

THE STATE OF NEW HAMPSHIRE
BEFORE THE
NEW HAMPSHIRE PUBLIC UTILITIES COMMISSION

Docket No. DE 07-125

REVISED DIRECT TESTIMONY OF

S. B. Wicker, Jr.
and
Richard C. Labrecque

Request for Approval Under RSA 362-F
of a
Power Purchase Agreement

March 4, 2008

1 **I. INTRODUCTION**

2 **Q. Please state your names, business addresses and positions.**

3 A. My name is S. B. Wicker, Jr. My business address is 780 North Commercial Street,
4 Manchester, NH 03105. I am currently a Principal Engineer with PSNH.

5 A. My name is Richard C. Labrecque. My business address is 780 North Commercial
6 Street, Manchester, NH 03105. I am a Principal Engineer with PSNH.

7 **Q. Mr. Wicker, have you previously testified before the Commission?**

8 A. Yes, I have testified on numerous occasions before the Commission on issues relating to
9 non utility generation.

10 **Q. Would you provide a brief summary of your educational background and work
11 experience?**

12 A. I received a Bachelor of Science degree in electrical engineering from Worcester
13 Polytechnic Institute in 1966. I received a Master of Business Administration degree
14 from Northeastern University in 1977. I first began my employment at PSNH in 1966.

15 From 1972 until 1981, I held various engineering positions. I became a manager of
16 financial projects in 1981. In 1986, I became manager of Supplemental Energy Sources
17 Department (SESD), a position I held until July of this year when I became a part time
18 employee handling special projects relating to non-utility generation. SESD is
19 responsible for PSNH's relations with all generators seeking to interconnect with the
20 PSNH electric system and includes the interconnection, administration, and payment
21 activities relating to approximately 150 projects.

22 **Q. Mr. Labrecque, have you previously testified before the Commission?**

23 A. Yes, I have testified several times in Energy Service and Stranded Cost Recovery Charge
24 dockets.

25 **Q. Would you provide a brief summary of your educational background and work
26 experience?**

27 A. I graduated from Rensselaer Polytechnic Institute in 1988 with a Bachelor of Science
28 degree in Nuclear Engineering. In 1992, I received a Masters of Nuclear Engineering
29 Degree from North Carolina State University. In 2001, I received a Master of Science

1 degree in Management from Rensselaer at Hartford. I have worked at Northeast Utilities
2 since 1992. From 1992 to 1998, I was employed in the Safety Analysis Branch of the
3 Nuclear Engineering Department.

4 In 1998, I joined the Wholesale Power Contracts department. My current responsibilities
5 include providing the analytical support required to fulfill the power supply obligations of
6 PSNH, CL&P and WMECO. For CL&P and WMECO, I assist in the design and
7 execution of the power supply sourcing contracts associated with these companies'
8 versions of generation service. For PSNH, I assist in the development of the Energy
9 Service rates and the strategy used to procure energy and capacity needed to supplement
10 PSNH's resources

11 **Q. What is the purpose of your testimony?**

12 A. PSNH has entered into two separate three-year agreements with two Pinetree biomass
13 projects to buy energy, capacity and New Hampshire Renewable Energy Certificates
14 (NH RECs) during 2008 through 2010 and is seeking Commission approval of the
15 arrangement as required under the RSA 362-F:9. That law provides, in part, as follows:

16 "Upon the request of one or more electric distribution companies and after
17 notice and hearing, the commission may authorize such company or
18 companies to enter into multi-year purchase agreements with renewable
19 energy sources for certificates, in conjunction with or independent of
20 purchased power agreements from such sources, to meet reasonably
21 projected renewable portfolio requirements and default service needs to the
22 extent of such requirements, if it finds such agreements or such an approach,
23 as may be conditioned by the commission, to be in the public interest."

24 **Q. Please define New Hampshire Renewable Energy Certificates.**

25 A. New Hampshire Class III Renewable Energy Certificates (NH RECs) are NEPOOL GIS
26 Certificates derived from the energy production of the Projects that have been qualified
27 for the New Hampshire minimum renewable standards for energy portfolios as
28 established in NH RSA Chapter 362-F.

29 **Q. Please describe the projects and the Terms of the agreements?**

30 A. Pinetree Power, Inc ("Bethlehem") is a 15 MW wood-fired plant in Bethlehem, New
31 Hampshire. Pinetree Power – Tamworth, Inc. ("Tamworth") is a 20 MW wood-fired
32 plant in Tamworth, New Hampshire. The Term of the Bethlehem agreement is from
33 January 1, 2008 to December 31, 2010. The agreement with Tamworth starts after the

1 expiration of the current rate order (April 1, 2008) and ends on December 31, 2010. Both
2 of the agreements are being filed under a Motion for Protective Order. Redacted versions
3 of the agreements are attached hereto as Attachments SBW/RCL-1 and SBW/RCL-2.

