

THE STATE OF NEW HAMPSHIRE
BEFORE THE NEW HAMPSHIRE PUBLIC UTILITIES COMMISSION
PREPARED TESTIMONY OF ROBERT A. BAUMANN
2010 DEFAULT ENERGY SERVICE RATE CHANGE
Docket No. DE 09-XXX

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, Connecticut.
3 I am Director, Revenue Regulation & Load Resources for Northeast Utilities Service Company
4 (NUSCO). NUSCO provides centralized services to the Northeast Utilities (NU) operating
5 subsidiaries, including Public Service Company of New Hampshire (PSNH), The Connecticut
6 Light and Power Company, Yankee Gas Services Company and Western Massachusetts Electric
7 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 the
12 necessary approvals to set the Default Energy Service (ES) rate applicable to PSNH's customers
13 who take service under Rate DE that will take effect on January 1, 2010.

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 ES rate
3 for all customers effective January 1, 2010, based on a forecast of PSNH's costs of providing
4 such power for the calendar year 2010.

5 The table below outlines ES rates in effect from May 1, 2001 to the present for residential, small
6 general service customers (Group 1) and large commercial and 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
January 2009 – July 2009	9.92
August 2009 – December 2009	9.03

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

6 In its initial decision in Docket No.DE 03-175 (Order No. 24,252), the Commission reiterated its
7 desire to avoid ES cost deferrals. As a way to minimize these deferrals, the Commission
8 provided any interested party the option of making an interim ES rate filing in July, with the
9 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 was
11 adjusted to coincide with the calendar year January – December. In 2009, the ES Rate was
12 adjusted effective August 1, 2009 to coincide with the distribution, SCRC and TCAM rate
13 changes.

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

15 A. No, we are not. In prior ES proceedings, the Commission has required PSNH to utilize market
16 information that is most current as of the hearing date. In light of that precedent, at this time
17 PSNH is supplying preliminary market data and operational data for its owned generation as well

1 as for existing power purchase obligations (such as IPPs). PSNH will formally propose an ES
2 rate, and provide a rate calculation based on updated market information, prior to the anticipated
3 hearing in December 2009. This updated filing will use the same calculation methodologies as in
4 previous proceedings and will also reflect any updated ES over or under recovery from 2009.

5 **Q. Has PSNH performed a preliminary calculation of what its projected actual, prudent, and**
6 **reasonable costs of providing Energy Service will be from January 1, 2010 through**
7 **December 31, 2010?**

8 A. Yes. PSNH has made a preliminary calculation of the ES rate using the latest available
9 information. As shown on Attachment RAB-1, for the period from January 1, 2010 through
10 December 31, 2010, PSNH's prudent and reasonable cost of providing ES is projected to be 9.31
11 cents per kWh.

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

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

18 Historically, through January 31, 2006, all ES reconciliation amounts (over or under recoveries)
19 were applied against Part 3 stranded costs. With the elimination of Part 3 of the SCRC in June
20 2006, all ES reconciliation amounts effective with ES recovery beginning February 1, 2006, were

1 no longer applied to Part 3 stranded costs. ES reconciliation amounts beginning in February 2006
2 are now being deferred and are applied to future ES rate recoveries per the Commission's order
3 and findings in Docket No.DE 05-164, Order No. 24,579, dated January 20, 2006.

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

6 A. Yes, the major cost categories are consistent. The major cost categories in this ES filing are the
7 revenue requirements for owned generation assets and the costs of purchased power obligations.
8 In addition, Energy Service costs include the fuel costs associated with PSNH's generation assets,
9 the costs from supplemental energy and capacity purchases, certain ISO-NE ancillary service
10 charges and the cost of compliance with the Renewable Portfolio Standard (RPS) and RGGI. The
11 generation revenue requirements include non-fuel costs of generation, including non-fuel
12 operation and maintenance costs, allocated administrative and general costs, depreciation,
13 property taxes and payroll taxes, and a return on the net fossil/hydro investment.

14 **Q. Please discuss the level of migration assumed in this filing.**

15 A. The level of migration assumed in PSNH's filing reflects the current actual level of
16 approximately 23%. This is up from the assumed migration level of 18% that was embedded in
17 the current rates effective on August 1, 2009.

18 **Q. What impact has the increased level of migration had on the currently filed ES rate?**

19 A. Increased migration levels have put upward pressure on the ES rate. The rate included in this
20 filing is approximately 5% higher than it would have been absent migration. The end result of

1 this increase in the ES rate is that certain customers that are unable to switch to a third party
2 supply, predominately residential customers, are now shouldering additional fixed costs, while
3 customers who have switched have been afforded the opportunity to choose lower rates from
4 third party suppliers.

