

DECISION

NSUARB NSPI-P-172
2009 NSUARB 111

NOVA SCOTIA UTILITY AND REVIEW BOARD

IN THE MATTER OF THE *PUBLIC UTILITIES ACT*

- and -

IN THE MATTER OF AN APPLICATION by **Nova Scotia Power Incorporated** ("NSPI"), **NewPage Port Hawkesbury Corp.** and **Strait Bio-Gen Ltd.** for approval of a power purchase agreement for 60 MW of Renewable Biomass Energy and a waiver of the requirements of NSPI's fuel manual relating to competitive solicitation of purchased power

BEFORE: Peter W. Gurnham, Q.C., Chair

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HEARING DATES: June 22, 23, 25, 26 and July 7, 2009

DECISION DATE: July 22, 2009

DECISION:

The Board finds it is outside its jurisdiction to approve, in advance, the prudence of this expenditure. The *PUA* does not expressly confer authority on the Board to do so. Moreover, such authority cannot reasonably be implied from the Board's general powers under the *PUA* because its exercise would unduly intrude in management of the Utility, would be contrary to the public interest and would be inconsistent with prior Board decisions.

Based on the record of this proceeding the Board declines to waive provisions of the Fuel Manual but retains jurisdiction to do so in the event the Applicants wish to provide additional information.

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I INTRODUCTION / BACKGROUND

[1] This is an application by Nova Scotia Power Incorporated ("NSPI"), NewPage Port Hawkesbury Corp. ("NewPage") and Strait Bio-Gen Ltd. ("Strait Bio-Gen"), (the "Applicants"), for approval of a power purchase agreement for 60 MW of renewable energy from biomass (i.e., burning wood and waste wood) and a waiver of the requirements of NSPI's Fuel Manual relating to the competitive solicitation of purchased power.

[2] Pursuant to the provisions of the *Electricity Act*, S.N.S. 2004, c. 25, s. 4, commencing January 1, 2006, a person who sells or supplies electricity to a customer in Nova Scotia must comply with the Renewable Energy Standards ("RES") set out in the Regulations (RES Regulations made under s. 5 of the *Electricity Act*). The RES Regulations require that by 2010 NSPI procure five percent (5%) of its energy from non-NSPI renewable sources constructed after 2001. The RES requirement increases to ten percent (10%) in 2013 but includes generation from both third party and NSPI facilities constructed after 2001.

[3] To meet the 2010 RES, NSPI conducted a competitive solicitation and negotiated power purchase agreements for renewable energy from independent power producers. NSPI signed power purchase agreements with wind developers for 711 GWH of renewable energy. Although NSPI contracted for more than enough renewable energy to meet the RES in 2010, NSPI advised that many of the independent power projects are now experiencing difficulty with project financing and schedules and their ability to meet the project timelines is uncertain. As a result, NSPI advised that it feels it must take steps to protect its ability to comply with the 2010 RES requirements. If NSPI fails to meet the

requirements of the RES Regulations it is possibly subject to significant penalties. Section 14 of the RES Regulations reads as follows:

Penalties and enforcement

14 (1) A person is liable to a daily penalty of no more than \$500,000, if they do any of the following:

- (a) fail to comply with these regulations;
- (b) fail, neglect, omit or otherwise refuse to do any act or thing required under these regulations;
- (c) fail, neglect, omit or otherwise refuse to comply with a direction or order of the Administrator or the Board made under these regulations.

(2) Unless otherwise provided in the Act, a person is not subject to a penalty under subsection (1) if the person establishes that they

- (a) exercised due diligence; or
- (b) reasonably and honestly believed in the existence of facts that, if true, would render the conduct of the person excusable.

[4] NewPage and Strait Bio-Gen have developed plans for a 60 MW biomass facility that could supply NSPI with approximately 400 GWH per year of energy which would assist significantly in meeting the 2010 RES requirement. NewPage and Strait Bio-Gen approached NSPI and in April of this year negotiations took place with respect to a power purchase agreement ("PPA") for NSPI to purchase power and energy from the biomass project. The parties executed a Term Sheet as of April 17, 2009.

[5] Strait Bio-Gen is a single purpose company incorporated to undertake this project. It has no other assets. It has a number of shareholders although NewPage is not a shareholder. The President of the company, Luciano Lisi, testified as part of the NewPage panel. A series of inter-company documents are contemplated whereby NewPage will be both the supplier of fuel (biofuel) and the operator of the plant. One of

the conditions of entering into a PPA under the Term Sheet is approval of the Nova Scotia Utility and Review Board ("Board").

[6] NSPI's Fuel Manual requires NSPI to normally procure energy through a competitive process. Because of the timelines NSPI says are associated with this project, it does not believe it has the time to initiate a competitive solicitation for biomass or other proposals.

[7] NSPI, NewPage and Strait Bio-Gen have jointly requested that the Board:

(1) Confirm that the execution of a Biomass PPA in accordance with the Term Sheet is a prudent means to assist NSPI to meet its obligations under the RES in these specific circumstances, thus entitling NSPI to recover the purchase power costs contemplated by the biomass PPA from customers in accordance with NSPI's Fuel Adjustment Mechanism; and

(2) Waive the requirements of the NSPI Fuel Manual relating to competitive solicitation of purchased power.

[8] NSPI concedes this project, even if approved, will not ensure NSPI meets the RES requirements in 2010 but advises it will significantly assist in meeting the targets.

Description of the Project and the Term Sheet

[9] NewPage, in its direct evidence, described the details of the project.

Certainly. Our main steam boiler has considerable unused capacity. This came about as a result of numerous energy improvement initiatives, major process changes and modernizations Mill-wide. This has placed us in a situation where this excess boiler capacity can be dedicated to the project.

The intention is that NewPage's main steam boiler and related equipment will become project assets through sale or lease. The utilization of these existing assets helps to lower the capital and infrastructure costs compared to a greenfield project of the same capacity.

Furthermore, as alluded to previously, the to-be constructed steam turbine/generator set and the existing steam boiler (and associated equipment) will create a fully balanced co-generation facility operating in conjunction with the Mill as its steam host. Cogeneration operations are more efficient than stand-alone thermal generating plants containing the same

power generating cycles. All of the heat energy in the process steam extracted from the turbine is utilized by the papermaking process, avoiding significant loss of heat to seawater cooling in the condenser. We estimate approximately forty percent (40%) of the total boiler thermal output will be routed to process under present Mill operating conditions. We are unaware of any potential renewable power project in Nova Scotia near this magnitude which would have these built-in inherent benefits.

(Exhibit N-5, p. 3)

[10] The principal terms of the Term Sheet are as follows:

1. Term: 25 Years, NSPI to have first option to negotiate to renew for 10 years.
2. Site: Point Tupper, Richmond County, Nova Scotia.
3. Name Plate Capacity of Facility: 60 MW; estimated minimum net output of 57 MW maximum continuous rating (MCR) as measured on the high side of the generator transformer based on estimated incremental station service power.
4. Energy Rate: \$106.50 per MWh CAD starting on Commercial Operation Date. This \$106.50 will be increased in a linear manner up to \$111.50 based on the amount of system interconnection costs which are to be borne by Strait Bio-Gen, and which are related to NSPI's transmission system and are after the Facility's interconnection to the NewPage Port Hawkesbury Corp. (NPPH)/NSPI ring bus (System Upgrades). The \$106.50 represents zero dollars of System Upgrades and the \$111.50 represents a maximum of \$25 million in System Upgrades which may be attributable to Strait Bio-Gen. The following example illustrates this point:

System Upgrades (\$ MM)	Energy Rate
\$ 0.0	\$106.50
\$ 5.0	\$107.50
\$ 10.0	\$108.50
\$ 15.0	\$109.50
\$ 20.0	\$110.50
\$ 25.0	\$111.50

The Energy Rate at the Commercial Operation Date ("COD") will escalate yearly in the following manner:

- a. Ninety percent (90%) of \$46 (which \$46 represents the biomass fuel component of the Energy Rate (the Biomass Component)) will be escalated yearly as at January 1 by the annual percentage change in the Nova Scotia Biomass Index starting from an initial baseline of year end 2010. The Nova

Scotia Biomass Index will be prepared by the Department of Natural Resources, the Primary Forest Products Marketing Board, or another independent third party agreed to by Strait Bio-Gen and NSPI, based on input from Strait Bio-Gen and NSPI and reflecting delivered pricing on a net heat value per tonne basis (i.e. on a heat adjusted basis).

b. Ten percent (10%) of the Biomass Component will be escalated yearly as at January 1 by 82.5% of the annual percentage change in the Nova Scotia Consumer Price Index, starting from an initial baseline in the month that the COD is achieved.

c. \$28.75 (representing the non-fuel variable O&M component of the Energy Rate) will be escalated yearly as at January 1 by 82.5% of the annual percentage change in the Nova Scotia Consumer Price Index, starting from an initial baseline in the month that the COD is achieved.

