

THE STATE OF NEW HAMPSHIRE
BEFORE THE NEW HAMPSHIRE PUBLIC UTILITIES COMMISSION
PREPARED TESTIMONY OF ROBERT A. BAUMANN
2009 DEFAULT ENERGY SERVICE RATE CHANGE
Docket No. DE 08-____

1 **Q. Please state your name, business address and position.**

2 A. My name is Robert A. Baumann. My business address is 107 Selden Street, Berlin,
3 Connecticut. I am Director, Revenue Regulation & Load Resources for Northeast
4 Utilities Service Company (NUSCO). NUSCO provides centralized services to the
5 Northeast Utilities (NU) operating subsidiaries, including Public Service Company of
6 New Hampshire (PSNH), The Connecticut Light and Power Company, Yankee Gas
7 Services Company and Western Massachusetts Electric Company.

8 **Q. Have you previously testified before the Commission?**

9 A. Yes. I have testified on numerous occasions before the Commission.

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

11 A. The purpose of my testimony is: (1) to provide an overview of this filing; and (2) to seek
12 the necessary approvals to set the Default Energy Service (ES) rate applicable to
13 PSNH's customers who take service under Rate DE that will take effect on January 1,
14 2009.

1 **Q. Please provide the historic and current ES rates.**

2 A. In this proceeding, PSNH is requesting the Commission to determine an updated, single
3 ES rate for all customers effective January 1, 2009, based on a forecast of PSNH's costs
4 of providing such power for the calendar year 2009.

5 The table below outlines ES rates in effect from May 1, 2001 to the present for
6 residential, small general service customers (Group 1) and large commercial and
7 industrial customers (Group 2).

Date of Service

May 2001 - January 2003	(a) 4.40 cents per kWh
February 2003 - January 2004	(b) 4.60/4.67
February 2004 - July 2004	5.36
August 2004 - January 2005	5.79
February 2005 - July 2005	6.49
August 2005 - January 2006	7.24
February 2006 - June 2006	9.13
July 2006 - December 2006	8.18
January 2007 - June 2007	8.59
July 2007 - December 2007	7.83
January 2008 – June 2008	8.82
July 2008 – December 2008	9.57

- (a) Set by statute for all retail customers.
- (b) Small C&I and residential rate set by statute (4.60 cents).
Large C&I rate set on forecasted costs (4.67 cents).

1 Initially, Energy Service rates were set by statute. Beginning in February 2003, the
2 Energy Service rate for large commercial and industrial customers (Group 2) was based
3 on PSNH's forecast of "actual, prudent and reasonable costs" (4.67 cents). Beginning in
4 February 2004, the Energy Service rate for all retail customers was based on a forecast
5 of PSNH's "actual, prudent and reasonable costs."

6 In its initial decision in Docket No.DE 03-175 (Order No. 24,252), the Commission
7 reiterated its desire to avoid ES cost deferrals. As a way to minimize these deferrals, the
8 Commission provided any interested party the option of making an interim ES rate filing
9 in July, with the objective of setting a revised ES rate effective on August 1.

10 This interim process has been used in recent years. Beginning in 2007, the ES rate year
11 was adjusted to coincide with the calendar year January – December.

12 **Q. Is PSNH proposing a specific ES rate at this time?**

13 A. No, we are not. In prior ES proceedings, the Commission has required PSNH to utilize
14 market information that is most current as of the hearing date. In light of that precedent,
15 at this time PSNH is supplying preliminary market data and operational data for its
16 owned generation as well as for existing power purchase obligations (such as IPPs).
17 PSNH will formally propose an ES rate, and provide a rate calculation based on updated

1 market information, prior to the anticipated hearing in November 2008. This updated
2 filing will use the same calculation methodologies as in previous proceedings and will
3 also reflect any anticipated ES over or under recovery from 2008.

4 **Q. Has PSNH performed a preliminary calculation of what its projected actual,**
5 **prudent, and reasonable costs of providing Energy Service will be from January 1,**
6 **2009 through December 31, 2009?**

7 A. Yes. PSNH has made a preliminary calculation of the ES rate using the latest available
8 information. As shown on Attachment RAB-1, for the period from January 1, 2009
9 through December 31, 2009, PSNH's prudent and reasonable cost of providing ES is
10 projected to be 10.51 cents per kWh.

11 **Q. Why is the preliminary ES rate calculation of 10.51 cents per kWh greater than the**
12 **current ES rate of 9.57 cents per kWh which was set in July 2008?**

13 A. The preliminary 2009 ES Rate is higher than the actual July – December 2008 ES rate
14 of 9.57 cents per kWh due to higher forecasted fuel and purchased power costs,
15 increases in the cost of compliance with the New Hampshire Renewable Portfolio
16 Standard (RSA Chapter 362-F) and new costs associated with the Regional
17 Greenhouse Gas Initiative (RSA 125-O:19 – 125-O:28) .

18 **Q. Please provide an overview of how customers acquire generation services and**
19 **how the ES cost recovery mechanism works.**

1 A. As a result of electric industry restructuring, customers may choose their source of
2 generation service. PSNH's customers may obtain generation service from an approved
3 competitive supplier, or they may choose to continue to receive their energy from PSNH
4 in the form of Default Energy Service.

