



Presentation to the
New Brunswick Energy
Commission

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**Presentation to the NB Energy Commission
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Good afternoon,

My name is Eric Marr, President & CEO of Saint John Energy and with me are Marta Kelly, Vice President, Finance & Administration and Dana Young, Regulatory Affairs officer.

First of all, I wish to thank the Commission for allowing our submission to be considered as part of your task of recommending a ten year energy plan for New Brunswick. This plan, if properly crafted and applied, will act as a guide for all energy producers and consumers allowing them to make informed decisions in the future. It is extremely important that, within your recommendations, all aspects of the use of energy in our daily lives be considered in order to provide fair and reasonable access to this vital resource by all consumers.

My comments today are formulated around the points of understanding highlighted in the “Consumer Backgrounder on Energy” paper.

To begin,

Environmental Considerations

Carbon emissions from the burning of fossil fuels are a major concern in today’s world. Electricity generation in New Brunswick was a large contributor but has improved considerably over the past few years with the minimized use of fossil fuel, the application

of scrubbers at Dalhousie, Belledune and Coleson Cove and the addition of numerous renewable sources. The return to service of the Point Lepreau nuclear plant will help to maintain a relatively low emissions profile.

Future in-province supply will most probably come from natural gas generators which can be built relatively quickly and economically.

In the longer term, conversion to natural gas of the existing plants at Coleson Cove, Dalhousie and Belledune may be considered.

It is important that care is taken not to overreact in the short-term by paying too high a price for cleaner energy sources when it is not a legislative requirement. We must meet our national commitments to green house gas reductions but only at the quantities and pace required if we are to strive for the lowest electricity rates possible.

The prospects of a regional approach to energy access and development should be pursued to maximize supply options and minimize cost to the consumer. Also long term regional contracts should help promote economic development by stabilizing costs relative to fluctuations based on external fuel markets.

Energy Options

The history of electricity use as a residential heat source began in the days of low and stable electricity costs and offered much more convenience to the homeowner. It was highly encouraged during the late 70's and 80's due to rising fuel oil prices and the lack of an alternate fuel supply. When natural gas became available, it was fraught with volatile pricing and high conversion costs. This has led to the current situation where

72% of the electricity consumption in New Brunswick is by residential, commercial and light industrial consumers which also account for 80% of NB Power's revenue. By contrast, the Large Industrial users consume 28% of the electricity produced and contribute 19.5% of NB Power's revenue. *(taken from NB Power's submission to the EUB, May 28, 2010)*

When comparing electricity prices across Canada, New Brunswick prices are only higher than those provinces blessed with abundant natural energy resources.

It is noted that New Brunswick has a very diverse supply of primary sources to produce electricity which gives us an ability to mitigate the impact of one source becoming scarce or high priced. In order for the consumer to take advantage of this, they must use electricity as their main energy supply.

Generation

The future supply of electricity can come by various ways. Genco could build more capacity; a merchant plant could be contracted; PPA's could be negotiated with suppliers inside or outside the province; energy conservation programs could be used; or consumers could utilize distributed generation to supply their own needs. Each of these alternatives has benefits and challenges.

We feel that the best solution will probably be a mix of all of these in order to maximize benefit while minimizing risk.

In general:

- contracts for supply will be market priced, although hopefully avoiding market volatility;
- conservation has limits and thus is only a deferral action;
- distributed generation may become more feasible;
- generation ownership allows for the most control and therefore is the most secure alternative.

Transmission

New Brunswick has an enormous asset in its transmission infrastructure. It is one of the most reliable and well operated systems in North America. New Brunswick's geographic position makes our transmission grid a very useful path to interconnect our neighbouring electrical supply systems. Advantage must be taken from these circumstances. We would suggest:

- That NBSO seek tariffs that are fair to all parties and compliant with FERC regulations;
- That an independent tariff for use of the Transco grid be maintained (versus a postage stamp rate) to maximize the benefit of geographic location;
- That generators be responsible for direct connection costs to the established grid in order to avoid subsidy;
- That the cost of reliability based upgrades should be within the tariff rates while capacity upgrades should be borne by the users and recovered over time.

