DECISION

2015 NSUARB 9
M06290

NOVA SCOTIA UTILITY AND REVIEW BOARD

IN THE MATTER OF THE PUBLIC UTILITIES ACT

- and -

IN THE MATTER OF a hearing into **NOVA SCOTIA POWER INCORPORATED'S** Fuel Adjustment Mechanism ("FAM") Audit

BEFORE:

Peter W. Gurnham, Q.C., Chair
Roland A. Deveau, Q.C., Vice-chair
Kulvinder S. Dhillon, P. Eng., Member

COUNSEL:

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BOARD COUNSEL:	S. Bruce Outhouse, Q.C.
HEARING DATE(S):	October 27 and October 28, 2014
FINAL SUBMISSIONS:	November 17 and November 24, 2014
DECISION DATE:	**January 20, 2015**
DECISION:	**FAM Audit results in a disallowance of $5,142,500, plus carrying charges.**

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1.0 INTRODUCTION

[1] This Decision is further to a public hearing conducted by the Nova Scotia Utility and Review Board ("Board") on October 27 and 28, 2014, in the matter of an audit of the fuel adjustment mechanism ("FAM") respecting Nova Scotia Power Incorporated ("NSPI", "Company", "Utility") for the years 2012 and 2013.

[2] Consistent with the Plan of Administration ("POA") for NSPI's FAM, The Liberty Consulting Group ("Liberty") was engaged to do a comprehensive audit with respect to the FAM for the period covering 2012 and 2013 ("FAM Audit"). The POA provides that an audit of the FAM will be done every second year. Liberty filed its FAM Audit with the Board on July 2, 2014. This Decision includes the Board's findings relative to the FAM Audit.

[3] The *Public Utilities Act*, R.S.N.S. 1989, c. 380, as amended ("*Act*"), gives the Board broad regulatory oversight over public utilities and provides it with the authority to discharge its regulatory responsibilities.

[4] Six Intervenors applied for formal standing. A number of these parties were represented at the hearing by counsel. The Small Business Advocate ("SBA"); the Consumer Advocate ("CA"); the Industrial Group, whose counsel represented 10 Intervenors; Heritage Gas; Port Hawkesbury Paper LP ("PHP"); and the Nova Scotia Departments of Energy and Environment ("Province") all participated in the hearing.

[5] The FAM has generally been described as a mechanism that allows periodic adjustments to customer rates, outside general rate proceedings, to reflect increases and decreases in the Utility's cost of fuel, provided they are prudently incurred.

[6] In its Rate Decision dated February 5, 2007, the Board identified at least four prerequisites prior to the implementation of a FAM:

> [45] For the guidance of the parties, however, and without in any way prejudging the issue, in the Board's view there are several prerequisites that must be in place in order for the Board to consider the adoption of a FAM now or in the future:
>
> 1. an adequate and appropriate fuel procurement policy at NSPI in which the Board has confidence;
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> 2. timely disclosure of complete and adequate information by NSPI so as to ensure confidence that the procurement policy is being appropriately administered;
>
> 3. disclosure and transparency with respect to the administration of the FAM;
>
> 4. <u>a meaningful audit process under the administration of the Board.</u>
>
> [46] This list is not meant to be exhaustive. [Emphasis added]
>
> [Decision, 2007 NSUARB 8, paras. 45-46]

[7] In its general rate application ("GRA") Decision dated November 5, 2008, the Board approved the FAM to take effect on January 1, 2009, conditional on the final approval of the Tariff and POA. A revised Tariff and POA were received on November 26, 2008 and approved by the Board in a letter dated December 11, 2008.

[8] Section 5 of the POA addresses the audit requirements and excerpts are included below:

> **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 proceeding 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 NSPI 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 every second year. The Board shall have a qualified independent firm

> conduct the audit. The audit will address the financial and management/performance aspects of NSPI'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, 20XX to December 31, 20XX+1. The first audit period will be for the year 2009. Subsequent audits will cover two-year periods.
>
> **Objectives and Scope of the Audit**
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> 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 NSPI, 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 NSPI Fuel Manual.
>
> The Scope of the Audit will include a review of fuel and energy procurement, fuel management, and generation production …
>
> …
>
> Prior to setting the final audit scope, the auditor shall meet with NSPI and interested stakeholders.
>
> **Timing of the Audit**
>
> The first audit will commence on February 1, 2010, and subsequent audits are expected to commence in February of every second year. The final report for the first audit will be filed with the Board and Stakeholders by July 2, 2010. Final reports for subsequent audits will be filed by July 2 of every second year. The final report will evolve from a draft report which is provided to NSPI 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.
>
> [FAM POA, July 29, 2011, pp. 13-15]

[9] The first FAM Audit was conducted in 2010 and covered the 2009 calendar year. The second FAM Audit was conducted in 2012 and covered the calendar years of 2010 and 2011.

[10] For the current audit period, the Liberty FAM Audit Report presented Liberty's findings, conclusions, and recommendations for 2012 and 2013.

[11] NSPI filed its Reply Evidence on August 18, 2014.

2.0 PRUDENCY TEST

[12] In 2005 NSUARB 27 (NSPI - P-881), the Board adopted the definition of prudence as set out in a decision of the Illinois Commerce Commission as a reasonable test to be applied in Nova Scotia.

[13] That test was set out at paragraph 84 of the Board's Decision:

> 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.
>
> [Decision, 2005 NSUARB 27, para. 84]

[14] The Board went on to say:

> [89] 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.
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> [Decision, 2005 NSUARB 27, para. 89]

3.0 GENERAL OBSERVATION

[15] The Board notes that this FAM Audit was very different than the last. It was a productive exercise which, in the Board's view, provided value for ratepayers. Liberty found most of NSPI's fuel procurement activities to be appropriate. NSPI accepted many of the helpful recommendations from Liberty. This Decision, of necessity, focusses on areas of disagreement but that should not detract from the fact that this was a productive review by Liberty and a productive response by NSPI.

4.0 IMPLEMENTING CHANGES TO NATURAL GAS HEDGING PROGRAM

[16] In its Report, Liberty concluded that NSPI acted too slowly to review and implement changes to its natural gas hedging program. Liberty recommends a sanction in the range of $750,000.

[17] By way of background, the issue of NSPI's natural gas hedging program was also reviewed as part of the 2012 FAM Audit conducted by Liberty. In its Decision 2012 NSUARB 227 ("2012 FAM Audit Decision"), the Board concluded:

> [313] In setting the context for its consideration of this issue, the Board is mindful of the discretionary nature of hedging practices. Hedging, by any party, has never been intended to safeguard a company or utility from all risks that might occur in the future.
>
> [314] The Board understands that NSPI, like any other party involved in hedging practices, requires some latitude to exercise judgment in the development and implementation of a hedging strategy. In the hearing, hedging was described as an art, rather than an exact science.
>
> [315] In fact, the decision to enter into any specific hedge or hedging strategy is akin to the purchase of insurance to protect against future losses. Like insurance, there is a wide range of hedging products that are available to parties to protect their positions. These products also come at a range of prices. In choosing any particular hedging product, it is appropriate for a party to consider the reasonable risks which might be encountered in the future.
>
> [316] Further, the Board recognizes that it is not appropriate to rely solely on hindsight in an analysis about the reasonableness or prudence of a hedging strategy. No person can predict the future. Accordingly, if circumstances occur which result in losses as a result of a particular event or a series of events, it does not necessarily follow that the chosen hedging strategy was wrong or unreasonable. Conversely, windfalls which occur as a result of unexpected future events which were not hedged do not make the hedging decision a brilliant one. Further, the size of any loss does not factor into the consideration of the appropriateness of a hedging strategy.
>
> [317] The Board considers that the reasonableness of a hedging strategy must be analyzed in the context of the facts or circumstances known or reasonably expected by the person or utility at the time the hedging strategy was developed or applied.
>
> [318] In this instance, NSPI was faced in 2010 with a long term natural gas supply contract with Shell, which was coming to an end on October 31, 2010. In replacing that contract, two significant elements of NSPI's circumstances changed. First, the price of the gas under the new contract would be based on daily prices, which are more volatile, rather than monthly prices that existed under the former contract. Second, because of the interplay between natural gas and coal prices, NSPI generally started using the natural gas in its generation fleet under the new contract, rather than selling the gas to third parties. The impact of this latter element caused NSPI to bear the increased costs itself, rather than being able to pass them to third parties purchasing the gas.
>
> [319] The Board is satisfied that NSPI did consider the impact of the impending conclusion of the long term Shell contract. In order to protect from negative fluctuations of prices for its gas purchases, it entered into a hedging strategy which

adopted swing/swaps. This would help reduce the risk of volatility in daily natural gas prices, effectively replacing the daily prices with average monthly prices which were more stable.

[320] While the swing/swaps did provide some protection to NSPI from the above noted monthly/daily price risk, swing/swaps did not, unfortunately, protect from a significant change in the "basis differential". They are not intended to operate as a direct hedge of the "basis".

[321] However, the Board accepts the hedging evidence of NSPI that an assessment of NSPI's program in the fall of 2010 would not have reasonably uncovered the need to hedge the "basis". The Board finds that no one could have reasonably foreseen the combined series of events which led to the "basis blowout".

[322] The Board notes that NSPI had the benefit of expert advice from its consultants on the issue of hedging. As described in the hearing, both Black & Veatch and Leonard Crook have expertise in this area. Both consultants assisted NSPI with the development and implementation of its hedging practices. Black & Veatch was involved in a broad sense in its periodic review of hedging generally, while Mr. Crook was more actively involved in the decision-making process by advising NSPI in relation to gas purchases and hedging risk.

[323] The Board is satisfied that it was reasonable to retain and rely on the advice of Black & Veatch and Mr. Crook.

[324] Neither expert specifically identified a potential "basis differential" as a stand-alone risk to be hedged.

…

[326] After reviewing the evidence and the submissions, the Board is satisfied that NSPI could not reasonably have foreseen the events commencing in December 2010, which would lead to a significant change in the basis differential and result in the "basis blowout".

[327] Further, even if NSPI had applied a hedging strategy to deal with a potential blowout in the basis differential, the cost of purchasing such hedging products, to the extent they were available, may possibly have cost ratepayers more than the "basis blowout" itself, which NSPI addressed immediately, early in 2011.

[328] Accordingly, the Board finds that no imprudence disallowance should be imposed on NSPI as a result of the "basis blowout" in the winter of 2010-11. Consequently, no specific review is required to study what amount NSPI might have saved in the winter of 2010-11 if it had adopted a different hedging strategy.

[329] <u>During the hearing, NSPI's hedging witness panel stated that a further examination of NSPI's hedging practices would appear appropriate on a prospective basis.</u>

[330] On the question of a prospective study, the Board does not consider that a specific direction is necessary. <u>The Board expects that NSPI should be continually undertaking any studies or analyses about any aspect of its fuel management practices, including hedging, if considered prudent or appropriate to lower or stabilize fuel costs</u>. [Emphasis added]

[2012 FAM Audit Decision, paras. 313-330]

[18] In its current FAM Audit, Liberty concluded that NSPI had continued to delay the implementation of an appropriate hedging program. Among its observations,

Liberty noted that a consultant's review (Pace Global) of the Company's hedging strategy conducted in late 2009 recommended that it should start measuring Value at Risk ("VaR"). Liberty also cited a consultant's 2011 report (ICFI) commissioned by NSPI as further support that weaknesses in its existing hedging program had been identified.

[19] However, as Liberty notes, NSPI did not adopt changes to its hedging strategy until very late in the audit period under review, with the changes only applying to trades after the audit period:

> In May 2013, NS Power engaged a different consultant, Concentric Energy Advisors, to conduct a comprehensive review of its gas hedging program. This review recommended replacing NS Power's time-based strategy with one that uses value at risk (VaR) to measure and manage gas price risk. The new strategy was adopted by the Fuel Strategy Table in early November 2013. Parameter selection took place in mid-December, and trades to implement the new strategy were approved in January 2014. [Emphasis added]
>
> [Exhibit N-1, p. II-19]

[20] The Board was advised at the hearing that the changes were indeed only implemented in March 2014.

[21] The findings on NSPI's alleged delay were outlined in Liberty's FAM Audit Evidence:

> The "start of this audit period" was January 1, 2012. We learned of no re-evaluation process during this period; moreover, NS Power's Reply Evidence cites none during this period. Our position on the 2011 outside report commissioned by NS Power has already been clearly expressed. Whatever one makes of the scope and substance of that report, however, the observation most pertinent here is NS Power's lack of a focused approach to its supply risks in relation to hedging continued until 2013.
>
> As we noted on page II-19 of the most recent Audit Report, NS Power retained an expert almost a year and a half (17 months) after the start of the current Audit Period. Nothing in NS Power's Reply Evidence contravenes our understanding that this mid-2013 review was the first undertaken in the current Audit Period. That lengthy delay comprises the principal reason for our conclusion that NS Power simply waited too long to respond comprehensively to conditions that have characterized the markets in which has operated for a long time.
>
> The UARB did not hold in response to the last Audit Report that NS Power was entitled to ignore the consequences of price movements in designing its hedging program on a going forward basis. The Company only changed its program to the current form just after

the December 31, 2013 end of the current Audit Period. It did not even commission the outside study that led eventually to the change until mid-2013. The simple questions are these:

- Is it reasonable for NS Power to have taken until 2014 to make the change it recently made?
- Is it reasonable that NS Power did not commission until 2013 the outside study which led to that change?