5 **Q. Will the upward pressure on ES rates continue into the future?**

6 A. Such a question can only be answered with knowledge of future migration levels and the related
7 levels of alternative market prices. During the current unprecedented market price decline,
8 suppliers have been successful in offering certain customers lower prices than the price calculated
9 in the ES rate formula. How long this price differential will last is not known, nor is the pricing
10 or terms of the current third party contracts. If market prices in the future increase once again
11 over the ES rate level, PSNH expects that some or all of these customers on third party supply
12 may migrate back to PSNH's ES default rate. If prices were to fall once again below the ES rate
13 level, we would expect that some of these returning customers would once again move to a third
14 party supply if it were in their economic interests to do so. This again would leave the remaining
15 customers with additional costs to shoulder.

16 **Q. Does PSNH have a proposal at this time that would address the issues raised above?**

17 A. Not at this time. PSNH believes that any solution to this issue should be vetted by all interested
18 parties through technical session discussions. We do believe that the restructuring law was not
19 intended to have one general group of customers shouldering additional costs as a result of
20 another group securing lower rates. To that end, the additional costs incurred may be the
21 unintended result of restructuring and therefore should be addressed appropriately.

1 **Q. How is PSNH's mandated purchased power obligations (IPPs) valued in calculating the ES**
2 **rate?**

3 A. PSNH includes IPP generation as a source of power to meet PSNH's load requirements, and that
4 power is valued based on projected market costs (energy and capacity). The over-market portion
5 of purchases from the IPPs are treated as a stranded cost and recovered through Part 2 of the
6 Stranded Cost Recovery Charge. This treatment is consistent with the Restructuring Settlement
7 and the Commission's Order in Docket DE 02-166. As market prices drop, the value of IPP
8 purchases recovered through the ES rate drops. However, at the same time, there is a
9 corresponding increase to the SCRC rate for the above-market value of IPP purchases. To
10 properly match the recovery of IPP costs, PSNH will also simultaneously file for a change in the
11 SCRC rate effective January 1, 2010.

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

13 A. If a rate adjustment is deemed necessary, PSNH (or any interested party) could file a petition in
14 early June prior to the beginning of the second half of the Energy Service Year requesting a
15 change in the Default Energy Service for the remaining six months of the year. The Commission
16 would revisit the rate in an abbreviated investigation. PSNH will submit actual and estimated
17 data on a date specified by the Commission to allow the parties and Staff to address the need for
18 an interim adjustment during the 2010 Energy Service Year.

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

1 A. Attachment RAB-2 provides detailed cost and revenue components relating to PSNH's
2 generating costs, and also provides a breakdown of market purchases and sales. Page 3 of the
3 attachment provides further detail relating to the energy simulation for the period January 1, 2010
4 through December 31, 2010. Page 4 provides further detail on the forecasted market value of IPP
5 generation. Page 5 provides a breakdown of Fossil/Hydro Operation and Maintenance costs and
6 page 6 provides a detailed calculation of the return on Fossil/Hydro investment. Attachment
7 RAB-3 provides the detailed cost and revenue components relating to the reconciliation of 2009.

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

9 A. Yes, PSNH needs final approval of the proposed ES rate by late December, 2009, in order to
10 implement the new rate for service rendered on and after January 1, 2010. Therefore, PSNH
11 requests that the Commission commence a proceeding so that the procedural schedule can be set
12 to review this filing and approve the ES rate in a timely manner.

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

14 A. Yes, it does.

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
35
36
37
38

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE
2010 ENERGY SERVICE RATE CALCULATION
(Dollars in 000's)

Summary of Forecasted Energy Service	TOTAL COST	Cents per KWH	Reference
Cost For January 2010 Through December 2010			
Fossil energy costs	\$ 166,238	\$ 2.78	Attachment RAB-2, page 2
F/H O&M, depreciation & taxes	142,129	2.38	Attachment RAB-2, page 2
Return on rate base	42,635	0.71	Attachment RAB-2, page 2
ISO-NE ancillary	4,525	0.08	Attachment RAB-2, page 2
Capacity	25,665	0.43	Attachment RAB-2, page 2
NH RPS	12,523	0.21	Attachment RAB-2, page 2
RGGI costs	8,800	0.15	Attachment RAB-2, page 2
Vermont Yankee	7,397	0.12	Attachment RAB-2, page 2
IPP costs (1)	30,086	0.50	Attachment RAB-2, page 2
Purchases and sales	123,585	2.07	Attachment RAB-2, page 2
Return on ES Deferral	105	0.00	Attachment RAB-2, page 2
Merrimack incremental O&M costs, net of proj. proceeds	(3,000)	(0.05)	Attachment RAB-2, page 2
Merrimack projected RPC insurance proceeds	(3,800)	(0.06)	Attachment RAB-2, page 2
Total Forecasted Energy Service Cost	\$ 556,888	\$ 9.31	
2009 ES Over/Under Recovery	(66)	(0.00)	Attachment RAB-3, page 1
Net Forecasted Energy Service Cost	\$ 556,822		
Forecasted Retail MWH Sales	5,978,999	9.31	
Forecasted Energy Service Rate - cents Per KWH (line 32 / Line 34)	\$ 9.31		