5 Historically, through January 31, 2006, all ES reconciliation amounts (over or under
6 recoveries) were applied against Part 3 stranded costs. With the elimination of Part 3 of
7 the SCRC in June 2006, all ES reconciliation amounts effective with ES recovery
8 beginning February 1, 2006, were no longer applied to Part 3 stranded costs. ES
9 reconciliation amounts beginning in February 2006 are now being deferred and are
10 applied to future ES rate recoveries per the Commission's order and findings in Docket
11 No.DE 05-164, Order No. 24,579, dated January 20, 2006.

12 **Q. Are the costs that PSNH has included in this ES rate filing consistent with the past**
13 **ES filings?**

14 A. Yes, the major cost categories are consistent. The major cost categories in this ES filing
15 are the revenue requirements for owned generation assets and the costs of purchased
16 power obligations. In addition, Energy Service costs include the fuel costs associated
17 with PSNH's generation assets, the costs from supplemental energy and capacity
18 purchases, certain ISO-NE ancillary service charges and the cost of compliance with the
19 Renewable Portfolio Standard (RPS). The generation revenue requirements include
20 non-fuel costs of generation, including non-fuel operation and maintenance costs,

1 allocated administrative and general costs, depreciation, property taxes and payroll
2 taxes, and a return on the net fossil/hydro investment. PSNH's ES rate also reflects the
3 ES portion of uncollectible expense. This change was effective July 1, 2007 and is a
4 result of the Settlement Agreement in PSNH's Delivery Service Rate Case, Docket
5 No.DE 06-028.

6 **Q. Please discuss the cost of compliance with the RPS in the proposed rate.**

7 A. In this filing PSNH has included approximately \$13.2 million in projected RPS
8 compliance costs as a result of the 2007 New Hampshire legislation regarding RPS.
9 That legislation amended RSA 374-F:3, V(c) to require, "Any prudently incurred costs
10 arising from compliance with the renewable portfolio standards of RSA 362-F for default
11 service or purchased power agreements shall be recovered through the default service
12 charge." The legislation identified four classes of renewable energy. In 2008, PSNH
13 was obligated to satisfy two of those classes, specifically 3.5% in Class III (existing
14 biomass and methane resources) and 0.5% in Class IV (small existing hydroelectric
15 generating facilities). In 2009, PSNH will be obligated to satisfy three classes of
16 renewable resources, 0.5% of Class I (new renewables), 4.5% of Class III and 1.0% of
17 Class IV. Class II (new solar) obligation will begin in 2010.

18 **Q. Are there any other new costs included in the Energy Service?**

19 A. Yes. PSNH has included costs associated with the Regional Greenhouse Gas Initiative
20 (RGGI), which is a 10-state program to limit CO2 emissions from fossil-fueled power
21 plants beginning on January 1, 2009. RSA 125-O:28 provides, "If the owner of an

1 affected CO2 source is a public utility pursuant to RSA 362:2 that provides electric
2 distribution service pursuant to RSA 374-F, the owner may recover through the utility's
3 default service charge all prudently incurred costs of complying with the requirements of
4 this subdivision in a manner approved by the commission."

5 **Q. Does PSNH know the exact cost of this program for its customers in 2009?**

6 A. Not at this time. RGGI is a new program that utilizes a cap and trade approach
7 requiring the buying of CO2 RGGI allowances for compliance. To date, there has been
8 a minimal amount of allowance transactions, making it difficult to forecast costs.

9 **Q. What are the costs that PSNH has included for RGGI compliance in this ES**
10 **forecast?**

11 A. The estimated RGGI compliance cost included in this filing for 2009 is
12 approximately \$15.4 million. This estimate is based on projected emissions of
13 approximately 4 million tons of CO2 from PSNH's fossil-fuel fired power plants with
14 generating capacities greater than 25 MW. The first auction of CO2 allowances is
15 scheduled for September 25, 2008. In that auction, CO2 allowances have a floor price
16 of \$1.86. Also, New Hampshire has passed a rebate threshold price of \$6 in 2009,
17 which effectively places a cap on the cost of an allowance.

18 **Q. How are PSNH's mandated purchased power obligations (IPPs) valued in**
19 **calculating the ES rate?**

1 A. PSNH includes IPP generation as a source of power to meet PSNH's load requirements,
2 and that power is valued based on projected market costs (energy and capacity). The
3 over-market portion of purchases from the IPPs are treated as a stranded cost and
4 recovered through Part 2 of the Stranded Cost Recovery Charge. This treatment is
5 consistent with the Restructuring Settlement and the Commission's Order in Docket DE
6 02-166. As market prices drop, the value of IPP purchases recovered through the ES
7 rate drops. However, at the same time, there is a corresponding increase to the SCRC
8 rate for the above-market value of IPP purchases. To properly match the recovery of
9 IPP costs, PSNH will also simultaneously file for a change in the SCRC rate effective
10 January 1, 2009.

11 **Q. Does PSNH plan to minimize cost deferrals through a mid-term adjustment?**

12 A. If a rate adjustment is deemed necessary, PSNH (or any interested party) could file a
13 petition in late May or early June prior to the beginning of the second half of the Energy
14 Service Year requesting a change in the Default Energy Service for the remaining six
15 months of the year. The Commission would revisit the rate in an abbreviated
16 investigation. PSNH will submit actual and estimated data on a date specified by the
17 Commission to allow the parties and Staff to address the need for an interim adjustment
18 during the 2009 Energy Service Year.