(Exhibit N-7, pp. 2-3)

[11] As of the date of filing the application, and as of the date of the hearing, no PPA for the project had been drafted or executed, nor had a biomass index been designed. NSPI stated that it is not prepared to accept the risk of entering into the proposed PPA without a prior prudency ruling by the Board. It described "the potential cost of future disallowance is unacceptably large" (Transcript p. 985).

[12] The Applicants agree that, as a matter of law, NSPI does not require the Board's prior approval to enter into a PPA. Indeed, NSPI entered into PPA's for considerably more power and energy (711 GWH) with various wind producers without Board approval. NSPI regularly contracts for significant operating expenditures for electricity, fuel and other items without Board approval. It would appear this is the first time NSPI has sought approval of such a contract.

II JURISDICTION

[13] As noted, NSPI seeks two things: Approval of a biomass PPA in accordance with the Term Sheet as being prudent and waiver of the requirements of the Fuel Manual. All parties concede, and the Board agrees, that it has the jurisdiction to waive the provisions of the Fuel Manual, if circumstances warrant. There was considerable disagreement amongst the parties as to whether the Board has the jurisdiction at this time to approve the PPA.

[14] The Board had the opportunity, on two previous occasions, to review its jurisdiction to approve, in advance, operational expenditures for energy supply. The first case was a complaint involving *Black River Hydro et al.*, 2004 NSUARB 118. In the *Black River* case the complainants requested the Board's intervention concerning an NSPI solicitation for up to 20 MW of power from independent power producers. After review of various provisions of the *Public Utilities Act*, R.S.N.S. 1992, c. 11, s. 43 ("*PUA*") the Board stated as follows:

[22] After a close review of the Act, and in particular the sections noted in the submissions, the Board finds that its statutory authority does not include advance approval of proposed contracts which involve operational expenditures for energy supply.

[23] The complaints essentially concern the prices proposed to be paid to potential suppliers of NSPI, not rates or charges paid by customers of NSPI. In the Board's view, its statutory authority to regulate and control rates, tolls, charges and schedules of public utilities relate directly to services provided to customers by utilities. While s. 35 of the Act requires advance Board approval for capital expenditures over \$25,000, the Board's authority to review contracts and operating expenditures of utilities generally comes into play only during rate hearings. Part of the rate hearing process involves establishing an approved rate base for the utility, which is a basic component in the ultimate calculation of rates to be charged to customers. The utility earns a return on rate base and is allowed to recover reasonable expenses.

...

[24] The Board believes that s. 45(2) gives the Board the authority to review, after the fact, the prudence and reasonableness of a utility's operating expenses. This would include the costs involved in purchasing energy or fuel. The Board, for example, heard submissions in the 2002 rate case that NSPI's proposed fuel costs were too high and should be reduced, consequently reducing the revenue requirement and rates to be charged to the utility's customers. In the 2004 rate case recently concluded, intervenors have alleged imprudence with respect to certain of NSPI's fuel purchases and have requested that the Board disallow a significant portion of these costs.

[25] Further, it would be difficult and inappropriate for the Board to carry out the 'prudence and reasonableness' functions required under s. 45 of the Act if the Board was involved in the development and approval of contract terms and conditions for the acquisition of energy supplies in the first place.

...

[29] In the present context, the Board does not believe that the complainants, who are potential IPPs, are distinguishable from other suppliers of NSPI, including fuel suppliers. If the Board had the statutory responsibility to approve, in advance, contracts for the acquisition of such supplies, the practical result would be that the Board would micro-manage a significant portion of NSPI's daily operations. This, in the Board's view, is clearly not what is contemplated in the Act, nor would it be in the public interest.

(Black River Hydro et al., 2004 NSUARB 118)

[15] In a second decision, dated September 20, 2005, in connection with a complaint from *Barrington Wind Energy Ltd.*, 2005 NSUARB 98, the Board confirmed its findings on jurisdiction with respect to a similar complaint.

[16] The principal sections the Applicants rely on with respect to the question of jurisdiction are sections 18, 19 and 45 of the *PUA*. Those sections read as follows:

Supervision of utility by Board

18 The Board shall have the general supervision of all public utilities, and may make all necessary examinations and inquiries and keep itself informed as to the compliance by the said public utilities with the provisions of law and shall have the right to obtain from any public utility all information necessary to enable the Board to fulfil its duties.

Summary investigation by Board

19 Whenever the Board believes that any rate or charge is unreasonable or unjustly discriminatory, or that any reasonable service is not supplied, or that an investigation of any matter relating to any public utility should for any reason be made, it may, on its own motion, summarily investigate the same with or without notice.

Amount utility entitled to earn annually

45 (1) Every public utility shall be entitled to earn annually such return as the Board deems just and reasonable on the rate base as fixed and determined by the Board for each type or kind of service furnished, rendered or supplied by such public utility, provided, however, that where the Board by order requires a public utility to set aside annually any sum for or towards an amortization fund or other special reserve in respect of any service furnished, rendered or supplied, and does not in such order or in a subsequent order authorize such sum or any part thereof to be charged as an operating expense in connection with such service, such sum or part thereof shall be deducted from the amount which otherwise under this Section such public utility would be entitled to earn in respect of such service, and the net earnings from such service shall be reduced accordingly.

(2) Such return shall be in addition to such expenses as the Board may allow as reasonable and prudent and properly chargeable to operating account, and to all just allowances made by the Board according to this Act and the rules and regulations of the Board.

Positions of the Parties**NSPI**

[17] Referring to Sections 18, 19 and 45 of the *PUA*, NSPI in its closing submission stated as follows:

These provisions permit the Board to investigate a major undertaking by the company to determine if it's in the public interest before it is undertaken. This inquiry can and should include an assessment of whether it is a prudent and proper way for the company to fulfil its compliance with the law, which is specifically referred to in Section 18.

Ultimately, however, the Board's jurisdiction is to determine the company's revenue requirement under Section 45(2), which is to include all expenses that the Board may allow as reasonable and prudent.

(Transcript, July 7, 2009, pp. 988-989)

[18] NSPI's principal argument is that under s. 45 of the *PUA* the Board determines which expenses are reasonable and prudent. Despite the statement to the contrary in *Black River*, NSPI contends that this need not be an after-the-fact prudence review but that under s. 45 it is appropriate for the Board now, on the basis of the facts

known to it, to determine whether the expenses, to be incurred pursuant to the Term Sheet, are prudent. Mr. Campbell expanded on that point in argument.

Point 5, the Board's general supervisory powers have never been understood to include prior approval of normal commercial activity of the utility in obtaining its inputs. Specifically, it has not included prior approval of prices paid for purchased power or for generation fuel.

That's a correct statement of fact. The Board has not, traditionally, reviewed normal commercial contracts in advance, though we submit this is not the situation - this is not a situation of normal commercial activity. This is a very special project in special circumstances which is proposed outside the normal procurement practice of the company and the Board, because of extraordinary circumstances, reviewing such a project at the request of the company is not precluded by anything in the Act.

(Transcript, July 7, 2009, pp. 993-994)

[19] Mr. Campbell, in argument, explained why in his view this case is distinguished from both the *Black River* and *Barrington Wind* cases.

This is very much why this application is before you. The present proposal, because of the extraordinary circumstances, is not the result of a competitive process. It's perfectly appropriate and, we submit, necessary for it to be reviewed in a public process before it is committed to on behalf of customers.

In their decision on the Black River case, the Vice-Chair said, and we quote this in Avon 12. This is from the decision:

In terms of the Board's authority under the Act, it's clear to the Board that the Act's primary purpose is to provide for fair and equitable treatment of customers by public utilities and to set rates for customers of public utilities which are just and reasonable and based on financially sound and prudent expenditures. After a close review of the Act and, in particular, the sections noted in the submission, the Board finds that its statutory authority does not include advance approval of proposed contracts which involve operational expenditures for energy supply.

