

ORIGINAL

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(FS-2)

**Before The
Nova Scotia Utility and Review Board**

Re: Application for Approval of Load Retention Rate - P-871

NOVA SCOTIA POWER INC.

**Submission of
Electricity Consumers Alliance Of Nova Scotia
(ECANS)**

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NOVA SCOTIA UTILITY
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**NSPI Load Retention Rate Proposal
ECANS Intervention**

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1 **Section 1.0 - Summary of ECANS Position Re Load Retention Rates**

2
3
4 Though the vast majority of Nova Scotian's electrical energy needs are still
5 served by a single regulated monopoly, ECANS recognizes that Nova Scotia
6 Power Inc. is facing competition on two major fronts. Oil, as an alternative
7 energy source, has been the major competitor to electricity for space heating
8 and hot water heating since the early 1980's. This competition has been
9 primarily limited to domestic and commercial customers. Throughout the 80's
10 and 90's, Nova Scotia Power has experienced a significant decline in
11 marketshare of the space heating and hot water sectors.

12
13 In 1995, NSPI attempted to meet this competitive challenge by applying for a
14 domestic rate structure that significantly discounted a third energy block that
15 likely would have only applied to all-electric customers. Though not called a
16 Load Retention rate, the intent was to retain electrical load. Expert witnesses
17 at those proceedings agreed in principle with the intent of the proposed
18 domestic rate structure and that in the end, all customers would benefit from
19 retaining electric space heating and water heating load through the continued
20 contribution to NSPI's fixed costs. There was; however, concern expressed
21 that the particular rate design proposed would have disadvantaged other
22 customers in the same classification. Namely, low-usage customers which
23 might have seen increases in their annual cost of power by as much as 10%.

24
25 In the Board's final decision, it rejected NSPI's proposed domestic rate
26 design. The Board's rejection was not from the perspective of NSPI's need to
27 retain load for the benefit of all customers, but rather that the rate design
28 would have disadvantaged other customers and would not have created any
29 incentive to improve the NSPI's system load factor . Dr. Rosenberg stated
30 that:

31 *"The goals of regulation (or rate making) are generally agreed*
32 *to include: • fairness • public • acceptance • efficiency •*
33 *stability • cost minimization consistent with safe, adequate and*
34 *reliable service"*

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1 In the Board's opinion, a single block, TOU rate designed to retain electric
2 space heating and water heating load was more consistent with: 1) good rate
3 design criteria 2) NSPI's desire to improve the system load factor and more
4 efficiently utilize existing, lower cost generating capacity and 3) more likely
5 to benefit all other customers of NSPI.

6
7 In other words, retaining load which might otherwise have been lost to
8 competitive energy alternatives was deemed to be an appropriate response by
9 NSPI at the time. However, any rate design should not disadvantage any other
10 customer class or negatively impact on the overall efficiency of the power
11 system.

12
13 Today, ECANS recognizes that the Utility is facing a potentially greater
14 competitive threat with the advent of natural gas in the retail energy
15 marketplace. The threat of losing substantial load to competitive energy
16 alternatives and hence the need for Load Retention rates is even greater today
17 than in 1995. Natural gas as an energy source undoubtedly will directly
18 compete with electricity across a much broader customer base than oil. This is
19 particularly true for large industrial and commercial customers where there
20 may be opportunities for cogeneration projects supplying both process steam
21 or district heating and electricity needs.

22
23 To meet this new challenge (though it has been expected by everyone,
24 especially NSPI, for at least the past 10 years), it is reasonable that NSPI must
25 be able to offer customers incentives to retain their load and the associated
26 contribution to the Utility's fixed costs while not disadvantaging any other
27 customer classes. At the same time, there must also be a concern expressed for
28 the continued environmental burden associated with coal fired electricity
29 generation and other fossil fuel fired steam boiler systems in the Province.
30 Nova Scotia's contribution to international efforts to curtail the production of
31 greenhouse gases would likely be negatively impacted with a continued
32 reliance on coal fired generation particularly if high sulphur content coal is
33 burned. Natural gas fired, highly efficient electrical power generation and
34 process steam production would likely significantly reduce the environmental
35 burden associated with combustion gas emissions.

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1 It is therefore important to consider a broad set of criteria when evaluating the
2 **true costs** associated with energy alternatives and particularly electrical power
3 generation alternatives. If the projected, long term environmental costs
4 associated with each energy alternative are not factored into the evaluation
5 along with fuel costs, capital fixed costs and operating and maintenance
6 related variable costs, then a true picture of the impact on the Province as a
7 whole will not be realized. Establishing this impact picture would likely have
8 to be the role of Regulators rather than the parties (i.e. supplier/customer)
9 directly involved in the technical and financial evaluation of customer-specific
10 energy alternatives.

11
12 The fundamental question that needs to be answered is simply “*How will all*
13 *other customers of NSPI and the Province as a whole be impacted when*
14 *incentives to retain electrical load are applied to only the largest energy*
15 *consumers?*”.