Even if one moves all the way to the end of the last Audit Period (December 31, 2011), it still took NS Power a little more than two full years to adopt its current hedging program. In Liberty's opinion this delay is not reasonable in view of the conditions driving Northeastern North American markets.

[Exhibit N-14, pp. 14-15]

[22] Liberty concluded in its original Audit Report:

NS Power's failure to revise its gas hedging program in a timely way failed to address its recognized and appropriate need to address gas price volatility. We recognize that the Utility and Review Board has determined that it was not inappropriate for NS Power to have failed to adopt a program including basis hedging during the previous Audit Period. Whatever one concludes about the existence of basis risk by the winter of 2010 (when the basis blowout occurred), it is clear to us, as we think the Company itself acknowledged at the latest in early 2011, that it needed to conduct a reassessment of its gas hedging program. Despite that recognition and the clarity of basis as a material cost risk for customers, NS Power failed to complete that reassessment and respond comprehensively to it until roughly three more years had passed (and just after the end of the current Audit Period).

[Exhibit N-1, p. II-24]

[23] In the end, Liberty recommended that NSPI should be sanctioned in the range of $750,000 for its alleged failure to implement timely changes to its hedging program.

[24] NSPI refuted Liberty's claim that it delayed the implementation of appropriate changes to its hedging strategy:

NS Power disagrees with Liberty's conclusion that the Value at Risk (VaR) hedging program now in place by NS Power should have been put in place at the start of the audit period. NS Power also disagrees with Liberty's recommendation that the Company be sanctioned for not having implemented its current VaR hedging program by the beginning of the 2012/2013 audit period.

Liberty's conclusion and recommendation on this issue relate solely to timing. Liberty acknowledges that the UARB reviewed and accepted the Company's hedging approach for the 2010 and 2011 audit period. That said, in support of its requested sanction, Liberty's analysis appears to commend a re-visiting of 2010 and 2011 period and appears to count that period as contributing to the delay it perceives in relation to NS Power's actions. NS Power disagrees with this approach and submits that the 2010 and 2011 audit period was closed with the Board's decision on this issue. Going forward, with

> respect to the current audit period, NS Power's evidence, as further detailed below, is that it acted reasonably in following expert advice to continue a hedging strategy designed to reduce volatility and to embark upon an appropriate expert consultation, review, approval and implementation process to put in place a new comprehensive VaR hedging program and that such actions proceeded in earnest on a reasonable timeline for the benefit of customers.
>
> NS Power had a well-defined hedging program, developed in consultation with external experts, in place that was being executed by the Company during the audit period. Specifically, NS Power engaged ICF International (ICFI) to complete a hedging study in early 2011 and the report was delivered on December 29, 2011. NS Power implemented the recommendation from ICFI's report beginning early in 2012. The study was a basis hedging study and not a wider study of hedging overall; however, the risk that Liberty is identifying is associated with the basis.
>
> At the start of [2013], the Company began the process of re-evaluating its hedging program and had engaged experts to help determine whether changes would be appropriate. Given recent market events, NS Power took appropriate steps to seek out expert advice and to take due consideration before implementing changes to ensure that the Company did not expose customers to new, unseen or unconsidered risks.
>
> [NSPI Reply Evidence, Exhibit N-3, pp. 24-25]

[25] Thus, NSPI asserts that the hedging issue had been canvassed by its consultants, that it had an appropriate hedging strategy in effect during the audit period, and that the review and implementation of a new hedging strategy was dealt with on a timely basis.

4.1 Findings

[26] NSPI's interpretation of the facts differs significantly from that of Liberty and other Intervenors in terms of the scope of prior hedging studies commissioned by the Company, as well as to the reasonableness of the timeline taken by NSPI to change its hedging program to one based on VaR.

[27] Based on its consideration of the evidence and the submissions of the parties, the Board has concluded that there was an unreasonable delay by NSPI in the review and implementation of appropriate changes to its natural gas hedging program.

[28] The Board is mindful of NSPI's concerns expressed in its Reply Evidence and Closing Submissions about the exercise of hindsight. The Board's intention is not

to retreat from its findings in the 2012 FAM Audit Decision and it does not consider the discussion in this case to be about the application of hindsight. The analysis of this issue does not involve second-guessing NSPI's decisions with respect to its hedging program based on facts which only became known later.

[29] Rather, the Board's conclusion in this proceeding is simply based on an objective assessment of the timeline adopted by NSPI to implement changes to its hedging program, when measured against the backdrop of the Company's own earlier statements in the prior FAM hearing and the analysis of its consultants, as well as the comments of the Board in the 2012 FAM Audit Decision. Quite simply, the time taken to engage its consultants and implement changes to the hedging strategy was not reasonable in the circumstances (irrespective of what circumstances or events may have occurred later).

[30] Further, contrary to NSPI's submission on this point, the Board is satisfied that Liberty's analysis of this issue is not "a revisiting of the 2010 and 2011 period", which NSPI asserts was "closed with the Board's decision on this issue". Indeed, unlike the lack of hindsight, NSPI had the benefit of knowing the circumstances surrounding the importance of reviewing the hedging issue and the concerns held by Liberty and the ratepayers. This context should have impressed upon NSPI the urgency and significance of the hedging issue and the parties' expectations in relation to it.

[31] In mid-2013, the Concentric Report recommended replacing NSPI's time-based strategy with an approach that uses Value at Risk. The Board is satisfied that the VaR methodology represents "best practices" at the present time: see Exhibit N-9, IR-2, Attachment 1, page 41. In its Final Submissions, the Industrial Group stated:

> 29. The Concentric Report suggests that the VaR approach is the "best practice", that it is "broadly implemented in the industry" and that it is "the standard methodology for risk measurement in all Energy Trading and Risk Management (ETRM) platforms." In the hearing, Mr. O'Connor agreed that it was the hedging tool that is "*most typically*" utilized. [Emphasis in original]
>
> [Industrial Group Final Submissions, p. 7]

[32] NSPI did not dispute the fact that the VaR approach represents an accepted methodology, but it submitted that it is one of various acceptable approaches used for hedging, including the time-based approach previously used by NSPI. Nevertheless, after receiving Concentric's comprehensive study, NSPI abandoned the time-based approach in favour of the VaR methodology.

[33] Moreover, despite its assertions in the prior FAM Audit proceeding that it continuously reviews its hedging practices, the changes it eventually made were not put into effect until March 2014, a full two years after the prior audit period, and thus did not impact fuel costs until after the conclusion of the audit period under review.

[34] Board Counsel questioned the NSPI witness panel on the issue of a comprehensive hedging study:

> MR. OUTHOUSE: Was there a comprehensive review of NSPI's hedging strategy -- hedging program, I should say, at any time up until Mr. Moreno's engagement in May of 2013.
>
> MR. DANDURAND: So by a comprehensive review, sir, my understanding of that terminology is to complete a review that would assess moving from the time-based hedging program that we were currently under to a hedging program that was more dynamic in nature in terms of measuring VaR, as by the work of Mr. Moreno in conjunction with Nova Scotia Power. And that was the first comprehensive review of the hedging strategy to move to a -- from a time-based hedging strategy to a value-at-risk-based strategy on a dynamic basis, yes.
>
> MR. OUTHOUSE: Maybe I was oversimplifying.
>
> I would have thought a comprehensive review was simply a review by a qualified company or person who's looking at all aspects of your hedging program and giving you recommendations either to leave it as it was or change it, as opposed to the update that Black & Veatch did in 2010 or as opposed to ICFI's work on hedging -- basis hedging, for example, which would seem to be more targeted, more limited scope.
>
> Comprehensive I took to mean a full review of the entire program and to make whatever recommendations the authors felt fit to improve your program.

In this case, I understand that Mr. Moreno's recommendation was that you move -- you make a fundamental change, but that doesn't necessarily, I guess, in my world, come out of a comprehensive review.

Do you see it differently?

MR. DANDURAND: As I see it, Mr. Outhouse, we had a hedging strategy in place that was achieving its objectives, being a time-based hedging strategy. And from the discussion that we had in the previous FAM audit with respect to hedging and the company's commitment at that time to complete a comprehensive review of its natural gas hedging strategy, I see it as that work having been embarked upon and completed over this audit period and that we have moved to a dynamic VaR-based hedging program as recommended by Concentric Energy Advisors.

MR. OUTHOUSE: So I want to ask the question again.

A hedging program was implemented, as I understand it, in 2006. And from that time forward, Mr. Moreno's engagement marked the first comprehensive review by an outside consultant of your hedging program.

MR. DANDURAND: Yes, in terms of reviewing the overall hedging program and making a recommendation to move from a time-based hedging program to a VaR-based hedging program, yes.

MR. O'CONNOR: Mr. Outhouse, if I may, so I would agree that some of the work done from the start of the hedging program until Mr. Moreno's work was, at times, maybe narrow on items, but my expectation certainly would be of any experts that review our hedging program if they were to find issues with overall design to bring those to our attention and, to my knowledge, that did not happen in any of the specific reviews.

There were adjustments suggested to our program, things that we should add to enhance it, but I just wanted to add that.

MR. OUTHOUSE: With respect to Mr. Moreno's report and recommendations that have been implemented, it was my understanding that some of those recommendations were, indeed, implemented or started implementation earlier than March of 2014.

Is that correct, or did first implementation start in March?

MR. DANDURAND: The implementation of the program did begin in March, sir.

MR. OUTHOUSE: So it all -- there was no partial implementation in earlier months?

MR. DANDURAND: No, there was review ongoing, interim review as well with stakeholders, but ultimately, the implementation of the recommendations from the work that Mr. Moreno had done was March 2014, sir.

MR. OUTHOUSE: So from the time he was engaged until the time of this implementation was approximately 10 months.

[Transcript, pp. 278-282]

[35] The Board concludes that Concentric's Report was the first comprehensive study conducted by NSPI in a number of years. The study suggested moving from a time-based approach to a VaR-based hedging program. Despite NSPI's submissions to the contrary, the Board finds that NSPI's intervening studies focused almost entirely on the issue of "basis hedging".

[36] In the Board's opinion, NSPI's response lacked the requisite urgency and timeliness for an issue which poses significant risk to ratepayers in the form of potentially increased volatility and fuel portfolio costs.

[37] Having found that NSPI unreasonably delayed the review and implementation of changes to its hedging strategy, the next issue for the Board to address is that of an appropriate disallowance.

[38] Liberty recommended a sanction in the range of $750,000:

> Traditionally, the calculation of harm to customers from unreasonable conduct lies in comparing actual costs with those that the Company would have incurred had it acted in a more appropriate manner. That approach raises the concern that the remedy (cost reduction) does not comport with the goal that hedging seeks (mitigation of cost volatility). Where one is measuring impacts over a multi-year period, an added concern is that mitigating volatility prudently might raise costs in one year, while lowering them in another. Recognizing the conceptual difficulties and challenges encountered in the last audit's treatment of the issue, therefore, we believe that a more direct and fair approach would be to impose a moderate but meaningful economic sanction to reflect the need, particularly in the case of costs recovered through an automatic adjustment clause, to induce management attentiveness to markets that are dynamic and uncertain.
>
> A sanction in the range of $750,000 would in our view provide such inducement, while ensuring that, on the one hand, there is no disproportionate impact to the Company should markets happen to rise dramatically, yet, on the other hand, untimely performance does not go without penalty solely because markets happened to fall.
>
> [Exhibit N-1, p. II-24]

[39] The SBA supported a sanction in the range of $750,000.

[40] Liberty noted the traditional method of calculating the harm to customers would be to compare the actual costs incurred versus the costs the Company would have incurred had it acted in a more appropriate manner. However, Liberty stated this

methodology would fail to provide a sufficient link between the ultimate disallowance (i.e., the difference of costs incurred with those costs that could have been saved) and the purpose of hedging (i.e., the mitigation of cost volatility).

[41] The Industrial Group submitted that a greater sanction of between $4 million to $5 million would be more appropriate. In its Final Submissions, it stated:

> 38. The Industrial Group submits that any sanction for imprudence should be meaningful, even in circumstances where it is difficult to quantify the precise impact of the failure to act or the act itself. The disallowance should bear relationship to NSPI's overall procurement, in the context of the specific act found to be imprudent.
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> 39. The FAM Reports indicate NSPI spent $234 million on natural gas including the settlement of hedges in the Audit period. The settlement of hedges resulted in a loss of $ [redacted] million. It is submitted that the appropriate disallowance should demonstrate that NSPI's corporate philosophy must respond with urgency and purpose in equivalent circumstances. In light of the gas-related costs that NSPI will recover in the Audit Period, the Industrial Group states that a disallowance of $750,000 does not send an adequate message to management. With an average fuel budget over the audit period of around $485 million a $750,000 sanction is an immaterial adjustment of 0.0015%.
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> 40. As discussed during the cross-examination of Mr. Antonuk, the FAM incentive mechanism by which NSPI shares in the over/under-recovery of fuel costs was suspended during the audit period. The incentive was approved at 10% to a maximum of $5 million. While the discussion was in the context of the difficulty quantifying the Trenton 5 disallowance, the proposition is a general one: the Board could look at the incentive built into the FAM Plan of Administration as a proxy for imprudent management performance.
>
> 41. Accordingly, using the settlement of gas hedges through the audit period as a comparator, the Industrial Group respectfully submits that a meaningful sanction for failure to undertake the hedging review and implement the necessary changes is in the range of $4 to $5 million.
>
> [Industrial Group Final Submissions, pp. 9-10]

[42] The Board notes that the imposition of penalties in a proceeding such as this is not consistent with the underlying purpose of the FAM: i.e., the recovery of prudently incurred fuel costs by NSPI on behalf of its ratepayers: see *Nova Scotia Power Inc., Re,* 2005 NSUARB 27, paras. 92-94. In cases where NSPI has not acted prudently, the FAM costs should be reduced accordingly and be reflective of the

additional fuel costs which were incurred, compared to what the costs should have been if the Company had acted prudently.