39 (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
27
28
29
30
31

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE
2010 ENERGY SERVICE RATE CALCULATION
(Dollars in 000's)

	January 2010 Estimate	February 2010 Estimate	March 2010 Estimate	April 2010 Estimate	May 2010 Estimate	June 2010 Estimate	Reference
Energy Service Cost							
Fossil energy costs	\$ 16,161	\$ 13,931	\$ 15,169	\$ 11,467	\$ 12,049	\$ 14,892	RAB-2, P3
F/H O&M, depreciation & taxes	10,163	9,528	15,979	17,093	11,188	10,912	RAB-2, P5
Return on rate base	3,529	3,514	3,486	3,460	3,476	3,534	RAB-2, P6
ISO-NE ancillary (inc.Congestion and Loss Adj.)	288	283	326	360	269	603	RAB-2, P3
Capacity	2,259	2,259	1,976	1,976	1,976	2,256	RAB-2, P3
NH RPS	1,151	992	1,048	928	946	1,012	RAB-2, P3
RGGI costs	824	744	824	633	650	793	RAB-2, P3
Vermont Yankee	674	631	674	521	343	627	RAB-2, P3
IPP costs (1)	3,659	2,570	2,783	2,828	2,712	2,010	RAB-2, P4
Purchases and sales	9,671	8,504	8,189	8,083	8,004	8,649	RAB-2, P3
Return on ES Deferral	(3)	(6)	(3)	5	10	9	
Merrimack incremental O&M costs, net of projected proceeds	-	-	-	-	-	-	
Merrimack projected RPC insurance proceeds	-	-	-	-	-	-	
Total Energy Service Cost	\$ 48,376	\$ 42,952	\$ 50,449	\$ 47,354	\$ 41,622	\$ 45,297	
Forecasted Retail MWH Sales	549,784	473,548	500,384	442,966	451,588	483,046	
Energy Service Cost - cents per kwh	8.80	9.07	10.08	10.69	9.22	9.38	

(1) The IPP costs represent the forecasted market value of IPP generation.

Amounts shown above may not add due to rounding.

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE
2010 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

	July 2010 Estimate	August 2010 Estimate	September 2010 Estimate	October 2010 Estimate	November 2010 Estimate	December 2010 Estimate	Total	Reference
Energy Service Cost								
Fossil energy costs	\$ 15,387	\$ 15,387	\$ 12,404	\$ 9,042	\$ 14,926	\$ 15,425	\$ 166,238	RAB-2, P3
F/H O&M, depreciation & taxes	10,605	10,281	15,602	10,327	9,946	10,503	142,129	RAB-2, P5
Return on rate base	3,560	3,550	3,576	3,601	3,641	3,707	42,635	RAB-2, P6
ISO-NE ancillary (inc.Congestion and Loss Adj.)	478	504	473	93	443	405	4,525	RAB-2, P3
Capacity	2,256	2,256	2,256	2,170	2,170	1,857	25,665	RAB-2, P3
NH RPS	1,196	1,145	965	1,001	1,016	1,122	12,523	RAB-2, P3
RGGI costs	820	820	640	429	797	824	8,800	RAB-2, P3
Vermont Yankee	660	644	629	668	652	674	7,397	RAB-2, P3
IPP costs (1)	2,213	1,790	1,476	2,083	2,772	3,192	30,086	RAB-2, P4
Purchases and sales	14,891	12,780	11,516	15,719	7,464	10,116	123,585	RAB-2, P3
Return on ES Deferral	9	6	16	25	20	16	105	
Merrimack incremental O&M costs, net of projected proceeds	-	-	-	-	-	(3,000)	(3,000)	
Merrimack projected RPC insurance proceeds	-	-	-	-	-	(3,800)	(3,800)	
Total Energy Service Cost	\$ 52,075	\$ 49,164	\$ 49,553	\$ 45,159	\$ 43,847	\$ 41,041	\$ 556,888	
Forecasted Retail MWH Sales	571,122	546,752	460,454	478,074	485,253	536,028	5,978,999	
Energy Service Cost - cents per kwh	9.12	8.99	10.76	9.45	9.04	7.66	9.31	

(1) The IPP costs represent the forecasted market value of IPP generation.

Amounts shown above may not add due to rounding.

