

1	PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE			
2	2010 ENERGY SERVICE RATE CALCULATION			
3	(Dollars in 000's)			
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8	<b>Traditional Approach</b>			
9				
10	<b>Summary of Actual and Forecasted Energy Service</b>			
11	<b>Cost For January 2010 Through December 2010</b>	<b>TOTAL COST</b>	<b>Cents per KWH (2)</b>	<b>Reference</b>
12				
13	Fossil energy costs	\$ 165,321	3.09	Attachment RAB-2, page 2
14	F/H O&M, depreciation & taxes	133,721	2.50	Attachment RAB-2, page 2
15	Return on rate base	40,788	0.76	Attachment RAB-2, page 2
16	ISO-NE ancillary	2,317	0.04	Attachment RAB-2, page 2
17	Capacity	14,212	0.27	Attachment RAB-2, page 2
18	NH RPS	10,963	0.21	Attachment RAB-2, page 2
19	RGGI costs	6,672	0.12	Attachment RAB-2, page 2
20	Vermont Yankee	7,108	0.13	Attachment RAB-2, page 2
21	IPP costs (1)	28,592	0.53	Attachment RAB-2, page 2
22	Purchases and sales	75,624	1.41	Attachment RAB-2, page 2
23	Return on ES Deferral	348	0.01	Attachment RAB-2, page 2
24	Merrimack projected O&M insurance proceeds	(6,500)	(0.12)	Attachment RAB-2, page 2
25	Merrimack projected RPC insurance proceeds	(8,700)	(0.16)	Attachment RAB-2, page 2
26	Company Use	(689)	(0.01)	Attachment RAB-2, page 2
27	2009 Actual ES under/(over) recovery	4,442	0.08	Attachment RAB-2, page 2
28				
29	Total Updated Energy Service Cost	\$ 474,218	8.87	
30	Total Updated Revenue at 8.96 cents per kwh	478,964		
31	Energy Service (Over)/Under Recovery	(4,746)		
32				
33	Forecasted Retail MWH Sales July-December 2010	2,693,785		
34				
35	Increase in Energy Service Rate - cents per kwh (L31/L33)	(0.18)		
36				
37	Energy Service Rate as approved in DE 09-180 - cents per kwh	8.96		
38				
39	Updated Energy Service Rate - cents per kwh	8.78		

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

(2) Cents per KWH was calculated using the 2010 actual and forecasted sales from Attachment RAB-2, page 2, line 34.

Amounts shown above may not add due to rounding.

	PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE						
	2010 ENERGY SERVICE RATE CALCULATION						
	(Dollars in 000's)						
	January	February	March	April	May	June	
	2010	2010	2010	2010	2010	2010	
	Actual	Actual	Actual	Actual	Actual	Estimate	Reference
10 <b>Energy Service Cost</b>							
11							
12 Fossil energy costs	\$ 17,238	\$ 16,427	\$ 16,134	\$ 11,963	\$ 12,131	\$ 13,839	RAB-2, P3
13 F/H O&M, depreciation & taxes	10,525	9,974	10,983	12,916	12,836	11,231	RAB-2, P5
14 Return on rate base	3,512	3,509	3,205	3,338	3,338	3,369	RAB-2, P6
15 ISO-NE ancillary (inc. Congestion and Loss Adj.)	(591)	124	154	(142)	109	245	RAB-2, P3
16 Capacity	2,290	1,673	1,779	1,086	1,264	853	RAB-2, P3
17 NH RPS	994	994	994	994	994	821	RAB-2, P3
18 RGGI costs	550	528	538	493	466	632	RAB-2, P3
19 Vermont Yankee	646	563	655	485	46	623	RAB-2, P3
20 IPP costs (1)	3,743	2,244	2,089	2,315	2,340	2,011	RAB-2, P4
21 Purchases and sales	9,062	5,537	4,264	6,501	8,400	4,329	RAB-2, P3
22 Return on ES Deferral	15	18	22	26	32	37	
23 Merrimack projected O&M insurance proceeds	-	-	-	-	-	-	
24 Merrimack projected RPC insurance proceeds	-	-	-	-	-	-	
25 Company Use	-	-	-	-	-	-	
26 2009 Actual ES under/(over) recovery	4,442	-	-	-	-	-	
27							
28 Total Energy Service Cost Re-estimate	\$ 52,426	\$ 41,591	\$ 40,818	\$ 39,975	\$ 41,956	\$ 37,990	
29							
30 Total Energy Service Revenue at 8.96	47,803	39,681	39,333	34,987	37,497	38,300	
31							
32 ES Under/(Over) Recovery	4,623	1,910	1,485	4,988	4,459	(310)	
33							
34 Retail MWH Sales	533,440	442,851	438,928	390,467	418,512	427,458	
35							
36 Energy Service Cost - cents per kwh	9.83	9.39	9.30	10.24	10.03	8.89	

(1) January 2010 IPP costs include \$305k of ES true-up to actual.