4 **Q. Can the Terms of the agreements end earlier?**

5 A. Yes. If the Commission rejects these agreements or fails to approve them by
6 December 31, 2008, the agreements will terminate on December 31, 2008.

7 **Q. How will PSNH reconcile the cost of the products procured under these**
8 **agreements?**

9 A. The energy, capacity, and RECs procured via these agreements will be used to satisfy
10 PSNH's Default Energy Service obligation and the associated renewable portfolio
11 standard requirement. Forecasted costs will be included in the Default Energy Service
12 rate and actual costs will be reconciled annually.

13 **Q. Why is PSNH seeking a protective order regarding certain financial terms and**
14 **conditions in these arrangements?**

15 A. PSNH would like to be able to use the structure of these arrangements to purchase
16 additional renewable power and does not want to be at a competitive disadvantage, which
17 would happen if the structure of these agreements became public. Also, certain terms
18 contained in these agreements are plant specific and are considered commercially
19 sensitive to the Projects' owners.

20 **Q. Are both agreements structured similarly?**

21 A. Yes. Except for certain plant specific data, the pricing and terms and conditions are the
22 same.

23 **Q. What are the specific energy pricing terms of the Agreements?**

24 A. PSNH will purchase the energy from the projects at fixed prices that are competitive with
25 forward market prices that existed at the time the agreements were completed. The actual
26 pricing is structured so that the projects are paid more during peak months and on-peak
27 hours and less during shoulder months and off-peak hours. The peak months are January,
28 February, July and August, with the rest of the year being shoulder months. In addition

1 the on-peak prices are increased when the on-peak capacity factor during on-peak months
2 is above a specified amount.

3 **Q. Please describe the payments for capacity from the projects.**

4 A. For each month during the Term, each Project will be paid a fixed percentage of the value
5 realized by PSNH through the ISO-New England settlement process for the Project's
6 capacity (the "Capacity Payment"). However, if the project's capacity factor is less than
7 75% in that month, then the Capacity Payment will be zero.

8 **Q. Please describe the terms and conditions associated with the purchase of NH RECs?**

9 A. PSNH will pay each project a fixed percentage of the NH Class III REC Default Price
10 for each MWh of energy that qualifies for a NH REC.

11 **Q. Are the projects required to sell all the NH RECs to PSNH?**

12 A. No. The Projects can elect to sell the RECs produced to third parties for compliance with
13 a Renewable Portfolio Standards programs other than the NH RPS program.

14 **Q. Why are the projects being given this option?**

15 A. Since New England REC market now includes all six states and the requirements and
16 prices vary from time to time, the agreements allow the projects to seek the greatest value
17 for the RECs.

18 **Q. Will PSNH customers benefit if the projects elect to sell RECs to third parties?**

19 A. Yes. The agreement provides for PSNH to receive a payment that is equivalent to the
20 discount off of the NH Class III REC Default Price whenever the projects sell RECs to
21 third parties.

22 **Q. What terms relate to encouraging the Projects to upgrade to qualify for NH RECs?**

23 A. The agreements contain three provisions to encourage the projects to modify the plants to
24 qualify for NH RECs. First, contract energy prices are reduced for generation that does
25 not qualify for NH RECs. Second, for purposes of calculating the project's capacity
26 factor, 14 days of outages are excused during the Projects conversion to qualify for NH
27 RECs. Third, the fuel price adjustment clause does not become effective until after the
28 project(s) qualifies for NH RECs.

1 **Q. Please describe the terms relating to changes in the cost of wood burned by the**
2 **Projects?**

3 A. The Agreement allows for a limited quarterly fuel price adjustment if delivered wood
4 prices for each project increases or decreases during the term of the agreement.

5 **Q. Does PSNH have an estimate of the number of RECs it will need under the New**
6 **Hampshire Class III RPS requirement?**

7 A. Yes. Based upon PSNH's 2006 retail load, PSNH would need approximately 294,079
8 Class III RECs in 2008, 387,119 RECs in 2009, and 483,791 in 2010, for a total
9 estimated requirement of 1,165,169 RECs.

10 **Q. What is the amount of NH RECs that could be generated by this agreement?**

11 A. If the projects upgraded under the proposed schedule and if PSNH bought all the RECs
12 from both projects, these agreements could yield approximately 750,000 NH Class III
13 RECs.

14 **Q. What generation sources qualify for New Hampshire Class III?**

15 A. New Hampshire Class III sources are qualifying biomass and methane projects.

16 **Q. What existing generation qualifies for Class III?**

17 A. All existing methane projects qualify for New Hampshire Class III. However, we
18 understand that all existing methane projects are currently selling RECs into the
19 Connecticut Class I market. No other current New Hampshire biomass project qualifies
20 for Class III RECs, although we understand at least one other wood project is in the
21 process of upgrading to qualify.

