DECISION **NSUARB-NSPI-P-883**
2006 NSUARB 97

NOVA SCOTIA UTILITY AND REVIEW BOARD

IN THE MATTER OF THE PUBLIC UTILITIES ACT

- and -

IN THE MATTER OF A HEARING to Establish a Rate to Replace Nova Scotia Power Incorporated's Extra Large Industrial Interruptible Rate

BEFORE: Peter W. Gurnham, Q.C., Chair
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Kulvinder S. Dhillon, P. Eng., Member

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HEARING DATES: September 5 - 8, 2006

FINAL SUBMISSIONS: September 15, 2006

DECISION DATE: September 28, 2006

DECISION: **Board approves two rate alternatives for Extra Large Industrial Interruptible Customers; see Summary of the Decision, commencing at page 66**

Table of Contents

1.0 INTRODUCTION 4

2.0 THE THREE RATE PROPOSALS AND AN OVERVIEW OF THE EVIDENCE . 6
2.1 NSPI Rate Proposal 6
2.1.1 NSPI Evidence 6
2.1.2 Other Parties' Evidence on the NSPI Rate Proposal 9
2.2 SEB Rate Proposal 13
2.2.1 SEB Evidence 13
2.2.2 Other Parties' Evidence on SEB's Rate Proposal 18
2.3 Dr. Stutz's Rate Proposal 23
2.3.1 Dr. Stutz's Evidence 23
2.3.2 Other Parties' Evidence on Dr. Stutz's Rate Proposal 26

3.0 ANALYSIS AND FINDINGS 29
3.1 Basis of Board Findings 29
3.2 Overview Of Findings 36
3.2.1 Cost of Service 37
3.2.2 Revenue / Cost Ratios 40
3.2.3 Glace Bay 42
3.2.4 Priority Interruptibility 42
3.2.5 Dr. Stutz's Rate Proposal 46
3.2.6 Board Ordered 2P-RTP Rate 48
3.2.7 Election and Compliance Filing 54
3.2.8 Stability Mechanism 54
3.2.9 ATL/BTL (Above the Line / Below the Line) 61
3.2.10 Start Up Issues 62

4.0 OTHER 65
4.1 Cost of Service 65
4.2 Costs 65

5.0 SUMMARY OF THE DECISION 66

APPENDIX "A" 70

APPENDIX "B" 71

1.0 INTRODUCTION

[1] This decision is further to a public hearing conducted by the Nova Scotia Utility and Review Board (the "Board"), after due public notice, over four days between September 5, 2006 and September 8, 2006 in the matter of a hearing to establish a rate to replace Nova Scotia Power Incorporated's ("NSPI", "the Company", "the Utility") Extra Large Industrial Interruptible Rate Tariff ("ELIIR-2").

[2] The direction for this hearing was given by the Board in the decision concerning NSPI's 2006 rate application. In its March 10, 2006 decision, the Board stated:

> The Board has decided that ELIIR will be substantially redesigned for 2007. The redesign will affect the 2P-RTP rate used in conjunction with ELIIR.
>
> ...
>
> It is clear to the Board that ELIIR is not working as it was originally intended to by both NSPI and SEB. Therefore, the Board will hold a separate hearing in 2006 to consider a replacement for ELIIR, which will become effective January 1, 2007. The Board directs NSPI to file an application for a new rate to replace ELIIR, after consultation with its customers, no later than June 30, 2006.
>
> ...
>
> The Board has directed NSPI to develop and file a replacement for ELIIR. Both NSPI and SEB have agreed that Dr. Stutz's approach to the development of such a replacement—beginning with a firm rate and then specifying credits for interruptibility—has merit. While the Board concurs, it would be prepared to consider other viable options which may be developed.
>
> (Board Decision, March 10, 2006, pp. 307-308)

[3] On June 28, 2006, NSPI filed an application[1] for the approval of the ELIIR-2. On July 5, 2006, Bowater Mersey Paper Company Limited and Stora Enso Port

[1] Exhibit N-1a

Hawkesbury (collectively "SEB") filed[2] their proposed ELIIR replacement rate. On July 6, 2006, Dr. John Stutz, Board Counsel Consultant, filed[3] his proposal for the ELIIR replacement rate.

[4] Witnesses for NSPI were Ralph Tedesco, Greg Blunden, Alan Richardson and Robert Boutilier. Witnesses for SEB were Bill Stewart, Fred Hussey and Dr. Alan Rosenberg. Avon Valley et al. called Mark Drazen while the Consumer Advocate called Nancy Brockway. Board Counsel witness was Dr. John Stutz. A complete list of the Intervenors appears in Appendix "A" attached hereto. A list of witnesses appears in Appendix "B".

[5] The three rate proposals all start with the 2006 Compliance Filing Cost of Service Study ("COSS"). The three rates also have a basic rate with adjustments for economic or voluntary interruptions. All rate proposals also address rate stability.

[6] There are major differences among the rate proposals.

[2] Exhibit N-4

[3] Exhibit N-5

2.0 THE THREE RATE PROPOSALS AND AN OVERVIEW OF THE EVIDENCE

2.1 NSPI Rate Proposal

2.1.1 NSPI Evidence

[7] The NSPI ELIIR-2 rate is a standard above-the-line ("ATL") rate.[4] NSPI's position is that, in accordance with sound rate making practice, the new rate will:

- Recover the cost of service to this class of customer, within the revenue to cost range approved by the Board;
- Respect the interests of other customers, in particular, ensuring that ELIIR replacement would not involve any transfer of costs without their knowledge and ability to provide input about such a transfer to the UARB;
- Provide the maximum possible opportunity for SEB to benefit economically from their equipment and facilities that allow them to modify their load in response to economic load shifting opportunities;
- Address the major points of contention which plagued the previous ELIIR and 2P-RTP rates;
- Provide SEB with rate stability similar to that available to other customers; and
- Adhere to Bonbright's Principles of Rate Design.

(Exhibit N-1a, p. 7)

[8] NSPI started with the 2006 Compliance Filing and then prepared a revised COSS that included SEB's ELIIR and two-part Real Time Price (2P-RTP) load as a new ATL class.[5] The Board approved cost of service methodology was used to allocate costs to this class using the same methodology as for other ATL classes.

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[4] Exhibit N-1a, p.10

[5] Exhibit N-34, NSPI response to Consumer Advocate IR-7

[9] NSPI proposes to set the Revenue/Cost ("R/C") ratio for this rate at 100%. NSPI's rationale is that this is a new ATL rate.[6] The NSPI revenue requirement for this rate is computed at $123.2 million. For a forecast 2006 energy requirement of 2.076 million MWH, the composite rate is 59.34 $/MWH.[7]

[10] The proposed rate is supply-interruptible but NSPI has removed the priority interruptibility that is part of the current ELIIR.

[11] In place of the built in credit for economic interruptibility of the current ELIIR rate, NSPI is offering a customer bid-price mechanism. NSPI's position is that under this mechanism the customer has complete control over the degree to which they wish to participate in economic interruptibility.

[12] The NSPI proposal includes a requirement that SEB provide NSPI with a 24 hour day-ahead load forecast. The payments to SEB for economic interruption credits will be adjusted by the average day-ahead forecast accuracy.

[13] NSPI states that the new rate will provide rate stability to these customers as it would only be adjusted when all other rates are adjusted (i.e., in a general rate proceeding).

[14] NSPI's proposed rate consists of the following charges:[8]

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[6] Transcript, Sept. 6/06, p. 430

[7] This is the rate before any SEB credits arising from the bid-price mechanism, Transcript, Sept. 5/06, pp. 42-44.

[8] Exhibit N-34, NSPI's revised response to UARB IR-3

Customer charge ($/customer/month)	$31,333.00
Energy charge ($/MWH)	$50.00
Demand charge ($/KVA)	$8.33
Interruptible Credit ($/KVA)	($3.43)

[15] NSPI notes[9] that these rate components are based on 2006 compliance costs, and are for use beginning January 1, 2007, until the next general rate case. However, if the Board approved ELIIR replacement rate is a below-the-line ("BTL") rate, the rate level must reflect 2007 costs. This cost update would be included in the usual November annual BTL rate filing.

[16] NSPI, in its rebuttal evidence, summarizes its position relative to the other rates as:

> NSPI regards the proposals put forward by both SEB and Dr. John Stutz as violating cost-based rate-making by their very design. The proposals of SEB and Dr. Stutz involve significant transfers of costs to other customers. By contrast NSPI is proposing a transparent, cost-based, workable mechanism that provides the maximum opportunity for SEB to realize a competitive rate and control their costs. As well, NSPI's proposal protects other customers from additional costs.
>
> (Exhibit N-44, p. 3)

[17] In its opening statement,[10] NSPI asserted that its proposal is the only one that does not transfer the costs of serving SEB to others.

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[9] Exhibit N-34, NSPI's revised response to UARB IR-3

[10] Exhibit N-67, p. 3

2.1.2 Other Parties' Evidence on the NSPI Rate Proposal

[18] Dr. Rosenberg summarized his overall response to the NSPI proposed rate in his August 11, 2006 evidence:

> Q. WHAT IS YOUR GENERAL IMPRESSION OF NSPI'S INITIAL SUBMISSION IN THIS PROCEEDING?
>
> A. It seems clear, based on NSPI's Direct Evidence, its Information Requests to SEB, and its Responses to Information Requests, that NSPI is not interested in pursuing a demand response rate that is suitable and works for is [sic] customers. I will demonstrate that the 'replacement' rate that it proposes seeks to turn back the clock to before the Board approved RTP rates. The bottom line is that NSPI's proposed new ATL rate, is not only radically different in concept and intent from the current ELIIR/2P-RTP, it appears neither workable, efficient, or stable.
>
> (Exhibit N-46a, Tab 1, p. 4)

[19] Dr. Rosenberg further states that the NSPI rate level is much higher than the current ELIIR rate which the Board found was not working. Mr. Boutilier confirmed during cross-examination that the new rate would bring in more revenue (nominally) than the existing rate in the event SEB were unable to achieve savings through NSPI's bid price mechanism.[11] The Board calculates the additional revenue to be approximately 10%.

[20] Dr. Rosenberg also states the rate gives poor price signals, does nothing to promote efficiency, has no stability feature, and the proposal to change the rate from a BTL (below the line) rate to an ATL (above the line) rate is an unnecessary and inappropriate departure from precedent.

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[11] Transcript, Sept. 5/06, pp. 35-36, p. 54

[21] SEB's position is that the rate proposed by NSPI simply will not work for SEB. Mr. Stewart states that "we do not want to use it"[12] while Mr. Hussey's position is that "Although the rate form is simplistic and easy to understand, it does not meet our business needs...".[13]

[22] Dr. Rosenberg believes that the Board should reject the rate because it is unworkable and because it conflicts with most of the principles set out in Professor James Bonbright's widely accepted criteria for a sound rate structure.[14]

[23] In Dr. Rosenberg's opinion the NSPI cost of service study overstates the cost of serving the SEB load. He states that the major problem is the large quantity of fixed generation costs that are reclassified, and allocated on the basis of annual energy.[15] In his view this is totally inappropriate and distorts the fundamental economics of system planning.

[24] Mr. Drazen agrees with the SEB position that the current load factor method of cost classification overstates the cost of serving SEB and other high load factor customers.[16] However, he does not think that this proceeding is an appropriate time to undertake a full review of that issue. Mr. Drazen provides some suggestions on

[12] Exhibit N-46A, Tab 2, p. 2

[13] Exhibit N-46A, Tab 3, response to Q. 7

[14] Exhibit N-46A, Tab 1, p. 5

[15] Exhibit N-46A, Tab 1, p. 8

[16] Exhibit N-36, p. 8

improvements that could be made to the COSS. These would only be used on an interim basis to set the ELIIR-2 rate, pending a re-evaluation of the COSS methods for all classes.

[25] Ms. Brockway's position is that:

> NSPI's proposed rate comes the closest to following cost-causation principles at the basis of fair cost allocation and rate design.
>
> (Exhibit N-37, p. 5)

[26] With respect to the R/C ratio, Ms. Brockway states that the target of 100% should be attempted.[17] However, she also acknowledged that the size of the resulting SEB rate increase may require a reduction in this target. She suggests starting at a ratio of 97%.

[27] Dr. Stutz disagrees with NSPI's justification for its 100% R/C ratio:

> ...NSPI justifies this ratio by claiming that its proposal is a "new rate". However, it is not a new rate. It is simply the existing Large Industrial Rate tailored to fit SEB.
>
> (Exhibit N-96, p. 2)

[28] SEB states that the bidding system proposed by NSPI is unworkable.[18] Mr. Stewart elaborated on SEB's concerns with the bidding system in his rebuttal evidence.[19] Mr. Stewart's concerns with respect to NSPI's proposals for interruptibility and the bidding mechanism can be summarized as follows:

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[17] Exhibit N-37, p. 31

[18] Exhibit N-46A, Tab 1, p. 36

[19] Exhibit N-46A, Tab 2, pp. 2-12

- NSPI's rate proposal does not provide fair credit for the value provided,
- NSPI's rate proposal creates operational difficulties for customers,
- NSPI's rate has unreasonable forecasting provisions, and
- NSPI's rate proposal will be operationally contentious.