[43] As noted above, Liberty referred to the inherent challenges in calculating the appropriate adjustment to FAM costs resulting from NSPI's delay. The difficulty in performing the calculation in the present case includes the issue that under a time-based hedging program NSPI was over-hedged. During the audit period, the Company undertook several reversal transactions to unwind its over-hedged positions that may not have been otherwise required under the VaR program.

[44] The complexity of this calculation would have been compounded by the fact that hedging is a dynamic exercise in which hedges change frequently. Undisputably, the calculation would have involved a subjective element requiring the application of judgment to determine the difference in FAM costs resulting from the implementation of the VaR program and the unwinding of the prior time-based hedges. Further, since natural gas is often on the margin, some discretion would have had to be applied to the calculation to reflect the fuel switching which would have occurred between natural gas and coal, even on an hourly basis.

[45] The application of an appropriate timeline to implement the switch to the new hedging program would have also required judgment.

[46] Some of the Intervenors requested further detail about the impact of the hedging changes, but were referred by NSPI to the transactions recorded in the Confidential Data Cart binders: see, for example, Industrial Group IR-17 (Exhibit N-9) and SBA IR-11 (Exhibit N-13).

[47] In this case, neither Liberty, nor any other Intervenor, has presented the Board with any calculation of the additional costs that would have been caused by NSPI's unreasonable delay to implement changes to its natural gas hedging strategy. The Board is mindful of Liberty's comments about the difficulty of quantifying such additional costs, but without such evidence the Board has no basis upon which to determine an appropriate disallowance.

[48] In the circumstances, the Board finds, on the balance of probabilities, that the amount of additional costs resulting from NSPI's unreasonable delay has not been demonstrated. The Board concludes that, in the specific circumstances of this case, no disallowance will be imposed on NSPI for its conduct.

[49] This finding should not be interpreted by NSPI as an indication that it can escape future FAM cost adjustments in similar situations. The Board expects NSPI to prudently manage its fuel portfolio costs at all times and in all respects. If it fails to do so, and any reasonable evidence is placed before the Board of increased costs resulting to ratepayers, the Board will not hesitate to impose the appropriate adjustment.

5.0 NEWPAGE CONTRACTS

[50] In the Board's 2012 FAM Audit Decision, the Board found that NSPI did not properly analyze the risks and benefits associated with assuming two natural gas contracts which it could have taken in an assignment from NewPage Port Hawkesbury and disallowed $903,000 in fuel costs for the period from November 1, 2010 through to December 31, 2011. The Board noted in that Decision that since these contracts were long-term contracts, the impact of this finding on any future test years would be the subject of consideration in future audits.

[51] To provide context, with NSPI's long term natural gas contract with Shell coming to end in October 2010, NSPI had issued a request for proposals in 2008 and 2009 to acquire replacement quantities of natural gas to supply its projected needs. One of the bids involved the two NewPage Port Hawkesbury contracts which NSPI rejected at the time due to concerns about associated transportation costs and supply interruption. These contracts came with separate contracts for matching transportation capacity on the Maritimes and Northeast ("M&NP") pipeline between Goldboro and Port Hawkesbury and secondary delivery rights to other points on the M&NP system, including Tufts Cove on the M&NP Halifax Lateral. The NewPage contracts had renewal provisions which, if exercised, would extend the contracts until 2021. Therefore, on the assumption that the contracts would have been in place during the 2012-2013 audit period, Liberty calculated the value of gas that it believed NSPI could have purchased favourably under those contracts.

[52] In its Audit, Liberty described the calculation it made to determine the value of the foregone gas and transportation. Liberty stated as follows:

> The calculation that Liberty determined to be appropriate substituted the gas supply and transportation that would have been available for the same quantity of gas and transportation actually taken by NS Power, but that would have been avoided on each day of the Audit Period. We then asked NS Power for data that would permit a calculation of the difference in cost. We tested the accuracy of that data. The total of those differences is from $5.8 million to $4.7 million.
>
> The calculation required a number of determinations. Major ones included:
>
> 1. What prices NS Power would have paid for gas from the foregone contracts, recognizing two principal price-affecting contract provisions:
>
>   a. The ability under the contracts for the buyer to elect what pricing basis to use for the earlier part of the current Audit Period
>
>   b. The provision for a price redetermination covering the later part of the current Audit Period.

2. The sources, amounts, and costs of gas for which the volumes under the foregone contracts would have substituted; i.e., what gas would NS Power not have purchased during the Current Audit Period.

3. In some cases, the volumes that NS Power would not have purchased during the current Audit Period consisted of daily purchases. On the days where daily purchases comprised what we determined were the avoided volumes, there could be some current Audit Period days where NS Power did not actually buy as much gas as was available under the foregone contracts. We therefore needed to find a means for accounting for the difference between actual daily purchases and the amounts available that day under the foregone contracts.

4. The Audit Period days and amounts during which NS Power would have experienced curtailments (to which NS Power would have been subject under foregone contracts).

5. During those days of curtailment, what NS Power could have done to mitigate the costs it would have experienced for pipeline capacity ("stranded pipeline capacity") it would not have used due to the curtailed portion of the foregone contracts.

[Exhibit N-1, pp. V-12 and V-13]

[53] Liberty noted that the renewal provisions in the contracts (set out later in this Decision) allowed for re-pricing under different standards including (a) the selection of a different liquid transparent well-established index to replace the one currently being used, and (b) consideration of the market for long-term contracts. Liberty concluded that it would have been reasonable to assume that Dracut full netback pricing was consistent with the use of index pricing in the contract. Liberty also calculated the net loss that would have occurred because of potential stranded pipeline capacity, given that under the gas contracts, the seller was only obliged to deliver gas from offshore Nova Scotia. Taking into account NSPI would have had an incentive to mitigate the cost of stranded capacity by buying replacement gas that would have used the capacity, Liberty estimated the net stranded costs at $900,000. Overall, Liberty recommended a disallowance of $3.8 million (based on one-half netback price) to $4.9 million (based on a full netback price) in relation to the foregone NewPage contracts for the audit period.

[54] Liberty stated:

… The supplier under the foregone contracts would have had to acquire capacity on the U.S. side. That supplier could not realistically have persuaded an arbitrator that it should get more than what the market would have given it on a net basis (i.e., pricing at Dracut without having to pay for the transportation that the supplier would have needed to acquire to get the gas there.

Nevertheless, we did perform a calculation that would effectively “split the difference” by assuming “Dracut Half Netback”, in order to determine the difference in consequences had a higher-than-full-netback price resulted. We used for this second calculation the price at Dracut, minus one-half of the transportation charges from the U.S. – Canada border to Dracut.

Determination 2 of the calculation required identification of what gas NS Power would not have purchased, had it had access to supply under the foregone contracts. NS Power had a supply mix that changed materially during the current Audit Period. We determined that the displaced gas would have come from varying sources across the period:

- For January 1, 2012 through October 31, 2012, the foregone gas would have displaced part of the gas that NS Power bought under the contract that it entered with [redacted] in the competition that presented the option to take the foregone contracts.

- For November 1, 2012, through October 31, 2013, the foregone gas would have displaced spot-market purchases. On many of those days, NS Power bought more than [redacted] MMBtu. We used NS Power’s weighted-average price of spot-market purchases on each day.

- For November and December of 2013, we used the price agreed to for a winter-period purchase (winter 2013-2014) from [redacted].

For those days addressed under Determination 3 above, we assumed that NS Power would have sold any excess gas at prices equaling or exceeding the prices it paid. We assumed for simplicity that such resales would have produced no net loss or gain.

The source of the gas under the foregone contracts was production from the Sable Offshore Energy Project (SOEP). SOEP encountered production difficulties during the current Audit Period. We needed to recognize that reduced SOEP production could produce curtailments under the foregone contracts. After extensive discussion with NS Power about curtailment priorities, we agreed that the best approach would be to assume curtailments of the foregone contracts on a *pro rata* basis with the other SOEP purchasers under long-term contracts.

Our recommended adjustment includes a reduction in benefits to customers due to “stranded” transportation capacity. NS Power would have had to take M&NP-CA capacity in volumes and for durations equal to the supply amounts under the foregone contracts. NS Power would have had to pay for, but might not have used portions or all of that capacity for delivering the supply; i.e., the amounts curtailed as permitted under the supply contracts due to production limitations at SOEP. NS Power would not, however, have faced stranding of all of the capacity corresponding to the amounts of supply curtailment. The Company bought gas at the U. S. - Canada border on some of the current Audit Period days during which curtailment occurred. At least some of that gas could have been moved with the transportation contracts (up to the amount not used to transport gas from SOEP under the contracts on Audit Period curtailment days.

[Exhibit N-1, pp. V-15 and V-16]

[55] The potential disallowance must be broken down into the period between January 1, 2012 and July 31, 2012 and the period subsequent to August 1, 2012. The contract renewal provision commenced August 1, 2012. The cost related to the earlier time frame was calculated, and agreed to by both Liberty and NSPI, at approximately $1.1 million prior to any curtailment and associated mitigation.

[56] Liberty and NSPI also agreed that the total potential disallowance would have been reduced by $1.4 million relating to curtailment and that the curtailment itself could have been mitigated by approximately $0.5 million, resulting in a net reduction in the disallowance of $0.9 million. The breakdown of these amounts and their impact on the gross $4.7 and $5.8 million figures was provided by NSPI in Exhibit N-3, Appendix E and the net reduction is attributable almost entirely to the period after August 1, 2012.

5.1 The Contract Provisions

[57] Critical to the discussions are the renewal provisions for the contract, in particular Article IX Price:

> 9.01 Contract Price
>
> (a) For each GJ included in the Contract Demand every Month of the Primary Term, each such Month being a "Delivery Month", Buyer shall pay Seller the Contract Price, which shall be determined by means of the following formula, and then converting the resulting price per MMBtu to a price per GJ:
>
> (i) the New York Price Index, multiplied by forty-three percent (43%) (this percentage hereinafter referred to as the "New York Weighting"); plus the New England Price Index, times fifty-seven percent (57%) (this percentage hereinafter referred to as the "New England Weighting");
>
> (ii) less the Demand Charge Rate charged by Maritimes (Canada) and Maritimes (US) in effect during the Delivery Month, expressed in $/MMBtu, under each pipeline's Rate Schedule MN365 for transportation from Goldboro, Nova Scotia to St. Stephen, New Brunswick, and the Maritimes (US) system from Calais, Maine to Dracut, Massachusetts (such Demand Charge Rate to be subject to adjustment as specified in 9.01 (b) below);
>
> (iii) less all variable charges, including, without limitation, all variable costs charged by Maritimes (Canada) and Maritimes (US) in effect during the

Delivery Month, expressed in $/MMBtu, under each pipeline's Rate Schedule MN365 for transportation from Goldboro, Nova Scotia to St. Stephen, New Brunswick, and the Maritimes (US) system from Calais, Maine to· Dracut, Massachusetts, allowances for lost and unaccounted for fuel and surcharges (e.g., FERC Annual Charge Adjustment ("ACA") and Gas Research Institute ("GRI") surcharges) in effect from time to time, expressed in $/MMBtu;

(iv) less the fuel Gas required, as set forth by Maritimes (Canada) and/or Maritimes (U.S.) under each pipeline's Rate Schedule MN365, expressed in MMBtu's, for the quantity included under this Subsection 9.01 (a), multiplied by the Contract Price (before adjustment for fuel Gas under this Subsection 9.01 (a) (iv)), expressed in $/MMBtu.

…

9.05 Revision of Contract Price

The Contract Price established in Section 9.01 above shall be subject to revision or replacement as provided in this Section 9.05, and pursuant to the consultation procedures specified in Section 9.06. <u>In the event that the Term is extended so that the following is applicable, Buyer or Seller shall each have the option, to be effective as of the beginning of the sixth (6'''), eleventh (11''') and sixteenth (16''') anniversary of the Commencement Date, to propose a new Contract Price and/or Replacement Index or Indices to be used in place of the Contract Price on a prospective basis</u>. That Party shall indicate its intention to do so by delivering to the other Party a notice specifying the proposed Contract Price or Replacement Index or Indices by not later than one hundred eighty (180) Days prior to the sixth (6'''), eleventh (11''') and sixteenth (16th) anniversary of the Commencement Date. If a Party proposes a Replacement Index, such index shall satisfy the criteria described under Section 9.02.