22 **Q. Could any other projects in New England qualify for New Hampshire Class III**
23 **RECs?**

24 A. Yes. Three other existing New Hampshire wood projects could qualify if they upgraded
25 their plant, but we understand that two of those projects have already sold at least some
26 of their future RECs. There are two other wood projects outside of New Hampshire that
27 potentially could qualify, but both projects are currently involved in long term power
28 purchase agreements. One other NH project is currently being redeveloped and its plans
29 to upgrade the facility are unknown.

1 **Q. What are the legal standards for approval of these agreements?**

2 A. RSA 362-F:9, I allows the Commission to authorize a utility to enter into a multi-year
3 purchase agreement for renewable energy certificates and/or energy from renewable
4 energy sources if it finds the agreement in the public interest. To determine whether an
5 agreement is in the public interest, RSA 362-F:9, II requires that the Commission must
6 find that the agreement is substantially consistent with the following factors:

7 “(a) The efficient and cost-effective realization of the purposes and goals of this
8 chapter;

9 (b) The restructuring policy principles of RSA 374-F:3;

10 (c) The extent to which such multi-year procurements are likely to create a
11 reasonable mix of resources, in combination with the company's overall
12 energy and capacity portfolio, in light of the energy policy set forth in RSA
13 378:37 and either the distribution company's integrated least cost resource
14 plan pursuant to RSA 378:37-41, if applicable, or a portfolio management
15 strategy for default service procurement that balances potential benefits
16 and risks to default service customers;

17 (d) The extent to which such procurement is conducted in a manner that is
18 administratively efficient and promotes market-driven competitive
19 innovations and solutions; and

20 (e) Economic development and environmental benefits for New Hampshire.”

21 **Q. Do these agreements meet the standards listed above?**

22 A. Yes, they do. The first standard requires that the agreement meet the purposes and goals
23 of the chapter in an efficient and cost-effective manner. The goals of the chapter are to
24 promote renewable energy production in New Hampshire. The agreements will certainly
25 do that, since they will not only allow the project to continue to operate, but will also
26 encourage modifications to each project to allow them to qualify for NH RECs.
27 Moreover, the pricing of energy is less than forward market prices that existed at the time
28 the agreements were signed, and the Class III RECs are being obtained at a discount to
29 the legislatively determined default price.

30 The second standard requires that the agreements be consistent with the restructuring
31 policy principles of RSA 374-F:3. Nothing in the agreements is in conflict with any of
32 the policy principles contained in that statute.

1 The third standard requires that the agreements create a reasonable mix of resources in
2 light of the state's energy policy in RSA 378:37 and the utility's integrated least cost
3 resource plan. The agreements will provide PSNH with renewable energy and assist
4 PSNH in meeting the requirements of the Renewable Portfolio Standard (RSA 362-F).
5 PSNH's Integrated Least Cost Resource Plan filed on September 30, 2007, PSNH
6 discusses the need to enter into intermediate-term contracts with renewable facilities that
7 produce RECs.

8 The fourth standard discusses the need for procurement of power to be administratively
9 efficient and promoting market-driven competitive solutions. With the approval of these
10 contracts, PSNH will obtain 35 MW of renewable power representing approximately
11 65% of PSNH's Class III requirement during 2008 – 2010. The contracts will form a
12 model for future negotiations, thus providing for administrative efficiency. Moreover,
13 since the contracts have been negotiated with market participants, they are market-driven
14 competitive solutions to PSNH's need for renewable energy.

15 The fifth standard requires that the agreements provide economic development and
16 environmental benefits for New Hampshire. The contracts ensure that the facilities will
17 continue to operate in their communities and will invest in capital additions to reduce
18 nitrogen oxide (NOx) and particulate emission rates. The renewable energy generated by
19 the facilities will reduce PSNH's reliance on fossil-fuel-based market purchases.

20 **Q. Do you believe these agreements are beneficial for PSNH's customers and will meet**
21 **the requirements of the New Hampshire RPS program?**

22 **A.** Yes. We believe the agreements provide energy and capacity for our customers at prices
23 that are below market and help fix our future cost of purchased power. These agreements
24 also promote the upgrade of existing biomass projects in New Hampshire as part of the
25 NH RPS program and help PSNH meet its RPS requirements.

26 **Q. What action are you requesting from the Commission?**

27 **A.** We are requesting that the Commission find that the agreements are in the public interest,
28 as required under RSA 362-F:9.

1 **Q.** **Does this complete your testimony?**

2 **A.** Yes, it does.