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Public Service
of New Hampshire

PSNH Energy Park
780 North Commercial Street, Manchester, NH 03101

Public Service Company of New Hampshire
P.O. Box 330
Manchester, NH 03105-0330
(603) 669-4000
www.psnh.com

The Northeast Utilities System

May 2, 2008

Debra A. Howland
Executive Director and Secretary
New Hampshire Public Utilities Commission
21 South Fruit Street, Suite 10
Concord, New Hampshire 03301-2429

ORIGINAL
N.H.P.U.C. Case No. DE 07-108
Exhibit No. 3
Witness Panel
DO NOT REMOVE FROM FILE

Re: PSNH Least Cost Integrated Resource Plan
Docket No. DE 07-108

Dear Secretary Howland:

Enclosed please find an original and six copies of revised pages to Public Service Company of New Hampshire's (PSNH) Least Cost Integrated Resource Plan filed on September 28, 2007. During the course of responding to data requests, PSNH discovered some errors that should be corrected. Pages 93, 156, 157, and 158 have been revised as follows:

1. Updated net present value of revenue requirement number for the biomass facility in Exhibits G-1 and G-2 on pages 156 and 157
2. Updated revenue requirements rating for biomass facility in Exhibit G-3 on page 158
3. Updated final project ranking in Exhibits G-4 on page 158 and V-15 on page 93 as a result of the rating change for the biomass facility

Attached are two sets of updated pages. One is a redlined version showing the changes and the other is the corrected version without edit marks. Please allow PSNH to amend its plan accordingly and insert the revised pages in PSNH's September 28, 2007

Copies of this letter and the attachments have been provided to the persons on the attached service list pursuant to Puc§ 203.02 .

Very truly yours,

Gerald M. Eaton

Gerald M. Eaton
Senior Counsel

Enclosures
cc: Service List

- Up to 12 MW of solar photovoltaic installations, connected to PSNH's distribution system, providing energy, RECs, and limited capacity value, matching the Class II New Hampshire RPS requirements

- Up to 150 MW of wind turbines, connected to PSNH's distribution system, providing energy, RECs, and limited capacity value

PSNH will also explore opportunities to increase its supply base through contracts for durations of greater than one-year from merchant generators, providing energy, capacity, and Renewable Energy Certificates if eligible.

B.7.1. New Generation Supply Options Analysis

An analysis of each project PSNH deemed appropriate for its consideration using a weighted criteria analysis system to rank the projects according to cost and to determine the supply options to pursue further and include in a potential portfolio. The criteria included in the analysis were:

- Net revenue requirements
- Environmental compliance costs
- Fuel diversity
- Availability at time of system peak
- Promotion of system stability

A weight was assigned to the criteria based on a subjective analysis by PSNH as to which criteria were the most important in keeping customers' costs low. PSNH analyzed two time horizons – the 5-year planning horizon of 2008-2012 and the project life planning horizon to calculate the net present value of revenue requirements. The two planning horizons were used because the 5-year planning horizon is short-sighted for a long-term project and would provide information that may be incorrect for a long-term planning decision. For the revenue requirements criteria, a net present value of revenue requirements was performed for each project and compared to the net present value of market purchases, the current method used to fill PSNH's resource gap. The remaining criteria were analyzed and given a subjective high, medium, and low rating in the weighted criteria analysis and a final determination of project rank was concluded based on this analysis. Exhibit V-15 lists the ordered rank of projects based on the criteria analysis. Appendix G provides more detail about the weights used to develop the final project ranking.

Exhibit V-15: Project Ranking

Project	Rank
50 MW Biomass Plant	4
20 MW Distribution Level Peaking Units	2
Solar PV – w/ Business Energy Tax Credit (BETC)	1
Solar PV – w/o Business Energy Tax Credit (BETC)	3
Wind Project	1

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Exhibits V-16 through V-20 graphically show the comparison of the net revenue requirements and the market purchases for each of the projects considered. Net revenue

Exhibit G-1: Net Revenue Requirements and Market Purchase Comparison, Planning Horizon 2008-2012

Base Case

Option	Project Life (Years)	NPV of Rev Rqmt ($000s)	NPV of Market Purchase ($000s)	Difference
50 MW Biomass Facility	30	$17,575	$15,016	$2,559
20 MW Distribution Level Peaking Unit	30	$1,285	$409	$877
Solar Photovoltaic – Without BETC	20	$7,693	$1,066	$6,628
Solar Photovoltaic – With BETC	20	($18,814)	$1,066	($19,880)
24 MW Wind Project	20	$4,298	$9,480	($5,182)