Amounts shown above may not add due to rounding.

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

	July 2010 Estimate	August 2010 Estimate	September 2010 Estimate	October 2010 Estimate	November 2010 Estimate	December 2010 Estimate	Total	Reference
<b>10 Energy Service Cost</b>								
12 Fossil energy costs	\$ 14,316	\$ 14,558	\$ 11,257	\$ 7,721	\$ 14,394	\$ 15,343	\$ 165,321	RAB-2, P3
13 F/H O&M, depreciation & taxes	10,473	10,038	15,925	9,752	9,230	9,837	133,721	RAB-2, P5
14 Return on rate base	3,396	3,391	3,381	3,371	3,432	3,546	40,788	RAB-2, P6
15 ISO-NE ancillary (inc. Congestion and Loss Adj.)	196	221	112	463	710	716	2,317	RAB-2, P3
16 Capacity	853	853	853	769	769	1,168	14,212	RAB-2, P3
17 NH RPS	940	936	813	800	793	891	10,963	RAB-2, P3
18 RGGI costs	653	659	510	339	635	668	6,672	RAB-2, P3
19 Vermont Yankee	656	640	624	663	648	670	7,108	RAB-2, P3
20 IPP costs	2,221	2,001	1,613	2,081	2,690	3,243	28,592	RAB-2, P4
21 Purchases and sales	7,318	7,060	7,656	10,077	2,028	3,392	75,624	RAB-2, P3
22 Return on ES Deferral	36	32	34	38	36	22	348	
23 Merrimack projected O&M insurance proceeds	-	-	-	-	-	(6,500)	(6,500)	
24 Merrimack projected RPC insurance proceeds	-	-	-	-	-	(8,700)	(8,700)	
25 Company Use	(115)	(115)	(115)	(115)	(115)	(115)	(689)	
26 2009 Actual ES under/(over) recovery	-	-	-	-	-	-	4,442	
28 Total Energy Service Cost Re-estimate	\$ 40,943	\$ 40,274	\$ 42,664	\$ 35,959	\$ 35,251	\$ 24,181	\$ 474,218	
30 Total Energy Service Revenue at 8.96	\$ 43,845	\$ 43,677	\$ 37,920	\$ 37,347	\$ 37,010	\$ 41,565	\$ 478,964	
32 ES Under/(Over) Recovery	\$ (2,902)	\$ (3,402)	\$ 4,745	\$ (1,388)	\$ (1,758)	\$ (17,384)	\$ (4,746)	
34 Retail MWH Sales	489,341	487,465	423,209	416,820	413,057	463,893	5,345,441	
36 Energy Service Cost - cents per kwh	8.37	8.26	10.08	8.63	8.53	5.21	8.87	

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**

			Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Total
1										
2	Hydro:	Energy	28.327	22.178	19.888	16.457	23.078	32.32	31.206	173.454
3										
4	Coal:	Energy	332.076	343.145	343.145	267.834	178.355	333.690	344.813	2,143.058
5		Energy Expense	\$ 13,510	13,976	13,976	10,928	7,359	14,044	14,512	88,303
6										
7	Wood:	Energy	25.435	26.283	26.283	25.435	27.951	27.050	27.951	186.388
8		Energy Expense	\$ 1,263	1,305	1,305	1,263	1,388	1,343	1,388	9,252
9		Revenue Credit	\$ (933)	(964)	(964)	(933)	(1,025)	(992)	(1,025)	(6,838)
10										
11	Nuclear:	Energy	14.285	15.029	14.664	14.314	15.207	14.846	15.349	103.694
12		Energy Expense	\$ 623	656	640	624	663	648	670	4,524
13										
14	Newington:	Energy	0.000	0.000	3.200	0.000	0.000	0.000	6.400	9.600
15		Energy Expense	\$ -	-	242	-	-	-	469	711
16										
17	IPP's:	Energy	44.571	42.889	37.866	33.454	42.086	51.937	56.294	309.097
18		Energy Expense	\$ 1,864	2,074	1,854	1,466	1,850	2,459	3,012	14,579
19		ICAP	\$ 147	147	147	147	231	231	231	1,282
20										
21	Peak Purchase:	Energy	5.703	26.009	12.647	35.505	41.030	0.000	0.955	121.849
22		Expense	\$ 374	1,735	845	1,826	2,098	-	79	6,957
23										
24	Known Purchases	Energy	80.606	77.794	80.194	78.206	79.133	80.150	86.612	562.695
25		Expense	\$ 6,729	6,700	6,936	6,493	6,545	6,595	7,171	47,169
26										
27	Offpeak Purchase:	Energy	2.615	12.781	15.561	18.603	53.444	0.370	2.571	105.945
28		Expense	\$ 122	664	801	804	2,243	21	167	4,822
29										
30	Surplus Energy Sales	Energy	(81.281)	(48.287)	(37.613)	(41.969)	(19.204)	(103.266)	(81.259)	(412.879)
31		(Credit)	\$ (2,896)	(1,781)	(1,522)	(1,467)	(809)	(4,588)	(4,025)	(17,088)
32										
33	Congestion and Loss Adjustment		\$ 98	49	45	(35)	(147)	182	188	379
34										
35	Total Energy GWH		452.337	517.821	515.835	447.839	441.080	437.097	490.892	3,302.901
36	Total Energy Expense	\$	20,900	24,559	24,304	21,116	20,394	19,942	22,835	154,051
37										
38										
39	ISO-NE Ancillary	\$	147	147	175	147	610	528	528	2,284
40	NH RPS	\$	821	940	936	813	800	793	891	5,993
41	RGGI Costs	\$	632	653	659	510	339	635	668	4,097
42										
43	Capacity (sold)/bought MW-mo		190	190	190	190	171	171	260	1,360
44	Capacity (sold)/bought Cost (\$000)	\$	853	853	853	853	769	769	1,168	6,120