While this is true in context, we submit it's broader than necessary to decide the case. The Board cannot deal with or impose proposed contracts which are not agreed, but it's going too far to say that it cannot approve agreed contracts. Indeed, it does so regularly in approving test year expense forecasts.

The decision continues:

The complaints essentially concern the prices proposed to be paid to potential suppliers of NSPI, not rates or charges paid by customers of NSPI. In the Board's view, its statutory authority to regulate and control rates, tolls and the charges and schedules of public utilities relate directly to services

provided to customers by utilities. While Section 35 of the Act requires advance Board approval for capital expenditures over \$25,000, the Board's authority to review contracts and operating expenditures of utilities generally comes into play only during rate hearings.

That last paragraph is true in context as well. And we agree that the Board's authority to review contracts generally comes into play in a GRA, but not exclusively, Mr. Chair.

The Vice-Chair's words correctly and wisely recognize that this authority may sometimes be exercised in other circumstances.

Later in her decision, the Vice-Chair referred to Section 24 as a restriction on the Board's power to deal with matters before it. The section provides:

Subject to this Act, the powers, rights and privileges and obligations secured to or imposed upon any public utility by any statute or by any contract or agreement made under the authority of any statute shall not be subject to the provisions of this Act, and nothing in this Act contained shall diminish the [oh, sorry] - shall authorize the Board to alter, enlarge or diminish such rights, powers, privileges or obligations or to impair the obligations of any contract except any contract or agreement relating to rates, tolls, charges and so on.

This makes clear that she was considering only a case where the Order sought would impair the rights or privileges of the company or impair the obligations of the contract. That was the case in the applications before her, where a third party sought to impose terms on the company. But it has no relevance here.

There's no Order sought which would infringe on the rights of the company. Indeed, the company seeks the Order. Consistent with the 1990 decision, there's no bar to the Board undertaking the requested review.

The point was made even more clearly in the subsequent Barrington Wind decision. That, too, was a decision of the Vice-Chair, and the key parts of her decision are set out in NSPI Avon 12 where she said:

The issue which confronts the Board is not whether Barrington Wind's allegations are valid. Before the Board can consider Barrington Wind's complaint, it must first determine that it has the statutory authority to do so. While the circumstances of this complaint differ somewhat from those in the Black River Hydro case, the basic question is the same, Does the Board have the authority to order NSPI to enter into contractual relations or arrangements with potential suppliers of energy. In Black River Hydro, the Board stated...

And I've admitted the quote which she, which she included:

The Board is of the view that the foregoing reasons apply with equal force in the present circumstances. The request before the Board would, if granted, involve ordering NSPI to buy energy from Barrington Wind Energy at a price to be negotiated between the parties or, failing that, at a price to be determined by the Board. This is really the same issue that was raised

by the complaints in Black River Hydro, and the Board remains of the opinion that it lacks the authority to force NSPI to buy energy from a particular supplier at specific prices. Accordingly, the complaint of Barrington Wind Energy must be dismissed for lack of jurisdiction.

Note that the Vice-Chair emphasized that the issue was the same, the application by a third party to order NSPI to enter into a contract with that party and to fix the terms of the contract. She concluded, correctly, that the Board had no jurisdiction to do so. That, then, is the point that the *ratio decidendi* of the two decisions. The Board did not have the jurisdiction to grant the remedy sought by the applicants.

(Transcript, July 7, 2009, pp. 1003-1007)

NewPage

[20] Like NSPI, NewPage emphasizes that the Board has broad powers under the *PUA* and notes that, in its view, s. 45(2) is not limited to retro-active operation. In its post-hearing brief on jurisdiction NewPage states as follows:

This subsection authorizes the Board to review the prudence and reasonableness of NSPI's operating expenses, including the expenses associated with the purchase of energy from independent power producers ("IPPs"), and to either allow or disallow such expenses as chargeable to NSPI's operating account, and thus to be passed through to ratepayers. In *Black River et al v. NSPI*, however, the Board took the position at paragraph 24 that the prudence and reasonableness assessment authorized by that subsection is required to be made after the fact of the expenditure by the utility. It is respectfully submitted, however, that such an interpretation (while it accords with the historic practice of the Board in the ordinary course of its regulatory activities) imputes a non-existent limitation into the statute. Section 45(2) merely states that the Board may allow "such expenses" as are "reasonable and prudent and properly chargeable"; it does not constrain when the Board may make such a determination, and in particular does not preclude the Board from making a determination on the prudence and reasonableness of an identified future expense.

(NewPage, Strait Bio-Gen, Post-Hearing Brief on Jurisdiction, pp. 3-4)

[21] NewPage also cites s. 52 of the *PUA* which reads as follows:

Duty to furnish safe and adequate service

52 Every public utility is required to furnish service and facilities reasonably safe and adequate and in all respects just and reasonable.

[22] NewPage notes that the adequacy of NSPI's services is to be determined in the context of its obligations to meet all legislative requirements including, in particular, the RES requirements. It goes on to say:

These statutory and "lowest cost" obligations on the regulated utility to provide "adequate" service necessarily clothe the regulator with the power (jurisdiction) to decide whether the service is in fact "adequate", including meeting both the legal and the "least cost" requirements of such service. In other words, the mandate to protect the public interest includes consideration of the adequacy of the service provided by the Utility, including provision of an adequate amount of renewable energy from IPPs to meet NSPI's legislated and planning requirements.

(NewPage, Strait Bio-Gen, Post-Hearing Brief on Jurisdiction, p. 9)

[23] NewPage distinguishes *Black River* and *Barrington Wind* in a manner similar to NSPI.

The present Application is of course of a very different nature than the requests before the Board in *Black River* and *BWEL*. The Applicants in the current matter have finalized the essential business terms of their arrangement and are not seeking to have the Board impose terms or to compel the parties to negotiate. This Application is not comprised of a complaint, but rather a request that the Board assess the prudence of NSPI's intended expenditures for the purchase of renewable electricity from SBG in light of current circumstances. Such an evaluation, as discussed in greater detail in this Brief, forms a core element of the Board's regulatory function.

(NewPage, Strait Bio-Gen, Post-Hearing Brief on Jurisdiction, p. 17)

The Province

[24] In addition to the sections cited by NSPI, the Province suggests the Board has jurisdiction under either s. 46 or s. 47 of the *PUA*. Sections 46 and 47 state:

Power to compel compliance by utility

46 The Board shall have power, after hearing and notice by order in writing, to require and compel every public utility to comply with the provisions of this Act and any municipal ordinance or regulation relating to said public utility, and to conform to the duties imposed upon it thereby by the provisions of its own charter, if any charter has or shall be granted it, provided, that nothing herein contained shall be held to relieve any public utility or its officers, agents or servants, from any punishment, fine, forfeiture or penalty for violation of any such law, ordinance, regulation or duty imposed by its charter, nor to limit, take away or restrict the jurisdiction of any court or other authority which now has or which may hereafter have power to impose any such punishment, fine, forfeiture or penalty.

Inquiry into neglect or violation by utility

47 The Board may inquire into any neglect or violation of the laws or regulations in force in the Province by any public utility doing business therein, or by the officers, agents or employees thereof, or by any person operating the plant of any public utility, and shall have the power, and it shall be its duty, to enforce the provisions of this Act as well as all other laws relating to public utilities.

The Province did not say however what neglect or violation of the law NSPI may have committed. The Province takes no position on whether the PPA should be approved.

Avon et al.

[25] In its arguments on jurisdiction Avon relied principally on the Board's decisions in *Black River* and *Barrington Wind*. Avon submitted that those decisions correctly interpreted that the authority given to the Board under the *PUA* does not include advance approval of proposed contracts which involve operational expenses for energy supply. Avon stated the following in its post-hearing submission:

13. NSPI seeks to distinguish these cases on a number of bases. First, NSPI states that the application has been made by NSPI and not a third party. Secondly, it seeks approval because of the "significance of the project" and thirdly, "the potential risks to NSPI's investors if the project is not determined to be a prudent approach for the company".

14. With respect, the fact that the application is made by NSPI and not a third party is not relevant to the Board's jurisdiction.