[29] In Dr. Stutz's opinion, "NSPI and SEB simply do not have a good enough working relationship to make voluntary interruption as proposed by NSPI a reasonable option".[20]

[30] Ms. Brockway commented on NSPI's proposal for economic interruptibility in her opening statement:

> I originally favored the NSPI proposal with only minor reservations. I accept the testimonies of Mr. Hussey and Mr. Stewart that the NSPI proposal would require many new transactions on a daily basis, and would prove difficult for the SEB customers. I understand that the NSPI proposal is new to Nova Scotia, and its workability is untested. And certain amendments to better match risk and reward for NSPI and SEB would be appropriate if it were adopted.
>
> (Exhibit N-95, p. 3)

[31] Dr. Stutz does not agree with NSPI's removal of priority interruptibility:

> Q. Please explain why priority interruptibility should remain a requirement.
>
> A. In my Additional Evidence I pointed out that NSPI's statements in 2002 concerning the qualitative benefits of Priority Interruptibility support continuation of Priority Interruptibility. Considerations of rate stability also support continuation. Taken together, these provide a sufficient basis for the continuation of Priority Interruptibility.
>
> (Exhibit N-59, pp. 6-7)

[20] Exhibit N-45, p. 15

[32] If a premium for priority interruptiblilty is made available, Mr. Drazen's position is that it should be made available to all customers, not just those on ELIIR-2. He also takes the view that any increase in payments for credits should be allocated among all customers as is now the case.

2.2 SEB Rate Proposal

2.2.1 SEB Evidence

[33] The SEB proposal[21] is a 2P-RTP-BTL rate. Dr. Rosenberg states that this rate is cost based and reflects the specific and unique cost characteristics and load shifting capabilities of SEB. Further, the rate is:

> ...simple to administer, and understand, provides the proper price signals to promote economic behavior, is eminently practical and workable, and should extend price predictability to the customer while at the same time provide NSPI with revenue stability from year to year, thereby reducing risk to both NSPI as well as these customers.
>
> (Exhibit N-4, p.2)

[34] The rate format is based on the existing Board approved 2P-RTP rate. SEB proposes that the NSPI monthly bill[22] would be calculated as follows:

Customer Charge at $10,000/month +
(Energy Charge x Annual Energy Under CBL)/12
+ Monthly Incremental Shift Charges
- Monthly Decremental Shift Rebates
- Monthly Incremental Export Benefit Credit

[21] Exhibit N-4, p. 2

[22] Exhibit N-4, Schedule 5, p. 1

= SEB's Monthly Bill

[35] The proposed CBL will be a flat load shape with cutouts[23] for forecast downtime. Energy under the CBL will be determined using last year's total energy requirement for the customer.[24]

[36] In SEB's opinion, the proposed rate is cost based and would not be subsidized by other ratepayers.[25] Dr. Rosenberg's position is that the allocation of costs among ATL customer classes is not an issue in the proceeding.[26]

[37] The basic energy charge is derived from an embedded cost analysis which treats the ELIIR and 2P-RTP rate as a simulated above the line class. Dr. Rosenberg uses the NSPI COSS as the starting point but then makes a number of changes to it.[27]

[38] NSPI's 2006 compliance cost of service study[28] takes 62.5%[29] of fixed generation and transmission costs that are initially considered demand related and reclassifies them as energy related. Dr. Rosenberg used the coincident peak method to allocate fixed generation costs.

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[23] Cutouts are deviations from the flat CBL

[24] Transcript, Sept. 7/06, pp. 633-635

[25] Exhibit N-77, pp. 4-5

[26] Exhibit N-4, p. 26

[27] Exhibit N-4, pp. 20-31 and
Exhibit N-35a, Tab 7, SEB response to Consumer Advocate IR-1

[28] Transcript, Sept. 5/06, p. 45

[29] For the NSPI COSS results that include SEB Load (Exhibit N-58, SEB IR-1a, Exhibit 9A) the system load factor is 66.47%.

[39] Dr. Rosenberg explained in his July 5, 2006 evidence his reasons for not using the energy classification:

> Q: WHY DID YOU NOT RECLASSIFY THESE FIXED GENERATION COSTS AS ENERGY-RELATED, BUT RATHER KEEP THE ORIGINAL CLASSIFICATION (I.E. DEMAND-RELATED) IN YOUR COST ANALYSIS?
>
> A: I made that judgement for several reasons. First, these costs are fixed and do not vary with annual energy usage. Second, it is my opinion that the reclassification unfairly and inappropriately shifts costs to high load customers such as SEB.
>
> (Exhibit N-4, pp. 23-24)

[40] In his rebuttal testimony, Dr. Rosenberg provided considerably more detail on justification for his COSS methodology.[30]

[41] Dr. Rosenberg's rebuttal testimony also provided his position on his proposed method compared to the method approved in the Board's 1995 decision.

> Q. NEVERTHELESS, WOULD YOU CONCEDE THAT, ALTHOUGH YOUR STUDY MAY BE AN AUTHENTIC MODEL OF COST CAUSATION, IT NEVERTHELESS DIFFERS FROM THE METHOD FOUND IN THE 1995 DECISION?
>
> A. My study does represent a different method than the one the Board found appropriate for ATL classes in 1995. Nevertheless, I respectfully disagree that my use of this method represents a departure from the 1995 Decision. The 1993 Cost of Service hearing did not specifically address extending an embedded cost of service analysis to below the line classes. In fact, in the much more recent Generic Rate Design Decision, the Board specifically rejected the suggestion of Dr. Stutz **and agreed with NSPI, and me**, that the Below-the-Line rates should **not** be measured by means of an embedded cost of service study along the lines of what is used to guide revenue apportionment among the Above-the-Line classes. Using a cost of service study for the ELIIR-2, that is different from that used for the ATL classes, is no more of a departure from Board precedent, and *arguably less of a departure*, than using a formula.
>
> (Exhibit N-46A, Tab 1, pp. 58-59)
> Emphasis in original

[30] Exhibit N-46A, Tab 1, pp. 56-58

[42] Dr. Rosenberg did not allocate any Glace Bay amortization costs to the new ELIIR/2P-RTP rate class.[31] He explains that the existing ELIIR did not include any Glace Bay costs and therefore he saw no justification for including them in a replacement rate.

[43] The new rate includes a 20% credit for priority supply interruptions. Dr. Rosenberg believes this to be a modest premium. In his rebuttal testimony, he states that while there is an element of judgement involved, he believes his premium is more appropriate than the 10% proposed by Dr. Stutz. Dr. Rosenberg allocates the cost of this premium among all customer classes.

[44] SEB's customer charges are also reduced in its proposed new rate. Dr. Rosenberg explained that this was necessary because the new EIIIR class is no longer economically interruptible and NSPI had allocated a disproportionately large amount of customer costs to the below the line ELIIR class.[32]

[45] Dr. Rosenberg uses a R/C ratio of 95% to determine the revenue requirement for the ELIIR/2P-RTP rate. He explains[33] that the Board has an objective of having rates within a 95% to 105% R/C ratio and any rate within this bandwidth will not result in cross subsidization.

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[31] Exhibit N-4, p. 22

[32] Exhibit N-35A, Tab 7, SEB response to Consumer Advocate IR-1

[33] Exhibit N-4, p. 10

[46] Incremental load shift charges and decremental load shift rebates are to be computed using NSPI marginal costs as defined in the existing Board approved 2P-RTP rate. These marginal costs are calculated using SEB load at the pre-shifted CBL value.

[47] In response to questions raised during cross-examination,[34] SEB filed an alternative payment methodology (Undertaking U-7) for decremental credits. This alternative provided three levels of decrements with the first block at 100% of marginal cost, the second block at the greater of 80% of marginal costs and the 2P-RTP base rate, and all remaining amounts at the greater of 60% of marginal costs and the 2P-RTP base rate. Undertaking U-7 assumes a 20% annual energy usage band.

[48] The proposed rate consists of the following charges.[35]

Customer charge ($/customer/month)	$10,000.00
Energy Charge ($/MWH)	$ 49.28

[49] Dr. Rosenberg proposes that rate stability be provided through a Performance Based Ratemaking ("PBR") mechanism. In his opinion, this will give NSPI an incentive to be productive and thereby provide benefits to all customers:[36]

> A. ...One way to do that is to include a feature known as Performance Based Ratemaking (PBR), and that is what I would propose for this rate. Typically, PBR rates escalate (or de-escalate) annually based on some published inflation index, usually the CPI, less some assumed productivity index.

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[34] Transcript, Sept. 7/06, p. 645

[35] Exhibit N-4, p. 31

[36] Exhibit N-4, p. 3

> Specifically, I propose that the rate be set for the remainder of 2006 based on the approved cost information and analysis from the most recent Board approved Compliance Filing. For the years 2007 through 2011, i.e. the subsequent five years, I propose that the rate be allowed to change each year by an amount equal to the CPI for the previous year, less a very modest 1% for an assumed productivity index. To the extent that the utility can be more efficient or productive than that 1%, its shareholders would benefit.
>
> Q. WOULD YOU AGREE THAT PBR MECHANISMS NORMALLY HAVE SOME TYPE OF EXTRINSIC "OUT OF THE ORDINARY" MECHANISM THAT WOULD TRIGGER A DEPARTURE FROM THE "INFLATION LESS PRODUCTIVITY" INDEX?
>
> A. Yes. In the jargon of PBR, that is usually referred to as a "Z factor". This is intended to provide an extra measure of protection to the utility.
>
> (Exhibit N-4, pp. 34-35)

2.2.2 Other Parties' Evidence on SEB's Rate Proposal

[50] NSPI's position is that the SEB proposed rate is not cost based. It also concludes the SEB rate design is unworkable, unsustainable, and inconsistent with sound rate making.[37]

[51] NSPI does not agree with Dr. Rosenberg's position that allocation of costs among the above the line customers is not an issue in this case. Ms. Brockway supports NSPI in this position:

> Q. Dr. Rosenberg, in his response to NSPI IR-11, states that the allocation of costs to the above the line customers "is not the subject of this proceeding."
> Do you agree?
>
> A. No. Costs of service allocations are largely a zero-sum game, and have been discussed in that context in this case.
>
> (Exhibit N-37, p. 8)

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[37] Exhibit N-44, p. 11

[52] NSPI calculates that the SEB proposal will result in an immediate annual cost increase to other customers of $23.4 million and estimates that ongoing cost increases could exceed $200 million over the next five years.[38] NSPI makes the cost comparison based on the rate it is proposing in this proceeding, **not** the current ELIIR approved by the Board.

[53] NSPI also notes that the cost of service methodology used by SEB is inconsistent with the approach approved by the Board and would result in lower costs being assigned to SEB. Other SEB changes to the COSS methodology (Glace Bay amortization exclusion, the system coincident factor used, and the reduction in customer charges) are all viewed by NSPI as providing an immediate discount to SEB.[39]

[54] Dr. Stutz also takes the view that Dr. Rosenberg's COSS methodology should not be accepted. He provides his reasons for this opinion in his rebuttal evidence.

> Q. SHOULD DR. ROSENBERG'S COSS METHODOLOGY BE ACCEPTED?
>
> A. No. An expedited, narrowly focused proceeding dealing with one specific rate is not the place to reopen general issues about the Board's approved methodology. Nor is it reasonable to argue, as Dr. Rosenberg does, that the Board should use its approved methodology for all purposes except the development of the ELIIR replacement. Accordingly, I recommend that SEB's proposals be rejected.
>
> (Exhibit N-45, p. 11)

[55] Mr. Drazen's position on the COSS methodology was summarized earlier in this decision. Ms. Brockway recommends the Board reject Dr. Rosenberg's reclassification of fixed generation and transmission assets as demand related, rather than energy

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[38] Exhibit N-44, p. 5

[39] Exhibit N-44, p. 6

related[40], and both Dr. Stutz[41] and Ms. Brockway[42] disagree with Dr. Rosenberg's exclusion of Glace Bay costs from the COSS.

[56] With respect to Dr. Rosenberg's reduction in assigned customer costs, Dr. Stutz's response is that this is not appropriate.[43] His view is that allocations should be based on the COSS methods applied by NSPI and accepted by the Board in the past.

[57] Both Dr. Stutz and Dr. Rosenberg use a 95% R/C ratio in the development of their rates. NSPI does not agree with either party's use of a 95% R/C ratio. Mr. Drazen does not recommend a specific ratio while Ms. Brockway's position on this issue was referred to earlier in this decision.