19 **Q. Please describe the detailed support for the calculation of the ES rate.**

20 A. Attachment RAB-2 provides detailed cost and revenue components relating to PSNH's
21 generating costs, and also provides a breakdown of market purchases and sales.

1 Page 3 of the attachment provides further detail relating to the energy simulation for the
2 period January 1, 2009 through December 31, 2009. Page 4 provides further detail on
3 the forecasted market value of IPP generation. Page 5 provides a breakdown of
4 Fossil/Hydro Operation and Maintenance costs and page 6 provides a detailed
5 calculation of the return on Fossil/Hydro investment. Attachment RAB-3 provides the
6 detailed cost and revenue components relating to the reconciliation of 2008.

7 **Q. Will PSNH implement the new ES rates on a service-rendered basis?**

8 A. Yes.

9 **Q. Does PSNH require Commission approval of this rate by a specific date?**

10 A. Yes, PSNH needs final approval of the proposed ES rate by December 31, 2008, in
11 order to implement the new rate for service rendered on and after January 1, 2009.

12 Therefore, PSNH requests that the Commission commence a proceeding so that the
13 procedural schedule can be set to review this filing and approve the ES rate in a timely
14 manner.

15 **Q. Does this conclude your testimony?**

16 A. Yes, it does.

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE
2009 ENERGY SERVICE RATE CALCULATION
(Dollars in 000's)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33

Summary of Forecasted Energy Service

Cost For January 2009 Through December 2009

TOTAL COST Reference

	TOTAL COST	Reference
Fossil energy costs	\$ 201,970	Attachment RAB-2, page 2
F/H O&M, Depreciation & Taxes	143,609	Attachment RAB-2, page 2
Return on rate base	40,493	Attachment RAB-2, page 2
ISO-NE Ancillary, Capacity, NH RPS and RGGI costs	82,020	Attachment RAB-2, page 2
Vermont Yankee	7,582	Attachment RAB-2, page 2
IPP costs (1)	34,011	Attachment RAB-2, page 2
Purchases and Sales	365,197	Attachment RAB-2, page 2
Return on ES Deferral	(184)	Attachment RAB-2, page 2
Total Forecasted Energy Service Cost	\$ 874,697	
2008 ES Over/Under Recovery	(21,182)	Attachment RAB-3, page 1
Net Forecasted Energy Service Cost	\$ 853,515	
Forecasted Retail MWH Sales	8,121,004	
Forecasted Energy Service Rate - cents Per KWH (line 27 / Line 29)	<u>10.51</u>	

34 (1) The IPP costs represent the forecasted Market Value of IPP generation.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE
2009 ENERGY SERVICE RATE CALCULATION
(Dollars in 000's)

	January 2009 Estimate	February 2009 Estimate	March 2009 Estimate	April 2009 Estimate	May 2009 Estimate	June 2009 Estimate	Reference
Energy Service Cost							
Fossil Energy Costs	\$ 19,335	\$ 17,364	\$ 17,434	\$ 9,435	\$ 14,596	\$ 17,141	RAB-2, P3
F/H O&M, Depreciation & Taxes	10,496	9,851	14,526	15,361	13,861	10,858	RAB-2, P5
Return on Rate Base	3,377	3,361	3,339	3,317	3,324	3,351	RAB-2, P6
ISO-NE Ancillary, Capacity, NH RPS and RGGI costs	7,249	7,104	6,957	6,567	6,715	6,544	RAB-2, P3
Vermont Yankee	644	582	644	623	644	623	RAB-2, P3
IPP Costs	3,362	3,191	3,238	3,381	3,132	2,532	RAB-2, P4
Purchases and Sales	33,979	29,791	26,858	35,127	25,820	27,789	RAB-2, P3
Return on ES Deferral	(51)	(44)	(38)	(25)	(12)	(9)	
Total Energy Service Cost	\$ 78,391	\$ 71,201	\$ 72,958	\$ 73,787	\$ 68,080	\$ 68,829	
Forecasted Retail MWH Sales	725,228	648,696	678,722	621,095	626,875	656,974	
Energy Service Cost - cents per kwh	10.81	10.98	10.75	11.88	10.86	10.48	

Amounts shown above may not add due to rounding.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE
2009 ENERGY SERVICE RATE CALCULATION
(Dollars in 000's)