9.06 Consultation Regarding Contract Price or Replacement Index

<u>For the purposes of Sections 9.02 and 9.05, the Parties agree to consult as to (a) the degree to which a proposed Replacement Index satisfies the criteria set forth in Section 9.02, or (b) the degree to which a proposed Contract Price reflects the price of long-term gas purchase and sales transactions in the Nova Scotia natural gas market, whichever is applicable</u>. In the event that the Parties are unable to reach an agreement through such consultations within a period of thirty (30) Days following delivery of the notice or notices described in Sections 9.02 and 9.05, the matter will be referred to arbitration pursuant to the provisions of Article XI. The purpose of this proceeding shall be to establish (a) whether, and if more than one has been proposed, which proposed Replacement Index should be substituted for the then effective price index in light of the criteria set forth in Section 9.02, or (b) whether, and if more than one has been proposed, which proposed Contract Price should be substituted for the then effective Contract Price, whichever is applicable. [Emphasis added]

[Exhibit N-3, Appendix C-1, pp. 23-26]

[58] NSPI's principal argument, as put forward mainly by its expert John Reed, is that the reopener provisions in the contract would have resulted in a market price and as such the parties would have been neutral in terms of commodity price as of August

1, 2012. In NSPI's view, the arbitration process would not have resulted in a winner or a loser. NSPI's view is that the intent of the reopener provision was to ensure that the contract would move back to a market price at each renegotiation.

[59] There were few, if any, long-term gas contracts in the market that an arbitrator could refer to. Indeed, there is a fundamental disagreement between Liberty and NSPI as to the relevance of NSPI's most recent long-term gas supply contract which was signed in mid-2010. NSPI believed that contract bore little relevance to the determination of a price reopener negotiated or arbitrated in mid-2012. NSPI believed it would be unreasonable to accept that any party that had M&NP sunk U.S. transportation costs would sell production in Nova Scotia at any less than Dracut flat pricing. Indeed, it argued it would be likely that higher prices would have been sought given the cost of alternative sources of gas for Nova Scotia customers. NSPI cites the following testimony from Mr. Reed:

> MR. REED: No, I can't accept that. If you're buying gas at St. Stephen, for example, at the U.S.-Canadian border on Maritimes, you pay a price that the seller charges. You don't know what's in that price. If they say the price is going to be $5, you pay $5; if they say it's going to be Dracut Index plus .50 cents, its Dracut Index plus .50 cents. How the seller got to that in terms of what cost they may have, in their own mind, included in the price or not really isn't relevant. The answer is you pay the price that's charged. Some of those contracts would have -- the seller would have incurred costs to get it from Dracut to St. Stephen in that example. Some of them would not have. Some of them may have, in fact, re-marketed production from SOEP.
>
> So again, the cost construct of the seller never enters into the equation. The market price is the market price. People who have transport and people who don't have transport selling at the same point do not charge a different price.
>
> [NSPI Closing Submission, p. 16]

[60] Mr. Reed went on to say:

> MR. REED: Yeah. I have actually been involved in gas contract arbitrations that had exactly that problem. So I can tell you, in my experience, how arbitrators have faced that. There's two ways to look at it.
>
> One is to say these circumstances are not amenable to the market today. We essentially have a case of commercial frustration and I'm going to direct that the contract be

terminated because it's incapable of being updated. I've seen that in electric market contracts where the market went from a regulated market to a deregulated market. But that's very difficult for an arbitrator to do and sometimes that result gets challenged as being outside the authority of the arbitrator.

In other cases where there have been major market changes and the data you need to apply the standard in the contract doesn't exist; for example, avoided cost analysis used to be the way electric contracts were priced. Now it's based upon locational prices; there are no avoided cost filings.

You see arbitrators frequently saying, "I need to take the best data I can and try and preserve the intent." And the intent was to go to market. And even though I don't have market with regard to long-term contracts, I'll take the best data I do have -- in this case, three-month contracts, five month contracts, one-month contracts, whatever the parties are able to come up with -- and I'll invite the parties to comment on what they think would be the relevant differential between these data that are in front of us and what a long-term contract would be in this market.

[NSPI Closing Submission, pp. 17-18]

…

MR. REED: I think an arbitrator would look to the question of, what is the market for gas in Nova Scotia long-term, short-term, the best available. And let me explain why. This is an important point that came up yesterday, so it may take a minute to really put all of this answer on it.

Why the fact that someone holds transport to the market or away from the market or in the market really doesn't influence that. If we were to take a simple example here in the Maritimes where you've got an industrial customer that, let's say, located right in the MacAulay Field where Corridor Gas Resources has production. And Corridor is looking to sell gas to that industrial customer.

Corridor doesn't hold transportation on Maritimes Canada, Maritimes U.S. or any other upstream pipeline. It's simply going to move the gas from one side of its gas field to the other to the industrial customer.

How is Corridor going to determine the price to that customer and how would the market determine the price to that customer? You look at the alternatives for that customer.

That customer's alternative in this market today would be to buy gas at Dracut and have that gas transported on the Maritimes U.S. system and the Maritimes Canada system and perhaps even on some distribution system to get to their property and that's their alternative.

Corridor, being a rational economic player would price the gas a penny below that customer's alternative which would reflect transportation in the U.S., transportation in Atlantic Canada, and whatever other costs the customer's alternatives are.

Does that mean that it's unfair or inappropriate for Corridor to charge that price to that customer? No.

THE CHAIR: But, Mr. Reed, those two people are starting with a blank page. They don't have the contract that has existed since whenever this one started. They're starting with a blank page.

> MR. REED: But the key is, if you accept my view that the intent of the contract was to go to the market then the question was; how does the price in the market get formed? The price in the market gets formed not on what the seller's costs are. The seller's costs in reaching the market are irrelevant. The buyer's cost, in accessing the market, are irrelevant.
>
> You go to the market, and again, it should be at a comparable pricing point. And I agree, you should not include transport as an extra cost in a contract in the Maritimes Canada system. We are talking about what is the market for gas into the Maritimes Canada system?
>
> And I think an arbitrator would look at that and say, "If I were to sign a new contract today for gas into the Maritimes Canada system, so the same pricing framework, the same contract framework as this contract, what would I have to pay?"
>
> And the answer is unequivocally in 2012, you would have had to pay Dracut plus because that is how the market had changed. And it doesn't make any difference whether the seller is Corridor in Atlantic Canada, in the Maritimes and not holding transport or whether it's somebody in Pennsylvania looking to move their gas across four systems; that is, in fact, the market price for gas into the Maritimes system.
>
> So if you accept the premise that the contract was intended to go to the market standard for gas into the Maritimes Canada system, I think that's what the result would be. [Emphasis added]
>
> [NSPI Closing Submission, pp. 19-20]

[61] NSPI repeatedly argued that the intent of Section 9.06 of the contract was to ensure the contract price reflects long-term contracts in the Nova Scotia market.

[62] The Industrial Group criticized NSPI's argument for a number of reasons.

[63] First, it says NSPI ignored the fact that the NewPage gas contracts were paired with transportation contracts and the prevailing logic of this contract is that the buyer is insulated from transportation costs that may have been present in the weighted index because the buyer has already paid for transportation.

[64] Second, it says while NSPI went to great lengths in the hearing to advance the argument that the market price is the market price regardless of the source of gas or actual transportation requirements, the evidence indicates that gas is priced differently based on whether transportation is required.

[65] Third, it says it is difficult to accept that NSPI would not have demanded a netback price in the renewal negotiations given the evidence that its goal at the time was to receive netback pricing. The Industrial Group argued that it is difficult to accept an arbitrator would impose a contract price that included embedded transportation costs. The Industrial Group concluded as follows:

> 84. The attributes of the NPPH Contracts clearly make them distinguishable from the gas contracts that were available for comparison in 2012 and through the Audit Period. While the Contract Price is linked to the "market price" it is reasonable to conclude that when an arbitrator determines the "*fairest resolution*" to a dispute over the NPPH long-term gas prices, the arbitrator would take into account the specific terms and risk profile of the contract, the fact that "market price" can differ based on whether or not transportation is embedded in the cost, the anticipation that the natural gas market would soon return to netback pricing, and the logic of the NPPH Contracts which protected the buyer from paying twice for transportation.
>
> 85. The Industrial Group takes that position that the calculations prepared by Liberty provide a more logical account of the likely outcome of an arbitrated settlement of a new Contract Price. NSPI's position that the NPPH gas price would not be distinguishable from actual gas prices observed during the Audit Period is not tenable given the many differences between the NPPH Contract and the short-term contracts that were actually executed. It is simply not logical that the "fairest resolution" would move the Contract Price from a Dracut full netback to a Dracut plus premium price (which is the outcome, under either of NSPI's proposals).
>
> 86. The Industrial Group supports Liberty's recommendation of a disallowance of \$4.9 million based on netback pricing. The Industrial Group does not accept that the fairest resolution would result in significantly altering the pricing formula. [Emphasis added in original]
>
> [Industrial Group Final Submission, p. 19]

5.2 Potential Future Stranded Pipeline Capacity

[66] In its Reply Evidence, NSPI looked forward from 2014 through 2021 to make the argument that, due to stranded pipeline capacity, the NewPage contract will not provide a benefit to NSPI's customers in the future and could ultimately result in losses. This is, in part, based on evidence from Mr. Reed relying on the assumption that SOEP production will be shut in by 2016, a forecast he said is consistent with statements made by Exxon Mobil, the offshore operator. Liberty cited other sources who expressed a different view about how soon offshore production would stop, which

stated abandonment could be as late as 2019, noting that the contracts end in mid-2021. Liberty went on to state:

> To that point, observe that the chart on page 52 of NS Power's Reply Evidence shows production steadily fell as U.S. shale production drove down North American gas prices. That phenomenon is consistent with the operator's observation about the influence of price on production. The operator also cited efficiency gains. With market prices firming and with repairs recently made, one can observe a firming in production levels. Looking at conditions since the beginning of 2013, one does not find the dramatic decline that drawing a mathematically derived line [as did NSPI] would have projected.
>
> [Exhibit N-14, p. 7]

[67] In any event, Liberty made the point that the Board does not need to speculate on that, as it could be dealt with in the next audit.

> It may be that production ends sooner or later. It may be that significant changes in market prices affect that timing. The key point to keep in mind is, why the UARB should have to speculate about such eventualities. Liberty has used actual performance to make its recommendation and future reviewers will have the ability to do the same.
>
> That ability to use actual information raises several important questions:
>
> - Is not access to actual information the purpose of the FAM; i.e., to avoid making final pricing decisions on the basis of forecasts regarding volatile markets?
> - If avoidance of speculation by regulators in setting the energy portion of rates is material to protecting the Company's financial interests, is it less so when it comes to protecting customer interests in cases such as this one?
> - Does it make sense to hazard what is essentially a guess on the correctness of a mathematical projection, when the data from which to test it will be clear, conclusive, and available in future audits?
>
> We believe that exercising the small modicum of patience required to let the facts govern this matter is fully consistent with the purpose of the FAM, and is required to ensure that it works even-handedly for both the Company and customers. It is also consistent with the regulatory notion that costs and revenues match over a defined period of time, whatever the nature of the recovery method (*e.g.*, base rates or adjustment mechanisms).
>
> [Exhibit N-14, pp. 8-9]

[68] Mr. Antonuk elaborated on that as follows:

> MR. ANTONUK … And we don't need to speculate on that, because we will know that as we go forward. We knew it the last audit period; we know it this audit period. And right now the -- if you will, the amount that NS Power is going out of pocket because of the disallowances growing. Well, if it turns around it's a simple matter to just bring that balance down to where it becomes zero.
>
> So if, in fact, the gas market turns around, NS Power would get compensated to the extent it is now losing shareowner money, and when that reaches zero, end of story. That's it. We're done.

> And so I sort of say if we have a FAM because we don't know what's happening in fuel and energy markets, if we look at how different the market in the Maritimes is now versus what we were all thinking years ago, why do we want to bet that Mr. Reed is right? He might be; he might not be.
>
> [Transcript, pp. 60-61]

5.3 Analysis and Findings

[69] This portion of the Decision is made more challenging by the degree of confidentiality (which the Board has permitted) on the comparative fuel contracts. However, NSPI, the parties who have signed Confidentiality Undertakings, and any reviewing court would have access to this material.

[70] To make a finding on this issue, the Board must make a reasoned determination as to what the new price would be as a consequence of any renegotiation or arbitration of the NewPage contracts.

[71] There are two very contrasting positions. Mr. Reed and NSPI interpreted the contract to say that the price would be a market price and it would be equivalent to, or more than, what NSPI paid in the audit period under short-term contracts. Liberty and the Industrial Group argued that the parties or an arbitrator would have taken into account the structure of the contract in determining a fair future price.