[58] With respect to SEB's proposed credit for priority interruptibility, NSPI states that it is "calculated without basis"[44] on what SEB claims to be their consultant's informed judgement. NSPI also disputes the SEB assertion that they would be called more often than other customers simply because of their size. Dr. Stutz agrees with SEB that a credit should be included, but he suggests 10% as opposed to SEB's proposal of 20%. Mr. Drazen's position was described earlier in this decision. Ms. Brockway recommends the

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[40] Exhibit N-37, p. 17

[41] Exhibit N-45, p. 10

[42] Exhibit N-37, p. 24

[43] Exhibit N-45, p. 10

[44] Exhibit N-44, pp. 6-7

Board reject the inclusion of the SEB 20% credit[45] but if the Board accepts that a credit should be included, it should be limited to 5%.

[59] Ms. Brockway does not agree with the allocation of any priority interruptible premium across all customer classes.[46] In her opinion, Large Industrial Interruptible customers should pay the premium based on the exemption it gives them from more frequent power supply interruptions.

[60] NSPI raises a number of objections to SEB's 2P-RTP rate design. In particular, it "strongly disagrees"[47] with the SEB position that the rate is "simple to administer and understand, provides the proper price signals to promote economic behaviour, and is eminently practicable and workable".[48] In NSPI's opinion, the existing 2P-RTP rate was only intended for a small fraction of SEB's load and, even with this restriction, the rate proved unworkable.[49] The large amount of load that SEB proposes to put on 2P-RTP would represent a serious risk to NSPI and its customers, in NSPI's view.

[61] SEB proposes a flat load shape (with maintenance cutouts) for the CBL. NSPI states that SEB's load is not actually flat and use of a flat CBL will transfer, at the expense

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[45] Exhibit N-37, p. 17

[46] Exhibit N-37, p.22

[47] Exhibit N-44, p.7

[48] Exhibit N-4, p. 2

[49] Exhibit N-44, p. 8

of other customers, $2.5 million in additional benefits to SEB.[50] Dr. Stutz does not agree with NSPI's position in this regard and supports a flat CBL.[51]

[62] NSPI states that the use of marginal cost to compute credits is entirely inappropriate. Load reductions will provide credits to SEB that are higher than the actual system cost savings. Also, for load increment, the marginal costs will under-recover the actual cost increase to the system.[52] Both effects, according to NSPI, will result in extra costs for other customers.

[63] Dr. Stutz also has concerns about pricing incremental and decremental charges at marginal cost.

> ...without any limits on the magnitude of the incremental and decremental usage to which these charges apply, use of marginal costs could produce a substantial mismatch between the actual impact of load shifting on costs and the amount paid to customers for the shift.
>
> (Exhibit N-45, p. 16)

[64] Ms. Brockway rejects Dr. Rosenberg's use of marginal cost for increases and decreases from the CBL.

> Q. Is Dr. Rosenberg's proposal for RTP based on costs?
>
> A. No. Dr. Rosenberg's proposal overcompensates SEB for reductions in usage, and undercharges SEB for usage above the baseline level. This is a result of Dr. Rosenberg's use of marginal cost, as he defines it for this purpose, to price the deviations from the CBL.
>
> (Exhibit N-37, p. 32)

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[50] Exhibit N-44, p. 8

[51] Transcript, Sept. 8/06, pp. 1114-1117

[52] Exhibit N-44, p. 9

[65] NSPI's position is that the PBR mechanism proposed by SEB does not incent productivity - it simply transfers costs to other customers.[53] NSPI is also concerned about the financial market's view of the proposed PBR mechanism.

> The financial market view of NSPI risk will worsen should the Board approve a rate-limiting mechanism such as that proposed by SEB (or by Dr. Stutz, see below), which attempts to prevent NSPI from recovering its costs and a [sic] having a reasonable opportunity to earn a fair return. These proposals will cause harm to the utility and other customers will face higher costs as a result of SEB's or Dr. Stutz's rate proposal. These proposals violate Bonbright's criteria for sound rates, in that they purport to deny NSPI the ability to recover its revenue requirement and approved return. These mechanisms must not be approved.
>
> (Exhibit N-44, p. 14)

[66] Mr. Drazen's concern about SEB's rate stability mechanism is that it will increase the risk of higher fuel costs being transferred to the remaining customers.[54]

2.3 Dr. Stutz's Rate Proposal

2.3.1 Dr. Stutz's Evidence

[67] Dr. Stutz's proposed rate is an above the line rate. The rate has a built in credit for economic interruptibility and also includes a credit for priority interruptibility.

[68] As with NSPI and Dr. Rosenberg, the starting point for Dr. Stutz's determination of the base rate is the NSPI modified 2006 Compliance Filing COSS .

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[53] Exhibit N-44, p. 12

[54] Exhibit N-36, p. 13

[69] Dr. Stutz then uses a R/C ratio of 95% to compute the revenue requirement under his rate.[55] Dr. Stutz's justification for the 95% starts with the 2006 Compliance Filing R/C ratio of 96.53% for the large industrial rate. Then, to address a concern that the allocation of fuel costs in the COSS could cause high load factor customers to be over charged, Dr. Stutz reduces the revenue/cost ratio for his proposed rate to 95%.

[70] Under Dr. Stutz's proposal, customers served on the new rate will be required to accept priority for supply interruptibility.[56] The credit for priority interruptibility is set at 10% of the regular credit. Dr. Stutz states that the choice of 10% is a matter of judgement. This 10% premium is recovered in the same way as the credit for supply interruptibility is recovered in NSPI's COSS[57] - it is allocated among all the above the line rates except ELIIR-2.

[71] The proposed rate builds in a credit for economic interruptibility.[58] The credit computation assumes the average amount of economic interruption called by NSPI in 2004 and 2005. The economic interruptibility credit in $/MWH is based on the value of avoided high cost usage by NSPI.[59] A buy-through rate is set consistent with the development of the

[55] Exhibit N-5, pp. 8-9.

[56] Exhibit N-5 p. 3

[57] Exhibit N-30, Dr. Stutz response to Berwick IR-5a.

[58] Exhibit N-5, p. 3

[59] Exhibit N-5, p. 12

economic interruptibility credit. Exhibit JS-8 of Exhibit N-5 shows a comparison of ELIIR and ELIIR-2.

Exhibit JS-8

COMPARISON OF ELIIR AND ELIIR-2

	ELIIR	**ELIIR-2**
Customer Charge ($ per Month)	20,700	29,767
Energy Charge ($ per MWH of Usage)	$53.90	$52.34[2]
Buy Through Rate ($ per MWH of Interruption)	202.43[1]	138.60

Note:

(1) Estimate based on ELIIR Buy Through Rate and NSPI forecast price of oil for CTs. $13.162 per million Btu's x 15 million Btus per MWH = $197.43 per MWH, plus $5 per MWH adder. Actual rate depends on published oil prices.

(2) ELIIR-2 energy charge of $55.26 per MWH per Exhibit JS-5, minus EI Credit of $2.92 per MWH per Exhibit JS-7.

(Exhibit N-5 as amended)

[72] While Dr. Stutz does not recommend a rate stability mechanism, he offered for the Board's consideration an alternative mechanism to that suggested by Dr. Rosenberg - a four year rate stability mechanism based on a moving deadband. Dr. Stutz described the operation of the moving deadband in his July 6, 2006 evidence.

Q. **HOW DOES A MOVING DEADBAND OPERATE?**

A. Operation of a Moving Deadband can best be explained through the use of an example. Assume that the ELIIR-2 charges are increased automatically by 3 percent each year for 4 years beginning in 2007. Assume further that a 7.5 percent Deadband is established. When a General Rate Proceeding occurs, ELIIR-2 would be redeveloped just like any other ATL rate. The average revenue produced by the escalated original rate (i.e., ELIIR-2 set using 2006 data plus 3 percent per year escalation) would be compared to that produced

> by the newly redeveloped ELIIR-2. If the difference is 7.5 percent or less, the escalated rate would continue in use. If not, the newly developed rate would be adopted. In either event, rates for other customers would be set as if the redeveloped version of ELIIR-2 were in use for the test year.
>
> The operation of the Deadband would continue in the fashion just described for 4 years. In the first General Rate Proceeding with a test year following that period, ELIIR-2 would be reset just like any other ATL rate. So continuing with the example, if there were a proceeding with a test year of 2011, ELIIR would be reset in that proceeding.
>
> (Exhibit N-5, p. 19)

2.3.2 Other Parties' Evidence on Dr. Stutz's Rate Proposal

[73] Neither NSPI nor SEB support Dr. Stutz's proposed rate.

[74] As with the SEB rate, NSPI's position is that Dr. Stutz's rate violates cost-based rate-making by its very design.[60] NSPI submits it will involve significant transfer of costs to other customers. NSPI also commented that most of the existing problems that made ELIIR unworkable are not addressed in Dr. Stutz's proposed rate.[61]

[75] In its rebuttal evidence,[62] NSPI estimates the immediate annual transfer of costs to other customers, under Dr. Stutz's rate, at $14.5 million. Over the next four years, NSPI predicts the cumulative cost transfer could exceed $123 million. However, in response to cross examination,[63] NSPI concedes that it misunderstood Dr. Stutz's proposal (this is further explained in Dr. Stutz's supplementary evidence of August 31, 2006). In addition, as noted,

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[60] Exhibit N-44, p. 3

[61] Exhibit N-44, p. 5

[62] Exhibit N-44, p. 5

[63] Transcript, Sept. 6/06, pp. 387-388

NSPI makes the cost comparison based on the rate it had proposed in this proceeding, **not** the current ELIIR rate approved by the Board.

[76] NSPI states that it no longer requires priority for supply interruptibility[64] and, therefore, Dr. Stutz's 10% credit is unsupportable. Dr. Rosenberg agrees with Dr. Stutz that there is an element of judgement in the choice of the level of credit, however, he believes his 20% is more appropriate.[65]

[77] As stated earlier in this decision, Mr. Drazen supports the allocation of the premium among all rate classes. However, Ms. Brockway's position, as stated earlier in this decision, is that the premium should be paid by the Large Industrial Interruptible customers.

[78] NSPI does not support Dr. Stutz's use of a 95% R/C ratio.[66] It notes that Dr. Stutz has confirmed that no other customer class has a 95% R/C ratio.[67] NSPI sees this as a 5% discount to SEB which will be paid for by other customers at an annual cost of $6 million per year.

[79] NSPI comments on Dr. Stutz's proposal to build a credit for economic interruptibility into his rate as follows:

> Dr. Stutz further proposes to continue to embed a pre-defined estimate of the amount of future economic interruptibility ("EI") into the new ELIIR-2 rate. This was part of the old ELIIR rate design, and was among the most contentious aspects of that rate. This requires the continued use of the much-debated frequency and duration terms that restrict NSPI's ability to access

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[64] Exhibit N-44, p. 16

[65] Exhibit N-46a, Tab1, p. 60

[66] Exhibit N-44, p. 16

[67] Exhibit N-32, Dr. Stutz's response to NSPI IR-1.

> economic interruption when it is required. It also requires NSPI to attempt to "claw back", as SEB's consultant puts it[14], the economic interruptibility service that NSPI and other customers have already paid for in advance.
>
> (Exhibit N-44, p. 17)

[80] Mr. Drazen identified the built in credit for economic interruptibility as a weakness in Dr. Stutz's proposed rate.[68]

[81] NSPI's criticisms of Dr. Stutz's revenue stability mechanism are similar to those it made of SEB's PBR mechanism. In fact, NSPI often references both proposals in the same comment.

> Both the Stutz and SEB proposals are based on the premise that NSPI would be required to assume a portion of SEB's costs of service in the future. This is not "fair and equitable" to either the utility or its other customers, and is harmful to the Company's financial viability. No known principle of rate making has as its goal a transfer of wealth to SEB from NSPI or its other customers. Credit rating firms take a very dim view of mechanisms that eliminate a utility's ability to recover its approved costs. Further downgrading of NSPI's credit rating will lead to increased costs of fuel and borrowing. Further volatility will lead to an increased cost of equity. These increased costs would ultimately be borne by NSPI's customers.
>
> These proposals of Dr. Stutz violate Bonbright's criteria with respect to offering rates that are not unduly discriminatory and are fair to <u>all</u> stakeholders[17]. They also violate Bonbright's 3rd criterion with respect to permitting the utility to recover its costs, and also violate the Public Utilities Act. They certainly violate the very principles of the regulatory compact which exists in Nova Scotia.
>
> Nova Scotia Power is a cost-based regulated vertically-integrated utility, with an obligation to serve. Accordingly, NSPI's revenue requirement is reviewed and approved in a public process based on tested evidence. Rates are then set to ensure that NSPI has the real opportunity to recover these costs, including an approved fair rate of return. Adopting either of the proposed SEB or Stutz "rate stability" schemes in order to insulate SEB from future fuel, tax and other cost increases, removes NSPI's ability to recover its costs.
>
> (Exhibit N-44, p. 20)

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[68] Exhibit N-36, p. 8

3.0 ANALYSIS AND FINDINGS

3.1 Basis of Board Findings

[82] The Board believes it is important to set out, primarily for the benefit of the general public, certain fundamental regulatory ratemaking principles upon which this decision is based.

[83] The Board also believes it is appropriate to comment on actions by both NSPI and SEB which, in the Board's view, have made this matter appear to the public to be more complex and controversial than is actually the case.