15. Jurisdiction does not extend only to benefit NSPI's shareholders. If the Board were to assume jurisdiction, it would potentially have to entertain applications by other customers or suppliers. For example, unsuccessful Proponent A could come to the Board before a contract was executed with successful Proponent B and seek a pre-determination on the prudence of the B contract versus the A proposal.

16. Furthermore, the fact that the two previous cases came before the Board by way of the complaint process does not affect the ratio of the cases – the Board is not enabled to adjudicate the terms of NSPI's operational expenditures, in advance. The fact the parties to this proposed contract agree on the terms and thus the matter was advanced jointly rather than by complaint is irrelevant to jurisdiction.

17. The magnitude of the financial commitment under the Agreement is likewise of no assistance to NSPI. As was evident in response to questions from the Chair, in the course of the last two years NSPI has entered into contracts for the purchase of wind energy totalling 700 GWh and it has not sought approval of the Board for any of these agreements. In response to questions from Board Counsel, NSPI acknowledged that these costs cumulatively exceed the Biomass PPA:

Mr. Outhouse: As a result of the 2007 RFP, I believe that NSPI entered into seven PPAs. Is that correct?

Mr. McAdam: Yes.

Mr. Outhouse: And at a total MW of 243 MW, approximately?

Mr. McAdam: Yes.

Mr. Outhouse: And all of these PPAs are for terms of over 20 years?

Ms. Cantwell: Yes.

Mr. Outhouse: And total costs, certainly over the terms of those contracts, would exceed this contract, the Biomass contract?

Ms. Cantwell: Yes.

Mr. Outhouse: And NSPI did not apply to the Board for a prudency ruling with respect to those contracts?

Mr. McAdam: That is correct.

...

20. NSPI acknowledged it does not necessarily believe it needs approval, but it wants approval. This fact itself is sufficient to distinguish NSPI's argument in its direct evidence that this is analogous to a capital expenditure. In respect of capital expenditures over \$25,000, by statute, NSPI must secure Board approval. Here, it is a matter of convenience to insulate NSPI's shareholders from the risk of an imprudence disallowance.

21. The management of NSPI is compensated well for running the operations of the company. It is part of the risk and reward covenant between NSPI's shareholders and its management that management is empowered to consider and make decisions with respect to NSPI's operations. NSPI is a profit-driven private enterprise with a virtual monopoly right. It acts in the best interests of its shareholders. The Board's role in a rate-setting context when it scrutinizes management's decisions is to determine if customers' interests are fairly accounted for in avoiding needless expenditure. This Board should not insert itself in NSPI management of day to day operations.

(Avon et al. Final Submission, pp. 5-8)

Consumer Advocate

[26] In its post-hearing brief the Consumer Advocate stated as follows:

It is the view of the Consumer Advocate that regulatory oversight is beneficial to ratepayers, particularly residential ratepayers, and thus, as a general proposition, the more jurisdiction the Board has the better. The bias of the Consumer Advocate is, therefore, to find such jurisdiction if that is possible.

...

Section 19 does not give the jurisdiction in question. It deals with rates, not costs. The inclusion of the word "charge" is to be read with the rest of the sentence that deals with reasonableness and discrimination, or a service that is not supplied.

The section is designed to grant jurisdiction to ensure the output side of the utility is fair and reasonable (output being the supply of power and the recovery of rates). None of the words suggest that the section is also to deal with a completely different scenario on the input side of the utility. The section grants jurisdiction to protect a ratepayer/customer, not jurisdiction to protect a utility from its suppliers or vice versa. Customers of a monopoly utility require regulatory oversight to give them the protection that market place forces and competition would provide if not for the monopoly. Suppliers to a utility are not in the same position of vulnerability because to a large extent the market place forces still apply.

It is to be noted that Section 19 applies when the Board believes a rate or charge is unreasonable or unjustly discriminatory. Even if the words "rate or charge" can be attributed to a power purchase cost, the objective of the Application is not to investigate whether the proposed rate is unreasonable or discriminatory, but rather to validate that it is not.

For Section 19 to give the power proposed by the Applicants, it is necessary to construe the words as allowing the Board to investigate a contemplated PPA, even if there is no basis to suspect it to be unreasonable or unjustly discriminatory, in order to approve the terms and to give an advance prudence blessing. Section 19 simply does not do that.

Section 18 deserves more careful consideration. It is broader and obviously meant to be a grant of wide general supervision jurisdiction.

The grant of "general supervision" and the power to "make all necessary examinations" could include an analysis of a proposed PPA.

What has to be determined is the purpose for which such authority is to be exercised.

The natural reading of the words make it clear that the jurisdiction given is for the purpose of ensuring NSPI is complying with the provisions of law. It is a policing jurisdiction. If the Board were of the view that the PPA, or any operational decision of NSPI, was contrary to law it would have the jurisdiction to make inquiry for the purpose of ensuring compliance.

...

An assessment of a proposed operational decision for the sake of approving its prudence in advance is a distinctly different function from assessing it for compliance with the law. Asking

this Board to validate an operational decision is different from investigating to determine if the company has acted in accordance with the law, including whether it has acted prudently. The former results in the Board trespassing into the role of management.

Section 18 empowers this Board to investigate a proposed PPA, for the purpose of ensuring the utility is complying with the law. The section read naturally, does not authorize the Board to grant prudence blessings of operational decisions in advance for the purpose of shifting risk from shareholders to ratepayers.

(Consumer Advocate Post-Hearing Brief, pp. 1-4)

Scotia Investments

[27] Scotia Investments make argument similar to those of the Consumer Advocate and Avon.

The first process concern is related to jurisdiction of the Board. The Applicants are relying particularly on Sections 18, 19, 35, 48 and 116 of the *Public Utilities Act* to support the position that the Board has the requisite authority. This “new” position of NSPI is not only contrary to previous practice and understanding but contrary to previously held positions fervently held by NSPI. We would submit the position they forward in this application is barely reconcilable, if at all with their previously held position. At page 24 of oral testimony before the Board, Mr. MacDougall confirmed from questioning by the Chair of the Board (the “Chair”) that the parties could in fact contract without Board approval. That is, this is a want of the parties not a need from a legislative or regulatory perspective. The Chair further pointed out and was confirmed by Mr. McAdam of NSPI at page 97 that in the last two years NSPI has entered into contracts for the purchase of wind energy totalling 700 GWH without having first sought Board approval. Similarly, the Chair (at page 99) identified that NSPI did not ask “to approve the Shell agreement for the purchase of **massive amounts** of, gas..” (emphasis added).

...

NSPI has attempted in cross examinations, and no doubt will as part of its closing submission and rebuttal, try to distinguish the previous rulings of the Board and those applications themselves as being different from the one now before the Board. We respectfully submit that this really is a distinction without a difference. The application before the Board is to approve a Term Sheet (leading to a PPA) in advance. In addition, it is being asked to make a prior ruling as to prudence. This is going much further than the request of the parties in P-172. Also, when this application was first made to the Board, there was a term that it wished the Board to resolve as the parties were then at odds. This is no different than price setting which was requested under P-172 (see cross examination by Mr. Outhouse at pages 316-319). The facts differ but the underlying request is the same.

(Scotia Investments, Post-Hearing Submission, p. 2 & 3)

Analysis on Jurisdiction

[28] It is well settled that the Legislature has vested in the Board broad regulatory powers with respect to its oversight of utilities in this province and, in this instance, NSPI.

[29] It is trite to say that where much is given - much is expected. The corollary of being granted broad powers is that they will be exercised prudently, judiciously and in the public interest. The Board described its role in regulating NSPI in its 2005 rate decision as follows:

. . . NSPI is not like an unregulated retailer. It is a virtual monopoly which operates its business on a cost-of-service basis. Providing electricity to all communities in the Province was not (and likely still is not) financially feasible for private, competitive companies. For that reason, the Province's electric service supplier is a cost-of-service monopoly. In return for undertaking and continuing the costs of electrification of the Province, the Utility is permitted, under the Act, to recover the reasonable and prudent costs of providing this service. Because it is a monopoly, regulation operates as a surrogate for competition. One of the regulator's tasks is to balance the need for the Utility to recover its reasonable and prudent costs with the need to ensure that ratepayers are charged fair and reasonable rates.