PUBLIC SERVICE RATE COMPANY OF NEW HAMPSHIRE
2010 ENERGY SERVICE RATE CALCULATION

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

		Jan-10	Feb-10	Mar-10	Apr-10	May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Total	
1															
2	Hydro:	Energy	31.766	27.28	35.147	40.26	38.066	28.616	21.572	19.5	17.124	23.635	32.697	31.471	347.134
3															
4	Coal:	Energy	340.974	307.976	340.974	262.140	269.169	328.360	339.306	339.306	264.999	177.524	329.975	340.974	3,641.677
5		Energy Expense	\$ 14,942	13,496	14,942	11,001	11,566	14,453	14,934	14,934	11,965	8,559	14,460	14,942	160,194
6															
7	Wood:	Energy	27.951	25.246	13.149	27.050	27.951	25.435	26.283	26.283	25.435	27.951	27.050	27.951	307.735
8		Energy Expense	\$ 1,530	1,381	720	1,480	1,530	1,392	1,438	1,438	1,392	1,530	1,480	1,530	16,839
9		Revenue Credit	\$ (1,047)	(946)	(493)	(1,014)	(1,047)	(953)	(985)	(985)	(953)	(1,047)	(1,014)	(1,047)	(11,531)
10															
11	Nuclear:	Energy	15.349	14.374	15.334	11.86	7.807	14.285	15.029	14.664	14.314	15.207	14.846	15.349	168.418
12		Energy Expense	\$ 674	631	674	521	343	627	660	644	629	668	652	674	7,397
13															
14	Newington:	Energy	6.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.000
15		Energy Expense	\$ 736	-	-	-	-	-	-	-	-	-	-	-	736
16															
17	IPP's:	Energy	55.338	41.653	49.698	51.040	50.933	38.251	36.569	31.546	27.134	35.766	45.617	49.974	513.519
18		Energy Expense	\$ 3,310	2,221	2,434	2,479	2,363	1,860	2,063	1,640	1,326	1,848	2,537	2,957	27,038
19		ICAP	\$ 349	349	349	349	349	150	150	150	150	235	235	235	3,048
20															
21	Peak Purchase:	Energy	19.385	14.267	10.841	17.307	11.154	29.960	73.697	50.614	59.436	68.337	8.190	26.259	389.447
22		Expense	\$ 1,502	909	626	951	591	1,728	5,631	3,229	3,370	4,053	589	1,927	25,106
23															
24	Known Purchases	Energy	87.071	82.692	91.593	88.871	83.723	86.927	86.514	86.514	84.527	85.454	86.471	92.932	1,043.289
25		Expense	\$ 8,114	7,815	8,407	8,147	7,666	8,132	8,352	8,343	7,897	7,952	8,015	8,589	97,429
26															
27	Offpeak Purchase:	Energy	24.542	15.015	13.635	9.814	19.761	12.365	32.396	36.650	30.314	81.974	11.489	16.444	304.399
28		Expense	\$ 1,497	923	717	499	942	650	1,867	2,139	1,514	4,040	715	1,073	16,576
29															
30	Surplus Energy Sales	Energy	(23.938)	(25.012)	(38.276)	(37.115)	(28.152)	(50.408)	(24.098)	(23.604)	(33.534)	(7.388)	(40.334)	(31.504)	(363.363)
31		(Credit)	\$ (1,442)	(1,143)	(1,561)	(1,514)	(1,195)	(1,861)	(959)	(931)	(1,265)	(326)	(1,855)	(1,473)	(15,526)
32															
33	Congestion and Loss Adjustment		\$ 46	41	54	21	(3)	38	(87)	(61)	(92)	(256)	94	56	(149)
34															
35	Total Energy GWH		584.438	503.491	532.095	471.227	480.412	513.791	607.268	581.473	489.749	508.460	516.001	569.850	6,358.255
36	Total Energy Expense		\$ 30,210	25,678	26,868	22,920	23,104	26,215	33,064	30,540	25,933	27,255	25,908	29,462	327,158
37															
38															
39	ISO-NE Ancillary		\$ 242	242	272	339	272	565	565	565	565	349	349	349	4,674
40	NH RPS		\$ 1,151	992	1,048	928	946	1,012	1,196	1,145	965	1,001	1,016	1,122	12,523
41	RGGI Costs		\$ 824	744	824	633	650	793	820	820	640	429	797	824	8,800
42															
43	Capacity (sold)/bought MW-mo		551	551	482	482	482	501	501	501	501	482	482	413	5,930
44	Capacity (sold)/bought Cost (\$000)		\$ 2,259	2,259	1,976	1,976	1,976	2,256	2,256	2,256	2,256	2,170	2,170	1,857	25,665

Amounts shown above may not add due to rounding.

