procure its fuel in a competitive market. Disclosing the information in those instances could result in

financial harm to ratepayers because releasing it could negatively impact the negotiation of fuel costs.

[191] However, the Board is also committed to ensuring that its processes are open and transparent. It is important for ratepayers to understand the nature and scope of NS Power's fuel costs, and for the Board to be able to explain in its decision why it has accepted or rejected certain costs that are being questioned in this proceeding. This not only fosters public confidence in the Board's processes, but also in the fuel procurement practices of NS Power. When unnecessary redactions must be questioned and reversed, it raises concerns about transparency, creates delays to address the confidentiality concerns, and adds extra costs for intervenors who must review the redactions and make submissions about how the information should be treated. It is particularly frustrating when redactions were unnecessary because the information was already in the public domain or there is inconsistent confidentiality treatment in different parts of NS Power's filings with the Board.

[192] In the previous FAM audit, the Board directed that the parties meet to discuss revisions to the Plan of Administration to improve the redaction process with a view to transparency and an efficient process for release of the audit report. These changes were adopted in the Plan of Administration and approved by the Board in November 2022. While the Board does not consider it necessary to revisit that process, it reiterates, as requested by counsel for the Industrial Group, the importance of NS Power making requests for confidentiality only where absolutely necessary and without intervenors having to identify instances where the redactions were not necessary.

3.13 FAM Balance and Carrying Costs

[193] In its closing submissions, NRR recommended that the FAM auditor consider the recovery of interest on fuel costs to ensure that it is appropriately factored into NS Power's FAM calculations and expressed an interest in the auditor's opinion in future FAM proceedings about options to reduce the FAM balance and associated interest costs with a view to minimizing the overall impact on ratepayers.

3.13.1 Findings

[194] The growth of NS Power's unrecovered fuel costs is of considerable concern. Managing the recovery of these costs will be difficult because attempting to do so over the short term (as the normal operation of NS Power's FAM contemplates) would most certainly cause rate shock, which would be especially unwelcome at a time when electricity prices are already unaffordable for many. On the other hand, extending the recovery of these costs over a longer term may result in higher overall costs paid by ratepayers. Furthermore, it is likely that cost pressures in the future, particularly due to the energy transition, will make it less likely that the deferred costs could be more affordably recovered at that time. As such, the overall result may only be to increase costs and delay the shock. To the extent that NRR's comments seek creative solutions to this serious problem, they are well raised.

[195] The Board observes that NS Power and the Province have recently proposed what could be a partial solution. The proposed arrangement, which would see the Province acquire part of the currently outstanding FAM balance and the recovery of

that part of the FAM balance over a longer period of time at a lower cost of capital is currently before the Board for consideration in Matter M11393.

[196] The Board also notes that Bates White's evidence in NS Power's recent general rate application provided some thoughts about this in response to the question, "Are there other regulatory tools available to the Board to help minimize interest paid on deferrals but also to mitigate rate shock?" [M10431, Exhibit N-45, pp. 43-44]. If Bates White has additional thoughts or recommendations about this, it should explore those in its next FAM audit report.

4.0 CONCLUSION

[197] The Board considers the conduct of the FAM Audit to have been a success. It was constructively and positively conducted in the best interests of all FAM customers, with a high degree of cooperation from NS Power that instills confidence in the utility's activities under its FAM. The FAM auditor made 32 recommendations and NS Power agreed with all but one of them. The single exception was a disallowance recommended by the FAM auditor that the Board concludes would not be a proper disallowance in this case.

[198] The Board disallows approximately $2 million plus interest, related to its finding that NS Power acted imprudently and contributed to an oil spill at Tufts Cove on August 2, 2018. These costs were incurred in 2018 and 2019, but the issue was not resolved in the previous audit. The Board directs that NS Power's customers be credited, through the FAM, with $157,921 plus interest for the additional cost of redispatching NS Power's generation fleet after the spill; and, approximately $1.8 million plus interest that

would have been returned to customers as excess earning but for the unnecessary uninsured operating costs that NS Power incurred as a result of the oil spill.

[199] To put this in context, the total disallowance, of approximately $2 million plus interest, is a very small fraction of the approximately $1.5 billion in FAM costs incurred by NS Power over the 2020 and 2021 audit period.

[200] NS Power is directed to calculate the exact amounts of these disallowances, for overearnings and interest in a compliance filing. The compliance filing must be filed within two weeks of the date of this decision. Given the limited nature of the compliance filing in this case, the Board does not anticipate seeking intervenor comments before issuing a final order in this matter.

[201] The Board also directs the following:

- NS Power is directed to file FAM Audit Action Plan updates, beginning August 31, 2024, and continuing every six months until all matters are resolved.
- The capacity value related to the Maritime Link under the Energy and Capacity Agreement and the need for Lingan 2 must be reviewed again in the next FAM audit.
- The coal supply dispute settlement agreement achieved in the fourth quarter of 2022 but related to the audit period will be reviewed in the next FAM audit, along with NS Power's dispatch practices for the coal units affected by the below market prices under the settlement agreement.
- NS Power is directed to try to engage with other participants to undertake a study of regional joint dispatch by a single system operator and report on its efforts every six months, beginning August 31, 2024.
- The FAM auditor may, in its next FAM audit report, discuss its views on regulatory tools available to minimize the interest paid on outstanding fuel balances under NS Power's FAM.

[202] An Order will issue accordingly after the compliance filing.

DATED at Halifax, Nova Scotia, this 21st day of February, 2024.

Stephen T. McGrath

Roland A. Deveau

Steven M. Murphy