



VIA E-MAIL

December 17, 2014

Electricity System Review
Nova Scotia Department of Energy
Joseph Howe Building
1690 Hollis Street
PO Box 2664
Halifax, NS B3J 3J9

Dear Minister Younger:

In the fall of 2013, the Government of Nova Scotia announced that the first comprehensive review of our province's electricity system in over a decade would begin in 2014. Port Hawkesbury Paper ("PHP") is pleased to have the opportunity to provide feedback on the future policy plans and regulations for electricity in Nova Scotia. As the single largest electricity user in the province, PHP is keenly aware of the challenging issues facing Nova Scotia's electricity system.

PHP has reviewed the technical studies commissioned by the province in 2014 on the three key areas of (i) emerging technologies, (ii) market trends in supply and demand, and (iii) utility governance, organization, performance, and accountability. At this time, PHP would like to submit further comments on the specific issues of (1) Energy Storage; (2) Energy Efficiency; (3) Performance-Based Regulation; (4) Market Competition; and (5) Inter-Regional Cooperation. PHP looks forward to remaining engaged in the electricity system review and providing further comments on the Draft Review Report scheduled for release in February 2015.

1. Energy Storage

Electricity

The Summary Report on the Emerging Technology and Market Trends Studies states as follows at page 25:

"In the short term, the province can gain significant value by managing our existing electricity resources better through technologies that focus on automation, communication, and load shifting, with an appropriate rate system that supports such change.

The province should also focus in the short and medium term on opportunities to explore and pilot new technologies such as storage, better utility efficiency, and regulatory support for micro-grid development in preparation for 2030 planning."

PHP currently receives its electricity service from Nova Scotia Power Inc. (“NS Power”) under the Load Retention Tariff and Pricing Mechanism (“LRT”) that was approved by the Nova Scotia Utility and Review Board (the “Board”) in 2012. The LRT ensures that PHP pays the full incremental cost to serve PHP’s Mill and also make a significant positive contribution to the utility’s fixed costs to the benefit of other ratepayers. PHP uses information received from NS Power and its existing load shifting capabilities to assist it in making its decisions with respect to its energy consumption. The successful continued operation of the LRT is a critical component of PHP’s overall business.

However, PHP has also identified additional opportunities to potentially expand its pulp storage capabilities to allow for broader energy storage opportunities that it believes could have added value for the province’s electricity system as a whole. PHP believes that these new opportunities for additional storage (based on more significant shifting of PHP’s production schedule) could provide additional benefits to the entire electricity system, particularly with respect to the integration of variable renewable generation such as wind.

PHP believes that the province should encourage the development of all potential energy storage initiatives by including support for the introduction of pilot projects and/or competitive solicitations for energy storage alternatives as part of the Final Review Report. In particular, specific competitive solicitations to provide new storage capabilities would provide incentives to industry to develop technologically innovative energy storage options at the lowest potential cost to the electricity system. The implementation of such solutions would provide real long term benefits to the province. PHP would be pleased to meet with the province to discuss its potential energy storage opportunities in more detail.

Natural Gas

PHP also notes with interest the application recently filed by Heritage Gas with the Board on December 10, 2014 for the approval of the treatment and recovery of natural gas storage service costs. As the Summary Report on the Emerging Technology and Market Trends Studies states at page 11, Nova Scotia’s electricity comes from a number of sources, and natural gas is a source that is used in varying amounts depending on whether the price is high or low. Affordable natural gas is a critical component for the province to help meet its emissions targets. Natural gas storage has been identified as a key option to address high natural gas price spikes, such as those that have occurred over the last two winters. PHP believes that support for the development of economic natural gas storage opportunities should be included as a key part of the Final Review Report’s consideration of future electricity supply sources in Nova Scotia.

2. Energy Efficiency

The Summary Report on the Emerging Technology and Market Trends Studies notes at page 9 that: “There is potential for energy efficiency to make a significant contribution to meeting Nova Scotia’s future electricity needs.” PHP agrees, and is a provincial leader in both efficient energy usage and energy efficiency management. Nova Scotia has seen significant investment in energy efficiency and demand-side management (“DSM”) programs since 2008, and the demand and energy savings that have been achieved have helped save on the cost of fuel for generating plants and delayed the need for more expensive new generation that would be paid for by all customers. The Integrated Resource Plan process that has just concluded identified further DSM spending as the lowest cost resource to meet Nova Scotia’s forecasted growth in demand for electricity services over the next 25 years.

PHP is not a participant in Efficiency Nova Scotia's programs since it identifies, analyzes, and implements its own energy efficiency activities directly on site. For example, PHP has recently submitted a proposal to Natural Resources Canada as part of its Investments in Forest Industry Transformation ("IFIT") program that would result in significant reductions in PHP's electricity consumption. Such demand and energy savings, if achieved, would further reduce upward pressures on Nova Scotia's overall electricity system over the long term.