16
17 These proceedings have essentially focused on this question. No one can
18 reasonably argue against NSPI being able to effectively compete in an ever
19 more complex energy market and for the broader good of all electricity
20 consumers in the Province. However, energy consumers have and will
21 continue to see an increase in supplier choices and options at the retail level
22 with both oil and natural gas. This is not the case with electricity. NSPI still
23 enjoys a natural monopoly in its service territory which accounts for in excess
24 of 98% of the electricity customer base in the Province. The remaining
25 customers are served by the Municipal Electric Utilities. There must be a
26 balance between the needs of electricity consumers, the Utility, other energy
27 stakeholders, the environment and the Province as a whole.

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Given all of the evidence and testimony that was presented during these proceedings, ECANS' position is that it does not object to the principle of customer-specific Load Retention Rates provided:

- .1 That Load Retention rates be based on accurate calculations of the cost of lost load in each case, and that their yield equals or exceeds NSPI's long-run marginal cost.*
- .2 That the remaining captive electricity consumers in Nova Scotia are not expected to carry the full burden of any revenue shortfall which may result either from large energy consumers choosing to leave the system or the implementation of Load Retention rates to keep them as part of the system.*
- .3 That any customer-specific Load Retention Rate is in fact limited to existing load at the time the rate is negotiated only and consistent with NSPI's IRP.*
- .4 That the true cost to the customer of an alternative energy supply be identified based on interconnection considerations and reliability levels.*
- .5 That, notwithstanding customer concerns with respect to the confidentiality of potentially sensitive information and data, the final approved LR rate (only) be in the public domain.*
- .6 That an environment that embraces Non-Utility Owned Generating capacity is fostered.*
- .7 That any Load Retention rates applied to the largest energy consumers do not negatively impact on the roll out and pricing of natural gas within the Province.*
- .8 That consideration of Load Retention rates not ascribe undue weight to similar rates in other jurisdictions where conditions vary from the Nova Scotian experience.*

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- 1 **.9 *That long term economic development in non-urban areas is not***
2 ***negatively impacted by the continuing reliance on traditional,***
3 ***centralized generation development strategies.***
- 4 **.10 *That the long term status and viability of existing non-utility***
5 ***generators are not negatively impacted if this Load Retention Rate is***
6 ***approved.***
- 7 **.11 *That Nova Scotia Power Inc. take a proactive approach and construct,***
8 ***own, operate and maintain highly efficient, cogeneration units for***
9 ***customers where there is a definite economic benefit from***
10 ***cogeneration whether or not Load Retention rates are approved.***

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Section 2.0 - Introduction to ECANS

The Electricity Consumers Alliance of Nova Scotia (ECANS) is a newly created non profit organization made up of members who share common interests on the issues relating to the use of electrical energy in Nova Scotia.

ECANS' mission is *"to promote the global competitiveness of the Nova Scotia economy through an efficient and competitive electricity market and to promote the development of a long term, integrated and sustainable energy strategy for the Province"*.

ECANS will be working hard to become a driving force in the Provincial energy sector and it wants to be recognized for its leadership, stewardship and professionalism. To this end, ECANS will be building relationships with all stakeholders in the Provincial energy sector. With respect specifically to the Utility and Review Board, it is ECANS' desire to work with the Board to ensure that the interests of energy consumers and the Province as a whole are represented and protected and that a healthy, dynamic and viable energy marketplace is created that is hallmarked by consumer choice, competitive pricing, reliable energy supplies and service, and environment stewardship.

Our membership represents a diverse group of electricity users in the industrial, commercial and institutional elements of Nova Scotia's economy. Although ECANS is still only in its formative stage, its members have taken a keen interest in these proceedings and they welcome the opportunity to present ECANS views on the proposed Load Retention Rate.

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Section 3.0 - ECANS Objection To The Process

Though a moot point at this time, we would like to register our objections to the Hearing schedule which was established by the Board. We believe that all interested parties should have full opportunity for reasonable and meaningful input into matters which concern the 'greater good' of the Province.

In our opinion, the timeline from public notification of NSPI's proposed Load Retention Rate to the notification deadline for intervention and filing arguments to the final public hearing process has been simply far too short for interveners to prepare adequately. It was unfortunate that the festive season was burdened with this regulatory process. ECANS could see no obvious, pressing matter that would have required this process to be conducted on such a tight timeline.

In reading through some of the interrogatory information, it appears that detailed discussions between the Board and Nova Scotia Power have been ongoing since September 1999. We respectfully request that, for future rate applications, the Board allow for adequate time during which the remaining stakeholders in the Province are afforded sufficient opportunity to think through the issues and draw conclusions.

The reality of natural gas for the vast majority of major energy consumers is still several years away. There appears to be no movement on the part of Government to create the framework for a competitive electricity environment anytime in the near future.

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Section 4.0 - ECANS' Position On The Proposed Load Retention Rate

.1 - Preamble

The North American and indeed the Global electricity marketplace is evolving into one driven by competition and consumer choice. Jurisdictions around the world are struggling with a broad set of issues as Legislators and Regulators must make informed decisions and develop sustainable strategies that will influence the way consumers purchase and utilize electrical energy as well as promote healthy economic development for the benefit of all stakeholders.