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Low Case

Option	Project Life (Years)	NPV of Rev Rqmt ($000s)	NPV of Market Purchase ($000s)	Difference
50 MW Biomass Facility	30	$14,447	$15,016	($569)
20 MW Distribution Level Peaking Unit	30	$893	$369	$524
Solar Photovoltaic – Without BETC	20	$6,556	$977	$5,579
Solar Photovoltaic – With BETC	20	($19,965)	$977	($20,942)
24 MW Wind Project	20	$2,398	$8,549	($6,151)

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High Case

Option	Project Life (Years)	NPV of Rev Rqmt ($000s)	NPV of Market Purchase ($000s)	Difference
50 MW Biomass Facility	30	$18,543	$16,005	$2,538
20 MW Distribution Level Peaking Unit	30	$1,677	$448	$1,229
Solar Photovoltaic – Without BETC	20	$8,369	$1,155	$7,215
Solar Photovoltaic – With BETC	20	($18,124)	$1,155	($19,279)
24 MW Wind Project	20	$4,593	$10,391	($5,798)

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Exhibit G-2: Net Revenue Requirements and Market Purchase Comparison, Project Life Horizon

Base Case

Option	Project Life (Years)	NPV of Rev Rqmt ($000s)	NPV of Market Purchase ($000s)	Difference
50 MW Biomass Facility	30	$96,797	$175,565	($78,768)
20 MW Distribution Level Peaking Unit	30	($2,692)	$1,695	($4,387)
Solar Photovoltaic – Without BETC	20	$47,199	$12,589	$34,610
Solar Photovoltaic – With BETC	20	$1,382	$12,589	($11,207)
24 MW Wind Project	20	($1,635)	$34,602	($36,237)

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Low Case

Option	Project Life (Years)	NPV of Rev Rqmt ($000s)	NPV of Market Purchase ($000s)	Difference
50 MW Biomass Facility	30	$73,495	$164,003	($90,508)
20 MW Distribution Level Peaking Unit	30	($3,793)	$1,571	($5,364)
Solar Photovoltaic – Without BETC	20	$38,026	$11,741	$26,285
Solar Photovoltaic – With BETC	20	($8,179)	$11,741	($19,921)
24 MW Wind Project	20	($4,005)	$32,037	($36,042)

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High Case

Option	Project Life (Years)	NPV of Rev Rqmt ($000s)	NPV of Market Purchase ($000s)	Difference
50 MW Biomass Facility	30	$103,856	$187,127	($83,271)
20 MW Distribution Level Peaking Unit	30	($1,592)	$1,819	($3,411)
Solar Photovoltaic – Without BETC	20	$51,892	$13,437	$38,455
Solar Photovoltaic – With BETC	20	$6,462	$13,437	($6,975)
24 MW Wind Project	20	$1,345	$37,167	($35,822)

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Exhibit G-3: Weighted Criteria Analysis

Criteria	Weight	50 MW Biomass Facility		20 MW Distribution Level Peaking Unit		Solar PV – with BETC		Solar PV – without BETC		24 MW Wind Project	
		Rating	Weighted Rating	Rating	Weighted Rating	Rating	Weighted Rating	Rating	Weighted Rating	Rating	Weighted Rating
Revenue Requirements Rank											
(1-High, 2-Medium, 3-Low)	0.30	3.00	0.30	1.00	0.30	1.00	0.30	3.00	0.90	1.00	0.30
Environmental Compliance Costs											
(1-Low, 2-Medium, 3-High)	0.20	1.00	0.20	2.00	0.40	1.00	0.20	1.00	0.20	1.00	0.20
Fuel Diversity											
(1-High, 2-Medium, 3-Low)	0.15	1.00	0.15	2.00	0.30	1.00	0.15	1.00	0.15	1.00	0.15
Availability at Time of System Peak											
(1-High, 2-Medium, 3-Low)	0.15	1.00	0.15	1.00	0.15	2.00	0.30	2.00	0.30	2.00	0.30
Promotes Price Stability											
(1-Stable, 2-Medium, 3-Volatile)	0.20	2.00	0.40	2.00	0.40	1.00	0.20	1.00	0.20	1.00	0.20
Total	1.00		1.80		1.55		1.15		1.75		1.15

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Exhibit G-4: Final Project Ranking

Project	Weighted Score	Rank
50 MW Biomass Facility	1.80	4
20-25 MW Distribution Level Peaking Units	1.55	2
Solar Photovoltaic - with BETC	1.15	1
Solar Photovoltaic - without BETC	1.75	3
24 MW Wind Project	1.15	1

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