[18] It is in the interests of all Nova Scotians to ensure that NSPI continues to be a stable and financially sound company. This is a reality which the Board must consider when determining what, if any, rate increase is warranted.

[19] In short, rates charged to customers are based on costs incurred by the Utility in providing service. If the Board finds certain costs to be imprudent or unreasonable, it can (and has) disallowed such expenditures and reduced proposed rate increases accordingly...

[Board Decision, March 31, 2005, 2005 NSUARB 27, p. 7]

[30] Part of protecting the public interest requires that the Board recognize its appropriate role in the regulatory process and respect the role of others and ensure that those roles are being appropriately undertaken.

[31] The role of NSPI and its officials is to appropriately and prudently manage the affairs of the Utility ensuring that the various requirements of the *PUA* are met, including incurring reasonable costs and providing safe and adequate service. The role

of the Board is most assuredly not to manage the Utility but to regulate the Utility so as to achieve the public interest objectives outlined in the above noted quotation.

[32] It is important that the Board not cross the line between being a regulator and involving itself in the management of the Utility.

[33] It is both appropriate and important that the utility managers of NSPI properly manage the Utility. The scheme of regulation in this province recognizes risks inherent with managing an enterprise including a monopoly like NSPI. For that reason a significant portion of NSPI's allowed rate of return is a risk premium (above long Canada bonds) to compensate NSPI's shareholders for the risks incurred in running the business.

[34] In the Board's view, it is in the public interest that NSPI and its shareholders, be at risk in ensuring that its expenses are reasonable and prudent and its service is adequate. It is because of this risk that they are motivated to ensure that only reasonable and prudent expenses are made and to ensure that service is adequate.

[35] This delicate and important balance in the public interest would be upset if the Board were to improperly involve itself in the operational decisions of the Utility.

[36] If the Board removes risk associated with NSPI's operations and transfers that risk prematurely to ratepayers, the risk to the public interest is that NSPI's managers and shareholders no longer have "skin in the game" and lose their risk incentive to negotiate the very best deal.

[37] NewPage suggests the Board just intervene this one time and then put things back the way they were and not allow future applications. This is not how regulation is

designed to work. The *PUA* should be consistently applied in all circumstances both the difficult ones and the not so difficult.

[38] The Board has no confidence that if it were to change the traditional order of things in this case that applications such as this by NSPI, seeking to avoid risky decisions, would not happen again and again.

[39] As noted by Avon in this proceeding, if the Board finds it has jurisdiction here - where does it stop? Can, for example, unsuccessful proponent A come to the Board before a contract is executed by NSPI with successful proponent B and seek a predetermination of the prudence of the B contract versus the A proposal? Will NSPI be coming back to the Board for advance approval of large fuel contracts / commitments?

[40] Counsel for NSPI and counsel for NewPage skillfully attempted to distinguish *Black River* and *Barrington Wind* by confining them to their facts. The facts of those cases involved a third party requesting the Board set contractual terms and conditions, compared to the facts of the present case where it is NSPI asking that contract terms it negotiated, including price, be approved. The Board accepts the circumstances are different.

[41] The Board notes however two critical statements in *Black River* relevant to this case, that are not confined to the facts.

[25] Further, it would be difficult and inappropriate for the Board to carry out the 'prudence and reasonableness' functions required under s. 45 of the Act if the Board was involved in the development and approval of contract terms and conditions for the acquisition of energy supplies in the first place.

...

[29] In the present context, the Board does not believe that the complainants, who are potential IPPs, are distinguishable from other suppliers of NSPI, including fuel suppliers. If the Board had the statutory responsibility to approve, in advance, contracts for the acquisition of such supplies, **the practical result would be that the Board would**

micro-manage a significant portion of NSPI's daily operations. This, in the Board's view, is clearly not what is contemplated in the Act, nor would it be in the public interest.

(Black River Hydro et al, 2004, NSUARB 118)

[42] A finding that the Board does not have jurisdiction here is both consistent with the previous findings in *Black River* and *Barrington Wind*, but more importantly consistent with the Board's view of how it should operate in protecting the public interest under the *PUA*.

[43] Mr. MacAdam, NSPI's Executive Vice President, in a fairly telling statement, said that NSPI wanted to partner with the Board in this matter (Transcript p. 319).

[44] If that represents the view of NSPI it discloses a fundamental misunderstanding of the regulatory process. Much as NSPI would like the Board to participate with it as its partner in its risky decisions on operational expenditures - that would not be in the public interest.

[45] Some observers might speculate as to why the Board is reluctant to accept jurisdiction to approve an operational expenditure when it routinely approves capital expenditures under s. 35 of the *PUA* for amounts significantly smaller than the expenditures about to be undertaken in connection with the acquisition of biomass power. The *PUA* explicitly directs the Board to pre-approve most capital expenditures. The reason, of course, is that capital expenditures form part of the rate base of the Utility and the Utility is compensated on a return on rate base. The larger the rate base the larger the return. In those circumstances it is entirely appropriate, in the public interest, to oversee

NSPI's capital expenditures, thereby regulating the amounts that may be included in rate base and earn a rate of return.

[46] NSPI and NewPage correctly point out that under s. 45 of the *PUA*, the Board routinely pre-approves estimated expenditures that form part of a general rate application. While correct, this approval is a necessary exercise in setting rates for a single test year. There is, in the Board's view, quite a difference between that exercise which is a necessary requirement of s. 45 of the *PUA* and the request in this application to pre-approve a single operational expenditure spanning a term of 25 years.

[47] The Board therefore finds it is outside its jurisdiction to approve, in advance, the prudence of this expenditure. The *PUA* does not expressly confer authority on the Board to do so. Moreover, such authority cannot reasonably be implied from the Board's general powers under the *PUA* because its exercise would unduly intrude into the management of the Utility, would be contrary to the public interest and would be inconsistent with prior Board decisions.

III WAIVER OF THE FUEL MANUAL

[48] In connection with the waiver of the Fuel Manual, the Board will review some of the same evidence that was submitted in respect to the review the Board would have had to undertake had it found it had jurisdiction to do a prudence review. NSPI should understand, however, that the Board will not be undertaking either now, or in the future, prudence reviews under the guise of a request to adjust the Fuel Manual. Having said that,

the Board will attempt to give some guidance to the parties in this proceeding. Indeed, because of the unique circumstances faced by NSPI in the context of meeting the RES requirements, the Board is going further in this section of the decision with respect to inquiring into the nature of the transaction than the parties should normally expect of the Board in considering a waiver of the Fuel Manual.

[49] The frustration for the Board, and others in this proceeding, is that this may well be a very good project that NSPI would be wise to pursue. However, NSPI simply has not provided sufficient information upon which to judge the merits of the transaction. NSPI asks the Board to consider a PPA which does not exist (albeit it will be based on its standard form PPA). A principal term of that PPA would be that the price of the power and energy supplied would escalate in accordance with an escalator which does not exist. Mr. Antonuk, of Liberty, indicated that, based on his experience, he had never seen an occasion where something this open and uncertain would be used to make a firm "buy or no buy" decision. With regard to the adequacy of the information before the Board he said:

And I've never seen something come before a commission in this state

(Transcript June 25, 2009, p. 536)

[50] On several occasions during the course of the hearing the Board invited the parties to adjourn, go away and fix up some of these deficiencies, and return. NSPI chose not to follow that course. Accordingly, the Board is forced to make its decision based on the record in this proceeding.

[51] One can only speculate how an informed Board of Directors would respond if asked to give final approval to an expenditure amounting to approximately \$50 million per

year, which escalates over 25 years in accordance with an index which does not exist, pursuant to an agreement that has yet to be drafted. Yet, that is what the Board was asked to do.