The imminent arrival of natural gas in the Province will lead to substantial changes in energy use and marketing. It will lead to a never-seen-before level of competition where many consumers will be inundated with sellers and marketers offering better deals. Energy users will, because of the process itself, become much more knowledgeable and sophisticated about energy matters. In fact, consumers will undoubtedly be spending significant amounts of time to ensure they are buying optimum energy packages. They will be moving from the current fragmented approach where fuel oil and electricity are purchased from one or more of several suppliers to one in which a cost effective 'converged' package is chosen only after detailed feasibility analyses which have identified the best option.

What Nova Scotia is about to experience is already happening in much of North America and Europe. The most noticeable part of this change can be found in the restructuring of electrical industries where monopoly utilities are being replaced with competitive marketplaces.

In ECANS' opinion, it is important that Nova Scotia Power Inc. remains healthy and financially viable during this period of change. Electrical energy has become a fundamental and integral part of life in Nova Scotia and it is in everyone's interests that the electricity supply remains reliable. ECANS also believes that the best interests of the Province as a whole and energy consumers will ultimately lie in an active and viable energy marketplace that:

- 1) encourages consumer choice
- 2) offers dynamic and integrated energy

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solutions for consumers and 3) encourages alternative energy sources
(particularly renewable sources and more environmentally friendly sources).

Further, it is our opinion, that an ***Integrated Provincial Energy and
Economic Development Strategy*** is needed, one that clearly establishes a
framework for competition in the energy sector, that maximizes benefits to the
consumer and with minimal regulatory burden. In the absence of such a
strategy, a potential tug-of-war between energy suppliers will impede the type
of healthy and sustainable energy sector that we believe is absolutely essential
for Nova Scotia to meet the economic challenges that lie ahead.

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.2 - ECANS' Statement of Position

Having stated the preceding, it is ECANS' position that we do not object to the principle of establishing Load Retention rates provided the concerns described in the following section are addressed.

Today, ECANS recognizes that the Utility is facing a potentially greater competitive threat with the advent of natural gas in the retail energy marketplace than oil has represented. The threat of losing substantial load to competitive energy alternatives and hence the need for Load Retention rates is even greater today than in 1995 when NSPI sought a domestic rate designed to retain electric space heating and water heating load. Natural gas as an energy source undoubtedly will directly compete with electricity across a much broader customer base than oil. This is particularly true for large industrial and commercial customers where there may be opportunities for cogeneration projects supplying both process steam or district heating and electricity needs.

To meet this new challenge (though it has been expected by everyone, especially NSPI, for at least the past 10 years), it is reasonable that NSPI must be able to offer customers incentives to retain their load and the associated contribution to the Utility's fixed costs while not disadvantaging any other customer classes. At the same time, there must also be a concern expressed for the continued environmental burden associated with coal fired electricity generation and other fossil fuel fired steam boiler systems in the Province. Nova Scotia's contribution to international efforts to curtail the production of greenhouse gases would likely be negatively impacted with a continued reliance on coal fired generation particularly if high sulphur content coal is burned. Natural gas fired, highly efficient electrical power generation and process steam production would likely significantly reduce the environmental burden associated with combustion gas emissions.

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1 It is therefore important to consider a broad set of criteria when evaluating the
2 **true costs** associated with energy alternatives and particularly electrical power
3 generation alternatives. If the projected, long term environmental costs
4 associated with each energy alternative are not factored into the evaluation
5 along with fuel costs, capital fixed costs and operating and maintenance
6 related variable costs, then a true picture of the impact on the Province as a
7 whole will not be realized. Establishing this impact picture would likely have
8 be the role of Regulators rather than the parties (i.e. supplier/customer)
9 directly involved in the technical and financial evaluation of customer-specific
10 energy alternatives.

11
12 The fundamental question that needs to be answered is simply “*How will all*
13 *other customers of NSPI and the Province as a whole be impacted when*
14 *incentives to retain electrical load are applied to only the largest energy*
15 *consumers?*”.

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.3 - Provisoes

As stated in the previous section, ECANS' has identified a number of provisos that in our opinion need to be addressed. Some can be addressed directly by the Board in its decision on this rate application. Others are much broader in nature and would require legislative amendments as well as Board approval and action on the part of NSPI.

.1 That Load Retention rates be based on accurate calculations of the cost of lost load in each case, and that their yield equals or exceeds NSPI's long-run marginal cost.

ECANS position is that any specific load retention rate should be equitable for all customers. This requires that the cost of lost load be calculated accurately. ECANS notes with concern that the example given in Mr. Melvin Whalen's testimony calculates the savings in the cost of lost load if the customer is retain as opposed to leaving the system, as the marginal cost of energy used. This is an under-estimate. For example, reliability costs can be recovered by a suitable charge if the customer remains connected , or will be reduced otherwise. As well, load reduction of the magnitude cited in the example would enable NSPI to decommission a thermal unit with savings in fixed costs.