	July 2009 Estimate	August 2009 Estimate	September 2009 Estimate	October 2009 Estimate	November 2009 Estimate	December 2009 Estimate	Total	Reference
Energy Service Cost								
Fossil Energy Costs	\$ 20,853	\$ 18,638	\$ 17,141	\$ 16,663	\$ 15,743	\$ 17,628	\$ 201,970	RAB-2, P3
F/H O&M, Depreciation & Taxes	11,060	10,356	12,571	13,282	10,753	10,634	143,609	RAB-2, P5
Return on Rate Base	3,351	3,353	3,370	3,400	3,431	3,516	40,493	RAB-2, P6
ISO-NE Ancillary, Capacity, NH RPS and RGGI costs	6,626	6,523	6,478	6,974	6,977	7,304	82,020	RAB-2, P3
Vermont Yankee	644	644	623	644	623	644	7,582	RAB-2, P3
IPP Costs	2,430	2,106	1,945	2,374	2,924	3,396	34,011	RAB-2, P4
Purchases and Sales	34,962	35,514	28,680	28,041	28,028	30,608	365,197	RAB-2, P3
Return on ES Deferral	(7)	(5)	(2)	3	4	2	(184)	
Total Energy Service Cost	\$ 79,920	\$ 77,129	\$ 70,806	\$ 71,380	\$ 68,483	\$ 73,732	\$ 874,697	
Forecasted Retail MWH Sales	743,510	737,590	647,826	662,103	660,740	711,645	8,121,004	
Energy Service Cost - cents per kwh	10.75	10.46	10.93	10.78	10.36	10.36	10.77	

Amounts shown above may not add due to rounding.

PUBLIC SERVICE RATE COMPANY OF NEW HAMPSHIRE
2009 ENERGY SERVICE RATE CALCULATION

PSNH Generation (GWh) and Expense (\$000)
IPP's Priced at Market Rate

		Jan-09	Feb-09	Mar-09	Apr-09	May-09	Jun-09	Jul-09	Aug-09	Sep-09	Oct-09	Nov-09	Dec-09	Total	
1															
2	Hydro:	Energy	30.596	25.97	33.789	39.284	37.31	27.97	20.43	18.264	16.163	22.849	31.686	30.364	334.675
3															
4	Coal:	Energy	333.906	301.592	326.601	169.999	266.994	321.531	332.249	332.249	321.531	319.974	300.799	331.245	3,658.670
5		Energy Expense	\$ 17,102	15,447	16,729	9,370	13,965	16,458	17,007	17,007	16,458	16,172	15,060	16,923	187,698
6															
7	Wood:	Energy	28.458	25.704	28.458	2.639	25.475	27.540	28.458	28.458	27.540	19.814	27.540	28.458	298.542
8		Energy Expense	\$ 1,687	1,524	1,687	156	1,510	1,633	1,687	1,687	1,633	1,175	1,633	1,687	17,698
9		Revenue Credit	(982)	(887)	(982)	(91)	(879)	(950)	(982)	(982)	(950)	(684)	(950)	(982)	(10,301)
10															
11	Nuclear:	Energy	15.177	13.708	15.177	14.687	15.177	14.687	15.177	14.687	15.177	14.687	15.177	15.177	178.695
12		Energy Expense	\$ 644	582	644	623	644	623	644	644	623	644	623	644	7,582
13															
14	Newington:	Energy	14.636	11.709	0.000	0.000	0.000	0.000	31.850	9.100	0.000	0.000	0.000	0.000	67.295
15		Energy Expense	\$ 1,528	1,280	-	-	-	-	3,141	926	-	-	-	-	6,875
16															
17	IPP's:	Energy	32.627	33.052	38.602	42.752	40.427	31.627	25.853	23.728	23.628	27.877	34.052	38.403	392.628
18		Energy Expense	\$ 3,102	2,931	2,978	3,121	2,872	2,336	2,234	1,910	1,749	2,090	2,640	3,112	31,075
19		ICAP	\$ 260	260	260	260	260	196	196	196	196	284	284	284	2,936
20															
21	Peak Purchase:	Energy	32.372	27.064	67.334	123.439	57.337	72.778	117.616	109.534	86.351	73.156	72.759	88.678	928.418
22		Expense	\$ 3,459	2,597	5,926	10,241	4,717	6,286	12,435	10,627	7,432	6,319	6,624	8,418	85,081
23															
24	Known Purchases	Energy	229.512	210.007	157.634	204.741	151.667	187.792	174.955	170.155	184.592	155.632	151.336	158.973	2,136.996
25		Expense	\$ 25,699	23,623	17,039	20,755	16,473	20,182	19,335	18,774	19,793	16,984	16,420	17,237	232,314
26															
27	Offpeak Purchase:	Energy	55.431	42.656	52.968	67.594	71.973	36.883	52.119	81.870	38.483	67.855	68.000	63.629	699.461
28		Expense	\$ 5,087	3,875	3,931	4,493	4,710	2,669	3,835	6,483	2,910	4,738	4,984	4,958	52,673
29															
30	Surplus Energy Sales	Energy	(3.459)	(3.383)	(0.609)	(6.304)	(1.394)	(23.926)	(10.039)	(6.152)	(25.778)	0.000	0.000	(0.089)	(81.133)
31		(Credit)	\$ (266)	(304)	(38)	(362)	(80)	(1,348)	(643)	(370)	(1,455)	0	0	(5)	(4,871)
32															
33	Congestion and Loss Adjustment		\$ (19)	(25)	(70)	(492)	(168)	(75)	(156)	(248)	(123)	(167)	(152)	(129)	(1,824)
34															
35	Total Energy GWH		769.256	688.079	719.954	658.831	664.966	696.882	788.668	782.383	687.197	702.334	700.859	754.838	8,614.247
36	Total Energy Expense		\$ 57,301	50,903	48,103	48,074	44,023	48,009	58,734	56,654	48,265	47,554	47,165	52,147	606,935
37															
38															
39	ISO-NE Ancillary, NH RPS and		\$ 3,297	3,158	3,253	3,285	3,109	3,047	3,210	3,199	3,029	3,014	3,002	3,092	37,695
40	RGGI Compliance Costs														
41	Capacity (sold)/bought MW-mo		1,059	1,059	1,007	1,007	1,007	871	871	871	871	1,007	1,007	1,059	11,694
42	Capacity (sold)/bought Cost (\$000)		\$ 3,971	3,971	3,775	3,775	3,775	3,572	3,572	3,572	3,572	4,127	4,127	4,341	46,149

Amounts shown above may not add due to rounding.

**PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE
2009 ENERGY SERVICE RATE CALCULATION**

1 **Forecasted PSNH IPP Market Value**

2								
3		IPP at						
4		IPP	Mkt Value	Capacity	ICAP Value	ICAP	Total	Total
5	Month	GWh	(\$000)	MW	\$/kw-mo	(\$000)	(\$000)	\$/MWh
6	January 2009	32.627	3,102	69.2	3.75	260.0	3,362	103.04
7	February	33.052	2,931	69.2	3.75	260.0	3,191	96.54
8	March	38.602	2,978	69.2	3.75	260.0	3,238	83.88
9	April	42.752	3,121	69.2	3.75	260.0	3,381	79.08
10	May	40.427	2,872	69.2	3.75	260.0	3,132	77.47
11	June	31.627	2,336	47.9	4.10	196.0	2,532	80.06
12	July	25.853	2,234	47.9	4.10	196.0	2,430	93.99
13	August	23.728	1,910	47.9	4.10	196.0	2,106	88.76
14	September	23.628	1,749	47.9	4.10	196.0	1,945	82.32
15	October	27.877	2,090	69.2	4.10	284.0	2,374	85.16
16	November	34.052	2,640	69.2	4.10	284.0	2,924	85.87
17	December 2009	38.403	3,112	69.2	4.10	284.0	3,396	88.43
18	Total	392.628	31,075			2,936	34,011	86.62

Amounts shown above may not add due to rounding.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE
2009 ENERGY SERVICE RATE CALCULATION
Fossil / Hydro O&M, Depreciation & Taxes Detail
(Dollars in 000's)

	January 2009	February 2009	March 2009	April 2009	May 2009	June 2009	July 2009	August 2009	September 2009	October 2009	November 2009	December 2009	Total
Fossil / Hydro O&M, Depr. & Taxes	Estimate	Estimate	Estimate	Estimate									
F/H Operation & Maintenance Cost	\$ 8,044	\$ 7,397	\$ 11,822	\$ 12,913	\$ 11,417	\$ 8,288	\$ 8,492	\$ 7,895	\$ 9,988	\$ 10,715	\$ 8,272	\$ 8,021	\$ 113,264
F/H Depreciation Cost	1,725	1,725	1,726	1,726	1,728	1,736	1,737	1,739	1,744	1,751	1,758	1,767	20,862
F/H Property Taxes	605	610	610	617	617	617	617	617	617	617	617	617	7,378
F/H Payroll Taxes	122	119	257	105	99	104	214	105	107	199	106	112	1,649
Amort. of Asset Retirement Obligation	-	-	111	-	-	113	-	-	115	-	-	117	456
Total F/H O&M, Depr. and Taxes	\$ 10,496	\$ 9,851	\$ 14,526	\$ 15,361	\$ 13,861	\$ 10,858	\$ 11,060	\$ 10,356	\$ 12,571	\$ 13,282	\$ 10,753	\$ 10,634	\$ 143,609

Amounts shown above may not add due to rounding.

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE
2009 ENERGY SERVICE RATE CALCULATION
FOSSIL/HYDRO RETURN ON RATE BASE
(Dollars in 000's)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27

	January 2009 Estimate	February 2009 Estimate	March 2009 Estimate	April 2009 Estimate	May 2009 Estimate	June 2009 Estimate	July 2009 Estimate	August 2009 Estimate	September 2009 Estimate	October 2009 Estimate	November 2009 Estimate	December 2009 Estimate	Total
Return on Rate Base													
Rate base													
Net Plant	278,408	276,893	275,393	274,482	278,870	278,493	277,591	278,444	280,349	283,720	285,100	298,873	
Working Capital Allow. (45 days of O&M)	13,964	13,964	13,964	13,964	13,964	13,964	13,964	13,964	13,964	13,964	13,964	13,964	
Fossil Fuel Inventory	47,121	47,121	47,121	47,121	47,121	47,121	47,121	47,121	47,121	47,121	47,121	47,121	
Mat'ls and Supplies	44,144	44,194	44,277	44,365	44,488	44,701	44,772	44,861	44,964	45,066	45,174	45,426	
Prepayments	250	250	250	250	250	250	250	250	250	250	250	250	
Deferred Taxes	(13,768)	(15,751)	(15,548)	(18,264)	(17,778)	(16,491)	(16,669)	(16,290)	(15,689)	(15,260)	(13,831)	(12,183)	
Other Regulatory Obligations	(2,901)	(2,901)	(3,013)	(3,013)	(3,013)	(3,126)	(3,126)	(3,126)	(3,241)	(3,241)	(3,241)	(3,358)	
Total Rate Base (L15 thru L22)	367,218	363,770	362,444	358,905	363,902	364,912	363,903	365,224	367,718	371,620	374,537	390,093	
Average Rate Base (prev + curr month)	367,218	365,494	363,107	360,675	361,404	364,407	364,408	364,564	366,471	369,669	373,079	382,315	
x Return	0.9197%	0.9197%	0.9197%	0.9197%	0.9197%	0.9197%	0.9197%	0.9197%	0.9197%	0.9197%	0.9197%	0.9197%	
Return (L25 x L26)	\$ 3,377	\$ 3,361	\$ 3,339	\$ 3,317	\$ 3,324	\$ 3,351	\$ 3,351	\$ 3,353	\$ 3,370	\$ 3,400	\$ 3,431	\$ 3,516	\$ 40,493