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE
2010 ENERGY SERVICE RATE CALCULATION

1 **Forecasted PSNH IPP Market Value - January - December 2010**

2

3 IPP Energy at

4 Month	IPP GWh	Mkt Value (\$000)	Capacity MW	ICAP Value \$/kw-mo	ICAP (\$000)	Total (\$000)	Total \$/MWh
6 January	55.338	3,310	85.2	4.1	349.0	3,659	66.12
7 February	41.653	2,221	85.2	4.1	349.0	2,570	61.70
8 March	49.698	2,434	85.2	4.1	349.0	2,783	56.00
9 April	51.040	2,479	85.2	4.1	349.0	2,828	55.41
10 May	50.933	2,363	85.2	4.1	349.0	2,712	53.25
11 June	38.251	1,860	33.3	4.50	149.9	2,010	52.54
12 July	36.569	2,063	33.3	4.50	149.9	2,213	60.51
13 August	31.546	1,640	33.3	4.50	149.9	1,790	56.74
14 September	27.134	1,326	33.3	4.50	149.9	1,476	54.39
15 October	35.766	1,848	52.1	4.50	234.6	2,083	58.23
16 November	45.617	2,537	52.1	4.50	234.6	2,772	60.76
17 December	49.974	2,957	52.1	4.50	234.6	3,192	63.87
18 Total	513.519	27,038			3,048	30,086	58.59

Amounts shown above may not add due to rounding.

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE
2010 ENERGY SERVICE RATE CALCULATION
Fossil / Hydro O&M, Depreciation & Taxes Detail
(Dollars in 000's)

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

	January 2010	February 2010	March 2010	April 2010	May 2010	June 2010	July 2010	August 2010	September 2010	October 2010	November 2010	December 2010	Total
Fossil / Hydro O&M, Depr. & Taxes	Estimate	Estimate	Estimate	Estimate									
F/H Operation & Maintenance Cost	\$ 7,542	\$ 6,919	\$ 13,111	\$ 14,443	\$ 8,479	\$ 8,151	\$ 7,932	\$ 7,631	\$ 12,833	\$ 7,559	\$ 7,268	\$ 7,676	\$ 109,544
F/H Depreciation Cost	1,776	1,776	1,777	1,777	1,780	1,794	1,796	1,796	1,799	1,825	1,825	1,849	21,570
F/H Property Taxes	688	688	688	734	734	734	734	734	734	734	734	734	8,673
F/H Payroll Taxes	157	145	292	139	195	119	144	120	120	209	119	126	1,884
Amort. of Asset Retirement Obligation	-	-	111	-	-	113	-	-	116	-	-	118	458
Total F/H O&M, Depr. and Taxes	\$ 10,163	\$ 9,528	\$ 15,979	\$ 17,093	\$ 11,188	\$ 10,912	\$ 10,605	\$ 10,281	\$ 15,602	\$ 10,327	\$ 9,946	\$ 10,503	\$ 142,129

Amounts shown above may not add due to rounding.

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE
2010 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 2010 Estimate	February 2010 Estimate	March 2010 Estimate	April 2010 Estimate	May 2010 Estimate	June 2010 Estimate	July 2010 Estimate	August 2010 Estimate	September 2010 Estimate	October 2010 Estimate	November 2010 Estimate	December 2010 Estimate	Total
Return on Rate Base													
Rate base													
Net Plant	286,383	284,841	283,593	283,714	288,499	287,484	286,088	285,513	295,458	294,171	303,317	306,699	
Working Capital Allow. (45 days of O&M)	13,505	13,505	13,505	13,505	13,505	13,505	13,505	13,505	13,505	13,505	13,505	13,505	
Fossil Fuel Inventory	59,235	59,393	59,550	59,708	59,883	60,058	60,233	60,408	60,583	60,758	60,968	61,195	
Mat'ls and Supplies	54,673	54,699	54,773	54,866	55,094	55,331	55,383	55,454	55,554	55,607	55,709	56,061	
Prepayments	376	376	376	376	376	376	376	376	376	376	376	376	
Deferred Taxes	(12,683)	(13,322)	(13,875)	(15,598)	(13,799)	(16,675)	(15,086)	(14,085)	(16,173)	(15,136)	(13,540)	(11,729)	
Other Regulatory Obligations	(20,269)	(21,487)	(22,872)	(24,015)	(25,169)	(14,865)	(16,503)	(18,128)	(19,653)	(20,869)	(22,089)	(23,550)	
Total Rate Base (L15 thru L22)	381,220	378,005	375,050	372,555	378,389	385,213	383,995	383,043	389,651	388,412	398,246	402,558	
Average Rate Base (prev + curr month)	381,220	379,613	376,528	373,803	375,472	381,801	384,604	383,519	386,347	389,031	393,329	400,402	
x Return	0.9257%	0.9257%	0.9257%	0.9257%	0.9257%	0.9257%	0.9257%	0.9257%	0.9257%	0.9257%	0.9257%	0.9257%	
Return (L25 x L26)	\$ 3,529	\$ 3,514	\$ 3,486	\$ 3,460	\$ 3,476	\$ 3,534	\$ 3,560	\$ 3,550	\$ 3,576	\$ 3,601	\$ 3,641	\$ 3,707	\$ 42,635

Amounts shown above may not add due to rounding.