[72] The Board finds the following excerpt from Liberty's Reply Evidence instructive:

> We must bear in mind that the seller under the foregone contracts had no option to "go to the market" at its sole discretion. Its options were limited to one; i.e., to seek agreement (or ultimately arbitration) under the contracts' price reconsideration provisions. Examining likely results in this context make it clear that the seller could have hoped for no more than market prices determined with reference to some relevant, liquid market center, less transportation to get the gas there. Were the seller under the foregone contracts to argue that others selling gas coming from the Maritimes were getting New England prices (and therefore it should as well), it would have to address the fact that under the foregone contracts, it, unlike those other sellers, had no transportation to those markets. The seller under the foregone contracts would have had to secure that transportation at a cost.
>
> [Exhibit N-14, p. 3]

[73] In Liberty's view, NSPI simply misinterpreted the contract:

> THE CHAIR: But that's where you're losing me, Mr. Antonuk. I don't understand why the Dracut plus discussion enters into this at all because the transportation arrangements had been set back when this contract was executed, and they're covered -- they're covered in the early part of Section 9. So -- but I don't want to get into the detail of this because I want to stick to theory because this is where I make -- this is where, personally, I seem to be getting lost. And obviously I'm missing something.
>
> But why does the Dracut plus/minus discussion enter into the recalculation of price here at all since transportation was already set, and all of this offshore you could ask for was gas to be priced in accordance with some New York or some other place indicia?
>
> MR. ANTONUK: Well, in the final analysis, that's where we get. Why did we start talking about Dracut plus? Because that was the position that NSPI offered to us and, thus, we had to address what its significance was.
>
> THE CHAIR: So in your view, is NSPI misinterpreting the contract?
>
> MR. ANTONUK: Yes. Yes.
>
> [Transcript, pp. 51-52]

[74] Mr. Reed, in cross-examination, acknowledged the nature of the contract as originally conceived:

> MR. OUTHOUSE: Okay. And essentially, the arrangement under these conditions is that, as part of the purchasing of the commodity from Duke, Stora had to take on an equivalent amount of firm transportation capacity on Maritimes Canada; correct?
>
> MR. REED: Yes, I can accept that.
>
> MR. OUTHOUSE: And it also, in doing that, had to relieve Mobil of that corresponding capacity obligation which it had on the Maritimes Canada line.
>
> MR. REED: That's correct.
>
> [Transcript, pp. 305-306]
>
> MR. OUTHOUSE: So basically, the tolls on Maritimes Canada and Maritimes U.S. are deducted in full from the price set under the previous sub-clause; correct?
>
> MR. REED: I'm sorry; could I have the question again?
>
> MR. OUTHOUSE: Yes. My question is under sub-clause (2) we're looking at here, from the price set in the previous sub (i), you deduct the tolls on Maritime Canada and Maritimes U.S. in full?
>
> MR. REED: Correct.
>
> MR. OUTHOUSE: And then under 3, sub (3), all variable charges on the Maritimes Canada and Maritimes U.S. line are deducted?
>
> MR. REED: All variable charges from the pipeline, yes.

MR. OUTHOUSE: Yes, and under 4, fuel gas on Maritimes Canada and Maritimes U.S. under each of the pipeline's rate schedule are also deducted?

MR. REED: That's correct.

MR. OUTHOUSE: Okay. And under Article 9.01(b), there's a true-up clause; correct?

MR. REED: Yes, I can accept that characterization.

[Transcript, pp. 308-309]

[75] Board Counsel obtained an acknowledgement from Mr. Reed as to the foundation for the contract pricing:

MR. OUTHOUSE: But since it's a proxy for that price -- and I suggest to you, Mr. Reed, there's no mystery about this and you and I can fence over the meaning of 9.01(b) -- but the whole concept was that the price would be set based on American indices, the market, if I can put it that way, and then everything back to Goldboro was deducted, including increases, because that's what it would have cost Exxon or Mobil to get the gas to that market indicia which they were using to set the price. And that included future increases, as we've discussed, and the adjustments would be as per 9.01(b). It was a proxy for the price at the Goldboro plant?

MR. REED: Yes, I think I'm in agreement with almost all of that, except the word "because"; it is a price effectively at Goldboro and it tracks, on a full netback basis, the transportation cost increases and decreases.

[Transcript, p. 314]

MR. REED: So, yes, the contract requires them to abide by the results of binding arbitration.

MR. OUTHOUSE: Sure. I agree with that. Nowhere in this clause, or elsewhere in the agreement, does it refer to the price being equal to a market price, does it?

MR. REED: I can accept that.

MR. OUTHOUSE: Nowhere does it say full market price, does it?

MR. REED: I can accept that.

MR. OUTHOUSE: Those words are your words.

MR. REED: Yes. I think the way I interpret the phrase, "the price of long-term gas purchase and sales transactions in the Nova Scotia natural gas market," it certainly doesn't talk in terms of a deduction from it or an increase above it. So, yes, I think it suggests that it should be equal to that.

MR. OUTHOUSE: That's your suggestion, I understand that. And your suggestion is based entirely, I suggest, on that first sentence in Article 9.06; that's all there is?

> MR. REED: Yes, I think that's the only guidance in the contract with regard to what the new contract price should be.
>
> MR. OUTHOUSE: Nowhere does it say, "Provide any guidance to the arbitrator or arbitrators directly," does it?
>
> MR. REED: No. It provides guidance to the parties and ---
>
> MR. OUTHOUSE: As to what they should consult about?
>
> MR. REED: That's correct.
>
> MR. OUTHOUSE: Right. And nowhere does it provide any guidance to the arbitrators, expressly?
>
> MR. REED: I think that's true. I don't see any express guidance to the arbitrators. I think the arbitrator would have to look to 9.05 for that guidance.
>
> [Transcript, pp. 328-330]
>
> MR. OUTHOUSE: Okay. I didn't want to -- maybe I used the word benefit, and you're taking the transportation piece; I realize there's a separate calculation. But on the commodity side, your entire analysis is based on the fact that these -- this long-term contract would have zero value as of August 1st, 2012; correct?
>
> MR. REED: Again, zero value as I define it, which is it being above or below market. Yes, I think it's quite clear that the contract was intended to go to market on the renegotiation dates.
>
> [Transcript, p. 331]

[76] The Board is not persuaded by Mr. Reed's evidence that the parties or an arbitrator would simply have started afresh, ignored the carefully crafted price provisions of Section 9.01, 9.05 and 9.06, as well as the fact that the Delivery Point specified in the contract was the tailgate of the Goldboro Plant, and set a price similar to what NSPI was paying in the short-term market. If this is the case, what was the advantage to NewPage in entering into a long-term contract?

[77] Indeed, NSPI, based on its own documentation, was buying in the short-term market at the time because it expected price conditions to improve in Maritimes Canada when Deep Panuke came into production, providing opportunities to go from a Dracut plus to a Dracut minus situation.

[78] Clearly, market prices are relevant to the price determination, but so is the structure of the NewPage contract, which undoubtedly would have informed a skilled arbitrator in discharging the assignment pursuant to Section 9.06 of the contract.

[79] The Board also concludes that Liberty was correct in taking into account NSPI's 2010 long-term contract because it contained the sort of pricing NSPI was hoping to achieve when Deep Panuke came into production. So, the Board rejects Mr. Reed's and NSPI's submission that the price that would have been negotiated or arbitrated under the contract would have been equal to the short-term market price contracts that NSPI suggested. Indeed, as noted by the Industrial Group, it is difficult to accept that NSPI would not have vigorously proposed and demanded a netback price in the revision negotiations because that was its goal at the time with respect to other gas purchases. In the view of the Board, this position is consistent with the structure of the contract as originally conceived, having regard to Article 9.00.

[80] The Board finds, as suggested by the Industrial Group and Liberty, that the arbitrator or the parties would have taken into account the specific terms and risk profile of the contract, the fact that market price can differ based upon whether or not transportation is embedded in the cost, and the Company's expectation at the time that the market would return to something closer to netback pricing.

[81] It does not seem logical to the Board, as suggested by Mr. Reed, that the purchaser under this contract would have to pay for the transportation obligations to M&NP (which were specifically excluded from the contract price originally) and then pay for future gas purchases, that included an embedded transportation cost, because that is what purchasers who were starting afresh were being forced to pay.

[82] Having regard to all of the foregoing, the arbitrator would have been faced with setting a fair price without the benefit of referencing many other long-term contracts in the market and the Board is faced with a similar problem in determining the disallowance.

[83] The Board finds Liberty's recommended disallowance of $3.8 million ($1.1 million for the period January 1, 2012 through July 31, 2012 and $2.7 million for the balance of the audit period) to be appropriate.

[84] As a result of not accepting the position of NSPI/Reed, the Board is left with determining whether NSPI's criticism of Liberty's recommended disallowance for the August 1, 2012 through December 31, 2013 period is warranted.

[85] In its Reply to Closing Submissions, NSPI stated this portion of the disallowance comes down to whether an arbitrator would have ignored the changing market pricing structure, and relied upon a 12 year old contract.

[86] Although the Board finds above that the 2010 long-term contract price is the appropriate starting point for an arbitrator, it agrees that it is uncertain whether, upon arbitration, full netback pricing would have remained.

[87] While the Board notes the deterioration of the market began in 2012, it remains unclear two years later whether these are, in fact, the prevailing market conditions. The Board accepts NSPI's evidence that throughout 2012 full netback pricing became increasingly more challenging to obtain, but cannot accept that unwinding of the entire contract would have resulted. NSPI's argument is based on the improbable premiss that an arbitrator would have forced it into a long term contract at a price at least equal to what could be achieved on the spot market. Moreover, contrary

to NSPI's assertion, an arbitrator, in early 2012, would not have been relying on a 12 year old contract. The high end of Liberty's disallowance was based on NSPI's 2010 contract, a two year old contract at the time.

[88] While NSPI was purchasing primarily in the spot market, Liberty's calculation of displaced purchases was done on a weighted average basis keeping the potential disallowance lower than what could otherwise have resulted.

[89] Given that Liberty presented partial netback as a plausible outcome, the Board directs a disallowance at the lower end of the calculated potential disallowance of $3.8 million.

[90] With respect to NSPI's argument on future stranded capacity, the Board considers, based on the evidence of Liberty, that there would have been opportunities to make use of that capacity on the M&NP with respect to future gas purchases. Liberty appropriately accounted for stranded capacity during the audit period. A calculation NSPI accepted.

[91] In any event, the Board agrees with Liberty that there is no need to speculate at this point about what will happen between now and 2021. Those facts can be taken into account during the course of the next audit and accounted for, as noted by Mr. Antonuk in the transcript at pages 60-61.

6.0 SYDNEY HARBOUR DREDGING

[92] Liberty reviewed NSPI's FAM expense of $1 million relating to the dredging of the Sydney Harbour project and concluded that:

> NS Power contributed to dredging costs that will permit vessels to carry more coal, thus, lessening delivery cost. Liberty believes that this type of expense is not provided for in the FAM, unless NS Power first seeks appropriate waiver and approval for the inclusion of such cost. While not per se an NS Power capital project, the work nevertheless was designed to produce long-term benefits. Assuming appropriate waiver request and approval the costs should therefore be amortized.
>
> [Exhibit N-1, p. XI-11]

[93] Had the Board accepted NSPI's submission that this expenditure provided a long term benefit, Liberty recommended that:

> Liberty does not question the value of the project; however, we believe that the FAM does not provide for recovery of such costs. The one-time cost of $1 million should be amortized at a rate of $16,666.67 per month; i.e., 60 months, beginning on the date actually paid (December 2012). Thus, for FAM-expense purposes the 2012 and 2013 annual cost would be $16,667 and $200,000, respectively.
>
> [Exhibit N-1, p. XI-13]

[94] NSPI, in its Reply Evidence, explained its reasons to include these costs in the FAM:

> … the Company confirms that it believes this expense is appropriately classified under account code 070 as an "optimization of fuel procurement". Section 3 of the POA sets out the allowable fuel costs and includes the following:
>
> > Solid fuel handling and transportation expenses to the generating stations' reclaim hoppers, including solid fuel handling costs resulting from optimization of fuel procurement.
>
> Alternatively, if the Board does not agree with NS Power's interpretation, NS Power seeks a waiver to permit inclusion of the $1 million in costs in the FAM starting in 2015.
>
> [Exhibit N-3, p. 55]

[95] Liberty responded to NSPI's comments in its Additional Evidence:

> <u>One risk in employing an automatic adjustment clause is the opportunity to include non-recurring costs or new costs arising between rate filings that might otherwise "fall through the cracks" of recovery through base rates. One must therefore exercise diligence in ensuring that the tests of FAM recovery not be limited to "value" or "optimization of fuel procurement," as NS Power's Reply Evidence suggests (at page 55). That the test is unilaterally applied by the Company increases the concern about such a test.</u>
>
> Hiring a new manager of a fuels function could also optimize fuel procurement. Nevertheless, all should agree that the manager's costs are not proper for FAM recovery. Using an example of current relevance, even though buying a currently-leased unloading facility (although it has a clear connection to fuel transportation) may optimize costs, all should agree that recovery of those costs associated with long-term production of efficiency and economy should occur outside the FAM. Even where harbour dredging

improves efficiency in fuel transportation, it too should be recovered like other expenses that are one-time or infrequent, and that produce benefits across a multiple-year period.

Apart from the magnitude of the costs, the reason to preclude expansion of the FAM to include this new cost type simply threatens the need to keep automatic recovery to cost types whose definitions remain predictable and stable, in order to preclude such a mechanism from becoming a haven for non-fuel costs that arise between base rate cases. [Emphasis added]

[Exhibit N-14, pp. 16-17]

[96] The CA, in its Post Hearing Submission, stated that:

In addition to a near three-year delay in NSPI's attempt to have ratepayers cover the costs of the Sydney Harbour dredging, there is also a significant concern regarding whether the NSPI contribution was required in order to have the project move forward….

[CA Closing Submission, p. 7]

[97] The Industrial Group, in its Final Submissions, noted that:

90. The Industrial Group submits that even though NSPI may incidentally be advantaged by the dredging, there is nothing that suggests that this was a necessary expenditure. It has the appearance of an act intended to enhance public relations. The cost of the dredging was approximately $38 million. NSPI confirmed that it was the only private sector contributor among Cape Breton Regional Municipality ($2 million), the Provincial government ($15.2 million) and the Federal government ($19 million). NSPI acknowledged that it had no information that the project would not have proceeded without the contribution from NSPI.

