

NOVA SCOTIA UTILITY AND REVIEW BOARD

IN THE MATTER OF: The Public Utilities Act, R.S.N.S. 1989, c.380 as amended

-and-

IN THE MATTER OF: An Application by NSPI, NewPage Port Hawkesbury Corp. and Strait Bio-Gen Ltd. - Review and Approval of a Proposed 60 MW Biomass Project - Power Purchase Agreement.

CLOSING SUBMISSIONS ON BEHALF OF THE ECOLOGY ACTION CENTRE

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PART I - OVERVIEW

1. The Ecology Action Centre (EAC) supports the use of biomass for electricity, but does not support the proposed 60MW biomass project due to the fact that long-term resource sustainability, community well-being and public good, have not been satisfactorily addressed or answered.

2. The EAC appreciates the opportunity to make comments on this application.

3. It is our position that the competitive bidding, request for proposals system cannot adequately support Nova Scotia Power (NSPI) intention to meet legislated renewable energy goals.

4. The EAC is concerned by the lack of attention surrounding the ecological consequences of this project on our forests, and, fundamentally, the question of how this model of biomass energy production would benefit our province relative to other models of biomass energy development.

5. The EAC respectfully requests that the Board allow an application by the EAC for costs.

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PART III - ARGUMENT

1.1 Should the Board approve proposed biomass project?

The Ecology Action Centre does not support the proposed 60MW biomass project. The EAC does support the use of biomass for energy production, however, “we strongly contend that Nova Scotia has insufficient policy or guidance in place, or in development, to provide even a modest assurance that forest biomass harvesting on the scale proposed by NPPH will not result in extensive ecological damage and forest productivity decline.”

Reference: Exhibit N-24, pg. 1

1.2 What are the ecological consequences of the proposed biomass project?

6. For perspective, the harvest level required to fuel the proposed project is nearly double NewPage’s current harvest level. This would be an unprecedented and massive increase in forest harvesting in eastern Nova Scotia. And yet, NSPI stated during cross-examination that they have not done the research to understand what is required to avoid ecological damage associated with harvesting biomass.

Reference: Hearing Transcript, June 23, 2009 (Ms. Cantwell – Cross-Exam by Mr. Simpson), p. 259.

Indeed, NSPI admits that they have not been adequately briefed on the scientific research done on the impacts of biomass harvesting. When questioned as to their definition of sustainability in the context of biomass harvesting, NSPI refers that biomass is listed under the government’s RES.

Reference: Hearing Transcript, June 23, 2009 (Ms. Cantwell – Cross-Exam by Mr. Simpson), p. 255.

This is a circular argument. Biomass is sustainable because it’s listed under the RES, and it’s listed under the RES because it’s sustainable.

7. To be fair, there are gaps in our understanding of the effects biomass harvesting. Soil scientist Kevin Keys articulated this deficit in a recent editorial in a forestry journal, stating that “when it comes to questions surrounding soil and site productivity [in Nova Scotia], for the most part, we aren’t even trying to find the answers.”

Reference: Exhibit N-24, pg. 2

As a scientist, he offers strong caution. Why? Because soil is the foundation of our forests, and all they have to offer. As illustrated in the EAC’s evidence, the scientific research that we do have clearly demonstrates negative consequences of unregulated biomass removal. We know that biomass removal, especially whole-tree harvesting, can result in productivity decline, loss of biodiversity and reduced carbon storage.

8. NSPI was unable to respond to concerns regarding the detrimental impacts of unregulated biomass harvesting, and questions of whether or not the amount of fuel stock required for the scale of the project they are proposing could be sustained without major negative ecological consequences.

9. More worrisome still is that NSPI has reserved right to supply up to 70% of the required raw biomass to the proposed energy facility, should it be able to source the material at a lower cost than can NewPage Corp. Any comfort we might take from NewPage's progressive practices on its Crown land lease are thus effectively tossed out the window. It is clear that NSPI has much work to do before it can confidently and responsibly promote a biomass energy project of this magnitude.

10. There is no doubt that NewPage has taken impressive steps toward ecosystem-based forest management, and this has been recognized in their certification under the Forest Stewardship Council. NewPage's biomass harvesting on Crown land would be governed by the conditions of FSC certification, as well as Nova Scotia's Code of Forest Practice and the soon-to-be released Guidelines on the Harvest and Retention of Biomass in Nova Scotia.