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

1
2
3
4
5
6
7
8

9 Summary of Forecasted Energy Service

10 Cost For January 2009 Through December 2009	TOTAL COST	Reference
11		
12 Fossil energy costs	\$ 145,258	Attachment RAB-3, page 2B
13 F/H O&M, depreciation & taxes	139,850	Attachment RAB-3, page 2B
14 Return on rate base	43,007	Attachment RAB-3, page 2B
15 ISO-NE ancillary	4,996	Attachment RAB-3, page 2B
16 Capacity	29,077	Attachment RAB-3, page 2B
17 NH RPS	9,511	Attachment RAB-3, page 2B
18 RGGI costs	6,880	Attachment RAB-3, page 2B
19 Vermont Yankee	7,391	Attachment RAB-3, page 2B
20 IPP costs	21,973	Attachment RAB-3, page 2B
21 Purchases and sales	248,637	Attachment RAB-3, page 2B
22 Merrimack Incremental O&M costs, net of proj. proceeds	5,480	Attachment RAB-3, page 2B
23 Merrimack projected RPC insurance proceeds	(6,150)	Attachment RAB-3, page 2B
24 Return on ES deferral	(497)	Attachment RAB-3, page 2B
25 2008 actual ES under/(over) recovery	<u>(41,475)</u>	Attachment RAB-3, page 2B
26 Total Estimated Energy Service Cost	\$ 613,939	Attachment RAB-3, page 2B
27 Total Estimated Revenue	<u>614,005</u>	Attachment RAB-3, page 2B
28 2008 Energy Service Estimated Under/(Over) Recovery	<u>\$ (66)</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
25
26
27
28
29
30
31
32

<u>Energy Service Cost</u>	Actual January 2009	Actual February 2009	Actual March 2009	Actual April 2009	Actual May 2009	Actual June 2009	Reference
Fossil energy costs	\$ 24,336	\$ 15,179	\$ 17,189	\$ 13,637	\$ 12,500	\$ 14,200	
F/H O&M, depreciation & taxes	11,748	9,116	10,227	12,431	9,625	9,603	RAB-3, P5
Return on rate base	3,521	3,516	3,487	3,518	3,518	3,516	RAB-3, P6
ISO-NE ancillary	461	782	727	616	448	470	
Capacity	3,525	3,143	3,028	2,812	2,589	2,891	
NH RPS	988	988	988	988	884	164	
RGGI costs	771	626	681	628	619	562	
Vermont Yankee	635	581	590	626	630	548	
IPP costs	3,708	1,445	2,139	2,154	1,754	1,258	
Purchases and sales	16,598	17,924	17,481	19,988	15,547	18,893	
Merrimack Incremental O&M costs, net of proj. proceeds	(69)	(58)	(58)	(55)	(53)	(49)	
Merrimack projected RPC insurance proceeds	-	-	-	-	-	-	
Return on ES deferral	-	-	-	-	-	-	
2007 actual ES under/(over) recovery (2)	(41,475)	-	-	-	-	-	
Total Energy Service Cost	\$ 24,748	\$ 53,243	\$ 56,479	\$ 57,343	\$ 48,060	\$ 52,057	
Total Energy Service Revenue (3)	\$ 69,283	\$ 55,110	\$ 56,133	\$ 49,585	\$ 48,311	\$ 48,557	
ES Under/ (Over) Recovery	\$ (44,535)	\$ (1,867)	\$ 346	\$ 7,758	\$ (251)	\$ 3,500	
Retail MWH Sales	706,849	548,954	566,142	500,446	487,320	489,306	

(1) The IPP costs represent the actual and forecasted market value of IPP generation. January 2009 also reflects the 2008 annual ES true up of \$210 thousand.

(2) See PSNH May 1, 2009 Annual Reconciliation filing in DE 09-091, Attachment RAB-4, page 6.

(3) The ES rate was set at \$0.0992 per KWH from January through July 30, 2009. The ES rate was reset to its current rate of \$0.0903 per KWH effective August 1, 2009.