It appears that the real saving due to load loss would approximate NSPI's long-run marginal cost (LRMC). Short-run marginal cost does not reflect the fact that customers served under Load Retention rates will continue to have an impact on NSPI's Integrated Resource Plan (IRP). ECANS accordingly advocates that LRMC be used as a floor level for all Load Retention rates.

Dr. Rosenberg, in his direct testimony to the Board, affirmed that the price offered by what he refers to as CARS (Competitive Alternative Rates) should not be less than is necessary to retain the customer. His position on this point; however, is that it is not necessary to state the requirement since it would be "*the natural outcome of vigorous and effective negotiations on*

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1 *the part of NSPI and the customer*". ECANS cannot support this
2 contention. Any negotiation at this point in time, is likely to be directed
3 more by applied leverage (of a variety of types), by one party or the other,
4 than by a *Win-Win-Win spirit* of negotiation.

5 In December 1995, Dr. John H. Chamberlin (on behalf of the NSUARB)
6 discussed general rate design considerations. His position then was "*that*
7 *for utility rates to be considered efficient, they must reflect marginal*
8 *costs*". He went on to discuss short-run vs long-run marginal cost
9 considerations. His position essentially appeared to be that if the Utility
10 expects to continue to supply the customer far into the future, then long-run
11 marginal costs are more appropriate for rate design.

12 It would therefore seem a reasonable expectation that NSPI would want to
13 keep large power consumers (in particular) over the long term. If not, why
14 even bother with a Load Retention rate? Long-run marginal costing gives
15 the consumer better energy price signaling for any future, long term capital
16 expansion commitments while at the same time better reflecting the
17 Utility's IRP and considerations such as Demand Side Management
18 (DSM), generation capacity development to meet both operating and
19 strategic reserve requirements and intertie capacity outside NSPI's service
20 territory.

21 In the Boards' Decision (March 4, 1996) pertaining to NSPI's 1995 Rate
22 Application Submission, it was the position of the Board that "*rates should*
23 *never be set below short-run marginal cost and that long-run cost*
24 *consideration should be used as guide in deciding the degree and extent to*
25 *which long-run cost consideration should be used to temper wide*
26 *fluctuations that can exist in the year-to-year levels of short-run marginal*
27 *costs. The Board must exercise judgment in assigning the appropriate*
28 *weights to short-run and long-run marginal costs*".

29 A considerable amount of time during these proceedings was committed to
30 seeking clarification of NSPI's intended methodology for calculating the
31 *indifference* point for a specific customer. ECANS' is still concerned that

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1 the indifference point may or may not be closely aligned to a simple *cost of*
2 *generation* equality point. The customer's indifference point may include
3 input variables such as service reliability and quality issues that are difficult
4 to affix a cost or value to. Conversely, NSPI's indifference point might
5 include such things as location of the load on the power system, the
6 magnitude of potential lost load, and the contribution the customers is
7 currently making towards fixed costs. In other words, the input variables
8 can have a significant impact on the calculated indifference point if they are
9 not well defined.

10 Given Mr. Huskison's evidence that the negotiated price, terms and
11 conditions of any customer-specific Load Retention rate would be
12 submitted to the Board for approval, ECANS urges the Board to carefully
13 scrutinize the submitted documentation and evidence with respect to all
14 input cost variables to ensure that a uniform criteria is applied.

15 There was also considerable discussion during these proceedings relating to
16 NSPI's approach to developing Cost of Service Studies. The position taken
17 by NSPI did not satisfy ECANS' concerns. NSPI indicated that Load
18 Retention rate customers would be treated differently than other customers
19 in that all other rate classifications will have specific cost recovery/class
20 revenue ratios. The Load Retention rate customers would not have specific
21 cost recovery/revenue ratios identified. It is a concern that there would
22 apparently be no way to truly determine whether or not all of NSPI's
23 customers are contributing fairly to NSPI's fixed costs and that the revenue
24 generated by all customer classes reasonably recovers the cost to service the
25 customer.

26 It appears that NSPI is not required to file Cost of Service Studies with the
27 Board unless they are applying for a broad based rate application. ECANS
28 believes that, given the nature of this rate application and the potential
29 impact on all other customer classes, a current Cost of Service Study would
30 be valuable in determining the impact of both having and not having this
31 rate. We therefore urge the Board to direct NSPI to file a current Cost Of
32 Service Study which would be in the public domain.

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1 ***.2 That the remaining captive electricity consumers in Nova Scotia are not***
2 ***expected to carry the full burden of any revenue shortfall which may***
3 ***result either from large energy consumers choosing to leave the system***
4 ***or the implementation of Load Retention rates designed to keep them as***
5 ***part of the system.***

6 NSPI has not submitted any rationalization for why the remaining
7 customers of NSPI should carry the full financial burden of any revenue
8 loss in the event that a significant amount of existing load is withdrawn
9 either as a result of self-generation or alternative energy conversion
10 processes. Further, NSPI has not presented any alternative mitigation
11 strategies to address revenue shortfalls other than to simply increase rates.
12 ECANS believes this to be an unrealistic expectation and urges the Board
13 to ensure a balanced transference of any financial burden to all
14 stakeholders.