[52] Board Counsel Consultant Liberty Consulting, in its evidence, outlines six concerns it has with the project as currently configured. They state as follows:

1. NSPI's evidence discusses approval of the Biomass PPA, but what actually exists among the parties falls well short of what is required to categorize it properly as an effective PPA. The lack of such an agreement, always important in projects such as this one, takes on added significance here, given the fact that those providing the capital for the project will continue to consider risk/reward adjustments through the time that all underlying agreements are executed.
2. Alternatives that NSPI has to the Strait Bio-Gen project and if and when the company has properly analyzed and pursued such alternatives merit consideration, given that NSPI is effectively seeking to transfer to customers the risks of an incomplete PPA in order to mitigate its RES regulatory risk.
3. There should have been a careful NSPI assessment of the penalties applicable to and potential relief from RES compliance strictly in accordance with current requirements.
4. Apart from an incomplete PPA, there are also substantial risks related to project fuel pricing and availability. They include an undefined pricing index, market dominance by NPPH, and uncertain access to sufficient fuel over the long term.
5. There is a need for well-defined and legally binding non-performance clauses regarding commercial production deadlines and plant production levels. The current Term Sheet does not detail them sufficiently.
6. Agreement and an arms'-length arrangement between NPPH and Strait Bio-Gen, who do or will operate in volatile markets, will be necessary to assure that there is an ability to deliver reliably across the expected term of the supply to NSPI. That agreement has not yet been reduced to executed documents that would allow for an assessment of the quality of the arrangement.

(Exhibit N-25, pp. 12-13)

[53] Other parties expand on those points or perhaps make them in a different way but they are a useful summary of the principal critiques of the project. While they were written by Liberty in part in contemplation of a possible prudence review, the Board feels it is useful in considering waiver of the Fuel Manual to deal with each of them in turn.

Liberty Point 1: Lack of a PPA

[54] NSPI would like the Board to waive the Fuel Manual in advance of a PPA being signed and presented to the Board rather than the other way around. Both NSPI and NewPage led evidence and gave assurances to the Board that the PPA would comply with the terms of the Term Sheet and use as a template NSPI's standard form PPA. The parties have had since April 20, 2009 to draft a PPA, and for reasons that are not apparent, have chosen not to do so. It seems quite reasonable for the Board and the other parties to expect that if NSPI wants the Board to review the PPA, or waive provisions of the Fuel Manual, the Board and the parties should have a copy of the PPA. It seems to the Board that this issue can be easily resolved by drafting and submitting to the Board a PPA.

Liberty Point 2: Alternatives that NSPI had to the Biomass Project

[55] NSPI submits that time does not permit it to engage in an RFP type competitive process and have a chance of meeting the 2010 RES requirements. While all parties, including and especially NSPI, would prefer an RFP competition the Board accepts NSPI's evidence that in these circumstances there simply is not sufficient time to comply with the RES and conduct an RFP. Both Liberty and Mr. Chernick, an expert retained by the Consumer Advocate, suggest NSPI consider burning biomass in its own units - something NSPI has been investigating. However, as NSPI notes and Liberty accepts, burning biomass in its own units, while reducing carbon emissions does not assist it in meeting the RES. Likewise, NSPI building its own windmills, while reducing carbon and

assisting NSPI in complying with the RES requirements in 2013, does not assist it in meeting the 2010 RES.

[56] Liberty also suggests NSPI take steps to financially assist or support the wind proponents in order to enable the projects to proceed. The Board assumes that, within the confines of the RES requirements, NSPI is pursuing these possibilities.

Liberty Point 3: An Assessment of the Penalties Applicable to and Potential Relief from the RES Compliance.

[57] Liberty, in its evidence, states as follows:

The Strait Bio-Gen proposal, in its current state, poses what we believe are very high risks for NSPI customers. Agreeing to take those risks should in significant part be judged by what risks the project avoids. Those risks essentially involve penalties for RES non-compliance. NSPI's evidence does not address the magnitude or the likelihood of the penalties to which it is exposed, should it find no acceptable means for addressing (e.g., through satisfaction, amendment, or postponement) the RES requirements. . . .

(Exhibit N-25, p. 20)

[58] In a similar vein, Board Counsel Consultant Mel Whalen, in his evidence, states as follows:

- a) The project is proposed because some of the renewable power and energy expected by NSPI under several Power Purchase Agreements (PPA's) may not materialize and as a result, NSPI may not be able to meet the Nova Scotia Regulations respecting Renewable Energy Standards (RES) in 2010. The implications of not meeting those standards do not appear to justify the risk NSPI is taking with the project proposed in this application.

(Exhibit N-23, p. 2)

[59] Both Liberty and Mr. Whalen note that the Regulations contain a due diligence defence.

[60] With respect to both Liberty and Mr. Whalen it is difficult, if not impossible, for NSPI to reasonably weigh the balance between the implications of not meeting the RES standards on the one hand and this project on the other.

[61] NSPI is in the position that it must do whatever it reasonably and prudently can to comply with the law and in this case the RES. It would be difficult, if not impossible, to weigh the benefits of the project on one hand versus a likely fine or the success of a due diligence defence on the other.

[62] NSPI outlined a series of discussions it has had with Government officials on the challenges it now faces in meeting the RES. NSPI says, and the Board accepts, that NSPI has kept these officials apprised of the current situation. While it might be hoped by NSPI that these officials might show flexibility in considering the other options for meeting the RES that were suggested by Liberty and others in the hearing, NSPI cannot assume that will happen.

Liberty Point 4: The Price and the Pricing Index

[63] NSPI described how it tested and evaluated the energy rate for the biomass project at a level that it believed represents a value for customers. The evaluation consisted of three components:

- (1) Comparison to previous requests for proposals;
- (2) Strategist modelling comparing the biomass project to wind energy;
- (3) Comparison to third party biomass generation.

[64] The process for the comparison to the previous requests for proposals involved an analysis by NSPI whereby it estimated the pricing that it might expect under any future RFP for wind. The analysis took into account that wind projects are non-dispatchable and therefore an adjustment had to be made for the cost of variable generation in the comparison of biomass to wind. It was then noted by NSPI that the price for wind is flat because there is no additional fuel over time. The biomass project includes two escalating components - fuel and O&M expenses. In order to compare the levelized wind price with the escalating biomass price, NSPI assumed that a portion of the cost would escalate at two point one three percent (2.13%) per year over the term of the contract. This analysis provided NSPI with an indifference point for the negotiation of a contract price which NSPI indicated allowed them to understand the maximum price acceptable.

[65] The goal of the Strategist analysis was to understand at what price customers would be indifferent to the biomass project or another renewable option. NSPI describes, in its direct evidence, the process it undertook in using Strategist runs. Strategist modelling is a tool NSPI frequently uses in comparing various alternatives in, for example, the integrated resource plan. It has been accepted by the Board on many occasions. NSPI indicated the analysis concluded that at an escalating starting price of \$111.00 per MWH, the model would pick the biomass project over the next alternative. NSPI's analysis suggested that at \$106.50 per MWH, customers are better off with the biomass project than if NSPI purchased additional wind energy to comply with the RES.

[66] In the third review, NSPI compared the cost of this project to an unrelated analysis CBCL conducted of a smaller biomass generation option.

[67] Mr. Whalen raised some concerns with respect to the initial price in the Term Sheet. His concern was that the company may have negotiated only to beat alternatives rather than to achieve the lowest possible cost.

[68] Mr. Whalen noted that the fixed cost component of the project has a net present value that is the equivalent of approximately \$2500.00 per KW. This is higher than the CBCL report mentioned above. It appears, however, that more recent costs for greenfield wood residue biomass facilities in North America is about \$3000.00 (U.S.) per KW (see Exhibit N-45).

[69] Mr. Whalen noted that the starting price of fuel, using NSPI's own estimates of fuel cost and volume (at the mid-point), would be \$44.06 per MWH as opposed to \$46.00 per MWH.

[70] He also observed that the O&M costs are high compared to NSPI's Point Tupper plant. It would appear, however, based on the evidence of Strait Bio-Gen, and in particular Mr. Lisi, that this is not really an apples to apples comparison because Strait Bio-Gen's O&M accounts include a broader variety of costs than NSPI's O&M accounts.

[71] Mr. Chernick, in his evidence, suggested that wind plant cost trends may in fact be going down and that NSPI may have over-estimated alternative wind costs.

[72] The Board has carefully considered all of this evidence and on balance believes NSPI's analysis justifying the starting price of \$106.50 per MWH is reasonable in

the circumstances. The analysis seems logical and uses tools (i.e., the Strategist runs) in which the Board has confidence.

Biomass Index

[73] Another component to the price is the biomass index. As noted earlier, the Term Sheet indicates that ninety percent (90%) of \$46.00 (which represents the biomass fuel component in the energy rate) will be escalated yearly by the annual percentage change in the Nova Scotia Biomass Index starting from an initial baseline year of 2010. However, there is no such index as the Nova Scotia Biomass Index. The parties apparently intend that the Department of Natural Resources, the Primary Forest Marketing Board, or another independent agency, will create such an index.