[84] As has been stated in previous Board decisions, setting electricity rates for all customers of NSPI is predicated on the basic principle of fairness. Professor James Bonbright's criteria for ratemaking have been cited by the Board in the past as constituting fair and effective guidelines in this regard. They are as follows:

CRITERIA OF A SOUND RATE STRUCTURE

1. The related, "practical" attributes of simplicity, understandability, public acceptability, and feasibility of application.
2. Freedom from controversies as to proper interpretation.
3. Effectiveness in yielding total revenue requirements under the fair-return standard.
4. Revenue stability from year to year.
5. Stability of the rates themselves, with a minimum of unexpected changes seriously adverse to existing customers. (Compare "The best tax is an old tax.")
6. Fairness of the specific rates in the apportionment of total costs of service among the different consumers.
7. Avoidance of "undue discrimination" in rate relationships.
8. Efficiency of the rate classes and rate blocks in discouraging wasteful use of service while promoting all justified types and amounts of use:
   (a) in the control of the total amounts of service supplied by the company;
   (b) in the control of the relative uses of alternative types of service (on-peak versus off-peak electricity, Pullman travel versus coach travel, single-party telephone service versus service from a multi-party line, etc.).

(James Bonbright, **Principles of Public Utility Rates**, Columbia University Press, 1961, p. 291)

[85] The **Public Utilities Act**, R.S.N.S. 1989, c. 380, as amended (the **Act**) also sets out the responsibility of the Board to ensure fairness between customer classes when rates are set.

> 67 (1) All tolls, rates and charges shall always, under substantially similar circumstances and conditions in respect of service of the same description, be charged equally to all persons and at the same rate, and the Board may by regulation declare what shall constitute substantially similar circumstances and conditions.

[86] Electricity rates are set on the basis that the costs incurred by the utility to serve its customers, together with a reasonable rate of return, are recovered from its customers. Customers are divided into customer classes. These classes reflect variations in the services required by different customers (e.g., domestic customers and industrial customers) which are received from the utility. Since the services required by each customer class differ, the utility's cost to serve each customer class also differs. For example, in order to serve domestic customers, the utility must have an extensive distribution system. Large industrial customers do not require this infrastructure and, therefore, the costs to serve these two classes of customers are quite different. As a result, the total revenue requirements of the utility must be fairly divided by customer class and allocated accordingly. The requirement for fair allocation of costs ensures that all customers pay for the cost of the service they receive and their rates do not subsidize the rates of other customers.

[87] This cost allocation is performed by using a cost of service study prepared by the utility which identifies the costs attributable to each customer class. In 1995, the Board

approved the cost of service methodology currently being used by NSPI. The approval was based on the Board's conclusion that this particular cost allocation methodology produces fair and reasonable electricity rates for all customers. Since it is virtually impossible to allocate customer costs over time with 100% accuracy, the Board has long accepted that an R/C ratio between 95% and 105% is an appropriate basis on which to set rates. As long as the R/C ratio falls within the target range of 95% to 105%, the Board is satisfied that all customer classes are being treated fairly and no customer class is receiving a preferential or subsidized rate at the expense of others. Indeed, the Board has approved rates where the R/C ratio for one or more classes is outside the 95% to 105% range where this has been necessary to achieve rate stability.

[88] On the rare occasions when the Board deviates from the approved cost of service methodology, it is in respect of rates for large industrial customers which are determined by a cost based formula (e.g., below the line rates). In these circumstances, the principle of fairness continues to apply but from a broader perspective. Generally, these rates relate to the utility's ability to interrupt service to large customers to "keep the lights on" for others. This occurs when the utility's supply of electricity is threatened by increased demand and/or equipment failure. It can also occur when interrupting service to large customers allows the utility to reduce the amount of electricity it has to generate, thereby avoiding the potential impact of higher fuel costs. The ability and willingness of large customers to shift their electricity requirements from the utility's high cost periods to lower cost periods (i.e., load shifting) is an important opportunity for the utility to lower its costs. The reduction in costs to

the utility results in a benefit to most customers at the expense of a few and corresponding credits are established to compensate these customers for the cost of accepting these interruptions. In all cases, the Board must be satisfied that NSPI's remaining customers are either better off or, at the very least, not negatively impacted when a rate of this nature is set by the Board. Accordingly, all rates in Nova Scotia must meet the criteria of being cost based and the three rates proposed by NSPI, SEB and Dr. Stutz are all advanced on the premise that they are, in fact, cost based.

[89] Accordingly, the ELIIR replacement rates which the Board has approved in this decision continue to be based on the principle that rates should reflect a fair and reasonable allocation of costs among all customers and that no customer class subsidizes another.

[90] In the Board's view, it is unfortunate that, in advance of the present hearing, NSPI embarked on a public information effort regarding the potential negative financial impact on other customers if the rates proposed by SEB or Dr. Stutz were to be approved by the Board. NSPI's much publicized estimate of the costs which could be transferred to other customers if this occurred was in the hundreds of millions of dollars.

[91] In the case of Dr. Stutz's proposal, NSPI's cost estimates were based on a misunderstanding of his evidence and, in the case of both Dr. Stutz's and SEB's rate proposals, NSPI made comparisons with a rate which does not currently exist. Even when the error in interpreting Dr. Stutz's proposal was corrected, NSPI's estimate of the potential costs to be borne by other customers was based on "worst case" scenarios, a qualification of its warnings of future rate increases which was not available to the public. As a result the

public was given information which was more hyperbole than fact. This, in the Board's opinion, has created an unwarranted impression among the public of the potential financial consequences if the Board were to approve any rate but the one proposed by NSPI.

[92] Similarly, while the Board does not regulate Stora Enso, it views the public pronouncements of the company to be neither helpful nor relevant to this proceeding. Stora Enso's statements, which have focussed on the closure of its plant, the loss of over 600 jobs in the surrounding area and the serious direct and indirect negative economic impact of the plant's closure - all of which the company said would occur unless the company's proposed rate was approved by the Board and imposed on NSPI - has also led to significant public concern that, in order to avoid these employment and economic losses, the Board might approve a rate for Stora Enso which other customers would subsidize. It should be noted, however, that during the hearing itself SEB displayed a willingness to constructively discuss modifications to the RTP component of their proposal.

[93] The Board is keenly aware of and, like many Nova Scotians, is very concerned about the fate of the Stora Enso operation at Port Hawkesbury and the economic impact its closure would have on the surrounding areas. The Board fully recognizes the value and importance of a large, long-standing stable employer providing well-paying jobs, particularly in more rural areas of the province where such employment opportunities are sought after but, unfortunately, are often not available.

[94] Despite the importance of this issue, it is necessary to understand that the impact of electricity rates on the competitiveness or viability of a business, for reasons outlined below, cannot be taken into consideration by the Board in the rate approval process.

[95] In the Board's 2004 decision on NSPI's general rate application it denied a request to establish a subsidized rate for low income customers, stating that:

> After reviewing the submissions of DLAS (Dalhousie Legal Aid Service), Board Counsel and the relevant provisions of the Act, the Board finds that it does not have the statutory authority to approve a RAP (Rate Assistance Program). The Board has the authority given to it by the Legislature to perform its duties in accordance with the provisions of the Act. The Board's role is to make decisions, based on fact and law, within the parameters of the statutory authority it has been given by the Legislature. The Board's duty is to follow public policy decisions made by the Legislature and expressed in statutes. The Board does not have jurisdiction to establish public policy. That is the role of elected officials who are accountable to the public for this function. It seems almost certain that the RAP, as described by Mr. Colton, would result in the electricity bills of certain customers, depending on their income, being subsidized by other customers. In the Board's view, this is a social and public policy question which falls within the purview of the Legislature rather than the Board. Should NSPI and DLAS wish to pursue this matter with Government, the Board would be pleased to offer assistance with respect to regulatory and ratemaking principles.
>
> (Board Decision, March 31, 2005, NSUARB 27 pp. 121-122)

[96] Dalhousie Legal Aid Service subsequently filed an appeal of the Board's finding in this regard with the Nova Scotia Court of Appeal. In dismissing the appeal (now under appeal to the Supreme Court of Canada) the Court of Appeal determined that the Board was correct in concluding that it does not have the jurisdiction to consider the financial circumstances of customers when setting rates.

[97] The Court stated, in part:

> [24] With respect, the factum's submission misinterprets s. 67(1). The provision refers to "substantially similar circumstances and conditions in respect of service of the same description." To justify a rate difference, the relevant dissimilarity is not in customers' incomes. It is in the service from NSP. The Board accepted, and there is no basis to question, that NSP provides substantially similar electrical service whatever the domestic customer's income.

> [25] Section 67(1) is mandatory. The rates and charges "shall always . . . be charged equally" to persons of similar circumstances and conditions in respect of service. The statute does not endow the Board with discretion to consider the social justice of reduced rates for low income customers. It is not for the Board or this court to read into s. 67(1) the words:
>
> > . . . similar circumstances and conditions in respect of the income level of customers and service of the same description,
>
> It is for the Legislature to decide whether to expand the Board's purview with the italicized words.
>
> . . .
>
> [35] The Board's decision in [2000] NSURBD No. 72 is not under appeal. Neither are its decisions on similar issues such as the extra large industrial interruptible rate: Re Nova Scotia Power Inc., [2003] NSUARB No. 6 and Re Nova Scotia Power Inc., [2003] NSUARB No. 91. I make no comment on those rulings, except to say that they do not support DLA's submission here that the Board can implement social policy. The Board's approval of the load retention rate was premised on the finding that, otherwise, the large customer could leave NSP, obtain its energy from another source, and this would hike NSP's rates to its remaining customers. The Board's approach affirms the Board's role as a competition surrogate. The Board's load retention rate recognizes the microeconomic reality that NSP is not an absolute energy monopoly with a vertical customer demand curve, and is subject to elastic demand from high volume customers with other energy options. No such factors govern DLA's proposed Rate Assistance Program.
>
> . . .
>
> [39] Section 67(1) is not ambiguous: "rates . . . shall always . . . be charged equally to all persons and at the same rate" in substantially similar "circumstances and conditions in respect of service of the same description". The Board cannot reduce the rate to a low income customer who receives the same service as a high income customer. There is no latitude for the interpretive presumption.
>
> (**Dalhousie Legal Aid Service v. Nova Scotia Power Inc.** 2006 N.S.C.A. 74, pp. 11, 14, 15-16)

[98] Since SEB have not applied for a load retention rate, the same reasoning applies in the case at hand. The question of the competitiveness of Stora Enso's electricity rate is no different than the question of the affordability of electricity rates charged to low income customers. While both concerns are important, neither fall within the jurisdiction of

the Board and cannot form part of the considerations which the Board must take into account when approving fair and reasonable rates for all customers.

[99] Finally, it has been suggested that, given the potential consequences of the Board's decision, it may be inappropriate or unfair for the Board to have to deal with this matter in the first instance. In fact, it is this specific statutory role and responsibility that the Legislature has conferred upon the Board under the **Act** - to hear such matters and determine what constitutes fair and reasonable electricity rates for all of NSPI's customers.

3.2 Overview Of Findings

[100] In the sections of this decision that follow, the Board makes specific findings on the various issues in this proceeding ranging from cost of service and R/C ratios, to the specifics of the rates approved.

[101] The Board has determined that there are two rates worthy of approval:

(a) a 2P-RTP rate (with a flat CBL) based on NSPI's approved cost of service study with increments and decrements priced at marginal cost subject to a 20% annual energy band and certain other restrictions;

(b) Dr. Stutz's rate proposal (as amended by the Board) including his proposal that the frequency and duration of interruptions are as outlined in the Board's letter of December 23, 2005.

[102] The Board did not see NSPI's proposal to increase ELIIR by approximately 10% and remove any guarantee of a benefit for economic interruptibility as a realistic attempt to assist the Board in coming to grips with what is a very serious issue.

[103] In this decision, the Board provides specific direction with respect to the design of the rates. There will be a Compliance Filing overseen by Dr. Stutz, but prepared by NSPI, which will provide to the Board actual tariffs based on the principles laid out in this decision. Stora Enso Port Hawkesbury and Bowater Mersey Paper Company, separately, will have 30 days to elect under which of the rates approved in this decision it wishes to take service.

[104] The Board has rejected each of the stability mechanisms put in evidence (i.e., that proposed by Dr. Rosenberg and that described by Dr. Stutz). Consistent with the position of NSPI on rate stability, the new ELIIR rate will only be adjusted at the same time as the ATL rates during a general rate proceeding.

[105] Finally, the Board does not consider these to be new rates, rather, they are successors to the current ELIIR and 2P-RTP rates under which these customers presently receive service.

3.2.1 Cost of Service

[106] All parties in this proceeding have chosen to base their rate design on cost of service and to justify it based on cost of service principles. This is a departure from the calculation of BTL rates in other proceedings where a formula was used. In the case of the

current ELIIR, for example, there is an attempt to base costs on those related to base load plants.