Amounts shown above may not add due to rounding.

1
2
3
4
5
6
7
8
9

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE
ENERGY SERVICE RATE CALCULATION
(Dollars in 000's)

10 **Summary of Forecasted Energy Service**

11 Cost For January 2008 Through December 2008	TOTAL COST	Reference
12		
13 Fossil energy costs	\$ 168,055	Attachment RAB-3, page 2B
14 F/H O&M, Depreciation & Taxes	132,847	Attachment RAB-3, page 2B
15 Return on rate base	38,228	Attachment RAB-3, page 2B
16 ISO-NE Ancillary, Capacity & NH RPS	49,644	Attachment RAB-3, page 2B
17 Vermont Yankee	6,673	Attachment RAB-3, page 2B
18 IPP costs	42,357	Attachment RAB-3, page 2B
19 Purchases and Sales	290,425	Attachment RAB-3, page 2B
20 Return on ES deferral	(395)	Attachment RAB-3, page 2B
21 ES Uncollectible Expense	845	Attachment RAB-3, page 2B
22 2007 actual ES under/(over) recovery	<u>(20,800)</u>	Attachment RAB-3, page 2B
23 Total Estimated Energy Service Cost	\$ 707,879	Attachment RAB-3, page 2B
24 Total Estimated Revenue	<u>729,061</u>	Attachment RAB-3, page 2B
25 2008 Energy Service Estimated Under/(Over) Recovery	<u>\$ (21,182)</u>	

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE
ENERGY SERVICE RATE CALCULATION
(Dollars in 000's)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24

	Actual January 2008	Actual February 2008	Actual March 2008	Actual April 2008	Actual May 2008	Actual June 2008	Reference
Energy Service Cost							
Fossil Energy Costs (1)	\$ 16,691	\$ 13,704	\$ 13,998	\$ 7,265	\$ 9,070	\$ 14,272	RAB-3, P3
F/H O&M, Depreciation & Taxes	8,945	8,942	9,973	15,079	10,249	11,093	RAB-3, P5
Return on Rate Base	2,974	2,985	2,916	2,932	2,932	3,362	RAB-3, P6
ISO-NE Ancillary, Capacity & NH RPS	3,736	3,516	4,117	3,666	3,591	2,091	RAB-3, P3
Vermont Yankee	655	605	567	573	650	582	RAB-3, P3
IPP Costs (2)	5,647	5,352	4,984	4,366	5,049	2,139	RAB-3, P4
Purchases and Sales	18,070	17,691	18,917	28,203	21,615	27,440	RAB-3, P3
Return on ES deferral	(70)	(62)	(68)	(48)	(30)	(25)	
ES Uncollectible Expense (3)	-	-	-	-	-	-	
2007 actual ES under/(over) recovery (4)	(20,800)	-	-	-	-	-	
Total Energy Service Cost Re-estimate	\$ 35,847	\$ 52,732	\$ 55,406	\$ 62,036	\$ 53,126	\$ 60,954	
Total Energy Service Revenue @ 8.82 Rate	\$ 61,543	\$ 56,104	\$ 57,537	\$ 50,355	\$ 51,472	\$ 59,851	
ES Under/ (Over) Recovery	\$ (25,696)	\$ (3,372)	\$ (2,131)	\$ 11,681	\$ 1,654	\$ 1,103	
Retail MWH Sales	697,877	636,122	652,440	570,922	583,589	648,919	

25 (1) Fossil Energy Costs for May include a credit of (\$218K) from the 2008 EPA SO2 auction.

26 (2) The IPP costs represent the actual and forecasted market value of IPP generation.
27 January 2008 also reflects the 2007 annual ES true up credit of \$151 thousand.

28 (3) Per the Settlement Agreement in Docket No. DE 06-028, PSNH began recovering the ES portion of
29 uncollectible expense through the ES Rate effective 7/1/07. Actual uncollectible
30 expense is reflected in the F/H O&M, line 12.

31 (4) See PSNH August 8, 2008 Quarterly Reconciliation ES filing in DE 07-096, Page 6.