11. Concern arises, however, with NewPage's intention to source half of the required forest biomass (some 200,000 green tonnes) from at least several hundred private woodlot owners. There are no restrictions on biomass harvesting for private landowners. NewPage's plan to audit woodlot owners is a positive step, but in no way can assure us that unsustainable harvesting practices would or could be avoided on private land. Only a sample of woodlot owners are audited, and the punishment for poor practices is simply an agreement on the supplier's part to future improvement.

12. Theoretically, thus, all of the woodlot owners that NewPage would buy biomass from could violate NewPage's guidelines for responsible harvesting at least once with no consequences. It is unacceptable to rely on a first-party, industry-operated process to safeguard against the negative consequences of unregulated biomass harvesting.

13. Further, NewPage states that they are "fully confident that the biomass resources necessary can and will be sustainably available and harvested."

Reference: Hearing Transcript, June 23, 2009 (Ms. Cantwell – Cross-Exam by Mr. Simpson), p. 660.

However, the only research they can offer to substantiate this claim is two reports on wood supply availability written in 1994.

14. The EAC suggests that NewPage, similarly to NSPI, cannot provide reasonable assurance that the level of biomass harvesting they are proposing can be done without significant detrimental consequences.

1.3 The Department of Natural Resource (DNR) Guidelines for the Harvest and Retention of Forest Biomass

15. DNR claims that the guidelines were created through a multi-stakeholder process. The process is in actuality a government and industry process. Following the resignation of two members of the committee, all that remained were industry and government representation, in addition to the Ecology Action Centre.

16. EAC concerns are not reflected in the current Draft Guidelines. The Guidelines offer only mild restrictions to biomass harvesting on Crown land, and no regulation of harvesting on private lands. NewPage, who was represented on the drafting committee, allowed during cross-examination that the Guidelines are not entirely adequate and in need of more work.

17. The EAC suggests that adequate guidelines are required.

1.4 Biomass Pricing

18. NewPage Corp. has undergone major, systemic changes in recent years, from the decision to stop using herbicides, to the pursuit of certification under the FSC. The provincial government is in the process of an extensive review of natural resources management policy. It is entirely feasible that clearcutting will be substantially reduced through regulation in the near future. Without a doubt, forest management, at both a company and a government level, is in a state of flux.

19. The EAC notes that these changes may well influence the availability and price of biomass beyond what we can predict at present.

1.5 Community benefit and the public good

20. Setting aside questions of ecological responsibility, we must ask whether this project is in the best interest of communities and the greater public good, relative to other models of biomass energy development.

21. An Ontario community-based biomass energy development have address community benefit and the public good. Their Biomass Energy strategic plan reads:

“A community wide biomass heating demonstration project will be undertaken using proven European design and equipment.

The Biomass Energy Project optimizes the use of local natural resources and the process of distributing the benefit by:

- using the optimum energy efficiency model, combined heat and power (CHP) where the waste heat is used to heat homes, which gives a 90% energy delivery rate compared to around 18% for industrial electrical production without CHP;
- producing heat and electrical energy close to where it is consumed;
- using an open, publicly-owned co-operative with a mandate to reinvest in future projects, which distributes benefits fairly and creates a culture of change;

- distributing the impact of the development benefits (lower energy costs provide all energy consumers with an improved quality of living).”

22. Where are Nova Scotia’s biomass energy demonstration projects? Why are progressive models such as this Ontario example not being examined in Nova Scotia? Where is the cost / benefit analysis of potential biomass energy development, wherein community well-being is the bottom line?

23. In addition to this, small scale community renewable energy producers are not provided adequate support to develop projects. According to Ms. Cantwell, the only way a small scale producer can sell excess electricity to NSPI is through the RFP system. As she states: “So under the RFP, the - issued in December 2008, and in - under the net metering program.”

Reference: Reference: Hearing Transcript, June 23, 2009 (Ms. Cantwell – Cross-Exam by Ms. Ratchford), p. 283.

24. The EAC suggests that genuine progress in terms of employment, ecological sustainability, carbon storage and community economic development, has not yet registered in the evaluation of biomass energy development in Nova Scotia. The most important questions are not even being asked.

1.3 Is the competitive bidding process for renewable energy projects achieving results?

25. According to Ms. Cantwell, “We find ourselves in a situation that causes us to be here today. I don't think it's a failure of a competitive process.”

Hearing Transcript, June 22, 2009 (Ms. Cantwell – Cross-Exam by Mr. Livingston), p. 396

The Ecology Action Centre would like to point to the lack of evidence to suggest that the current procurement practices are working properly. The competitive bidding process or request for proposal system that is currently used by NSPI has consistently resulted in high risk levels of contract failure. It is important the flaws in the system be addressed if the percentage of renewable energy used to generate electricity is to increase in Nova Scotia.

