



DALHOUSIE
University

ENERGY RESEARCH GROUP

DEPARTMENT OF
ELECTRICAL & COMPUTER
ENGINEERING

Faculty of Engineering

23 February 2007

Mr. Bruce Outhouse,
Counsel,
Nova Scotia Utility and Review Board,
1601 Lower Water Street, 3rd Floor,
Halifax, Nova Scotia, B3J 3S3

Dear Mr. Outhouse,

Re: P-884 – Integrated Resource Plan

As a formal intervener in P-884, I wish to register my objections to NSPI's proposed list of "new generation" sources as they do little to help Nova Scotia obtain energy security or reduce its greenhouse gas emissions.

In our submission to the Basic Assumptions, which apparently never reached NSPI, members of the Energy Research Group proposed that NSPI consider three other generation sources:

- Nuclear. Nuclear power is rejected by NSPI as it is "*prohibited by NS legislation*". The legislation in question is the Nova Scotia Power Privatization Act of 1992, which states that "*the Company shall not construct a generating plant that utilizes nuclear energy to produce electricity*".

This is a specious argument, as the Act, like all others passed in the Legislature, can be amended (and has been several times since it was enacted in 1992), meaning that nuclear power could be considered as part of the province's energy mix.

Furthermore, if amending the Act were not possible, there is nothing to say that Emera could not establish a nuclear subsidiary and sell electricity to NSPI.

- Hydroelectric (Lower Churchill). The Lower Churchill project consists of generating facilities at Gull Island and Muskrat Falls, with a planned generating capacity of nearly 3,000 MW. The CEO of Emera has mentioned the Lower Churchill project on several occasions. Now that Newfoundland and Labrador has indicated that it is considering proceeding with the project, NSPI should consider participating in it.
- Tidal. Tidal energy is dismissed by NSPI because "*stream tidal under review, but not commercially available by 2010.*" This argument implies that NSPI will be installing all its new capacity on or before 2010 and none between 2010 and 2029. Since NSPI is projecting an increase in peak

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demand to about 3,100 MW in 2029 (a 50 percent increase), NSPI will clearly be adding new generating capacity after 2010.

NSPI relies almost exclusively on imported energy and is a major reason why Nova Scotia is energy insecure. Furthermore, relying on fossil energy will do nothing to help reduce Nova Scotia's greenhouse gas emissions. All of the above generation sources are of sufficient size that they will do both.

I would therefore respectfully request that the Board instruct NSPI to include the three generation sources as part of its IRP. I would also request that NSPI review our original submission that they apparently did not receive last October.

Yours sincerely,

Larry Hughes, PhD
Professor