[107] The issue before the Board, all parties having determined that cost of service is the common basis for rate design, is whether the replacement ELIIR should be designed using the Board approved methodology or the 3CP method adopted by Dr. Rosenberg. SEB, in its final submission, states:

> Dr. Stutz says it would be "extraordinarily prejudicial" for the Board to adopt Dr. Rosenberg's Cost of Service Methodology without giving all parties and their experts a full opportunity to examine the proposal (Transcript, p. 1014, Q. 257). Dr Stutz says this is something that can only be done at a general rate hearing, or at least at a full rate case. It is wrong in principle, he says, to apply one methodology to one set of customers, while applying a different methodology to another set.
>
> Dr. Stutz might well have a point, **IF** the customer being singled out were above-the-line, as Dr. Stutz proposes for ELIIR-2. In such a case, the other ATL customers might well complain that the ELIIR-2 customers were not pulling their weight.
>
> But that is not at all the case here. The existing ELIIR is below-the-line, and the Board seeks to replace it with a new, workable rate - a rate that better reflects the way that class imposes costs on, and provides benefits to, the system.
>
> The Board has never applied to the BTL classes the methodologies it has mandated for the ATL customers. On the contrary, it has approved each BTL class based on its particular attributes. Moreover, each BTL class is treated differently from the others.
>
> (SEB Closing Submission, p. 9
> Emphasis in original)

[108] As noted earlier, Dr. Stutz is very direct with his advice to the Board stating the following:

> Q. SHOULD DR. ROSENBERG'S COSS METHODOLOGY BE ACCEPTED?
>
> A. No. An expedited, narrowly focused proceeding dealing with one specific rate is not the place to reopen general issues about the Board's approved methodology. Nor is it reasonable to argue, as Dr. Rosenberg does, that the Board should use its approved methodology for all purposes except the development of the ELIIR replacement. Accordingly, I recommend that SEB's proposals be rejected.
>
> (Exhibit N-45, p. 11)

[109] The Consumer Advocate discusses the issue in his brief:

> *Classification of Assets for Cost of Service Calculation*
>
> 9. This issue has the potential to make the most impact on the revenue requirement from each rate category. The classification of generation and transmission assets as demand related and energy related used by the Board in 1995 is reasonable and there is no basis or need to make a change. As Dr. Stutz aptly stated on cross examination:
>
> > 260. Q. Would you agree that it is not inappropriate for the Board to consider now 11 years after adopting a cost-of-service study methodology to embark on that exercise once again, to take into account changed circumstances in the interim?
> >
> > A. I don't think it's appropriate because I don't think the relevant circumstances have changed much. What's relevant to a cost-of-service study is the kind of system you have. Here we're talking about the generation and transmission component of the cost-of-service study. While there has been addition of generation and transmission, the bulk of the system is as it was when the Board selected its methodology. So my personal view is we don't need such a re-visitation. The nature of the system doesn't call for it. That being said, it's the Board's judgement as to whether we need it. I wouldn't recommend it. But if it's going to occur, I think everyone should get to put in their views.
>
> (Consumer Advocate’s Post-Hearing Submission, pp. 3-4)

[110] NSPI’s submission is outlined in their reply brief:

> SEB appears to accept that the consensus views of all other participants concerning ELIIR-2 are correct if the rate is set ATL. That is why SEB wants ELIIR-2 to be below the line – SEB appears to believe that if ELIIR-2 is a BTL rate, no real rules need apply and SEB can be provided their desired rate level. This result-oriented approach to rate design is inconsistent with established rate making principles and must be rejected. BTL rates have not been designed in this fashion in the past, and should not be now or in the future. This aspect of the SEB submission also means that if ELIIR-2 is set ATL, the consensus position of all other parties can be readily adopted by the Board.
>
> At page 9 and again at pages 37-38, SEB argues that the Board-approved COSS methodology should not be applied to ELIIR because it is a BTL rate. The argument is circular – ELIIR is a BTL rate because it is established independently from the COSS. Before the development of ELIIR, much of the same electric service was provided under the LI rate, an ATL rate.
>
> The fundamental principle is that the COSS is the Board’s tool for evaluating whether rates are fair as between customer classes. That conclusion can be drawn only if the same cost

> analysis is applied to all rates. While the Board is free to depart from its COSS methodology, it should do so only for a clearly articulated reason, supported by proper evidence. It is not sufficient to simply insist that ELIIR is a BTL rate, and the ELIIR customers are therefore "different".
>
> (NSPI Reply Submission, pp. 4-5)

[111] In the Board's view, if cost of service is to be used as a tool to design rates, then fairness requires that the same cost of service methodology apply to all rates.

[112] The Board does not accept Dr. Rosenberg's position that because ELIIR is a BTL rate one can take another cost of service methodology "off the shelf" - one that classifies costs quite differently than the Board approved method - and use that for purposes of rate design. If that were to be done, in the Board's view, it would be very difficult to truly test cross subsidization.

[113] Simply because the rate is below the line does not justify adopting costing assumptions that bear no relation to the manner in which costs are assigned to other customer classes.

[114] Fairness requires that all rates, that are designed based on cost of service, use the same cost of service methodology. Accordingly, for purposes of the rates calculated in this proceeding including the 2P-RTP rate, they will be based on the Board approved cost of service methodology.

3.2.2 Revenue / Cost Ratios

[115] Both Dr. Stutz and Dr. Rosenberg have chosen to fix the R/C ratio of the rates they design at 95%. Dr. Stutz in his additional evidence summarizes the issue:

> Q. TURNING TO A NEW TOPIC, PLEASE DISCUSS YOUR CHOICE TO FIX THE R/C RATIO AT 95 PERCENT.
>
> A. One can argue, as Dr. Rosenberg does in his evidence, that hourly allocation of energy costs would be fairer than the monthly allocation currently approved by the Board. Setting the R/C ratio at 95 percent as SEB and I propose provides a way to address the issue of possible overpayment by SEB without either reopening the issue of COSS methodology or departing from the 95-105 range for R/C ratios relied upon by the Board in the past. Of course, if the Board decides that concern about overpayment for energy is inappropriate, or if there is evidence that convinces the Board that SEB is not overpaying, the proposal to fix the R/C ratio at 95 percent should be rejected. Instead, the R/C ratio used to develop ELIIR-2 should be set as it is for other ATL rates. For a rate based on 2006 data, I would recommend the use of 96.53 percent, the R/C ratio used for the Large Industrial Rate in the Company's compliance filing.
>
> (Exhibit N-45, p. 11)

[116] Ms. Brockway prefers an R/C ratio of 100% but in recognition of certain ratemaking principles including stability the ratio could, in her view, be as low as 96.53% based on the 2006 Compliance Filing.[69]

[117] NSPI supports a 100% R/C ratio on the basis that this is a new rate. NSPI also disagrees with Dr. Stutz's and Dr. Rosenberg's view that a 95% R/C ratio could address the overcharging concern, noting that their average costs on peak are lower than their average costs off peak because of how hydro is dispatched.

[118] Board Counsel, on cross-examination of the NSPI Panel[70] introduced Exhibit N-76 which confirms that in the 2006 rate proceeding NSPI proposed a 95% revenue to cost ratio for the Large Industrial Class.

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[69] Transcript, Sept. 8/06, p. 959

[70] Transcript, Sept. 6/06, p. 382

[119] In the view of the Board it would not be reasonable to set the R/C ratio above the 96.53% R/C ratio used for the large industrial rate in NSPI's 2006 Compliance Filing.

[120] Further, the Board accepts the advice and recommendation of Dr. Rosenberg and Dr. Stutz that an hourly rather than a monthly allocation of fuel costs would reduce the costs assigned to the high load factor customers such as those served on the current ELIIR. To address that concern, the Board agrees with Dr. Stutz and Dr. Rosenberg that for purposes of rate design the R/C ratio should be set at the low end of the range (i.e., 95%).

3.2.3 Glace Bay

[121] The Board observes that a disproportionate amount of hearing time was devoted to what the Board considers to be a relatively insignificant issue with respect to the allocation of costs relating to the amortization of the Glace Bay plant. This cost, which represents approximately $0.44/MWH on the rate will disappear in early 2008 thereby eliminating it for future years. Given that all rate proposals are now based on cost of service there is no logical reason to exclude Glace Bay from the calculation. It is, however, a short term inclusion of a relatively minimal cost.

3.2.4 Priority Interruptibility

[122] The current ELIIR customers are interrupted for supply reasons in priority to customers on the interruptible rider to the Large Industrial Rate. Both Dr. Rosenberg and Dr. Stutz in their rate designs continued, and assigned a value, to this feature. As noted, in the

case of Dr. Rosenberg, it is 20% of the value of supply interruptibility as shown in NSPI's cost of service study and in Dr. Stutz's case, it is 10%. Dr. Stutz explains his treatment of priority interruptibility as follows:

> Q. PLEASE EXPLAIN THE TREATMENT OF PRIORITY INTERRUPTIBILITY.
>
> A. Within the ELIIR tariff, an order for Supply Interruption was established. The Generation Replacement and Load Factor (GRLF) rate was first, followed by ELIIR and then the LIIR. Priority Interruptibility for ELIIR simply refers to ELIIR coming before the LIIR. While no specific value for Priority Interruptibility is identified in the ELIIR tariff, it is reasonable to assume that there was some implicit value provided. Absent that assumption, the customers taking service on ELIIR would have been accepting an obligation-Priority Interruptibility-without compensation. ELIIR-2 continues to assume Priority Interruptibility. As shown in Exhibit JS-3, there is a credit-10 percent of the value of Supply Interruptibility shown in NSPI's COSS. The choice of 10 percent is a matter of judgment.
>
> (Exhibit N-5, p. 9)

[123] In cross-examination and in their IR responses, both Dr. Rosenberg and Dr. Stutz indicate that the determination of the amount of the credit is a matter of judgment.

[124] NSPI takes the position that priority interruption is no longer required.[71]

[125] It appeared to be NSPI's view that with new technology (if acquired by NSPI) interruption of smaller customers can be obtained efficiently.[72]

[126] However, NSPI agreed that priority interruptibility was part of the original value proposition when the ELIIR was developed:

> 37. Q. Now, so at the time ELIIR was established the value proposition that you have spoken about before was that approximately six to nine million in costs were being transferred from SEB to ATL customers on the one hand, correct?
>
> A. (Boutilier) That's correct.

---

[71] Exhibit N-1, p. 11

[72] Transcript, Sept. 5/06, pp. 249-250

> 38. Q. And in return, the burdens that SEB were agreeing to accept were priority interruptibility, that's one, correct?
>
> A. (Boutilier) Yes.
>
> 39. Q. And economic interruption?
>
> A. (Boutilier) Yes, although I wouldn't call that a burden. They had received the credit up front for that.
>
> 40. Q. Yeah, but that's the value proposition ---
>
> A. (Boutilier) Yes.
>
> 41. Q. --- is what I put to you. The burdens that they were agreeing to accept in return for that rate and getting rid of the six to nine million dollar costs were priority interruptibility and economic interruption, correct?
>
> A. (Boutilier) Yes, that was the value proposition.
>
> (Transcript, Sept. 6/06, pp. 304-305)

[127] As noted earlier, Ms. Brockway's recommendation is that there be no credit for priority interruptibility but, if a priority credit is maintained, it should be no greater than 5%. She also recommends that the cost be allocated only to the LIIR customers who will benefit from SEB's willingness to be interrupted on a priority basis.

[128] A number of the Avon Valley et al. customers would be the ones most affected by Ms. Brockway's suggestion with respect to charging the LIIR customers. The Avon Valley et al. brief deals extensively with this point.

> 40. The internal logic of the original ELIIR suggests some premium for priority supply interruptibility in ELIIR-2. The difficulty is in determining a value for priority supply interruptibility as any credit was only implicit in the ELIIR formula. . . .
>
> 41. The second issue regarding any priority premium is allocation of those costs. NSPI insists that any premium credit for priority supply interruptibility must be offset by a reduction in credits for other interruptible customers. This view is supported by Ms. Brockway.
>
> 42. The pre-filed evidence of our clients suggests different perceptions of the value of SEB being interruptible in priority. Halifax Grain Elevator Limited, for example, indicates that it is

> quite important to it that SEB remain interruptible for supply reasons in priority. By comparison, Oxford Frozen Foods Limited has, as a business, discussed how it would accommodate its operations with increased and more frequent interruptions. Oxford indicates that if the Board determines there ought to be an increased credit for those offering priority supply interruptibility, then Oxford would wish access to this group and expect to take up the option.
>
> 43. On behalf of our clients, we object to any reduction in the credit afforded to the LIIR customers. Priority interruptibility affords value to the system as a whole and other customers, as a prompt response "keeps the lights on". Furthermore, the implicit credit for priority supply interruption was allocated to all customers so maintaining that allocation would be consistent with the Board's prior approach and the "value exchange".
>
> 44. Abrupt fundamental changes to the terms and conditions upon which LIIR customers receive service can have a profound change on the relative risks and rewards of receiving interruptible service. With some advance notice of impending change, in 2003 they may have provided notice of their intention to switch to firm.
>
> 45. Furthermore, if credits for priority supply interruptibility were made available, they should be available to all customers who are able and willing to respond and not just SEB. Dr. Stutz agreed in principle that to the extent there is value and a benefit, this is something that should be extended to others, having regard to NSPI's reserve requirements.
>
> 46. On the reverse side, if the existing supply interruptibility credit is reduced or if the arrangements for priority supply interruptibility are modified, we respectfully submit that customers who currently take service under the LIIR class should be afforded the opportunity to go firm, without the five year notice requirement as included in the rate. It is acknowledged that a gross shift of interruptible customers to firm service could have an effect on NSPI's system. However, without full disclosure of NSPI's capacity, at this stage, we are unable to evaluate the extent to which NSPI could accept transfers to firm service without compromising its reserve requirements. We do note that there has been evidence as recently as the Generic Rate Hearing that interruptible load is in excess of NSPI's requirements for the foreseeable future.
>
> (Avon Valley et al., Closing Submission, pp. 10-11)

[129] Dr. Stutz points out[73] that allocating the cost of priority interruptibility to the LIIR customers reduces the value those customers receive for agreeing to be interruptible.