15 Mr. Jatinder Kumar, in his direct evidence to the Board, affirms that
16 Utilities are not guaranteed to recover all of their lost revenues or increased
17 costs. He goes on to suggest one possible split of cost transference between
18 Interruptible LR customers (25%), NSPI Shareholders (25%) and other
19 customers (50%). While ECANS does not necessarily support this
20 particular split, we do strongly support the position that there should be no
21 *guaranteed* recovery of revenue shortfalls as a result of any individual
22 customer or customer class making a strategic business decision to
23 significantly reduce energy purchases from NSPI.

24 ECANS also agrees in principle with Mr. Kumar's contention and NSPI's
25 response to UARB IR-28 that economic development as a result of the
26 improving global economy and the availability of natural gas locally will
27 naturally result in increasing demand for electricity. Increasing demand for
28 electricity would likely offset any revenue shortfalls as a direct result and
29 implications of either the approval or rejection of this Load Retention rate
30 application.

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1 ***.3 That any customer-specific Load Retention Rate is in fact limited to***
2 ***existing load at the time the rate is negotiated only and consistent with***
3 ***NSPI's IRP.***

4 In NSPI's submission to the Board, under point (4) of the Availability
5 statement, it is clear that a customer-specific Load Retention Rate shall not
6 apply to new load. ECANS is concerned that given the probable lag time
7 between when NSPI and a customer may enter into negotiations for a Load
8 Retention rate and the time an alternative energy source might actually be
9 available to displace purchases from NSPI's system, that a customer's
10 electrical load condition may have changed. Any increase or decrease in
11 electrical load and energy consumption would likely impact on the
12 *continued cost of service* vs. *withdrawal of service* analysis used in the
13 rate negotiation.

14 Mr. Jatinder Kumar, in his direct testimony to the Board, states that "*there*
15 *is no economic reason for giving the LR rate to any customer before the*
16 *customer can have self-generation*". He goes on to state that "*the LR rate*
17 *should not extend beyond the period when NSPI installs or acquires more*
18 *long term capacity especially if the marginal cost of this capacity is higher*
19 *than the LR rate revenue*".

20 ECANS believes then that any negotiated Load Retention rate must reflect
21 the prevailing customer load conditions and the Utility's Integrated
22 Resource Plan (IRP) at the earliest time the customer could take advantage
23 of self-generation. Simply amortizing the contract term over a longer period
24 with a net reduction in the Load Retention rate discount will likely
25 introduce complication in both the negotiating process and the final agreed
26 terms and conditions of a contract. The mechanism by which customer-
27 specific cogeneration projects are first analyzed on merit and then the terms
28 and conditions of a Load Retention rate are negotiated should be uniformly
29 applied as much as possible to each case. ECANS recognizes that any
30 mechanism to accomplish this will be complex but nonetheless necessary.
31 This is an area that our membership will be investigating in greater detail.

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1 There is also no indication in NSPI's application for the Load Retention
2 rate as to whether the applicable electric load will be interruptible. It is
3 assumed that Load Retention rates applied to existing load will continue to
4 be interruptible in design if the load is currently billed under any of NSPI's
5 interruptible rates. If a discounted Load Retention rate should provide an
6 incentive for a customer's load to be billed on a firm basis, it is assumed
7 that the provision for a five year advance notice to revert to a firm load
8 basis would apply. Any conversion of significant industrial load from an
9 *Interruptible* to a *Firm* basis would likely have a significant impact on all
10 customers.

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.4 That the true cost to the customer of an alternative energy supply be identified based on interconnection considerations and reliability levels.

Any large industrial or commercial customer that may have a potential interest in an alternative energy supply for electricity generation must also recognize all of the direct and indirect costs for operating the generator. It is highly unlikely that any customer contemplating self-generation would totally withdraw from NSPI's power grid. There would be an expectation that reliability of the electrical supply would, as a minimum, be equivalent to that with NSPI supplying all electrical power needs. For a customer to realize this level of reliability with 100% self-generation, there would have to be sufficient redundancy to ensure that both scheduled and breakdown out-of-service equipment maintenance can be carried out. This redundancy would likely be cost prohibitive and make any self-generation uneconomical.

It would therefore seem reasonable to assume that any customer considering self-generation would have to maintain an interconnection with NSPI's power grid. ECANS urges the Board to ensure that all applications under an approved Load Retention rate are treated the same in terms of identified costs to maintain an interconnection with NSPI's grid.

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1 ***.5 That, notwithstanding customer concerns with respect to the***
2 ***confidentiality of potentially sensitive information and data, the final***
3 ***approved Load Retention rate (only) be in the public domain.***

4 As stated in our opening discussion, ECANS represents a broad cross
5 section of power consumers. Confidentiality issues are naturally more of a
6 concern with those members actively engaged in highly competitive
7 endeavors. The consensus of ECANS membership is that confidentiality of
8 sensitive business information and data used in any negotiation of a LR rate
9 must be respected. However, it is also the position of ECANS that once a
10 customer-specific Load Retention rate has been approved by the Board, the
11 rate itself becomes part of the public domain. There is no reasonable
12 justification for keeping the energy rate itself confidential, only the
13 supportive documentation and discussions.