91. In Nova Scotia, base rates are set in a general rate application on the basis of a forward looking test year. While unforeseen or unusual expenses could conceivably be the subject of an after-the-fact request for a directive and approval from the Board, the Industrial Group submits that having failed to apply for inclusion of the Sydney Harbour dredging at the time of the last GRA, (or earlier) it is wholly inappropriate to seek to include those costs as a FAM expense.

…

93. When NSPI knew about this expense became clear during the hearing. The timing of NSPI's commitment to fund the dredging of Sydney Harbour was publically announced <u>May 15, 2009</u> by Mark Sidebottom, the Director of Fuels, Energy and Risk Management in a photo opportunity in Sydney, Cape Breton. Approval from the Fuel Strategy Table came after-the-fact, two years later in May, 2011 and the expense was booked in August of 2012.

94. The Industrial Group respectfully submits that the Board should not allow the FAM to become a catch-all to allow NSPI to run expenses through at its convenience to the account of customers. As stated by Liberty, the concept of "optimization" is far too broad to include any expense which may reduce fuel-related costs. The more rational understanding of that word is as reflected in the FAM Plan of Administration and Appendix B, the fuel forecasting methodology, which speaks about fuel blending as it relates to optimization.

95. The Industrial Group recommends that the $1 million dredging expense be disallowed a) because it was a voluntary, unnecessary expense, and b) it is not properly part of the FAM. [Emphasis added in original]

[Industrial Group Final Submissions, pp. 20-21]

[98] NSPI, in its Reply to Closing Submissions, argued that:

The history of the decision to contribute to the Sydney Harbour dredging costs is well described in response to NSUARB IR-1 and its supporting attachments. As is shown, the legal commitment was not made until certain contractual requirements had been provided by the Sydney Ports Corporation Inc. in 2012, ensuring the value for customers.

...

There is no question that the Sydney Harbour Dredging expenditure is an operating expense; NS Power owns no asset and it therefore cannot be capitalized. It was undertaken to facilitate a lower cost of solid fuel transportation. It is certainly more appropriately described as a fuel cost than an OM&G cost. The fact that this is the first time such a cost has arisen does not mean that it requires additional approval.

...

... NS Power submits that it should not be denied recovery on an item that was pursued in the interest of customers and brings direct long-term fuel savings to customers, particularly when there is no other avenue for recovery of this cost; it would not have been an appropriate test year expense as a one-time costs and it does not meet the test for capitalization under NS Power's Accounting Policy. FAM customers will see savings from this expenditure for years to come, and it is therefore appropriate that the one-time cost of attaining those savings be recovered directly through the FAM. NS Power does not however object to the SBA's alternative position that the costs be amortized and recovered through the FAM over a 5-year period.

[NSPI Reply to Closing Submissions, pp. 5-8]

6.1 Findings

[99] The Board has reviewed all the evidence and finds that NSPI made the commitment in 2009. NSPI had more than reasonable time to seek the Board's approval or direction on the issue before including these costs in the FAM.

[100] NSPI has argued that Account 070 of its Chart of Accounts allows the type of expenses to be included in the fuel cost:

<u>070 - FUEL - COAL CONSUMED</u>

Use this amount to record the cost of coal and petroleum coke consumed including freight and demurrage but excluding coal additives. Include also any discrepancy between the value of measured coal stocks on hand and the book value of stored coal.

[Undertaking U-4, Attachment 1, p. 8]

[101] NSPI has also stated that the FAM Plan of Administration sets out which fuel costs are to be included in the FAM:

> … Specifically, Fuel Costs will include the following items:
>
> - Fuel expenses recorded in Accounts
>   069-Fuel-Gas Consumed
>   070-Fuel-Solid Fuel Consumed
>   071-Fuel-Bunker C Consumed
>   072-Fuel-Diesel Oil Consumed
>   073-Fuel-Light Oil Consumed
>   074-Fuel-Additives
>   075-Fuel-Limestone
>   009-Fuel-Mercury Sorbent
> - Solid fuel handling and transportation expenses to the generating stations' reclaim hoppers, including solid fuel handing costs resulting from optimization of fuel procurement
>
> [FAM Plan of Administration, pp. 8-9]

[102] The Board notes that the first bullet set out in the preceding paragraph refers to where the fuel expenses are to be included in the Chart of Accounts and not the justification for inclusion of these costs in the FAM. The second bullet refers to handling and transportation of solid fuel to a generating station, including solid fuel handling costs resulting from the optimization of fuel procurement. The Board disagrees with NSPI that the optimization referred to above applies in this case. The Board's understanding of optimization is that it is meant to be the blending of different fuel types at any given time, including the cost of different fuel types, customer demand, inventory of fuel on hand, and future needs for each type of fuel. It does not mean the optimization of the transportation cost of solid fuel.

[103] The Chart of Accounts, 070 – Fuel-Solid Fuel Consumed, is simply an account to record the use of coal and pet coke including differences between coal stocks on hand and the book value of stored coal. There is nothing about optimization of solid fuel in this section of the Chart of Accounts.

[104] The Board also notes that this cost is not a recurring cost. NSPI knew that it planned to add these costs to the FAM since 2009 and had ample opportunity to discuss the point with the FAM Small Working Group and also to seek Board approval before making payments in 2012 and including these costs in the FAM. The Board is of the opinion that these types of costs were not contemplated during discussion and approval of the FAM. NSPI should have received prior Board approval of these costs, especially when it promised full transparency to ratepayers during the FAM approval.

[105] NSPI has not provided detailed information on the benefits ratepayers will receive and over what time. It has noted that dredging of the Sydney Harbour will create additional water depth which ships can use to carry additional coal. NSPI has calculated the amount of additional coal which can be added and the pay back period. However, there is no certainty that it will reduce the number of coal shipments in any one particular year.

[106] The Board also notes that in response to Board Information Request IR-1, NSPI stated:

> (a) The dredging of Sydney Harbour cost approximately $38 million. The funding in total was $1 million from NS Power, $2 million from CBRM, $15.2 million from the Provincial government and $19 million from the Federal Government.
>
> ...
>
> (c) No one was required to pay the fee. The dredging of Sydney Harbour provided NS Power an opportunity to reduce customer costs and it supported the effort through putting monetary support behind the project.
>
> [Exhibit N-11, NSPI RIR-1]

[107] NSPI knew or should have known that these costs are not recurring FAM expenses which the Board has approved in previous years. In addition, it had enough time to seek Board clarification or approval before including these costs in the FAM. NSPI also admitted in response to the Board IR that it was not required to contribute to

these costs as no other non-government party did. There is also no indication that the project would not have proceeded if NSPI did not participate.

[108] Based on all the above, the Board agrees with Liberty's recommendation and denies NSPI's request to include $1 million, its share of the Sydney Harbour dredging project, in the FAM.

[109] The Board orders that all costs related to the Sydney Harbour dredging be removed from the FAM expenses.

7.0 BIOMASS LAND LEASE AND BIOMASS ALLOCATION

[110] Liberty's Audit recommended that two cost items related to the Port Hawkesbury biomass plant should be disallowed:

> In December 2013 NS Power failed to apply a normal ongoing allocation factor to various operating and maintenance expense so as to remove approximately $30,000 of cost from FAM consideration; thus, FAM claimed cost should be reduced accordingly.
>
> Liberty believes that the $12,500 cost associated with the lease of land to provide for additional storage facilities for solid fuel inventory is not the type of expense properly includable in the FAM.
>
> [Exhibit N-1, p. XI-14]

[111] NSPI, in its Reply Evidence, responded to Liberty's recommendation:

> NS Power agrees with recommendation (a) [$30,000 O&M adjustment] and has already made the appropriate adjustments.
>
> NS Power does not agree with recommendation (b) [$12,500 land lease] and believes that the FAM Plan of Administration (POA) does provide for the land lease costs. Appendix B of the POA states, "The Solid Fuel Pile Management costs will be based on the most current information of fuel movement and management…" Appendix B speaks to forecasting methodology for items that would be included in the FAM. NS Power considers land lease costs for storage of the biomass to be associated with the movement and management of its biomass inventory. Therefore, NS Power believes these costs to be a FAM expense.
>
> [Exhibit N-3, pp. 55-56]

[112] Liberty, in its Evidence, elaborated on its reasons for the disallowance:

> The concern here does not lie with the magnitude of the costs; they are very small in comparison to total fuel expenses. The problem is where the expansion of FAM recovery stops if such association, determined in NS Power's sole discretion, is the only test applicable to their recovery on an automatic-adjustment basis.

> The only rational way to control FAM scope growth and to discourage inclusion of costs between rate cases and non-recurring costs into the FAM is to require that NS Power seek prior permission to recover costs that otherwise have clear accounting "homes." Those costs include costs like one-time harbour dredging, land leases, equipment costs and the like.
>
> [Exhibit N-14, p. 17]

[113] In its Closing Submissions, NSPI further stated:

> Although NS Power believes the language in the POA clearly allows recovery of these expenses, the alternative is that the language is ambiguous and, as such, one should favour inclusion of the proposed costs - particularly given the recognized value of the projects for FAM customers through direct fuel cost savings. ...
>
> [NSPI Closing Submissions, p. 31]

[114] NSPI requested the Board's confirmation of these costs being allowed as in its accounting procedures and, if the Board decides not to approve these costs in the FAM, NSPI requested Board approval to include these costs starting in 2015.

[115] The SBA supported Liberty's recommendation. The Industrial Group and the CA did not provide any comments, but provided extensive submissions on the Sydney Harbour dredging expense which, in the Board's view, is similar to this issue.

7.1 Findings

[116] The Board has considered the evidence and does not accept NSPI's submission. The Port Hawkesbury biomass plant recently came on stream after NSPI purchased it with the Board's approval. The storage requirements would have been known to NSPI when the purchase was finalized. As in the case of dredging, the Board is concerned that NSPI is adding costs to the FAM without the Board's approval.

[117] NSPI has argued that these costs are part of the Solid Fuel Pile Management as noted in Appendix B of the POA:

> 3. *Solid Fuel Pile Management*
>
> The Solid Fuel Pile Management costs will be based on the most current information of fuel movement and management for the forecast year from the fuel delivery schedule. If no new information exists, the average of the last three

> years will be utilized. Any forecast adjustments from historical values for known changes will be fully documented and stated in the assumptions both in magnitude and reason.
>
> [FAM Plan of Administration, Appendix B, p. 14]

[118] The Board does not agree with NSPI's justification that these costs are related to the Solid Fuel Pile Management and should be included in the FAM expenses.

[119] The Board agrees with Liberty's recommendation that, similar to Sydney Harbour dredging costs, it is not proper to include the $12,500 in the FAM without prior Board approval. The Board denies NSPI's request to include additional land lease costs in the FAM.

[120] The Board also accepts Liberty's recommendation that $30,000 related to operations and maintenance expenses be removed from the FAM. NSPI has agreed to Liberty's recommendation and the Board so orders.

8.0 TRENTON UNIT 5

[121] During March 2012, while undergoing a brief repair, Trenton 5 was taken off-line and the turbine was held at rated speed with no load. This presented a potentially high risk situation which could lead to overheating and damage to the turbine if sustained for an extended period of time. NSPI stated that it anticipated the repair would take less than an hour; however, when it became apparent that additional time was needed, a senior operations person provided direction to the operators on areas to monitor.

[122] Three hours and fifteen minutes after Trenton 5 was taken off-line, the repair work was completed and the unit was re-synchronized, placing it back on-line.

Shortly afterward, it became apparent that a major failure had occurred and the unit was manually tripped.

[123] The evidence has identified that during the repair period, there were alarms and other indicators of trouble which were not acted upon. NSPI stated during the hearing that:

> … there were certainly inactions by people that were directly responsible for the operation of that unit that evening.
>
> …
>
> There was a failure by the individual operating the unit to inform his supervisor of the issues.
>
> [Transcript, p. 240]

[124] NSPI's investigation concluded that erosion shields were not sufficiently attached to the turbine blades and the brazing process for their attachment was flawed. This resulted in a number of erosion shields separating from the blades and entering the condenser at high speed. The resulting damage to the condenser tubes allowed seawater to enter the feedwater system and the boiler. NSPI also concluded that operator errors contributed significantly to this incident.

[125] Trenton 5 remained out of service for more than seven months. Costs to restore the unit totalled $6 million, two-thirds of which ($4 million) was recovered through insurance policies. The remaining $2 million of non-fuel costs was attributed to operating expenses in 2013 while the Rate Stabilization was in effect.

[126] During its audit, Liberty concluded that management failures contributed materially to the causes of the Trenton 5 incident and that the scope of NSPI's Root Cause Analysis, or RCA, was too narrow. The audit noted that the RCA failed to address any role or influence of management during the incident, dismissed relevant

concerns raised by operations personnel regarding a history of spurious or otherwise incorrect alarms, and gave insufficient attention to an alarm that would have instructed the operator to trip the unit but was not connected.

[127] Liberty determined that unavailability of Trenton 5 for more than seven months resulted in lost value to customers, which was attributed to circumstances that NSPI management could have addressed, but failed to do so until after the incident occurred. In assigning a value to this loss, Liberty considered examining the costs of replacement generation. However, Trenton 5 has often been operated out of economic order to provide security against certain contingencies on the transmission system. NSPI stated that it does not collect data on the hours of such operation, the amount of energy generated during those periods, or the specific reasons for running the unit during those hours. Given the wide range of inputs and the complexity associated with calculating this replacement cost of generation, Liberty did not consider the result would be analytically sound. In this instance, recognizing that the complexity precluded determining a precise cost, Liberty recommended that an estimated downward adjustment of $300,000 would be fair and reasonable.