[130] Dr. Stutz goes on to raise a rate stability issue with respect to priority interruptibility.

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[73] Exhibit N-59, p. 8

> Q. PLEASE EXPLAIN THE CONSIDERATIONS OF RATE STABILITY.
>
> A. Priority for supply interruptibility has always been a requirement for service on ELIIR. Priority Interruptibility imposes a burden on those subject to it. As a consequence, it is only reasonable to assume that implicit in the design of ELIIR was a value for Priority Interruptibility somewhat larger than the value for Supply Interruptibility provided by the Large Industrial Rate. Absent such an implicit value, the acceptance of Priority Interruptibility by those served on ELIIR would have been economically irrational. This being the case, dropping Priority Interruptibility and the implicit value SEB had derived from it on ELIIR would be contrary to rate stability.
>
> (Exhibit –59, p. 7)

[131] The Board agrees that priority interruptibility was part of the original "value proposition" of ELIIR. For stability reasons it should continue. The Board also accepts that it has value in "keeping the lights on" for all other customers. NSPI has two very large loads it can easily interrupt. The Board accepts the submissions of Avon Valley et al., supported by Dr. Stutz and Dr. Rosenberg, that since priority interruptibility is of value to all other customers, its cost should be allocated to all other customers. This is consistent with the Board's current approach and the "value exchange". Little concrete evidence was produced on how to calculate the amount of the credit. While the Board is reluctant to simply adopt a compromise number it will, in this limited circumstance, set the value for priority interruptibility at 15%.

3.2.5 Dr. Stutz's Rate Proposal

[132] The detailed calculations of Dr. Stutz's rate are explained earlier in this decision and specifically outlined (in Exhibits JS-3, JS-4, JS-5, JS-6, JS-7 and JS-8) in Exhibit N-5.

[133] Both NSPI and SEB rejected Dr. Stutz's ELIIR-2 rate design because they believe it would continue problems that existed under the current ELIIR rate.

[134] The Board perceives their position was influenced by two factors. Firstly, each party was advancing its own rate design which it firmly believed was appropriate. Secondly, the improvements made by Dr. Stutz in the ELIIR rate design were not really focussed on in the course of the hearing. In the Board's view, Dr. Stutz made three important changes to the rate which should make it fairer and easier to administer. They are:

1. incorporation of an explicit credit for economic interruption;
2. the buy-through rate is set so that at 100% buy-through, the cost of buy-through matches the value of the credit built into the rate;
3. frequency and duration of interruptions will be governed by the terms and conditions outlined in the Board's letter of December 23, 2005, which Dr. Stutz adopts as part of his rate proposal.

The Board believes that these changes in Dr. Stutz's rate represent a significant improvement over the current ELIIR. In a series of meetings facilitated by Board staff earlier this year, all but one of the outstanding operational issues raised by the parties were resolved. This should make the rate less contentious.

[135] Elsewhere in this decision the Board approves a 2P-RTP. However, the Board recognizes that the base rate portion of the 2P-RTP is not costed in the manner recommended by Dr. Rosenberg, rather, it is costed based on NSPI's approved cost of service methodology. That and the changes made by the Board to the load shifting portion of the RTP rate design will make it less attractive to SEB. In the circumstances, the Board is approving Dr. Stutz's rate as an alternative should SEB wish to revisit the attractiveness of Dr. Stutz's rate, having regard to the Board ordered changes in the 2P-RTP rate design. Dr. Stutz's rate will be amended to reflect the 15% for priority interruptibility. The monthly

customer charge will be $20,700, the same customer charge set by the Board in the 2P-RTP rate.

[136] The new energy rate, subject to being confirmed in the Compliance Filing, is estimated to be $52.12/MWH.[74]

3.2.6 Board Ordered 2P-RTP Rate

[137] As noted above, the Board will approve a 2P-RTP rate based on costs as determined by NSPI's COSS. The Board is persuaded that a properly functioning RTP rate can provide benefits to the customer and to the system. As somewhat colourfully pointed out by Dr. Rosenberg in his opening statement, the RTP load "zigs when the balance of the load zags". Dr. Rosenberg estimates that, with the 2P-RTP, SEB would be able to save NSPI and themselves "$10 million or even more" from fuel costs.[75]

[138] Intuitively, it seems to the Board that if large customers can shift load to reduce it when costs are high and increase it when costs are low, then they and the balance of the customers should benefit.

[139] Despite proclaiming the virtues of load shifting and real time pricing in many of its annual reports and other publications over the last few years - and despite its support of the 2P-RTP rate currently in NSPI's tariff - NSPI, for purposes of this hearing, has

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[74] This calculation applies the 95% R/C ratio after deduction for priority interruptibility is applied.

[75] Transcript, Sept. 7/06, p. 752

determined that it cannot accommodate anything other than a very small RTP load.[76] NSPI is concerned as to whether it can accommodate loads such as SEB on an RTP rate.

[140] Dr. Rosenberg was firm in his view that RTP was an appropriate mechanism to serve customers with these large loads.

[141] Mr. Drazen said the RTP rate can work with some measure of cooperation between the parties and some provisions to avoid undue risk. NSPI and all parties, other than SEB, raised an issue concerning the possible mismatch between marginal costs charged under the rate and actual avoided costs.

[142] Mechanisms to ameliorate the risk, both in terms of amount of load shifted and the cost mismatch, were discussed in the hearing.

[143] The Board has determined that it will approve a 2P-RTP rate with the following characteristics:

Customer Charge:	a $20,700 monthly customer charge - this is identical to the customer charge in the current ELIIR;
Cost of Service:	costs will be assigned using NSPI's approved cost of service study;
Revenue to Cost Ratio:	the revenue to cost ratio will be 95% - this can be re-examined in any general rate proceeding;
Priority Interruptibility:	the premium for priority interruptibility will be 15% of the interruptible credit;
Customer Baseline:	a flat CBL with cutouts for normal maintenance.

[76] Transcript, Sept. 6/06, p. 445

[144] Dr. Stutz commented on the CBL in questioning from the Panel.

> 569. Q. And what about the CBL, the calculating -- the determining of the CBL? You spoke in favour of a flat line because of its simplicity this afternoon and there's been a suggestion that it be based on the prior year's performance by either Stora or Bowater. Is that a reasonable way to approach the CBL?
>
> A. I think it is. There are two issues about the CBL and I think you could -- if you were going in this direction, I think you could dispatch both of them ---
>
> 570. Q. I just want everything on the table so we have everything to think about.
>
> A. Oh, absolutely, and I'll come back to Mr. McGrath's question because I think that's also going to be of interest to you if you're pursuing this direction. But let's just stay with the CBL. So, there are two issues about the CBL. The first is what shape should it have. I recommend basically flat. Now, what the "basically" modifier means is this, there are these annual interruptions where you know the company is going to be down and you don't want to just give them a credit for being out for maintenance, but other than that I think flat is the way to go. I think the idea of setting it on the basis of last year's energy is a good one. I do think you should take the SEB caveat in mind and somehow embed it if you're going this way. That is, last year may not be representative. Mr. Hussey gave you the example of startup. So, it should be last year unless there's a good reason not to use last year, and it ought to be a pretty darn good reason.
>
> 571. Q. Okay. And what would be the mechanics for determining the CBL? In other words ---
>
> A. We just take the forecast of energy and divide by the hours in the year and then adjust for the cutout for maintenance.
>
> (Transcript, Sept. 8/06, pp. 1114-1116)

[145] The Board has determined that the CBL will be a flat line based on last year's energy takings (corrected for any anomalies) and energy takings will be adjusted annually. To the extent that Stora Enso specifically did not operate normally last year (i.e., in 2005) a normalized adjustment should be made. The CBL will include cutouts for normal maintenance. The Board will settle any disputes with respect to the CBL. The Board accepts Dr. Stutz's evidence[77] that there will not be a $2.5 million "windfall" adjustment as suggested

[77] Transcript, Sept. 8/06, p. 1117

by NSPI in recognition of the fact that both Stora Enso and Bowater Mersey were voluntarily load shifting which affected their load shape.

Marginal Costs: marginal costs will be calculated with the customers' usage under the CBL included;

[146] The following limitations will be placed on the real time pricing portion of the rate:

Risk Protection

Limitation of 20%:
- a limitation of 20% of the customer's total annual energy taking;

Credit for Decrements:
- the credit for decrements up to 30 megawatts for Bowater and 75 megawatts for Stora Enso will be at marginal cost;
- for the next 10 megawatts for Bowater and 30 megawatts for Stora Enso, the credits for decrements will be the greater of:
  a) 80% of marginal cost; and
  b) the 2P-RTP base rate;
- for decrements in excess of the above amounts the credit will be the greater of:
  a) 60% of marginal cost; and
  b) the 2P-RTP base rate;

Charge for Increments:
- increments will be charged at marginal cost.

[147] Two issues arise with respect to risk: the amount of load that can be shifted; and the concern that as one moves further away from the CBL there may be a mismatch between marginal cost and avoided cost. The response to Undertaking U-7 provided by SEB

attempted to address these concerns and that information assumed these restrictions operated within a 20% band. Again Dr. Stutz discussed this with the Panel in evidence:

> 578. A. ... I think I would do more or less what SEB suggested in Undertaking No. 7, which is to say I would make my adjustment just on the decrements. So, I would reduce ---

...

> 581. Q. Yeah, I've got it right here.
>
> A. Okay. So, I'm not interested in the details here. I'd just point out to you that everything they're doing they're doing to the decrements, there's nothing being done to the increments. So, the concern is that somehow the difference between what they get for the decrement -- presumably they decrement in high-cost hours, they increment in low-cost hours. The difference could be too big. That's the thrust of the exhibit I prepared. It's the thrust of anyone who isn't happy with their scheme. You want to make that difference smaller. We have a basis for making that difference smaller on the decrement side. Namely, you could set it at 77 or any other percentage you wanted. I just picked 77 because it's the one that came up in the cross of Dr. Rosenberg and it has a basis in fact, but you could pick another number if you felt it was more appropriate. On the increments I'm not recommending any change. I would simply price them at marginal cost, as I assume is intended here. So, if you price what they're getting paid for at a fraction of marginal cost and you charge them at full marginal cost for the increments, you're reducing the difference, you're achieving what you wanted. Is this an absolutely rough and ready scheme? Yes. But so is charging the residential class for demand on the energy rate.
>
> 584. Q. Oh, I see. Okay.
>
> A. Now, you could overlay mine on 10 or you could say, "Well, I've made this price adjustment here, that gives me a little more confidence and so I'll overlay it on 20."
>
> 585. Q. And would that be a reasonable thing to think about?
>
> A. I think so, because what you're trying to do is get some confidence that you're not going to over-pay due to this deep decrement problem. So, if you're going to correct for it twice, once with the limitation on the usage and once on the pricing —
>
> 586. Q. You could expand the band?
>
> A. --- you would expand the band, and that might make life a little easier for the people who are trying to use the procedure.
>
> (Transcript, Sept. 8/06, pp. 1118-1121)

[148] Based on the above, the energy charge for the annual energy under the CBL, subject to being confirmed in the Compliance Filing, would be approximately $55.04/MWH.[78] Assuming SEB can use load shifting to reduce their annual power bill by $10 million (and reduce NSPI costs by the equivalent amount) as suggested by Dr. Rosenberg, the resulting annual SEB rate will be approximately $50/MWH.[79] The debits and credits for load shifting are intended to be cost neutral to other parties and so should not factor into setting the revenue requirement for ATL customers.