14 NSPI still enjoys the privileges of a regulated monopoly with respect to
15 how it conduct's it's business and generate revenues. Therefore, it would be
16 a reasonable assumption that Board approval of a customer-specific Load
17 Retention rate would not negatively impact other power consumers.
18 However, it would also be reasonable to assume that non-published,
19 customer specific rates would likely introduce a significant level of mistrust
20 and apprehension on the part of other consumers.

21 There is certainly nothing wrong with healthy competition. There is also
22 nothing intrinsically wrong with some consumers receiving discounted
23 rates. However, there should be no confusion that Load Retention rates,
24 while perhaps approximating a competitive electricity market place for
25 those customers receiving the benefit, are not a substitute for a competitive
26 electricity marketplace. It would likely have to be a leap of faith for all of
27 the other captive customers to see any direct benefit to them. Natural
28 competitive forces within the electricity market place do not and will not
29 exist for the vast majority of consumers for some time to come yet. For the
30 regulatory process to be seen and perceived as being fair and equitable,
31 there must be final disclosure of the approved rate. If not, then in our
32 opinion, the system becomes flawed and opaque to the general public.

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1 ECANS respectfully asks the Board to consider the following quotation
2 regarding transparency of tariffs from a report by the International Energy
3 Agency; *“In order to facilitate public control of electricity prices, many*
4 *countries require that tariffs be transparent. Behind this rather broad*
5 *concept is the aim of securing that the differentiation of prices between*
6 *classes of customers is based on the difference in costs of serving them and*
7 *that utilities justify these cost differences in a way that is understandable to*
8 *the general public. In order to be effective, the requirement for a*
9 *justification that tariffs are differentiated according to costs is often linked*
10 *with an obligation to publish tariffs.”*

11 This quote comes directly from **An IEA Report on Electricity In IEA**
12 **Countries.** Canada is a member of IEA and was a participant in the study.

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.6 That an environment that embraces Non-Utility Owned Generating capacity is fostered.

Jurisdictions around the world that have been successfully restructuring their electrical industries have done so with an integrated strategy of embedded Non Utility Generators (NUGS). These NUGS are essentially comprised of three categories:

- i. Private operators who have purchased existing generating capacity from Utilities (which in some instances have been legislated to divest generating capacity to deal with the stranded asset issue).
- ii. Private operators who have constructed new, efficient generating capacity (in many instances based on renewable energy sources)
- iii. Industrial self-generation and cogeneration.

All of the net surplus capacity of this installed generation is offered for sale to consumers through local Power Pools and Independent Market Operators of some description.

This dynamic approach to a long term, electrical generation strategy ensures that consumers always have choices driven by competitive and technologically advanced and environmentally friendlier sources of electrical energy. Utilities, in many instances, have accepted that they cannot continue to maintain their regulated natural monopolies and that consumer choice in a competitive marketplace is the driving force behind change. In some instances as well, Utilities have also recognized that they cannot expect consumers to carry the burden of recovering ***Stranded Assets*** that can no longer compete in an open marketplace. The impact of business decisions made in the past (which may very well have been sound decisions in the context of the time) has not been carried forward into the future. While someone obviously has to repay the debt associated with past business decisions, it should not be automatic that it is naturally the

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1 consumer who bears the responsibility for past decisions that they had
2 neither input into or influence over.

3 In the United States for example, at the end of 1998, 12% of the total
4 installed generating capacity was owned and operated by NUGS. This was
5 up from 9% in 1997 as the electric industry restructuring process continued
6 to evolve. Though we do not have the supportive data available, it is likely
7 that this figure will have increased when looking at 1999 in review. It is
8 even more interesting to look at the individual State level where as of the
9 end of 1998, 4 states had over 45% of their generating capacity in the hands
10 of NUGS (California, Maine, Massachusetts and Rhode Island).

11 While ECANS does not object to appropriately structured Load Retention
12 rates in principle, we also see the value in fostering an environment that
13 embraces non-utility generators. The long term value of a distributed and
14 diversified generation mix should not be overlooked by the Utility and the
15 Board.

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1 ***.7 That any Load Retention rates applied to the largest energy consumers***
2 ***do not negatively impact on the roll out and pricing of natural gas within***
3 ***the Province.***

4 While ECANS has no specific knowledge of Semptra Atlantic Gas Inc.'s
5 development strategy, it would be reasonable to assume that the potential
6 for natural gas fired, cogeneration and self-generation has to some extent
7 been factored into the natural gas distribution roll-out strategy.

8 It is therefore a concern that Load Retention rates offered to major
9 industrial energy consumers not result in upward pricing pressures and
10 delay the availability schedule for natural gas being supplied via the
11 Provincial distribution franchisee. Those major energy consumers that
12 likely have an optimal heat sink for combined-cycle cogeneration would
13 also have a significantly higher gas demand. The conversion of existing
14 process steam or heating systems alone to natural gas, without the
15 incremental benefit from electricity generation, may not be economically
16 justifiable until such time as emissions standards are enforceable. As a
17 result, from a social consciousness perspective, the Province as a whole
18 may not benefit as much from an environmentally friendlier energy source.