[128] In its Reply Evidence, NSPI stated it did not believe its actions with respect to the 2012 Trenton 5 outage were imprudent, but did accept Liberty's recommended downward adjustment of $300,000 in recoverable fuel expense.

[129] In its Closing Submission, the CA stated:

> The record contains ample evidence to reach the clear conclusion that the Trenton 5 incident was the result of imprudent asset operation.
>
> …

> The level of imprudence demonstrated in the operation of the Trenton 5 facility provides copious support that, at a minimum, the $300,000 disallowance agreed to between Liberty and NSPI is warranted.
>
> [CA Closing Submission, p. 4]

[130] Regarding the $2 million non-fuel cost that was not recovered through insurance policies, the CA indicated that the Rate Stabilization balance should be increased by that amount to the benefit of ratepayers and intends to raise this issue when the Rate Stabilization plan next comes before the Board.

[131] On the issue of the narrow focus of NSPI's RCA, the CA urged the Board to direct NSPI to undertake more robust RCA if similar events occur in the future:

> ...Following the event and during the investigation, there was attribution of responsibility, and consequences, to the front line employees involved but no recognition of the responsibility of more senior management. NSPI must be aware that in any future incidents management must be prepared to shoulder responsibility.
>
> [CA Closing Submission, p. 6]

[132] The SBA's Closing Submission noted that a disallowance of at least $300,000 is warranted for the incident at Trenton 5.

[133] The Industrial Group, in its Closing Submission, raised the issue of confidentiality regarding the RCA, and the costs related to imprudence at Trenton 5.

[134] On the issue of confidentiality, the Industrial Group stated that NSPI made certain redactions of attributes associated with names, on the basis that it was a private personnel matter. In addition to removing employee names and redacting their job titles, NSPI redacted the name of the company which installed the erosion shields but provided no rationale for that redaction. The submission went on to say that the Board Regulatory Rules require NSPI to outline the reasons for a confidentiality request, including providing details of the nature and extent of the specific harm that would result if the information was publicly disclosed. The Industrial Group submitted that:

… there is no evidence of specific harm that would result from not disclosing the RCA in its entirety; there is nothing more than the bare assertion of a preference by NSPI that personnel matters not be made public. One can speculate that NSPI wishes to protect these individuals from some embarrassment. But, when balancing the ability to intrude upon this Board's presumptive openness and freedom of expression, the Supreme Court of Canada has said it has to have a public aspect to it. So, personal privacy interests, personal embarrassment, personal damage to reputation to these managers or employees of Nova Scotia Power are not enough. Furthermore, it must be "well-grounded in the evidence"; speculation or the assertions of counsel are not enough.

107. The reality is that by obliterating the job titles, it masks the level of seniority and roles these individuals played in the incident. NSPI has obscured the transparency required to evaluate the RCA and management's involvement in the incident at Trenton. Particularly here, where Liberty and NSPI are at odds as to management's role in the incident, it is critically important to the process to understand who did what and why.

108. The Industrial Group reminds the Board of its findings in the last audit hearing when NSPI sought sweeping confidentiality orders to protect the reputation of its personnel:

…

> *[60] While there is a clear public interest in preserving some of the commercial information so as to permit NSPI to obtain fuel at competitive prices, that imperative does not exist with respect to criticism an auditor might direct against NSPI in the operation of the FAM. It is critical to maintaining public confidence that as much of the regulatory process as possible take place in public because, after all, it is a public process.*
>
> *[61] While the Board agrees with Mr. Downard that there is a public interest in the protection of reputations, in weighing the competing interests here the Board finds that an open process is the more important public interest, by a significant measure.*

109. The Industrial Group submits that for similar reasons, the job titles should be disclosed and the requested redactions refused.

110. There is no information why the corporate identity of the erosion shield installer has been redacted. As the burden is on NSPI to demonstrate the necessity of that redaction and it has not done so, likewise this should be disclosed.

[Industrial Group Closing Submission, pp. 23-24]

[135] On the issue of imprudence and associated costs, the Industrial Group highlighted Liberty's determination that NSPI management contributed to the Trenton 5 problem and that measures taken by NSPI subsequent to the incident implicitly recognized the role of NSPI management in this incident. The Industrial Group stated:

112. It is management's role to ensure that those immediately responsible on site are adequately trained, that management is responsive and available during high-risk scenarios and most importantly, that alarms are properly connected.

> …
>
> 114. In the view of the Industrial Group, the evidence of mismanagement and culpability is so clear that a penalty in excess of the agreed upon $300,000 ought to be imposed.
>
> [Industrial Group Closing Submission, p. 24]

[136] Regarding the $6 million Trenton 5 repair cost, based on cross-examination during the hearing, the Industrial Group submitted that the balance of the Rate Stabilization account would be $2 million higher to the benefit of ratepayers if this insurance deductible amount was expensed without being carried forward in the Rate Stabilization account.

[137] In addition, based on NSPI's response to Undertaking U-6(b) regarding increased insurance premiums, the Industrial Group submitted that those premiums have been adversely affected due to the Trenton 5 incident and customers will continue to bear the effect for a number of years, but should not be penalized as a result of an imprudence finding.

[138] In concluding, the Industrial Group recommended the following:

> 5. Find that management was imprudent in relation to the incident and lengthy outage at Trenton 5 and impose a sanction in the amount of $300,000 as calculated by Liberty plus $2 million to relieve NSPI ratepayers of the deductible paid under the insurance property damage claim.
>
> 6. The redactions requested by NSPI in the Root Cause Analysis should be denied and the job titles and identity of the corporation should be disclosed.
>
> [Industrial Group Closing Submission, p. 29]

[139] In its Reply to Closing Submissions, NSPI disagreed with the CA's suggestion that it be directed to undertake more robust RCA in future events. NSPI submitted that its Trenton 5 RCA and action plan were robust.

[140] NSPI also disagreed with the Industrial Group's proposed treatment of the $2 million insurance deductible expense. While the CA and the Industrial Group both

expressed a similar concern, the CA intends to pursue this issue during a subsequent proceeding while the Industrial Group recommended recovery of that amount through this FAM Audit proceeding. NSPI's disagreement is based on the understanding that the $2 million insurance deductible is a 2012 OM&G expense, not a fuel expense.

[141] The other item of disagreement by NSPI is the Industrial Group's recommendation to deny NSPI's request to redact job titles and the name of the Original Equipment Manufacturer ("OEM") contained in the RCA report.

[142] On the issue of job title redaction, NSPI noted that Counsel for the Industrial Group did not require un-redaction to conduct cross-examination at the hearing and stated:

> To require publication of the information serves no public interest purpose while the individuals involved clearly have an interest in not having their personal involvement in the incident a matter of public debate and discussion among their co-workers and community.
>
> [NSPI Reply to Closing Submissions, p. 20]

[143] Regarding redaction of the name of the OEM, NSPI stated that ordinarily the name of an OEM is not confidential. However, it said that, in this case, the OEM has not acknowledged being at fault so having a document in the public which attributes responsibility to the OEM may be damaging to that company. Furthermore, NSPI submitted that "the desirability of avoiding disclosure in the interest of the OEM affected outweighs the desirability of adhering to the principle that documents be available to the public".

8.1 Findings

[144] Having considered the evidence and submissions by parties, it is the Board's view that NSPI bears responsibility for imprudence related to the Trenton 5 incident of March 2012. The Board accepts Liberty's conclusion that management

failures contributed materially to the causes of the Trenton 5 incident and that NSPI's Root Cause Analysis did not fully address this issue. NSPI is directed to ensure that such future events be subjected to a more robust analysis of management's influence and responsibility related to the event.

[145] Regarding disallowance of costs, the Board understands the complexities that preclude determination of a precise cost of replacement energy during the prolonged outage lasting more than seven months. This difficulty is primarily attributed to a lack of data being collected by NSPI during periods of uneconomic generation. In order to avoid experiencing similar difficulties in the future, NSPI is directed to collaborate with Liberty to develop and implement a suitable data collection process. NSPI is to file a report with the Board describing the results of the collaboration by March 31, 2015.

[146] In the absence of a precise calculation of the replacement energy cost, the Board accepts the $300,000 adjustment in recoverable fuel expense that has been agreed upon by Liberty and NSPI as a proxy for a more specific calculation.

[147] On the issue of the $2 million insurance deductible expense, the Board recognizes this cost to be an OM&G non-fuel expense, which is not a FAM issue. The Board accepts the position of the Intervenors that the existence of the Rate Stabilization Account has resulted in unusual treatment of that expense, so parties will have the opportunity to address this issue during a future GRA proceeding.

[148] Similarly, parties will be able to address their concerns about any increased insurance premiums during a future GRA proceeding.

[149] Regarding the issue of redactions in the RCA report, the Board is not persuaded by NSPI's submission that no public interest will be served by disclosing job titles or the name of the Original Equipment Manufacturer. As noted by the Industrial Group, disclosing job titles will reveal the levels of seniority and the management roles of the individuals associated with the Trenton 5 incident.

[150] Also, the Board finds, for the purposes of this proceeding only, that NSPI has not satisfied the burden of quantifying the specific harm that would result from disclosing the name of the OEM of the turbine blade erosion shields or how that outweighs the desirability of adhering to the principle that documents be available to the public. As part of the Compliance Filing, NSPI is directed to file the un-redacted version of the Trenton 5 Root Cause Analysis report.

9.0 PORT HAWKESBURY PAPER ("PHP") ISSUES

[151] PHP, in a final submission, refers to the possible disallowance of between $3.8 million and $4.9 million related to the NewPage Contract. PHP requested that, if the Board determines such a disallowance is appropriate, then as part of any compliance filing a dispatch analysis would be carried out to determine whether any costs associated with the disallowance should be returned to PHP. In its Reply Argument, NSPI emphasized that PHP is not a FAM customer. NSPI pointed out that the FAM Audit is required to confirm the appropriate amount of fuel costs to be recovered from FAM customers. Absent the FAM, there would be no audit. NSPI went on to say:

> … The LRT "context" is very different. There is regular and frequent engagement between the Company and the LRT customer on fuel and dispatch decisions. There are opportunities available to the LRT customer which are not available to FAM customers to respond to NS Power decisions and fuel circumstances, and such construct favours no portion of the disallowance being shifted to the benefit of the LRT customer.

> NS Power also submits that an attempt to extend a FAM Audit finding (NewPage contract) to a real-time pricing environment would require additional analysis and likely additional regulatory review on a matter which has already been confirmed to be computationally challenging. The additional cost and uncertainty associated with this would outweigh any benefit associated with undertaking this exercise.
>
> The hearing and audit processes are funded through rates applicable to all customers other than the LRT customer. For 2014, presumably any benefit realized by the LRT customer through the FAM process will reduce the 2014 earnings credit available to FAM customers. The LRT customer would have benefited from the audit at the cost of FAM customers without having borne any of the cost or commitment associated with the FAM process. …
>
> [NSPI Reply to Closing Submissions, p. 32]

9.1 Findings

[152] The Board agrees with NSPI that it would be inappropriate to permit PHP to benefit from FAM adjustments when it bears no responsibility for the FAM and no responsibility for the cost of the Audit. The Board sees no reason to further revisit rates payable by PHP.

10.0 DEFINITION OF FAM COSTS

[153] The CA, based on an exchange with Mr. Antonuk in cross-examination and an exchange between Mr. Antonuk and the Chair, recommends that the Board direct that the FAM Small Working Group review, discuss and report on a better definition of costs to run through the FAM. The CA suggested that this will help serve to eliminate confusion regarding appropriate FAM costs, implying that the issues with respect to the Sydney Harbour dredging costs and the biomass land lease costs might have been avoided had there been a better definition.

[154] NSPI appeared to agree with this suggestion in the hearing; however, in its Reply Brief, NSPI cautioned that trying to articulate and define every cost that may be run through the FAM may not be possible and it could lead to an overly prescriptive definition of the FAM, which might preclude recovery of appropriate costs if not

specifically defined. However, NSPI indicated it did not object to the CA's request that members of the FAM Small Working Group be involved in reviewing, discussing and reporting on a proposal to achieve better clarity.

10.1 Finding

[155] While the Board acknowledges a completely satisfactory set of definitions may not be possible, the Board agrees with the CA that it would be appropriate for the FAM Small Working Group to review and report on a proposal to better define the costs to be run through the FAM. The Board believes if this could be achieved, that it would better protect both ratepayers and NSPI and serve to avoid controversy in future audits.

11.0 RETENTION OF REVIEWERS' NOTES

[156] Liberty's Audit recommended that NSPI retain all comments provided by reviewers during the review of draft monthly/quarterly/annual FAM reports. Though the Board heard arguments from parties on this issue, NSPI in its Reply to Closing Submissions accepts Liberty's position as stated in Undertaking U-2.

[157] The Board directs NSPI to retain audit review control sheets and work papers that support its FAM Reports.