PHP believes the Final Review Report arising from this process should continue to emphasize the important role of energy efficiency in helping Nova Scotia meet its future electricity needs at the lowest possible long term cost to the system. In this regard, the Government should seek to develop mechanisms and provide support for significant projects that assist in achieving measurable and verifiable demand and energy savings that will provide the electricity system with additional flexibility and provide room for potential new growth in demand through economic development.

3. Performance-Based Regulation

The Summary Report on the findings of background reports relating to the governance study component of the electricity system review identifies performance-based regulation ("PBR") as a possible alternative to the traditional form of regulation that currently applies in Nova Scotia. At page 8, the Summary Report states:

"Performance-based regulation is seen as a possible alternative to achieve the following customer objectives: quality of service, optimal capital spending, competitive rates, avoidance of discrimination, and information disclosure."

The Summary Report notes that PBR can include many different approaches, and that in its simplest form, PBR simply sets service standards and applies incentives and/or penalties for success or failure in achieving these standards. At page 10, the Summary Report states:

"...performance benchmarks could be narrowly focused to target certain objectives or to be part of a broader system. Experience elsewhere suggests that such benchmarks should be set at the most recent three-year average performance. Such benchmarks should be established for a limited number of broad measures that are easily tracked and important to customers, including

- customer complaints
- outage duration
- frequency of outages lasting five minutes or longer
- frequency of momentary power outages
- storm outage response time
- hours lost due to accidents"

PHP believes that the incorporation of PBR could be beneficial in Nova Scotia in certain circumstances. However, it is important that the introduction of any benchmarks related to reliability, such as those noted above in the Summary Report, also be clearly accompanied by requirements that the utility not be allowed to simply increase the costs it passes on to ratepayers as a means for improving its performance. Rather, the goal of PBR must be to provide the utility with incentives to increase its performance while keeping costs as low as possible. This focus on cost containment should be a key element if components of PBR are to be successfully introduced in Nova Scotia.

Further, in addition to the benchmarks identified above, PHP believes that specific reliability criteria with respect to the availability and operation of NS Power's generation plants should also form part of the measures that can be easily tracked as part of a PBR framework. Since the fuel and other variable costs that are incurred to serve all of NS Power's customers are directly related to the availability and operation of NS Power's fleet of generation units, it would be appropriate to ensure that the proper incentives are introduced to ensure that the lowest cost generation sources are available as much as possible to meet the province's overall electricity needs.

4. Market Competition

In the Scope of Work for Nova Scotia's Electricity System Review (March 2014), the Government noted that the *Electricity Reform Act* has two parts, and that the first involved the opening up of the market for low impact renewable electricity suppliers to compete for the sale of electricity to NS Power's customers. Work on implementing this portion of the Act is currently underway in a separate process, and PHP has been an active participant.

PHP supports the recent attempts at opening of the market to low impact renewable electricity suppliers as a key component of the province's future electricity strategy. However, from PHP's perspective, the renewable to retail policy will only be successful if the tariffs, procedures, standards of conduct, and other mechanisms that need to be developed as part of the process result in the creation of a truly functioning market in which new renewable projects can be financed and constructed. It is also important that larger customers such as PHP are provided the opportunity to receive competitive service from suppliers for only a portion of their load requirements, as otherwise some of the more significant customer loads that could support a renewable market opening may be precluded from the market.

PHP intends to remain active in the renewable to retail proceeding and hopes that the Government will support what is necessary as part of that overall process to help ensure the development of a successful renewable to retail market that provides real competition and alternatives for Nova Scotia customers as intended, which will also provide support for potential wider market opening in the longer term which may be beneficial to all participants in the Nova Scotia electricity marketplace, particularly once the Maritime Link is operational.

5. Inter-Regional Cooperation

The Summary Report on the Emerging Technology and Market Trends Studies notes at pages 12-13 that today Nova Scotia has very limited access to energy produced outside the province, but that this will soon change. With the development of the Maritime Link, Nova Scotia will no longer be at the end of the North American electricity grid. Together with the development of the Maritime Link, further inter-regional cooperation, especially in the development of enhanced transmission within New Brunswick, will be critical to ensuring that Nova Scotia can avail itself of

the wider North American grid system to optimize lowest cost reliable electricity supply. PHP believes the Final Review Report should emphasize Government's commitment to foster inter-regional cooperation in this respect and ensure that NS Power has the proper incentives to enter into inter-utility arrangements that will benefit all its electricity customers.

We appreciate the opportunity to provide this feedback and look forward to continued participation in the electricity system review and renewable to retail process.

Yours truly,

Bevan Lock
Energy Manager