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE
ENERGY SERVICE RATE CALCULATION
(Dollars in 000's)

1
2
3
4
5
6
7
8

	Actual July 2008	Re-estimate August 2008	Re-estimate September 2008	Re-estimate October 2008	Re-estimate November 2008	Re-estimate December 2008	Total	Reference
9 Energy Service Cost								
11 Fossil Energy Costs (1)	\$ 19,905	\$ 17,720	\$ 12,665	\$ 12,244	\$ 14,963	\$ 15,556	\$ 168,055	RAB-3, P3
12 F/H O&M, Depreciation & Taxes	11,435	9,836	13,948	14,293	9,252	9,802	132,847	RAB-3, P5
13 Return on Rate Base	3,255	3,320	3,381	3,386	3,389	3,395	38,228	RAB-3, P6
14 ISO-NE Ancillary, Capacity & NH RPS	3,631	5,062	4,486	4,918	5,323	5,508	49,644	RAB-3, P3
15 Vermont Yankee	472	627	607	344	364	627	6,673	RAB-3, P3
16 IPP Costs (2)	2,907	1,899	1,776	2,189	2,649	3,400	42,357	RAB-3, P4
17 Purchases and Sales	35,306	23,544	26,102	27,079	21,230	25,228	290,425	RAB-3, P3
18 Return on ES deferral	(15)	(10)	(13)	(10)	(16)	(28)	(395)	
19 ES Uncollectible Expense (3)	-	169	169	169	169	169	845	
20 2007 actual ES under/(over) recovery (4)	-	-	-	-	-	-	(20,800)	
21 Total Energy Service Cost Re-estimate	\$ 76,897	\$ 62,167	\$ 63,122	\$ 64,612	\$ 57,323	\$ 63,657	\$ 707,879	
22 Total Energy Service Revenue @ 9.57 Rate	\$ 70,708	\$ 65,804	\$ 61,885	\$ 63,257	\$ 62,864	\$ 67,679	\$ 729,061	
23 Total Energy Service Under/ (Over) Recovery	\$ 6,189	\$ (3,637)	\$ 1,237	\$ 1,355	\$ (5,541)	\$ (4,022)	\$ (21,182)	
24 Retail MWH Sales	738,450	687,542	646,658	660,996	656,888	707,202	7,887,606	

25 (1) Fossil Energy Costs for May include a credit of (\$218K) from the 2008 EPA SO2 auction.

26 (2) The IPP costs represent the actual and forecasted market value of IPP generation.
27 January 2008 also reflects the 2007 annual ES true up credit of \$151 thousand.

28 (3) Per the Settlement Agreement in Docket No. DE 06-028, PSNH began recovering the ES portion of
29 uncollectible expense through the ES Rate effective 7/1/07. Actual uncollectible
30 expense is reflected in the F/H O&M, line 12.

31 (4) See PSNH August 8, 2008 Quarterly Reconciliation ES filing in DE 07-096, Page 6.

**PUBLIC SERVICE RATE COMPANY OF NEW HAMPSHIRE
ENERGY SERVICE RATE CALCULATION**

**PSNH Generation (GWh) and Expense (\$000)
IPP's Priced at Market Rate**

		Aug 08	Sep 08	Oct 08	Nov 08	Dec 08	Total
8	Hydro: Energy	18.664	16.544	23.186	31.518	30.355	120.267
10	Coal: Energy	356.880	267.893	263.181	322.264	336.006	1546.224
11	Energy Expense	\$ 15,963	12,103	11,941	14,401	14,963	69,371
13	Wood: Energy	29.716	29.160	21.020	29.160	30.132	139.188
14	Energy Expense	\$ 1,762	1,729	1,246	1,729	1,786	8,251
15	Revenue Credit	\$ (1,181)	(1,166)	(943)	(1,166)	(1,193)	(5,649)
17	Nuclear: Energy	15.128	14.64	8.296	8.784	15.128	61.976
18	Energy Expense	\$ 627	607	344	364	627	2,569
20	Newington: Energy	10.707	0.000	0.000	0.000	0.000	10.707
21	Energy Expense	\$ 1,176	-	-	-	-	1,176
23	IPP's: Energy	24.238	24.137	28.431	34.672	39.067	150.545
24	Energy Expense	\$ 1,719	1,596	1,929	2,389	3,140	10,773
25	ICAP	\$ 180	180	260	260	260	1,140
27	Peak Purchase: Energy	26.666	76.735	110.210	62.387	83.794	359.792
28	Expense	\$ 2,304	5,672	8,434	4,945	7,521	28,876
30	Known Purchases Energy	217.077	197.504	153.877	143.904	152.277	864.639
31	Expense	\$ 19,224	16,197	12,813	11,913	12,651	72,798
33	Offpeak Purchase: Energy	44.672	65.417	92.622	63.782	63.117	329.610
34	Expense	\$ 3,306	4,567	5,832	4,376	5,064	23,145
36	Surplus Energy Sales Energy	(19.338)	(6.376)	0.000	(0.066)	(0.104)	(25.884)
37	(Credit)	\$ (1,290)	(334)	0	(4)	(8)	(1,636)
39	Congestion and Loss Adjustment	\$ 278	(204)	(321)	(15)	(80)	(342)
41	Total Energy GWH	724.410	685.654	700.823	696.405	749.772	3,557.064
42	Total Energy Expense	\$ 44,068	40,946	41,536	39,191	44,731	210,472
45	ISO-NE Ancillary and NH RPS	\$ 1,605	1,512	1,531	1,526	1,580	7,754
47	Newington Capacity Revenue	\$ (142)	(142)	(142)	0	0	(426)
49	Capacity (sold)/bought MW-mo	885	885	1,026	1,017	1,069	4,883
50	Capacity (sold)/bought Cost (\$000)	\$ 3,321	3,321	3,849	3,812	4,008	18,311