Distribution (Customer Service and Rental Sales)

Saint John Energy's distribution system, similar to NB Power's, has been designed and built, over the last thirty years, for electric heat. As a result, it is very strong and consequently reliable.

It is recognized that electric heating causes a peak demand to occur in the coldest time of the year, but to imply that it is the sole driver of peaking is not correct. All classes of customer contribute to peak demand and this is factored into the applicable rates through a Cost of Service approach.

Over the last few years and into the near future, peaking demand is not an issue as adequate capacity exists and thus it is only fuel costs that are incurred which are related to energy more than demand.

In the longer term:

- Other jurisdictions have found a good response from public education and advertising regarding critical time curtailment versus time-of-use rates. If coupled with "Share the Savings" incentives based on reduction in overall consumption, education and awareness could bring positive results.
- Most residential and smaller commercial customers are not able to respond to time based pricing methods as they are not at home or cannot interfere with employee or customer comfort during business hours.
- With the advent of two-way customer communications, the supply authority may be able to take positive load reduction actions in response to peaking conditions in a manner that would be independent of the customer. Water heaters, air conditioners, refrigeration compressors, space heating, etc.

could have their operations deferred to an off-peak time by sending a control signal. This will be one of the benefits of the Smart Grid technology.

- Time-of-Use rates, if used, should be voluntary and available to all customer classes.

Natural Gas

Although Saint John Energy is not directly involved with the supply of natural gas, we would like to offer the following observations:

- There appears to be a definite customer reluctance to use natural gas likely due in part to its history of price volatility. The commodity cost is based on the U.S. market with little recognition of local resources;
- The present subsidy on residential usage will disappear as the distributor is required to recover full costs of product delivery;
- Electrical generation by natural gas fits easily into our present situation of supply options. It is also readily constructed with a relatively small impact on the community;
- Electricity used for heating gives the consumer access to all fuel types (hydro, nuclear, natural gas, wind, tidal, bio-mass, etc.) with the best mix at any one time being controlled by the System Operator. The consumer has the security of not being locked into a single source.

Petroleum Products

The use of fuel oil for home heating has diminished over time and will likely continue to do so as the price continues to rise.

The cost of heating with electricity or natural gas should be lower than fuel oil and have less impact on the environment.

Natural gas is an easy conversion where the gas distribution system is available and electric heat may be the best alternative in other areas since the cost of losses sustained in the generation of electricity from natural gas are likely to be less than the expansion of the gas distribution system throughout the province.

With respect to vehicular fuels, a portion of the existing or a new tax could be utilized to subsidize public transportation and promote the use of electric vehicles. Inter city, electric, rapid rail services should be considered in the longer term.

Energy Efficiency

The efficient use of energy should be important to every New Brunswicker.

Saint John Energy has extensively promoted energy conservation and efficiency over the past through a number of programs and services. We have sponsored:

- Energy conservation advertising for the past six years;
- CFL lighting through a large giveaway event;
- A Christmas decorative lighting exchange;
- Energy conservation seminars for commercial customers;
- Efficient appliances through a refrigerator roundup and Energy Star rebates;
- Cold water washing thorough a clothesline and detergent giveaway;
- Energy conservation at home through helpful kit giveaways.

The public has, and continues to look to their electric utility for energy savings advice. To this end, in addition to focused programs, we have had a dedicated energy advisor for a number of years and have offered a variety of energy conservation programs to our customers.

We feel that Efficiency New Brunswick has played an important role in the residential, commercial and industrial energy conservation efforts across the province over the last five years. However we feel that the cost of delivering energy efficiency programs should diminish over time as the need for upgrade assistance is fulfilled. Efficiency New Brunswick should remain an information resource to assist new developments.

In the short to midterm, the cost of Efficiency New Brunswick should not exceed the present value of savings achieved by the consumer after payback of their own investment.