12.0 NON-CONTESTED RECOMMENDATIONS IN THE AUDIT REPORT

[158] As mentioned earlier in this Decision, NSPI accepted most of Liberty's Audit recommendations. However, these still need to be implemented with results reported to that effect. In its Closing Submission, NSPI requested:

> That the Board determine that for recommendations for which Liberty and NS Power are in agreement, these shall be resolved, if applicable, through an NS Power's commitment to an Action Plan, progress against which NS Power commits to report upon to the Board and the FAM Small Working Group as appropriate.
>
> [NSPI Closing Submission, p. 35]

[159] The Board agrees with NSPI's approach and directs a FAM Audit Action Plan Update be filed by June 30, 2015.

13.0 FAM INCENTIVE

[160] The issue concerning the FAM incentive has been resolved by a Settlement Agreement in Matter M06475, which Settlement Agreement was approved by Order dated December 12, 2014.

14.0 PARTICIPATION BY INTERVENORS

[161] An issue arose during the hearing which merits further discussion in this Decision.

[162] At the commencement of the hearing, the CA raised a preliminary issue respecting the disclosure of NSPI sourced documentation relating to the cause of the Trenton 5 incident discussed earlier in this Decision. NSPI eventually released the document to the parties, in confidence, but objected to the cross-examination of the NSPI witness panel on the document by the CA and other Intervenors. It claimed that the questions were outside the scope of the FAM Audit hearing because the Intervenors sought to increase the disallowance that had been agreed to by the Company and Liberty. In its submission, the joint recommendation of a $300,000 disallowance by NSPI and Liberty effectively foreclosed the pursuit of further evidence by the Intervenors, and the request for a higher disallowance.

[163] NSPI asserted that the issues for the hearing were defined by the FAM Audit and the Company's Reply Evidence. In the submission of Mr. Landrigan:

> ...Where the Company agrees with the auditor there simply is no issue.
>
> [Transcript, p. 130]

[164] Counsel for NSPI also submitted that allowing the Intervenors to increase the scope of the hearing in this fashion would be procedurally unfair to the Company because it would allow the late introduction of issues into the proceeding, citing the tight timeline leading to the hearing. On this point, NSPI claimed that it had learned of this issue just three days before the hearing, but the Board notes that the CA had previously requested the backup documentation for the Trenton 5 incident in IRs. This request was denied by NSPI in its IR response.

[165] The Intervenors submit that the issue of Trenton 5 is relevant to the FAM Audit. The CA submitted:

> The shutdown of a generator for seven months has fuel impacts to it, and the cost of fuel impacts. How efficiently assets are being run and whether they're being properly run enters in to that calculation as well. It's highly relevant as to whether all costs of an incident like this have been passed on to ratepayers or ratepayers are being made sufficiently immune to those costs. ...
>
> [Transcript, pp. 141-142]

[166] Ms. Rubin highlighted the importance of transparency in the audit process and the need for a full review of all matters in relation to fuel procurement.

[167] In relation to NSPI's position that the Company and Liberty can define the issues for the hearing, the SBA submitted:

> The Board is the final arbiter of whether or not the sanction's appropriate. It's not the parties, it's not Liberty and NSPI agreeing that it's an appropriate sanction.
>
> [Transcript, p. 139]

14.1 Findings

[168] In the Board's view, relevancy is the key determinant to whether an issue should be considered during the FAM Audit hearing. The Board considers the specific facts under consideration to be relevant to the FAM Audit. The document itself, entitled the Root Cause Analysis Report, prepared by NSPI, was the subject of comment by

Liberty in its Audit Report. Indeed, Liberty expressed concern that the Root Cause Analysis Report was not sufficiently complete in its review of the Trenton 5 incident: see Exhibit N-1, p. 186.

[169] Moreover, the Board finds that an agreement between NSPI and Liberty on an issue in the FAM Audit Report does not preclude the other parties from pursuing that issue. It is important to recall that the purpose of the FAM Audit is to ensure that all fuel related costs passed on to ratepayers were prudently incurred. When considered in this context, it would be unfair to ratepayers if their representatives were not able to participate in a meaningful way in the review of the FAM Audit Report. This participation should include submissions on the amount of the disallowance, as occurred in the present case. Further, assuming appropriate procedural safeguards to ensure fairness to all other parties, the participation should extend to the introduction of evidence on new issues directly related to the proper management of FAM fuel costs. However, collateral issues which are not relevant to FAM fuel costs, and which are not discussed in the Report, would normally be beyond the scope of a FAM Audit proceeding.

[170] On the issue of procedural fairness raised by NSPI, the Board notes that NSPI did not object to the timeline leading to the hearing in this matter. In the future, if NSPI considers it requires further time to deal with potential issues raised by Intervenors, it should raise its concerns with the Board earlier in the process and request an amended timeline.

15.0 COMPLIANCE FILING AND ACCOUNTING FOR AUDIT FINDINGS

[171] NSPI is directed to file a Compliance Filing by February 2, 2015.

[172] The Formal Intervenors must provide their comments, if any, by February 9, 2015.

[173] Based on the findings in this Decision, the Board directs a disallowance of $5,142,500, plus carrying charges:

NewPage Contracts	$3,800,000
Sydney Harbour Dredging	1,000,000
Biomass Land Lease	12,500
Biomass Allocation	30,000
Trenton Unit 5	300,000
Total Disallowance	**$5,142,500**

[174] NSPI is to calculate and provide the assignment of carrying charges in its Compliance Filing.

[175] The Board notes that, typically, disallowances under the FAM are intended to be a cost borne by the Utility's shareholders for imprudent actions. As such, FAM disallowances, while removed from the fuel deferral, should not result in an adjustment to any other deferral, but should be a reduction in actual earnings available to the shareholders.

[176] The Board notes the $30,000 error was historically allocated to operating and maintenance. Therefore, the Board accepts this was an unintentional oversight as opposed to an imprudent action and, as such, can be booked as a reduction to the 2014 overearnings, if any.

[177] There is nothing in evidence to indicate the land lease costs would not have been considered a prudent operating expense, therefore, the Board will permit a further $12,500 reduction to overearnings.

16.0 SUMMARY OF BOARD FINDINGS

[178] This Decision relates to a public hearing respecting an audit of NSPI's fuel adjustment mechanism ("FAM") for the years 2012 and 2013.

[179] The Liberty Consulting Group ("Liberty") was engaged to do the audit and filed its FAM Audit report on July 2, 2014. NSPI filed its Reply Evidence on August 18, 2014.

[180] The Board notes that this FAM Audit was very different than the last, which was conducted in 2012 for the calendar years of 2010 and 2011. It was a productive exercise which, in the Board's view, provided value for ratepayers. Liberty found most of NSPI's fuel procurement activities to be appropriate. NSPI accepted many of the helpful recommendations from Liberty. This Decision, of necessity, focusses on areas of disagreement but that should not detract from the fact that this was a productive review by Liberty and a productive response by NSPI.

Most Audit Recommendations Accepted

[181] NSPI accepted most of Liberty's FAM Audit recommendations and will develop an Action Plan regarding their implementation. The Board directs NSPI to file a FAM Audit Action Plan Update by June 30, 2015.

Implementing Changes to Natural Gas Hedging Program

[182] In its FAM Audit, Liberty concluded that NSPI acted too slowly to review and implement changes to its natural gas hedging program. It recommended a sanction in the range of $750,000.

[183] Coming out of the last 2012 FAM Audit, NSPI had the benefit of knowing the circumstances surrounding the importance of reviewing the hedging issue and the concerns held by Liberty and the ratepayers. This context should have impressed upon

NSPI the urgency and significance of the hedging issue and the parties' expectations in relation to it.

[184] The Board has concluded that there was an unreasonable delay by NSPI in the review and implementation of appropriate changes to its natural gas hedging program. NSPI's response lacked the requisite urgency and timeliness for an issue which poses significant risk to ratepayers in the form of potentially increased volatility and fuel portfolio costs. Despite its assertions in the prior FAM Audit proceeding that it continuously reviews its hedging practices, the changes it eventually made were not put into effect until March 2014, a full two years after the prior audit period, and thus did not impact fuel costs until after the conclusion of the audit period under review.

[185] The next issue for the Board to address was that of an appropriate disallowance. The imposition of penalties in a proceeding such as this is not consistent with the underlying purpose of the FAM. Instead, in cases where NSPI has not acted prudently, the FAM costs should be reduced accordingly and be reflective of the additional fuel costs which were incurred, compared to what the costs should have been if the Company had acted prudently.

[186] The Board is mindful that the calculation of a disallowance for additional fuel costs caused by the change from a time-based hedging program to a Value at Risk ("VaR") strategy is an inherently complex exercise. However, without such evidence, the Board has no basis upon which to determine an appropriate disallowance. In this case, neither Liberty, nor any other Intervenor, has presented the Board with any calculation of the additional costs that would have been caused by NSPI's unreasonable delay to implement changes to its natural gas hedging strategy.

[187] The Board concludes that, in the specific circumstances of this case, no disallowance will be imposed on NSPI for its conduct.

NewPage Contracts

[188] In the Board's 2012 FAM Audit Decision, the Board found that NSPI did not properly analyze the risks and benefits associated with assuming two natural gas contracts which it could have taken in an assignment from NewPage Port Hawkesbury and disallowed $903,000 in fuel costs for the period from November 1, 2010 through to December 31, 2011. The Board noted in that Decision that since these contracts were long-term contracts, the impact of this finding on any future test years would be the subject of consideration in future audits.

[189] On the assumption that the contracts would have been in place during the 2012-2013 audit period, Liberty calculated the value of gas that it believed NSPI could have purchased favourably under those contracts. Liberty recommended a disallowance of $3.8 million (based on one-half netback price) to $4.9 million (based on a full netback price) in relation to the foregone NewPage contracts for the audit period.

[190] To make a finding on this issue, the Board must make a reasoned determination as to what the new price would be as a consequence of any renegotiation or arbitration of the NewPage contracts.

[191] The Board accepts NSPI's evidence that throughout 2012 full netback pricing became increasingly more challenging to obtain, but cannot accept that unwinding of the entire contract would have resulted. The Board finds Liberty's recommended disallowance of $3.8 million ($1.1 million for the period January 1, 2012

through July 31, 2012 and $2.7 million for the balance of the audit period) to be appropriate.

Sydney Harbour Dredging

[192] Liberty recommended disallowance of NSPI's FAM expense of $1 million relating to the dredging of the Sydney Harbour project

[193] NSPI knew or should have known that these costs are not recurring FAM expenses which the Board has approved in previous years. NSPI knew that it planned to add these costs to the FAM since 2009 and had ample opportunity to discuss the point with the FAM Small Working Group and also to seek Board approval before making payments in 2012 and including these costs in the FAM.

[194] The Board orders that all costs related to the Sydney Harbour dredging be removed from the FAM expenses.

Biomass Land Lease and Biomass Allocation

[195] Liberty's Audit recommended that two cost items related to the Port Hawkesbury biomass plant should be disallowed. The Board finds that $30,000 related to operations and maintenance expenses be removed from the FAM. The Board also denies, as a FAM related cost, the $12,500 cost associated with the lease of land to provide for additional storage facilities for solid fuel inventory.

[196] However, the Board notes the $30,000 error was historically allocated to operating and maintenance, and accepts this was an unintentional oversight as opposed to an imprudent action. Further, there is nothing in evidence to indicate the land lease costs would not have been considered a prudent operating expense.

Accordingly, the Board will permit both amounts to be applied as reductions to the 2014 overearnings.

Trenton Unit 5

[197] During March 2012, Trenton Unit 5 suffered a major failure when it was taken off-line and the turbine was held at rated speed with no load, which caused overheating and damage. It remained out of service for more than seven months. Liberty determined that unavailability of Trenton 5 for more than seven months resulted in lost value to customers. NSPI stated its actions were not imprudent, but did accept Liberty's recommended downward adjustment of $300,000 in recoverable fuel expense.

[198] The Board accepts Liberty's conclusion that management failures contributed materially to the causes of the Trenton 5 incident and that NSPI's Root Cause Analysis did not fully address this issue. It concludes that NSPI bears responsibility for imprudence related to the Trenton 5 incident. NSPI is directed to ensure that such future events be subjected to a more robust analysis of management's influence and responsibility related to the event.

[199] In the absence of a precise calculation of the replacement energy cost, the Board accepts the $300,000 adjustment in recoverable fuel expense that has been agreed upon by Liberty and NSPI as a proxy for a more specific calculation. The determination of a precise cost of replacement energy during the prolonged outage was not possible, primarily attributed to a lack of data being collected by NSPI during periods of uneconomic generation. In order to avoid experiencing similar difficulties in the future, NSPI is directed to collaborate with Liberty to develop and implement a suitable data collection process. NSPI is to file a report by March 31, 2015.

Definition of FAM costs

[200] The Board directs that it would be appropriate for the FAM Small Working Group to review and report on a proposal to better define the costs to be run through the FAM. The Board believes if this could be achieved, that it would better protect both ratepayers and NSPI and serve to avoid controversy in future audits.

[201] Based on the findings in this Decision, the Board directs a FAM disallowance of $5,142,500, plus carrying charges:

NewPage Contracts	$3,800,000
Sydney Harbour Dredging	1,000,000
Biomass Land Lease	12,500
Biomass Allocation	30,000
Trenton Unit 5	300,000
Total Disallowance	**$5,142,500**

[202] An Order will issue accordingly.

DATED at Halifax, Nova Scotia, this 20th day of January, 2015.

Peter W. Gurnham

Roland A. Deveau

Kulvinder S. Dhillon