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

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

	Actual July 2009	Actual August 2009	Re-estimate September 2009	Re-estimate October 2009	Re-estimate November 2009	Re-estimate December 2009	Total	Reference
Energy Service Cost								
Fossil energy costs (1)	\$ 13,585	\$ 2,815	\$ 6,703	\$ 6,025	\$ 5,500	\$ 13,588	\$ 145,258	RAB-3, P3 (5)
F/H O&M, depreciation & taxes	16,627	10,560	11,220	13,468	12,886	12,341	139,850	RAB-3, P5
Return on rate base	3,588	3,588	3,680	3,642	3,634	3,801	43,007	RAB-3, P6
ISO-NE ancillary	223	(17)	289	254	269	475	4,996	RAB-3, P3 (5)
Capacity	1,391	1,833	1,654	1,976	1,976	2,259	29,077	RAB-3, P3 (5)
NH RPS	594	809	724	767	770	847	9,511	RAB-3, P3 (5)
RGGI costs	606	738	317	297	265	770	6,880	RAB-3, P3 (5)
Vermont Yankee	639	613	606	644	628	650	7,391	RAB-3, P3 (5)
IPP costs (2)	1,796	1,769	837	1,254	1,664	2,196	21,973	RAB-3, P3 (5)
Purchases and sales	19,108	30,361	26,124	24,778	24,422	17,412	248,637	RAB-3, P3 (5)
Merrimack Incremental O&M costs, net of proj. proceeds	(43)	(41)	(51)	(26)	(4)	9	(497)	
Merrimack projected RPC insurance proceeds	-	-	-	-	-	5,480	5,480	
Return on ES deferral	-	-	-	-	-	(6,150)	(6,150)	
2007 actual ES under/(over) recovery (3)	-	-	-	-	-	-	(41,475)	
Total Energy Service Cost	\$ 58,115	\$ 53,028	\$ 52,101	\$ 53,078	\$ 52,009	\$ 53,678	\$ 613,939	
Total Energy Service Revenue (4)	\$ 53,485	\$ 55,032	\$ 41,587	\$ 44,018	\$ 44,243	\$ 48,661	\$ 614,005	
Total Energy Service Under/ (Over) Recovery	\$ 4,630	\$ (2,004)	\$ 10,514	\$ 9,060	\$ 7,766	\$ 5,016	\$ (66)	
Retail MWH Sales	539,102	593,947	460,544	487,468	489,957	538,884	6,408,919	

(1) August reflects \$5 million physical inventory adjustment for Merrimack coal.
(2) The IPP costs represent the actual and forecasted market value of IPP generation.
(3) See PSNH May 1, 2009 Annual Reconciliation filing in DE 09-091, Attachment RAB-4, page 6.
(4) The ES rate was set at \$0.0992 per KWH from January through July 30, 2009. The ES rate was reset to its current rate of \$0.0903 per KWH effective August 1, 2009.
(5) Supporting detail for re-estimate data only.

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

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

		Sep 09	Oct 09	Nov 09	Dec 09	Total
8	Hydro: Energy	16.679	23.443	32.325	31.009	103.456
9						
10	Coal: Energy	125.691	117.606	104.959	305.133	653.389
11	Energy Expense	\$ 6,125	5,610	4,922	12,991	29,648
12						
13	Wood: Energy	27.540	19.814	27.540	28.458	103.352
14	Energy Expense	\$ 1,595	1,147	1,595	1,648	5,985
15	Revenue Credit	\$ (1,017)	(732)	(1,017)	(1,051)	(3,817)
16						
17	Nuclear: Energy	14.314	15.207	14.846	15.349	59.716
18	Energy Expense	\$ 606	644	628	650	2,528
19						
20	Newington: Energy	0.000	0.000	0.000	0.000	0.000
21	Energy Expense	\$ -	-	-	-	-
22						
23	IPP's: Energy	23.628	27.877	34.052	38.403	123.960
24	Energy Expense	\$ 624	905	1,315	1,847	4,691
25	ICAP	\$ 213	349	349	349	1,260
26						
27	Peak Purchase: Energy	3.802	6.165	14.418	25.865	50.250
28	Expense	\$ 118	242	697	1,503	2,560
29						
30	Known Purchases Energy	328.592	304.432	295.336	158.973	1,087.333
31	Expense	\$ 27,153	24,608	23,743	17,044	92,548
32						
33	Offpeak Purchase: Energy	7.758	11.050	12.706	11.301	42.815
34	Expense	\$ 217	385	547	579	1,728
35						
36	Surplus Energy Sales Energy	(58.159)	(16.544)	(17.814)	(41.591)	(134.108)
37	(Credit)	\$ (1,364)	(457)	(565)	(1,714)	(4,100)
38						
39	Congestion and Loss Adjustment	\$ (224)	(230)	(215)	(9)	(678)
40						
41	Total Energy GWH	489.845	509.050	518.368	572.900	2,090.163
42	Total Energy Expense	\$ 34,045	32,471	31,999	33,837	132,353
43						
44						
45	ISO-NE Ancillary (inc.Congestion & Loss Adj.)	\$ 513	484	484	484	1,965
46	NH RPS	724	767	770	847	3,108
47	RGGI	317	297	265	770	1,649
48						
49	Capacity (sold)/bought MW-mo	404	482	482	551	1,918
50	Capacity (sold)/bought Cost (\$000)	\$ 1,654	1,976	1,976	2,259	7,865