Ultimately the cost of Efficiency New Brunswick should be borne by all energy users (electric, oil and gas) based on \$/BTU basis. It should not rest solely on the electricity ratepayer. The emphasis should not be on peak demand reduction only but on overall energy conservation.

Regulatory Structure

With respect to energy, the Energy and Utilities Board has the critical role of regulating the operations and rates of the providers of electricity, natural gas and petroleum products in New Brunswick.

The parties that appear before them are large, monopoly or quasi-monopoly organizations whose operations affect all New Brunswickers and therefore must have public confidence.

The Energy and Utilities Board filing process is a necessary and integral part of assuring fair and reasonable rates within the province.

Energy is so important to our daily lives that, at least in the case of electricity, it must be regulated to establish a default supply and a benchmark rate against which competition can occur.

The Energy and Utilities Board has acted and must continue to act as an arbiter of energy related disputes between parties.

The cost of an Energy & Utilities Board hearing is a burden on the ultimate consumer and therefore the benefit must be realized by the consumer. If there is little or no benefit then there should equally be little or no cost.

Thus it is Saint John Energy's position that full hearings are not necessary for small, inflationary rate adjustments or those which are driven by global energy price fluctuations that can be recognized within a formulated approach.

With respect to the cost and role of a public intervener, it is our belief that due to the lack of knowledge of the complexities of the energy industry; the time commitment and the lack of resources of the small consumer, it is extremely important to have a strong, knowledgeable representative looking after their interests. This person should be in the position for a defined term so as to be independent. Outside the Energy and

Utilities Board processes, the person could also fill the role of an ombudsman with respect to energy matters.

Energy's Role in Economic Development

A stable and economical supply of energy is absolutely necessary to the prosperity of our province. It must be recognized however, that “You can't make a silk purse from a sow's ear”. In other words, the supply and cost of energy within New Brunswick is governed, in large part, by external forces over which we have little or no control. Our native energy sources have already been developed so as to produce the lowest cost possible. To expect that new energy can be obtained to support further development at a cost competitive with energy rich jurisdictions is unrealistic.

It would not be appropriate to subsidize large industry when the result is higher costs to the other classes of consumer. Industry that competes in an external market has the responsibility to stand on its own.

Those industries that rely on the natural resources of the province must survive in a competitive market by applying intelligence to their operations rather than receiving any form of subsidy. Subsidy, if necessary, required to create or maintain employment is a direct government responsibility as the benefit is mainly received through tax revenue.

Most jobs are created by small business and therefore it is important to recognize and respond to their concerns as well as the larger users.

Research and Development

Saint John Energy is actively involved in the Power Shift Atlantic project which is seeking to study, develop and implement a load control system which would be able to offset the effects of variable generation on the electricity grid. The first pilot project will utilize Saint John Energy's existing Advanced Metering Infrastructure to demonstrate the control of individual water heater loads in response to an external command.

We are also pursuing our own Demand Side Management project utilizing this same system.

In general we feel that provincial government investments should be limited to those initiatives which offer a good prospect of creating an energy advantage to the majority of citizens within the province.

Summary and Conclusion

The need of a clear long-term energy plan for New Brunswick cannot be understated. As consumers, both large and small, make their decisions regarding the use of energy, in whatever form, they must be assured of a relatively stable and predictable future with respect to its cost and availability.

Everyone understands that the depletion of resources coupled with an increased environmental awareness will result in higher costs. It is our responsibility as energy providers and regulators to implement strategies aimed at the mitigation of those rising costs.

It is the government that must enable these actions to protect the end consumer from the long term harm caused by inappropriate short term choices.

Due to the high cost, lengthy development times required and the extended capital recovery period, the supply of new energy sources is fraught with risk. Secure, stable supply is however, so important to our future that the risk must be accepted by government in response to its obligation to protect its citizens while encouraging growth and development.

We thank you for your time and attention and would be pleased to answer any questions either at this time or by future engagement.