26. As early as 2004, only 52.9% of projects greater than 2MW were built and only 33% of projects of under 2MW were built.

Reference: Undertaking U-5, pg. 1, Lines 12-13.

This is a contract failure rate that is made worse by the current credit crisis. Therefore it is essential that NSPI and the Government of Nova Scotia work together to address this policy failure.

27. In the European Union there are a number of different policy frameworks designed to support the development of renewable energy, some of which include feed-in tariffs, green certificates, tendering systems and tax incentives. The Commission of European Communities reviewed and assessed the various schemes in the European Union and found that feed-in tariffs allow the development of renewable energy at faster rates and at a lower cost than other systems. The report points out that competitive tendering systems generally have a high level of investment risk and do not promote incentives for innovation.

According to the report: “While tendering systems theoretically make optimum use of market forces, they have a stop-and-go nature not conducive to stable conditions. This type of scheme also involves the risk that low bids may result in projects not being implemented.”

Reference: Commission of the European Communities. The Support for Electricity from Renewable Energy Sources. Official Journal C 49 of 28 (February 2006):

http://europa.eu/legislation_summaries/energy/renewable_energy/l24452_en.htm

28. The Ecology Action Centre outlined two of the most significant barriers to the competitive bidding process in its 2007 publication, *Pathways to Sustainable Energy Prosperity in Nova Scotia*. The first being, “experience in North America has shown that 50% of contracted projects are not built.” The second that “only the ‘big dogs’ can participate in the market because of the sophisticated gaming and significant financial uncertainty involved in the bidding process.”

Reference: Pathways to Sustainable Energy Prosperity in Nova Scotia.

<http://www.ecologyaction.ca/content/energy> p.18.

29. Jurisdictions around the world have been working to evaluate renewable energy procurement processes and are learning from experience. In 2008 the California Public Utilities Commission approved the use of feed-in tariffs to support the development of onsite renewable generation.

Reference: California Public Utilities Commission. (February 14, 2008):
docs.cpuc.ca.gov/WORD_PDF/NEWS_RELEASE/78824.PDF

30. The EAC respectfully requests that the Board order a re-evaluation of the renewable procurement policies of NSP to consider other alternatives such as the feed in–tariff.

1.3 Should NSPI be held accountable to meet the goals of the Renewable Energy Standard?

31. The 2007 IRP is currently being updated “based on new information about Nova Scotia’s greenhouse gas targets and renewable energy standard, new renewable projects, DSM experience and other changes since 2007.”

Reference: NSPI 2009 IRP Update: Redacted. Final Basic Assumptions (June 11, 2009).

Meeting renewable energy targets is essential to NSPI's long term planning as well as meeting its provincial greenhouse gas emission goals. NSPI should be held accountable for meeting the renewable portfolio standard goals.

1.4 Should the Ecology Action Centre be awarded costs in this matter?

33. The power to make an order for costs is contained in sections 12 and 28 of the *Utility and Review Board Act*.¹ Section 6(2) of the Board's Rules of Practice and Procedure Respecting Costs states that:

- 6(2) The Board may consider awarding costs against a utility to non-profit, public interest interveners with limited financial resources who:
- a) have a substantial interest in the proceeding
 - b) will be affected by the proceeding
 - c) participate in the hearing in a responsible way; and
 - d) contribute to a better understanding of the issues by the Board.

34. The Ecology Action Centre is a non-profit, public-interest organization dedicated to respecting and protecting Nova Scotia's environment. The EAC is an organization that represents over 1, 200 members in Nova Scotia

35. The environment has a substantial interest in the application before this hearing. Biomass has a role in the transition away from fossil fuel use, and the social and economic benefits of purchasing fuel domestically. However it is essential that the policies are in place to assure that that forest biomass harvesting on the scale proposed by NPPH will not result in extensive ecological damage and forest productivity decline.

35. As a membership based, non-profit organization we have no commercial interest in the outcome of these hearings.

36. The EAC contributed to a better understanding of the issues for all parties involved and through participation in the hearing as well as filing of evidence.

37. It is submitted that the EAC acted responsibly and prudently in these hearings. The EAC has behaved in a responsible manner to incur only such costs as were necessary to complete the evidence before the Board.

38. It is respectfully submitted that the Board should allow the application by the Ecology Action Centre for costs in this application.

39. If requested, the EAC can provide further documentation on this matter.

¹ *Utility and Review Board Act*, R.S.N.S. +1992, c. 11

40. All of which is respectfully submitted.

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