[149] Avon Valley et al., in its final submission, provided an interesting analysis of what might be a fair base rate.[80] That analysis concluded as follows:

> 28. The above analysis demonstrates that there are three different approaches that point to a fair base rate of about $55-$56/MWh. Dr. Stutz has arrived at a base rate of $56.60/MWh; Mr. Drazen calculates $55.40/MWh. These calculations are both without considering the effects of economic interruptibility. The "ELIIR margin" approach gives $55.55/MWh (including a credit for economic interruptibility). The current rate is $53.90/MWh although this is after 100% economic interruptibility. Considering that SEB have bought through an average of 68% of calls for economic interruption, the current effective rate including buy-though is $56/MWh. Any base rate at or below this price which permits SEB to extract greater value for economic interruption would be to the advantage of SEB.
>
> 29. The object of the above comparative exercise is not to urge the Board to adopt Mr. Drazen's refinement to the current demand/energy classification for the ELIIR replacement only. Rather, it shows that a basic rate of $55-$56/MWh is compatible for the results of both NSPI's current COSS methodology (at a 95% revenue-to-cost ratio and a 10% premium for priority interruptibility) and Mr. Drazen's recommended methodology (at 100% revenue-to-cost ratio and no premium). Any further revision to the ELIIR replacement rate should only be done following adoption of a new Cost of Service methodology in a separate proceeding.
>
> (Avon Valley et al., Closing Submission, pp. 7-8)

---

[78] This calculation applies the 95% R/C ratio after deduction for priority interruptibility is applied.

[79] This assumes the total annual energy requirement remains at 2,076 GWH (Exhibit N-58, NSPI Response to SEB IR 1a and Exhibit N-9A, line 8, Col. 1)

[80] Avon Valley et al., Closing Submission, pp. 6-7

[150] The Board ordered rate is close to that range before taking into account load shifting.

3.2.7 Election and Compliance Filing

[151] NSPI, under Dr. Stutz's direction, is to prepare and file with the Board a 2P-RTP tariff based on the terms outlined above and a tariff for Dr. Stutz's recommended rate, both by October 16, 2006. In preparing the RTP Compliance Filing, NSPI is to be guided by the terms and conditions, to the extent they apply, of the existing 2P-RTP rate. In preparing the Dr. Stutz rate Compliance Filing, NSPI is to be guided by the terms and conditions, to the extent they apply, of the current ELIIR rate. All parties in this proceeding will have 7 days to make any comment following which the Board will issue the Compliance Order. Stora Enso and Bowater will have 30 days from the date of the Compliance Order to separately elect which rate they want to take service under. There will be no ability to re-elect at a later date; and there will be a 5 year notice requirement under each of the rates in order to go to a firm rate. The rate will be effective the first day of the month following the election.

3.2.8 Stability Mechanism

[152] SEB states that they require rate stability to serve their business requirements over the course of the next 5 years.

[153] As noted, two proposals were submitted for consideration. Dr. Rosenberg recommended a modified PBR mechanism for a 5 year period which he believed offered both risk and reward to NSPI.

[154] Dr. Stutz provided, but specifically did not recommend adoption of, a 4 year "moving deadband" mechanism which again offered both risk and reward for NSPI.

[155] The Board viewed Dr. Stutz's stability mechanism as more balanced but Stora Enso made it "crystal clear" that Dr. Stutz's stability mechanism was not acceptable.

> QUESTION: Does Dr. Stutz's proposal for a stability mechanism meet the needs of SEPH?
>
> ANSWER: Definitely not. ...
>
> (Exhibit N-46A, Tab 3, Q. 6)

[156] With respect to Dr. Stutz's mechanism, he did not recommend it and Stora Enso did not want it. The Board believes the issue of a stability mechanism must be considered from two perspectives: fairness to all customers and financial risk to NSPI.

[157] Avon Valley et al., in their final submission, state their position on this issue quite succinctly:

> 72. There are fairness and equity issues with offering a "stability mechanism" for 15% of NSPI's load. Fairness would dictate that if such an option were desirable then it should be considered more broadly and the relative risks and rewards fully evaluated. Board Member Margaret Shears was alive to this issue of fairness when she questioned both the SEB Panel and Dr. Rosenberg. The suggestion that a stability mechanism was merited because these are the only two customers who requested it or that it could be introduced on a "trial basis" leaves little comfort and risks offending public acceptability of the new rate when SEB alone are granted the opportunity to take up stable rates at some risk to NSPI and its other customers.
>
> 73. SEB has stated it requires the new rate in order to maintain its competitiveness on a global basis. The most volatile element of NSPI's costs and the largest component of recent general rate applications has been rising fuel costs. Not convincingly, Dr. Rosenberg takes issue with Nancy Brockway's intimation that fuel prices will inevitably rise. It is clear that SEB is not buying predictions to the contrary as it would prefer to pay an annual rate increase of CPI minus

> 1% than face rate increases brought on by further fuel cost increases. If fuel cost increases occur, then the rate proposed by SEB will pull them increasingly away from being globally competitive.
>
> (Avon Valley et al., Closing Submission, pp. 17-18)

[158] Berwick points out that previous proposals by NSPI for rate stability based on CPI have been rejected by the Board as bearing no resemblance to "cost drivers"[81] at NSPI.

[159] In his final brief, the Consumer Advocate indicates that if a stability mechanism is to be considered it should be done in a general rate proceeding. This being a significant departure from past practice, it should not be adopted simply to accommodate SEB. The Consumer Advocate goes on to say:

> There is also an issue of fairness related to the establishment of a stability mechanism. If a reasonable stability mechanism is to be adopted (following the receipt of sufficiently reliable cost forecasts) why not apply same mechanism to all rate classifications. Domestic customers have as much need for stability as SEB.
>
> (Consumer Advocate Post-Hearing Submission, p. 9)

[160] NSPI appears to take the position that rate stability mechanisms contravene the **Act** although it did not really say why. As pointed out by Berwick, NSPI itself had proposed stability mechanisms in the past, presumably thinking they were consistent with the **Act**.

[161] The SEB final brief states:

> The record makes clear how important a five year stability mechanism is for these customers.
>
> (SEB, Closing Submission, p. 33)

[81] Berwick Submission, p. 12

[162] The brief goes on to indicate that SEB would agree to certain minor refinements to the PBR stability proposal as Dr. Stutz suggested would be necessary should the Board accept SEB's request.

[163] The issue of the financial health of NSPI and the possible implications of a credit rating downgrade were discussed by the Board in the 2006 Rate Decision in Section 13 entitled "Financial Health of NSPI". Among the findings in that decision were:

> The Board recognizes the importance of ensuring that NSPI remain on a sound financial foundation as it heads into the future. The Company's ability to attract capital, access fuel markets and control costs must not be compromised. ...
>
> The Board recognizes that the interests of customers and shareholders of NSPI are not mutually exclusive. They both benefit from a financially sound utility. In this decision the Board strived to strike an appropriate balance between the interests of NSPI and its customers.
>
> (NSUARB Decision, March 10, 2006, P-882, pp. 293-294)

[164] Since that decision the credit rating of NSPI was downgraded by Standard & Poor's.

[165] Mr. Blunden, a member of the NSPI Panel, testified that the Company understood that one of the principal reasons for the downgrade was the concern of the rating agencies with respect to NSPI's timely recovery of its costs. The actual credit report appears as part of NSPI's rebuttal evidence.[82] Mr. Tedesco indicated that the notion of cost recovery is particularly important when viewed in the context of Standard & Poor's recent action.

> This notion of cost recovery is particularly important, viewed in the context of Standard and Poors recent action. The company is really not in a position to take on additional risk. Indeed, we were downgraded due to risk of not recovering, and it would make little sense to add to that

[82] Exhibit N-44

> when in fact that very - - increasing that very risk will put upward pressure on prices, whether they be interest rates or even measures that we may need to take to simply procure fuel.
>
> (Transcript, Sept. 5/06, pp. 257-258)

[166] Dr. Stutz agrees that the Board should be very cautious about doing anything that would adversely affect NSPI's risk.

[167] Mr. Stewart of Bowater candidly acknowledges that harm to the Utility would ultimately result in harm to its customers.

> 213. Q. Would you agree with me that if the bond rating were at risk that we may suffer a lot of long-term pain for some very short-term gain?
>
> A. (Stewart) Absolutely. I think that the customers and the utility need each other. I don't think we have any intent to harm the utility. That would be ultimately harming ourselves and counterproductive.
>
> (Transcript, Sept. 7/06, p. 673)

[168] Avon Valley et al., in its final brief, states as follows:

> 69. While the ability of NSPI to carry forward its under-recoveries remains to be seen, any inability of NSPI to fully recover its costs could result in revenue instability. As described by Ms. Brockway:
>
> > *If NSPI's rates are not stable (and in particular if they have an overall tendency to rise over time), restraining the (upward) movement of SEB's rates will lead either to an unacceptable revenue shortfall for NSPI, or more likely to a transfer of the unrecovered costs incurred to serve SEB to other customers.*
>
> 70. The issue of revenue instability and its impact on the Utility's perceived risk among capital providers is a concern for NSPI and should be accounted for by the Board. The Board would be aware of NSPI's downgrade by Standard & Poors following the release of the last decision.
>
> 71. It is significant that Dr. Stutz does not recommend the Board adopt a rate stabilization mechanism. To be accurate, he does not recommend the Board reject the mechanism but did indicate it would be a "significant departure" from established ratemaking procedures in Nova Scotia and further acknowledged on cross-examination he is "very concerned about the potential adoption of a rate stability mechanism.
>
> (Avon Valley et al., Final Submission, p. 17)

[169] Dr. Stutz, in a fairly thoughtful exchange with the Consumer Advocate, and again with the Panel, makes it clear that customer characteristics can be taken into account in rate design including a stability mechanism. The following passages explain that:

> 333. Q. Thank you. Would you agree with the proposition that if you were to make a stabilization mechanism such as yours available that there's no real justification not to make it available to other customers?
>
> A. No, I wouldn't agree with that.
>
> 334. Q. What would be your criteria by which you would decide who was entitled to it and who wasn't?
>
> A. Well, I think we always design rates based on what we perceive to be the characteristics of the customer. So, for example, in the residential class we don't force residential customers to buy expensive demand meters even though they obviously have substantial demand costs. We design the rates around the fact that for them that would be onerous. I think here you have customers who have a particular need for a stabilization mechanism in part because so much of their cost is fuel, which is the most variable portion of the company's costs, so there's a question of designing the stabilization mechanism appropriately. I think you could make a case that the mechanism ought to be extended to the large industrial interruptible customers, maybe to some of the other industrial customers. I don't see that you could make a case that it should be extended to the residentials, nor frankly, given automatic three percent increases, do I necessarily think it's in their interest.
>
> (Transcript, Sept. 8/06, p. 1035)
>
> 547. Q. And I wonder if you could just explain -- expound on that a little bit for me.
>
> A. Sure. Having fair rates, that is rates that treat everyone fairly, doesn't mean having the same rates for everyone. So, you could have quite different rates which allocate costs and recover costs within rate classes differently and still be fair. And, in fact, if you look at utility regulation, that's what we have. So, for residential customers who have, let us say, the simplest metering arrangements, we have a very crude form of allocation. We, in fact, ignore demand and collect on the basis of customer and energy. At the other end of the spectrum for the very largest customers in some jurisdictions we have very elaborate meters and we, you know, meter them at 15-minute intervals and collect costs accordingly. Both are fair. Both exist side-by-side. So, the general point I was making was that we can have very different rates and still be fair. Now, the specific point I would make is that for large customers it's often the case that the rates tailored to them take the form of contracts which are in place for lengthy periods of time. It's simply thought that that's the best rate form for them. I myself am not a particular enthusiast of these contracts. I've had to review them, I have problems with them many times, but the point I would make is they are a standard way of setting rates. I don't know about Canada but I can say in the US they're approved in many states. So, while I'm not a great fan of them, I have to acknowledge they're there and they're thought to be a fair rate form, which is to say that regulators who have the job of approving fair rates approve them.

> Sometimes these contracts cover many years. It's thought, for example, that this helps everyone for the reason that was given for priority interruptibility when we first put in ELIIR, namely it helps with system planning. If you've got a gigantic load, the last thing you want it to do is disappear the day before you open your next power plant, and that's the kind of benefit to everyone that the contracts can provide. So, I'm not a partisan of contracts but I think they're a legitimate form and they do sometimes take the form of a multi-year agreement. So, that was the general background and rationale that permitted me to say what I did to Mr. Merrick.
>
> (Transcript, Sept. 8/06, pp. 1104-1106)

[170] Mr. Drazen points out that the problem with the adjustment mechanism as proposed is that the majority of costs attributable to ELIIR customers are fuel costs and fuel costs are the largest and most volatile component of NSPI's total cost of service. He would only recommend a formula based adjustment if it applied to non-fuel costs. Ms. Brockway raises a similar concern:

> ...to the extent that NSPI's increasing costs are driven by world fuel markets, NSPI will not necessarily be able to exert enough control over them to be able to recover its prudent costs under Dr. Rosenberg's proposal.
>
> (Exhibit N-37, p. 42)

[171] Dealing first with risk, it is the Board's view that it would be imprudent and inappropriate, in view of the recent action by rating agencies, to impose on NSPI at this time a stability mechanism which has the likely potential (given volatile fuel markets) of depriving NSPI recovery of its full fuel costs for a period of 5 years. The Board is very concerned how this might be perceived by the financial markets. Further rating downgrades could compromise NSPI's ability to attract capital and access fuel markets, thus leading to generally higher costs, a result which, Mr. Stewart concedes, would not be to anyone's benefit.