[74] Mr. MacAdam was questioned by the Consumer Advocate with respect to work to date on the Index.

MR. MERRICK: Alright. Let me ask just a few questions about the biomass index.

Have you had discussions with the Department of Natural Resources as to them being the provider of the index?

MR. McADAM: We have not.

MR. MERRICK: But they're put down as a possible source of the index.

MR. McADAM: That is true.

MR. MERRICK: But you haven't talked to them about it.

MR. McADAM: We have not.

MR. MERRICK: You haven't asked them if they're prepared to do so or what ideas they have for how to set up the index?

MR. McADAM: Nova Scotia Power has not done that.

MR. MERRICK: How about the Primary Forest Products Marketing Board?

- MR. McADAM: Nova Scotia Power has not been in touch with them on that matter.
- MR. MERRICK: What about the third parties that you reference? How many third parties are there that might be the source of the index?
- MR. McADAM: I don't know how many third parties might be the source of the index, but however many there are or aren't, we have not been in touch with them.
- MR. MERRICK: Can you name one, possible?
- MR. McADAM: Well, I would think there are a variety of economic consulting firms that would take on that work and do it well.
- MR. MERRICK: Can you name one?
- MR. McADAM: Oh, I think a markets expert like Reid would be the kind of party that I would be comfortable looking at that work.
- MR. MERRICK: Of course, you haven't approached them yet.
- MR. McADAM: That is true.
- MR. MERRICK: Do you know if the index would include sales made to Strait Bio-Gen under the BPA?
- MR. McADAM: The index is not developed, and so we do not know what it does and does not include.

(Transcript June 22, 2009, pp. 157-159)

[75] The issue of the biomass index was perhaps the most contentious issue in the hearing. In support of the need for an index, NewPage, in its final submission, stated as follows:

As NewPage and SBG noted in their Opening Statement, and elsewhere throughout their evidence, the marketplace in Nova Scotia for forest products, including biomass, is a vibrant short-term market and does not tend to long-term arrangements. Thus, an index that takes account of cost and market factors is imperative in order for the project to be developed and financed. This of course is no different than NSPI's own acquisition of fuels based on market prices, such as natural gas, coal, etc., as discussed above. As NewPage stated, the biomass index is simply meant to ensure that the price of biomass fuel is dealt with in a manner that is equitable for the project while being consistent with NSPI's current Board-approved FAM regarding its own fuel costs.

Mr. Waycott noted that he is familiar with previous work in developing a similar index in Nova Scotia, he has been in contact with an expert who has indicated that such an index could be developed for biomass, and that the index would have both cost and market components.

(NewPage Final Argument, pp. 10-11)

[76] Mr. Whalen, in his direct evidence, noted his concerns with respect to the index.

a) The index does not exist, and there is no guarantee that it will ever exist. As noted in NPPH (Multeese) IR-2(e), the parties identified in Clause 4 of the Term Sheet have not been approached to develop and administer the proposed index.

b) The proposed index is based on a small market in which NPPH is a large player, leaving open the possibility that the index can be controlled.

NPPH addresses this in NPPH(Liberty) IR-5, noting that there is already a competitive hog fuel market in NS (in which NPPH is one of the major players) and that manipulation of the biomass price would not be in NPPH's interest because such manipulation could also influence the price of fibre for its mill operation. This response provides little comfort that there will be no manipulation of the biomass prices, particularly when one considers NPPH(Multeese) IR-2(g) which suggests that there may not be significant correlation between the price of biomass and the price of fibre, and NPPH(Avon) IR-1 which indicates that Bio-Gen will clearly be the dominant consumer of biomass in eastern Nova Scotia.

c) The index is proposed to include the sales of fuel to this project, as confirmed in NSPI(CA) IR-12. This makes the index circular; i.e. the fuel price is based on an index which in turn is based on the fuel price. This is particularly troubling given that NPPH will supply more than half of the fuel to be used by this project from its own operations, as noted in NPPH(CA) IR-13(a).

d) The index will not be based strictly on the cost of supplying fuel, but will reflect the supply and demand for biomass fuel, as noted in NPPH(Multeese) IR-2 (h) and NPPH(CA) IR-13(b); i.e. it will be market based rather than cost based.

(Exhibit N-23, pp. 5-6)

[77] Mr. Whalen went on to explain why the biomass index is so critical and how very small variations in the index can affect the economics of the Bio-Gen project.

a) The economics of the project depend on the fuel price. As shown in Confidential Exhibit MCI-1, using NSPI's assumptions, the Bio-Gen project is 1.2% (\$7.1M) more attractive than wind on a lifetime basis. One of NSPI's assumptions is that the Biomass Index will escalate at CPI, or 2.13%. Sensitivities performed based on this Exhibit indicate that if the index escalates at 3%, the Bio-gen project becomes 2.7% (\$16.0M) more expensive than wind. This grows to 7.8% (\$46.3M) if the index escalates at 4% and to 13.6% (\$81.1M) if the

index escalates at 5%. Putting it another way, if the Biomass index escalates at 2.13 %, this project is cheaper than wind until year 12, but if the biomass index escalates at 5%, this cross over occurs in year 7.

(Exhibit N-23, p. 6)

[78] He confirmed, on cross-examination, that the point at which the biomass index needs to escalate greater than the Consumer Price Index ("CPI") to make this project more expensive than wind was somewhere between 2.13% and 3.0%. At 2.13% it is more economical than wind; at 3.0% it is not.

[79] Among other things Liberty stated as follows:

We think it poses a very significant risk for customers for two reasons: (a) the index does not exist, and (b) the information provided by NPPH and NSPI do not make either the transparency or the size of the relevant market knowable.

...

Unless NPPH is committing to pay the same prices to third parties that the yet-to-be established index will publish, the fact that it will transact in a related market (or even the very same one) does not bear on the validity of prices established by this presently undefined index. Even in a reasonably competitive U.S. natural gas market, there was not so long ago a great outcry about manipulation of index prices and a high level of concern that even transparent purchases at index prices were too few to serve as an effective baseline for pricing the myriad of transactions closing at Index+ or Index- prices.

...

Consequently, we believe that hinging so much of the escalation for fuel costs on a regional index that does not exist, and in a regional biomass market not demonstrated to be thick and robustly traded, creates great risk in the project fuel price. The project sponsors have effectively protected the project and its financial backers from escalating or unstable pricing in the fuel market by passing the risk to NSPI and its customers through this clause.

(Exhibit N-25, pp. 23-25)

[80] Mr. Antonuk spoke further in his evidence with respect to this matter.

... I don't like the biomass index and I don't think there's a biomass index I could like, given my understanding of how it's proposed to be developed and the kind of market it operates in.

I mean, remember, this is not an index that thousands of people - one, one seller in the whole - on the whole planet will have an interest in this index. You know, my view is that indexes

work because there are thousands or millions of transactions or there are - there's a massive set of government agencies which can compel information disclosure from a broad array of participants.

...

I just don't understand how that one can be developed in a market like this that can be successful. I can't see it. I've given a lot of thought to it. We've talked a lot about it, and we, we just can't get started. We can't get past go in trying to think about how you would do it, where the price disclosure's going to come from, who can compel people to provide information, whether an entity is going to provide all of the information to the index creator, or just the information that serves its purposes.

(Transcript June 25, 2009, p. 629-631)

[81] Mr. Chernick, on behalf of the Consumer Advocate, raised similar concerns with respect to the biomass index and went on to say:

What could be the effect of this proposed market-based biomass index?

At best, the use of the market-price index would allow NPPH to charge NSPI the highest cost of biomass produced in the Nova Scotia market for fuel it produces at its average cost. Market prices may be very volatile, as we have seen with fossil fuels and other commodities. At worst, NewPage may be a dominant player in the Nova Scotia biomass market and may be able to manipulate the prices that it charges NSPI for fuel.

(Exhibit N-26, p. 23)

[82] Mr. Chernick further discussed his concerns in cross-examination.

Well, even, even if it were a reliable index of the market price of certain kinds of biomass, I don't think that really solves the problem because we would also have to have some idea of what that price might be and whether it would be determined by a very small number of players or whether it would really be a competitive market, and so on.