19 ECANS would like to see a move toward integrated (bundled) solutions for
20 consumer's energy needs and assurances that the potential loss of
21 significant, incremental natural gas sales not impact on either the price or
22 delivery scheduling. This will mean that energy suppliers will have to work
23 together to offer creative solutions for consumers.

24 We therefore respectfully urge the Board to consider the merits of
25 establishing a mechanism whereby any combination of electricity, natural
26 gas, oil, waste wood, etc. that provides the optimal, integrated energy
27 solution for a consumer can be offered. ECANS will be addressing this area
28 of interest with its membership.

29

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1 ***.8 That consideration of Load Retention rates not ascribe undue weight to***
2 ***similar rates in other jurisdictions where conditions vary from the Nova***
3 ***Scotia experience.***

4 ECANS has conducted it's own review of those Utilities noted by NSPI in
5 their rate application as well as those Utilities that along with NSPI are
6 members of the Northeast Power Coordinating Council (NPCC). ECANS
7 concurs with Mr. Jatinder Kumar's review as given in his direct testimony
8 before the Board.

9 Most, if not all, of the Utilities NSPI has cited as having some form of
10 Load Retention Rates are already operating to some degree in a competitive
11 marketplace. As well, many are converged energy suppliers providing both
12 electricity and natural gas to consumers. The implications of this fact are
13 obvious in that these Utilities are able to offer *bundled* energy solutions for
14 consumers without necessarily limiting or discriminating one energy source
15 against another.

16 It would also appear that the majority of the Utilities noted are offering this
17 type of rate 1) as part of a broader economic development strategy with
18 several levels of Government or 2) to retain load within a specific
19 jurisdiction where there is a real threat of the load physically leaving the
20 jurisdiction but without necessarily impacting on other energy sources. The
21 compounding concerns in these jurisdictions are the loss of jobs along with
22 the economic impact in the local communities, tax implications, etc.
23 Electric power sales may not necessarily be a major concern in and of itself.

24 In a few jurisdictions, Electric Utilities are specifically targeting electric
25 consumers where there may be a concern for cogeneration or alternative
26 energy conversion processes displacing electricity purchases. However, the
27 majority of these situations also reflect a more developed competitive
28 energy marketplace and are likely to disappear when Retail competition
29 becomes entrenched.

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1 Of particular note is the Operating Region of the North American
2 interconnected, bulk power grid that NSPI belongs to; namely, the
3 Northeastern Power Coordinating Council (NPCC). Within this area are a
4 number of GENCOS, TRANSCOS and DISCOS in the U.S. as well as
5 NSPI, NB Power and Hydro-Quebec. With the exception of Central Maine
6 Power, there would appear to be no existing load retention rates in any of
7 the member Utilities that are specifically directed at alternative energy
8 sources. Where there are published load retention rates, the rates are
9 intended to apply to only those situations where is a real threat of the
10 customer either commercially failing or relocating to another jurisdiction.
11 Some Utilities are applying economic development incentive rates as part of
12 a broader initiative to encourage the expansion of existing businesses and
13 the establishment of new businesses.

14 In ECANS opinion, there is limited value to looking at other jurisdictions.
15 We therefore respectfully urge the Board to exercise caution in assigning
16 any comparative significance to Load Retention rates offered in other
17 jurisdictions.

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.9 That long term, economic development in non-urban areas is not negatively impacted by the continuing reliance on traditional, centralized generation development strategies.

In an electricity marketplace that still relies exclusively on centralized, generating facilities with a networked transmission grid and radial power distribution system, consumers in high density, urban areas are more likely to benefit from economic expansion and development. To the extent that electricity can dictate the economic development strategies of individual companies or organizations, ECANS is concerned that the continued reliance on the traditional Utility system model may naturally tend to discourage industrial expansion and development in the more rural areas either due to power system capacity limitations or reliability concerns.

There will likely be occasions where the most viable (or perhaps only) option for a particular power consumer to continue to expand will be to install self-generation or cogeneration regardless of whether a Load Retention rate is available. As such occasions arise, there should be a mechanism for the accelerated recovery of capital investment for those companies that, for one reason or another, still see a technical or operational benefit from an alternate energy source. ECANS will be exploring this area in greater detail and would be pleased to submit to the Board a proposal at a later date.

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1 ***.10 That the long term, status and viability of existing non-utility generators***
2 ***are not negatively impacted if this Load Retention Rate is approved.***

3 In the early 1990's, this board mandated NSPI to actively seek up to 63
4 megawatts (net) of interconnected non-utility generation. At the time, there
5 was considerable interest and proposals totaling more than the 63
6 megawatts were filed with the Utility. Ultimately, only a very few proposals
7 came to fruition for one reason or another. Approximately 30 megawatts of
8 non-utility generation came on stream. Of that total, nearly 90% is
9 contributed from one source, the former Brooklyn Energy Company in
10 Milton, N.S.. The remainder is comprised of only a handful of small scale
11 generators with the largest being in the order of 1.2 megawatts.