[172] The Board is of the view that it would not be fair to other customers to impose a stability mechanism which essentially shields SEB from fuel costs for a period of 5 years, thereby creating an unacceptable risk to other customers in terms of NSPI's credit and in terms of possible attempts by NSPI to recover those costs from other customers.

[173] Protection from world fuel costs is not something the Board is prepared to provide to SEB alone, thereby placing NSPI and its other customers at risk. If that protection is an essential pre-condition to SEB continuing in business, then that assurance will have to be sought elsewhere.

[174] The Board is not prepared to approve the rate stability mechanism proposed by SEB.

3.2.9 ATL/BTL (Above the Line / Below the Line)

[175] SEB's vigorous argument that the ELIIR remain a BTL rate was motivated in large part by its justification of its rate design based on the 3 coincident peak (3CP) cost of service study. SEB acknowledged that if ELIIR-2 was an ATL rate, a different cost of service study could not be used. The Board has not accepted the 3CP methodology.

[176] Future adjustments to both the rates approved in this decision, the 2P-RTP rate and Dr. Stutz's rate, will be made only during general rate proceedings when other rates are reviewed.

[177] For these two reasons, the significance of the ATL/BTL distinction is diminished.

[178] Having said that, the Board envisages that, if the 2P-RTP rate is subscribed by either Bowater or Stora Enso, there may be a need for the Board to review the terms and conditions (as opposed to the price) once experience is gained operating under the rate by NSPI and the customers.

[179] For that reason the rate will continue to be below the line. The Compliance Order of the Board will include a provision that there be an annual review (not necessarily a hearing) of the new ELIIR rate which will not be a price adjustment, but rather will determine whether the rate is functioning fairly and efficiently with respect to its terms and conditions.

3.2.10 Start Up Issues

[180] The Board heard evidence from Stora Enso that any new rate will require start up provisions as a result of the closure of the mill for the past nine months.

[181] In his prefiled evidence Mr. Hussey noted the need for transitional provisions for the approved rate:

> Q. 27 Do you have any final comments?
>
> A. Yes. It will take a period of time for our mill to ramp up to full production following a favourable Board decision. As such, it will be necessary to have transitional provisions apply to the technical and operational aspects of the approved rate during this period.
>
> (Exhibit N-2, p. 16)

[182] Mr. Hussey further explained this issue in his opening statement:

> Regarding 2006, we have been shut down and out of the market for 9 months. Our start-up will have to be a staggered start between product lines. The current ELIIR is unworkable in a startup situation. (For example, the full annual amount of economic interruptibility would be available to NSPI during the final three months of the year; this would make it impossible to

> operate in the balance of 2006). Therefore, we will need the new rate in 2006, and even then we will need flexibility in the startup situation.
>
> We understand this may be a concern for the utility under the new rate structure. We do not expect to get credits for energy not taken. We are simply asking for flexibility and cooperation where these gaps in production are treated as cutouts. In this way, both the utility and the customer are protected from an abnormal startup situation.
>
> (Exhibit N-80, p. 5)

[183] In response to Board questions regarding transitional provisions, Mr. Hussey stated that:

> Q. Mr. Hussey, going back to your direct evidence, Exhibit N-2, on page 16? It's Question 27. You refer to the need for transitional provisions. That if the Board were to approve the proposal put forward by SEB, there would have to be transitional provisions provided for in the rate. And I wonder if you could explain what those transitional provisions would be?
>
> A. (Hussey) Our operation consists of two production lines; a newsprint line and an SE line. The start up -- both will not start up together, and they would start up in a staggered format. So, in that scenario, say, under our rate proposition it would have, let's say, a different CPL for the different periods, or that would have to be recognized as a cutout. We don't expect to get benefits, say having set a CBL. Our proposal was to set it on the basis of last year's energy. Well, if we are operating at less than that, we wouldn't expect to be less than that. Likewise, we would not want that to establish the basis for next year, which we would hope would be normal operation, and that we would be exposed to marginal costs for all of, say, the two-line operations. So, those are the key aspects that I was referring to.
>
> (Transcript,, Sept. 7/06, pp. 668-669)

[184] In its closing submissions, Stora Enso clarified the need for the start up provisions:

> b) Transitional Startup Provisions. As noted above, the 2-Part RTP does not carry with it the load factor and economic interruption difficulties during startup that are inherent in ELIIR and LIR. However, there is one theoretical difficulty, and this relates to the need for "specialty cutouts" to address the startup situation.
>
> SEPH believes that the wording of SEB's 2-Part RTP proposal regarding cutouts - which is largely based on the existing 2-Part RTP rate - meets customers' needs regarding startup situations. SEB has set out its specific startup proposals in Undertaking U-8, and believes they comply with the proposed tariff. However, to be certain that this is so, and to allow for a quick startup without the potential for possible lengthy debate over the scope of the

"cutout clause", SEPH asks the Board to confirm the specific startup proposals regarding cutouts as set out in U-8.

(SEB, Closing Submission, p. 35)

[185] The response to Undertaking U-8 states that:

Specifically, we are requesting:

1. To set the 2006 CBL based on 2005 actual energy adjusted for full operation. Since 2006 actual energy cannot be used to set the CBL for 2007, we are requesting that the 2007 CBL also be set on the basis of 2005 actual energy, adjusted for full operation.

2. During the start-up period, Stora Enso will define the block size for each production line (PM1 and PM2) and provide NSPI with a minimum of seven days' notice of the duration of a shutdown for defining cutouts. As a result, we will not receive credits for energy not taken (decrements) between the original CBL and the revised CBL during the period of the cutouts. In addition, the start-up cutouts will not impact setting the CBL for the following year.

3. The start-up period may extend through the winter months of 2007.

On page 3 of 8 of the proposed 2-Part RTP Tariff (Ex. AR-1, Schedule 5 of Dr. Rosenberg's Direct Testimony, N-4), it states:

> **"In the event of significant load reductions that have not been reflected in the CBL (such as plant shutdowns, labour issues or any other reason), the CBL will be lowered accordingly until the customer returns to normal operations."**

We believe this clause is generally applicable to Stora Enso Port Hawkesbury's start-up situation. However, we want to be certain that this is so. Thus we request the Board's specific approval for the start-up measures set out above.

(SEB Response to Undertaking U-8)

[186] The Board has not received any evidence from intervenors on this issue. NSPI has not specifically referred to this issue but, in its Reply to Closing Submission, NSPI states that:

Although NSPI disagrees entirely with the submissions of SEB, only selected points are dealt with in this reply. Failure to rebut any specific point in the SEB submission should not be interpreted as acceptance of that point; NSPI relies on its evidence in this proceeding and its closing submission.

(NSPI, Reply to Closing Submission, p. 10)

[187] The Board has considered and approves the start up provisions set out in Stora Enso's response to Undertaking U-8.

4.0 OTHER

4.1 Cost of Service

[188] During the course of the hearing it was recommended by some participants that the Board conduct a separate proceeding into NSPI's cost of service methodology. It was not clear going into the hearing that this was a matter all parties were prepared to address, other than as it related to ELIIR. A cost of service proceeding, as pointed out by a number of witnesses, could be costly and contentious. However, the Board is prepared to consider whether such a proceeding is appropriate at this time and will allow parties until October 30, 2006, to file additional written submissions on the issue, following which the Board will decide the matter.

4.2 Costs

[189] In its final brief, the Affordable Energy Coalition sought costs. NSPI did not comment on the issue. NSPI shall have until October 30, 2006, to make any submissions following which the Board will issue a decision.

5.0 SUMMARY OF THE DECISION

[190] The rates which have been approved by the Board in respect of this application are cost-based rates, set in accordance with the Board's fundamental responsibility to ensure that rates charged to all customers of NSPI are fair and reasonable. The Board is satisfied, based on the evidence before it and the structure and conditions imposed on the operation of these rates by the Board, that these rates are not preferential to, or subsidized by, any of NSPI's customer classes.

[191] The two rates approved by the Board to be available to SEB are:

Rate:

(a) a 2P-RTP rate (with a flat CBL) based on NSPI's approved cost of service study with increments and decrements priced at marginal cost subject to a 20% annual energy band and certain other restrictions;

(b) Dr. Stutz's proposed rate (as amended by the Board) including his proposal that the frequency and duration of interruptions are as outlined in the Board's letter of December 23, 2005.

Cost of Service:

[192] Both rates approved by the Board will be based on NSPI's approved cost of service methodology.

Revenue / Cost Ratios:

[193] Both rates approved by the Board will have a revenue/cost ratio set at the low end of the Board approved range (i.e., 95%).

Glace Bay:

[194] The cost of amortization of the Glace Bay plant will be included in the calculation of the two rates approved by the Board.

Priority Interruptibility:

[195] The value for priority interruptibility under each of the rates is set at 15% of the value of supply interruptibility as shown in NSPI's cost of service study.

Stability Mechanism:

[196] The Board is not prepared to approve the rate stability mechanism proposed by SEB or offered as an alternative by Dr. Stutz. The price of the new rates, however, will only be adjusted at the time of a general rate application.

ATL/BTL (Above the Line / Below the Line):

[197] The new ELIIR approved rates remain BTL.

Start Up Issues:

[198] The Board has considered and approves the start-up provisions as requested by Stora Enso with respect to the start-up of their mill.

Election and Compliance Filing:

[199] NSPI, under Dr. Stutz's direction, is to prepare and file with the Board a 2P-RTP tariff based on the terms outlined in the decision and a tariff for Dr. Stutz's recommended rate, both by October 16, 2006. All parties to the proceeding will have 7 days to make any comment, following which the Board will issue a Compliance Order. Stora Enso Port Hawkesbury and Bowater Mersey Paper Company Limited will have 30 days from the date of the Compliance Order to separately elect which rate it wants to take service under. There will be no ability to re-elect at a later date. The rate will be effective the 1st day of the month following the election. The Compliance Order will contain a direction for annual reviews of the terms and conditions (as opposed to the price) of the new Board approved rates to ensure they are working fairly and effectively.

Cost of Service Hearing:

[200] The parties will have until October 30, 2006 to file additional written submissions with respect to a generic hearing on cost of service following which the Board will issue a decision on that issue.

[201] An Order will issue accordingly

DATED at Halifax, Nova Scotia, this 28th day of September, 2006.

Peter W. Gurnham, Chair

Margaret A.M. Shears, Vice-chair

Kulvinder S. Dhillon, Member

APPENDIX "A"

List of Intervenors

Intervenor	Representative(s)
Affordable Energy Coalition	Megan Leslie and Claire McNeil
Avon Valley Greenhouses Ltd. Canadian Salt Company Limited CKF Inc. Crown Fibre Tube Inc. Halifax Grain Elevator Limited High Liner Foods Inc. Imperial Oil Limited Intertape Polymer Inc. J.D. Irving Ltd., Saw Mills Division Maritime Paper Products Ltd. Michelin North America (Canada) Inc. Minas Basin Pulp & Power Company Ltd. Oxford Frozen Foods Limited Statia Terminals Canada Incorporated Trentonworks Limited	Robert G. Grant, Q.C, Nancy G. Rubin
Berwick Electric Commission	Don Regan and Albert Dominie
Canadian Manufacturers & Exporters	Mike MacIntyre and Robert Patzelt, Q.C.
Consumer Advocate	John Merrick, Q.C., William Mahody and Nancy Brockway
Electricity Consumers Alliance of Nova Scotia	John Woods
GasWorks Energy Corp.	Dwight Jeans and John Reynolds
Halifax Regional Municipality	Mary Ellen Donovan and Julian Boyle
Heritage Gas Limited	Jason Haynes
Liberal Caucus Office (Nova Scotia)	Michel Samson and Ryan Grant
Province of Nova Scotia - Department of Energy	Stephen T. McGrath, Allan L. Crandlemire, Scott McCoombs and Richard Penny
Stora Enso Port Hawkesbury Limited and Bowater Mersey Paper Company Limited	George T.H. Cooper, Q.C David MacDougall

APPENDIX “B”

List of Witnesses

On behalf of	Witness
NSPI	Ralph Tedesco President and Chief Executive Officer
	Greg Blunden General Manager of Finance
	Alan Richardson General Manager Customer Service
	Robert Boutilier Director of Regulatory Affairs
STORA ENSO & BOWATER MERSEY	Fred Hussey Vice President Engineering and Services (Stora Enso Port Hawkesbury Limited)
	William Stewart Managing Manufacturing Services Manager (Bowater Mersey Paper Company Limited)
	Dr. Alan Rosenberg
AVON VALLEY et al.	Mark Drazen
CONSUMER ADVOCATE	Nancy Brockway
BOARD COUNSEL	Dr. John Stutz