51
52
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 - September - December 2009**

2

3

4

5

6

7

8

9

10

	IPP Energy at						
Month	IPP GWh	Mkt Value (\$000)	Capacity MW	ICAP Value \$/kw-mo	ICAP (\$000)	Total (\$000)	Total \$/MWh
September	23.628	624	51.9	4.1	213.0	837	35.42
October	27.877	905	85.2	4.1	349.0	1,254	44.98
November	34.052	1,315	85.2	4.1	349.0	1,664	48.87
December	38.403	1,847	85.2	4.1	349.0	2,196	57.18
Total	123.96	4,691			1,260	5,951	48.01

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)

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

	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
<u>Fossil / Hydro O&M, Depr. & Taxes</u>	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Re-Estimate	Re-Estimate	Re-Estimate	Re-Estimate	
F/H Operation & Maintenance Cost	\$ 9,190	\$ 6,573	\$ 7,407	\$ 9,941	\$ 7,439	\$ 6,885	\$ 13,988	\$ 8,007	\$ 8,579	\$ 10,855	\$ 10,352	\$ 9,673	\$ 108,887
F/H Depreciation Cost	1,710	1,712	1,715	1,719	1,722	1,732	1,728	1,730	1,755	1,759	1,763	1,774	20,819
F/H Property Taxes	684	684	684	729	690	690	690	690	647	647	647	647	8,129
F/H Payroll Taxes	164	147	318	42	(226)	191	221	133	124	207	124	130	1,575
Amortization of Asset Retirement Obligation	-	-	103	-	-	105	-	-	115	-	-	117	440
Total F/H O&M, Depr. and Taxes	\$ 11,748	\$ 9,116	\$ 10,227	\$ 12,431	\$ 9,625	\$ 9,603	\$ 16,627	\$ 10,560	\$ 11,220	\$ 13,468	\$ 12,886	\$ 12,341	\$ 139,850

30 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

	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
	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Estimate	Estimate	Estimate	Estimate	
Return on Rate Base													
Net Plant	277,119	277,119	276,979	276,979	276,979	277,164	277,164	277,164	279,245	279,502	280,591	292,607	
Working Capital Allow. (45 days of O&M)	13,490	13,490	13,490	13,490	13,490	13,490	13,490	13,490	13,490	13,490	13,490	13,490	
Fossil Fuel Inventory	73,769	73,769	70,428	70,428	70,428	72,561	72,561	72,561	74,321	74,321	74,321	74,321	
Mat'ls and Supplies	53,221	53,221	52,028	52,028	52,028	51,883	51,883	51,883	59,464	59,464	59,656	59,999	
Prepaid Property Taxes	376	376	1,190	1,190	1,190	975	975	975	376	376	376	376	
Deferred Taxes	(16,817)	(16,817)	(15,763)	(15,763)	(15,763)	(17,651)	(17,651)	(17,651)	(10,281)	(10,281)	(9,776)	(8,941)	
Other Regulatory Obligations	(10,509)	(10,509)	(10,608)	(10,608)	(10,608)	(10,832)	(10,832)	(10,832)	(22,426)	(24,294)	(26,162)	(28,357)	
Total Rate Base-Adjusted (sum L15 thru L22)	390,649	390,649	387,744	387,744	387,744	387,590	387,590	387,590	394,189	392,578	392,496	403,495	
Average Rate Base (prev + curr month)	391,189	390,649	389,197	387,744	387,744	387,667	387,590	387,590	390,890	393,384	392,537	397,996	
x Return	0.9001%	0.9001%	0.9001%	0.9073%	0.9073%	0.9073%	0.9257%	0.9257%	0.9257%	0.9257%	0.9257%	0.9257%	
Return-Adjusted (L25 x L26)	\$ 3,521	\$ 3,516	\$ 3,487	\$ 3,518	\$ 3,518	\$ 3,516	\$ 3,588	\$ 3,588	\$ 3,680	\$ 3,642	\$ 3,634	\$ 3,801	\$ 43,007

Amounts shown above may not add due to rounding.