It, it seems to me that, for the portion of the plant's fuel supply that comes from waste material that NewPage generates currently and expects to continue generating, that the cost of taking that waste from - I believe NewPage described it as from their wood room - and grinding it up and blowing it in to the boiler, that's dependent upon maybe labour costs and some other equipment related inflators, but basically it's a fixed kind of cost that doesn't have to vary with the market. It can be cost based. And the same may be true for some of the other components that they're talking about.

So to the extent we can move away from a market base to a cost base index, that would be comforting, even if an appropriate government agency or widely respected professional organization came in and said yes, we can work out an index and here's a sketch of what it would look like that would really attract the market. That's valuable information, but I'm not

sure that that's something that you want the rate payers to be on the hook for for the next 25 years.

(Transcript June 26, 2009, pp. 806-807)

[83] The issue of the biomass index was for the Board the most troubling aspect of NSPI's application. To suggest that the Board should accept a biomass index which does not exist is, in the view of the Board, simply an unacceptable request for NSPI to make.

[84] NewPage suggested that the Board approve the project or waive the Fuel Manual conditionally and leave it to the parties to create a biomass index to be submitted to the Board at some future time. However, the index is so critical to the project that the Board does not accept this as reasonable.

[85] Sensing the significance of the biomass index issue NewPage, with the apparent concurrence of NSPI, filed a "compromise" index with their final brief which appeared to be a combination of already existing indices. No evidence was led on the compromise and neither the Board, nor any of the parties, had an opportunity to consult their experts on it. It cannot be considered as part of this decision.

[86] Simply put, in order to get a waiver of the Fuel Manual, a reliable transparent index or some other acceptable alternative will need to be available for scrutiny by the Board and intervenors. Indeed, the weight of evidence in this proceeding, particularly from Mr. Antonuk and Mr. Chernick, was that it would not be possible to create a reliable transparent biomass index.

Liberty Point 5: The Need for Well Defined and Legally Binding Non-Performance Clauses Regarding Commercial Production Deadlines and Plant Production Levels

Liberty Point 6: Agreement and an Arms-Length Arrangement Between NewPage and Strait Bio-Gen to Ensure there is an Ability to Deliver Reliably Across the Expected Term of the Supply to NSPI

[87] The issues raised by Liberty Points 5 and 6 likely go beyond any analysis the Board feels it needs to undertake with respect to waiver of the Fuel Manual. However, it is assumed that these matters can be dealt with in a thorough and complete PPA discussed under Liberty Point 1, should one come forward.

IV OTHER ISSUES

Supply and Harvesting of Biomass

[88] Both Black River Wind and the Ecology Action Centre expressed concerns as to whether sufficient biomass exists to supply this project and meet other biomass needs in the province. Black River Wind states, in its evidence, as follows:

29) The environmental effects of the Strait Bio-Gen project are potentially serious due to the increase in cutting of hardwoods, and softwoods. New Page currently has a more or less stable supply of wood waste from forest operations in its operating area. It is my opinion that the co-generation facility size should be based upon this existing yearly supply, and that no increase in harvesting of hardwoods or softwoods or larch wood should take place. The risk is requiring an increased wood supply for a co-generation boiler that appears to be oversized beyond current wood supply. The sustainability of any increase in forest harvesting is questionable.

(Exhibit N-22, p. 5)

[89] The Ecology Action Centre, in its final submission, states as follows:

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.

(Ecology Action Centre Final Submission, p. 5)

[90] NewPage, in its direct evidence, estimated that 50,000 to 75,000 additional tonnes of sawable hardwood material are estimated to be available from harvesting on Crown lands. It notes that a significant increase in hardwood saw log availability from private land sources is also expected to result. It goes on to say:

. . . The combined hardwood saw timber availability from Crown and private sources will facilitate a significant increase in hardwood lumber production (with a potential of approximately 20MMfbm) in Eastern Nova Scotia.

(Exhibit N-5, p. 5)

[91] In its final submission NewPage state:

Biomass Sustainability

With respect to the issue of biomass sustainability, we principally refer the Board to the written record and the transcript in this proceeding. NewPage submits that it became abundantly clear during the cross-examination of Mr. Waycott and Mr. Easthouse that there is a sustainable and economic biomass resource available for the proposed project which will be harvested in a sustainable manner. NewPage has confirmed throughout that it is committed to - indeed is required by law to - follow all provincial laws, regulations and guidelines regarding the harvesting of biomass, and has moreover been certified to the highest standards in the world regarding sustainable forest practices. With respect to activities that may occur on lands not directly managed by NewPage, NewPage will continue to audit, as it does today, contractors working on those lands to ensure they are complying with sustainable forest practices, and to continue to do everything in its power to ensure sustainable practices on private lands from which it acquires biomass. This is fully consistent

with NewPage's current practice with respect to other forest products such as pulpwood and sawlogs and is critical to the sustainability of NewPage's core business.

(NewPage Final Argument, p. 9-10)

[92] With respect to concerns about harvesting practices, that is not a matter that is subject to the Board's jurisdiction. The Board assumes that other authorities who have responsibility for the harvesting of the forest will ensure appropriate regulations and guidelines with respect to harvesting biomass are in place.

[93] With respect to the supply of biomass, it is difficult, based on the record, for the Board to make clear findings on this issue but on balance accepts the evidence of NewPage that sufficient biomass exists to fuel this project and their other operations. NewPage appears to be a knowledgeable and respected forestry company.

Feed-in Tariffs

[94] The evidence of Black River Wind was that only by the use of a feed-in tariff policy would Nova Scotia be able to create affordable and sustainable renewable energy. Briefly stated, a feed-in tariff is a guaranteed price set, usually by Government, for anyone who wants to sell renewable electricity into the grid and a guarantee that they will have access to the grid to do so. A more complete description of feed-in tariffs was appended to Exhibit N-22, the Black River evidence.

[95] The Ecology Action Centre points to what it considers to be the failure of current procurement processes by NSPI. They view the bidding process or RFP process as resulting in a high risk of contract failure. They, and Black River, point to various

jurisdictions in the European Union where feed-in tariffs allow the development of renewable energy at faster rates and at lower costs than other systems.

[96] While feed-in tariffs may or may not be a desirable feature to be considered in Nova Scotia, it is clear, based on the jurisdictional findings in this decision, and more importantly the jurisdictional findings in the *Black River* and *Barrington Wind* cases, that the Board, under the *PUA* as currently drafted, does not have the authority to order feed-in tariffs. It appears that in Ontario and elsewhere, where variations of the feed-in tariffs have been used, it has been a matter of Government policy to set these tariffs.

V THE CARBON CHALLENGE

[97] The Board is acutely aware of the carbon challenge faced by all who produce and consume carbon producing fuels and faced by those who regulate them. NSPI, its customers, and this Board, face particular challenges because of NSPI's heavy reliance on coal. Significant and sometimes bold steps will need to be taken to meet the carbon targets that are likely to be imposed by Government. But that does not mean anyone can sacrifice thorough analysis and documentation of solutions. Indeed, it emphasizes the need for same. NSPI does not do itself, or the public it serves, or the Board, any favour by bringing an incomplete, poorly documented application to the Board and asking for urgent approval. Indeed, the Board observes that the progress of this project has likely been delayed because of NSPI's action in this regard. The carbon challenge will require a timely but well conceived and thorough response if the challenge is to be met.

VI DISPOSITION

[98] The Board is dismissing the request for a prudence ruling for the reasons noted in Section II above (see para. 47). The Board will retain jurisdiction with respect to the issue of the waiver of the Fuel Manual.

[99] NSPI, in the hearing, said it would not proceed with the project without a prudence ruling. If that is still its position then, subject to any appeal of this decision, that ends the issue. If, on the other hand, NSPI wants to continue to pursue the waiver of the Fuel Manual by fixing the deficiencies identified in this decision and in the record before the Board, the Board is prepared to reconvene the hearing on sufficient notice to all parties, to allow any new evidence including a PPA and resolution to the biomass index issue, to be examined by the parties and their consultants.

[100] As the Board commented earlier in the decision, this may well be a worthwhile project but, based on the state of the record in this proceeding, the Board is simply unable to determine if this is the case.

[101] An Order will issue accordingly.

DATED at Halifax, Nova Scotia, this 22nd day of July, 2009.

Peter W. Gurnham