12 ECANS strongly supports a balanced approach to the application and the
13 protection of non-utility generators. With limited or no growth in
14 independent power production (whether for self-generator or export
15 purposes), the small base of existing cogeneration operations will have
16 limited leverage in the integrated energy sector. We do not believe this is
17 healthy for the industry over the long term. These non-utility generators are
18 contributing positively to the day to day operation of NSPI's power
19 network. This is particularly true for cogeneration interconnected at the
20 distribution network level and in more rural areas.

21 Section 48 (3) of the ***Public Utilities Act*** specifies that when NSPI applies
22 to the Board to increase generating capacity to meet forecasted load growth,
23 the Board shall consider the ability of private power producers to supply a
24 portion of the increase capacity.

25 In ***An Act Respecting the Privatization of the Nova Scotia Power***
26 ***Corporation***, section 14 maintains the commitment of the Utility to
27 purchase up to 63 megawatts of power from independent power producers.
28 The Act also establishes in section 15 a goal that NSPI shall purchase a
29 minimum of 5% of its total electricity capacity from non-utility generators.
30 Though not explicit in the Act, it is assumed that the intention was to
31 continue to utilize and promote indigenous generation.

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1 From NSPI's response to Undertaking U-2, it is clear that the contribution
2 of indigenous non-utility power production to satisfying the energy needs of
3 Nova Scotians is falling far short of the target. In 1999, only 1.5% of the
4 total energy needs of Nova Scotians was supplied by indigenous non-utility
5 power production.

6 Whether intentional or not, it would be an understatement to suggest that
7 the current environment in Nova Scotia has not been supportive of the
8 existing privately owned, interconnected generation or the establishment of
9 new privately owned generating capacity. Considerable financial risk has
10 been assumed by these generators and they either need assurances that their
11 investments can be recovered through long term and equitable purchase
12 contracts with the Utility or, alternatively, direct access to consumers.

13 ECANS respectfully seeks assurances from the Board that existing, non-
14 utility generators will continue to be embedded in NSPI's operational
15 planning strategy with a return to the owner that reflects appropriate
16 marginal costs for generation, transmission and distribution (depending
17 upon the area served by the NUG) as well as displaced transmission (and
18 distribution losses where applicable) and any other applicable avoided
19 capital expenditures.

20 We would also urge the Board to direct NSPI to actively seek efficient
21 cogeneration projects up to an aggregate of 63 megawatts and enter into
22 meaningful negotiations with the project principals for energy purchase
23 contracts that reflect the value of the generation into the area served by the
24 cogeneration facility.

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1 ***.11 That Nova Scotia Power Inc. take a proactive approach and construct,***
2 ***own, operate and maintain highly efficient, cogeneration units for***
3 ***customers where there is a definite economic benefit whether or not***
4 ***Load Retention rates are approved.***

5 ECANS supports the position that for businesses, institutions, etc. to
6 operate effectively in the reality of the Global Economy, they must focus on
7 fundamental core activities. Producing electricity in any significant
8 quantities is best done by those who are experts in the field and where
9 electricity generation is part of their core business. There will likely be
10 opportunities for Nova Scotia Power Inc. to take the lead and enter into
11 joint ventures with major power consumers to build, own, operate and
12 maintain optimally sized, highly efficient cogeneration units.

13 ECANS believes that this approach to offering competitive, integrated
14 energy solutions for a select few customers would more likely realize a
15 much broader benefit to all power consumers than a Load Retention rate
16 designed to keep them from withdrawing from the power system.
17 Aggregation of these smaller scale, distributed generators would likely
18 advance the decommissioning of the least efficient of NSPI's existing fossil
19 fuel fired generating units. The resulting reduction in the cumulative,
20 environmental burden as a result of displacing both less efficient electric
21 power generators and boiler systems for process steam or space heating will
22 benefit all environmental stakeholders in the Province.

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Section 5.0 - Conclusion

In conclusion, it is the position of ECANS that Load Retention rates in principle may be an effective means for a Utility to meet challenges presented by competition from alternative energy sources. However, ECANS cannot fully endorse the Load Retention rate as proposed by Nova Scotia Power Inc. without the concerns raised being addressed to the satisfaction of the membership.

ECANS acknowledges that the Board faces a tremendous challenge. On the one hand, there is the need to ensure the financial viability of the Utility which in turn benefits the Province as a whole. On the other hand, the Regulatory process for the electricity sector should not directly or indirectly impact on the roll-out and pricing of natural gas as an alternative energy source. This would obviously be counterproductive over the longer term.

We also see this Hearing as an opportunity for the Board to make a forward looking decision and one that will complement a framework for the ultimate restructuring of the electric industry in the Province.

We sincerely trust that our input into this Regulatory process has been insightful and will ultimately help to bring balance to the Board's final decision. We sincerely appreciate the opportunity to share our membership's needs and concerns with the Board. Finally, as part of ECANS mandate, we would certainly offer any assistance to the Board that may be appropriate in matters relating to the electric industry in Nova Scotia.