53 Amounts shown above may not add due to rounding.

**PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE
ENERGY SERVICE RATE CALCULATION**

1 **Forecasted PSNH IPP Market Value**

2
3

4		IPP at						
5	Month	IPP GWh	Mkt Value (\$000)	Capacity MW	ICAP Value \$/kw-mo	ICAP (\$000)	Total (\$000)	Total \$/MWh
6	August 2008	24.238	1,719	47.9	3.75	180.0	1,899	78.35
7	September	24.137	1,596	47.9	3.75	180.0	1,776	73.58
8	October	28.431	1,929	69.2	3.75	260.0	2,189	76.99
9	November	34.672	2,389	69.2	3.75	260.0	2,649	76.40
10	December 2008	39.067	3,140	69.2	3.75	260.0	3,400	87.03
11	Total	150.545	10,773			1,140.0	11,913	79.13

12 Amounts shown above may not add due to rounding.

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE
ENERGY SERVICE RATE CALCULATION
Fossil / Hydro O&M, Depreciation & Taxes Detail
(Dollars in 000's)

	January 2008	February 2008	March 2008	April 2008	May 2008	June 2008	July 2008	August 2008	September 2008	October 2008	November 2008	December 2008	Total
Fossil / Hydro O&M, Depr. & Taxes	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Estimate	Estimate	Estimate	Estimate	Estimate	
F/H Operation & Maintenance Cost	\$ 6,444	\$ 6,527	\$ 7,457	\$ 12,659	\$ 8,509	\$ 7,875	\$ 8,901	\$ 7,220	\$ 11,213	\$ 11,675	\$ 6,642	\$ 7,043	\$ 102,165
F/H Depreciation Cost	1,648	1,657	1,658	1,658	1,655	1,682	1,692	1,828	1,840	1,846	1,850	1,855	20,870
F/H Property Taxes	612	617	663	616	(2)	1,237	620	668	668	668	668	668	7,704
F/H Payroll Taxes	240	141	91	145	87	192	223	120	102	104	92	109	1,646
Amortization of Asset Retirement Obligation	-	-	104	-	-	106	-	-	125	-	-	127	462
Total F/H O&M, Depr. and Taxes	\$ 8,945	\$ 8,942	\$ 9,973	\$ 15,079	\$ 10,249	\$ 11,093	\$ 11,435	\$ 9,836	\$ 13,948	\$ 14,293	\$ 9,252	\$ 9,802	\$ 132,847

Amounts shown above may not add due to rounding.

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE
ENERGY SERVICE RATE CALCULATION
FOSSIL/HYDRO RETURN ON RATE BASE
(Dollars in 000's)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33

34 Amounts shown above may not add due to rounding.

	January 2008	February 2008	March 2008	April 2008	May 2008	June 2008	July 2008	August 2008	September 2008	October 2008	November 2008	December 2008	Total
	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Estimate	Estimate	Estimate	Estimate	Estimate	
Return on Rate Base													
Net Plant	238,148	238,148	237,797	237,797	237,797	264,457	264,457	273,591	272,548	274,528	275,114	274,802	
Working Capital Allow. (45 days of O&M)	13,334	13,334	13,334	13,334	13,334	13,334	13,334	12,733	12,733	12,733	12,733	12,733	
Fossil Fuel Inventory	43,067	43,067	37,073	37,073	37,073	49,268	49,268	54,270	54,270	54,270	54,270	54,270	
Mat'l's and Supplies	42,426	42,426	44,438	44,438	44,438	49,305	49,305	39,758	39,449	38,875	39,109	42,986	
Prepaid Property Taxes	250	250	164	164	164	151	151	2,028	2,028	2,028	2,028	2,028	
Deferred Taxes	(14,097)	(14,097)	(12,939)	(12,939)	(12,939)	(12,700)	(12,700)	(4,819)	(4,070)	(3,726)	(5,689)	(6,767)	
Other Regulatory Obligations	(1,373)	(1,373)	(1,472)	(1,472)	(1,472)	(1,574)	(1,574)	(972)	(972)	(972)	(972)	(972)	
Total Rate Base-Adjusted (sum L15 thru L22)	321,755	321,755	318,394	318,394	318,394	362,241	362,241	376,589	375,986	377,736	376,593	379,080	
Average Rate Base (prev + curr month)	320,594	321,755	320,075	318,394	318,394	340,317	362,241	369,415	376,287	376,861	377,164	377,836	
x Return	0.9276%	0.9276%	0.9276%	0.9209%	0.9209%	0.9209%	0.8986%	0.8986%	0.8986%	0.8986%	0.8986%	0.8986%	
Return-Adjusted (L25 x L26)	\$ 2,974	\$ 2,985	\$ 2,916	\$ 2,932	\$ 2,932	\$ 3,362	\$ 3,255	\$ 3,320	\$ 3,381	\$ 3,386	\$ 3,389	\$ 3,395	\$ 38,228