Amounts shown above may not add due to rounding.

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

**Forecasted PSNH IPP Market Value - June - December 2010**

IPP Energy at							
Month	IPP GWh	Mkt Value (\$000)	Capacity MW	ICAP Value \$/kw-mo	ICAP (\$000)	Total (\$000)	Total \$/MWh
June	44.571	1,864	32.8	4.5	147	2,011	45.13
July	42.889	2,074	32.8	4.5	147	2,221	51.80
August	37.866	1,854	32.8	4.5	147	2,001	52.86
September	33.454	1,466	32.8	4.5	147	1,613	48.23
October	42.086	1,850	51.3	4.5	231	2,081	49.44
November	51.937	2,459	51.3	4.5	231	2,690	51.79
December	56.294	3,012	51.3	4.5	231	3,243	57.60
Total	309.097	14,579			1,282	15,861	51.31

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)

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	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
<b>Fossil / Hydro O&amp;M, Depr. &amp; Taxes</b>	Actual	Actual	Actual	Actual	Actual	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	
F/H Operation & Maintenance Cost	\$ 7,812	\$ 7,297	\$ 8,200	\$ 10,262	\$ 10,111	\$ 8,435	\$ 7,694	\$ 7,353	\$ 13,126	\$ 7,083	\$ 6,595	\$ 7,026	\$ 100,995
F/H Depreciation Cost	1,752	1,750	1,753	1,748	1,748	1,773	1,789	1,790	1,792	1,797	1,794	1,831	21,317
F/H Property Taxes	720	720	773	687	795	723	723	723	723	723	723	723	8,756
F/H Payroll Taxes	205	171	194	173	136	187	267	172	168	149	118	139	2,079
Amort. of Asset Retirement Obligation	36	36	63	46	46	113	-	-	116	-	-	118	574
Total F/H O&M, Depr. and Taxes	\$ 10,525	\$ 9,974	\$ 10,983	\$ 12,916	\$ 12,836	\$ 11,231	\$ 10,473	\$ 10,038	\$ 15,925	\$ 9,752	\$ 9,230	\$ 9,837	\$ 133,721

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)

	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
<b>Return on Rate Base</b>	Actual	Actual	Actual	Actual	Actual	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	
<b>Rate base</b>													
Net Plant	283,340	283,340	277,517	277,517	277,517	282,773	281,837	281,035	281,702	281,655	295,480	304,837	
Working Capital Allow. (45 days of O&M)	12,020	12,020	12,020	12,020	12,020	12,605	12,605	12,605	12,605	12,605	12,605	12,605	
Fossil Fuel Inventory	81,748	81,748	65,480	65,480	65,480	62,000	62,000	62,000	62,000	62,000	62,000	62,000	
Mat'ls and Supplies	53,616	53,616	53,762	53,762	53,762	53,885	53,937	54,001	54,164	54,221	54,403	54,873	
Prepayments	2,428	2,428	2,292	2,292	2,292	1,789	1,789	1,789	1,789	1,789	1,789	1,789	
Deferred Taxes	(20,454)	(20,454)	(18,780)	(18,780)	(18,780)	(21,748)	(20,591)	(19,121)	(20,487)	(20,105)	(18,856)	(16,535)	
Other Regulatory Obligations	(12,409)	(12,409)	(15,521)	(15,521)	(15,521)	(7,606)	(8,665)	(9,705)	(11,055)	(11,946)	(12,846)	(13,643)	
Total Rate Base (L15 thru L22)	400,289	400,289	376,770	376,770	376,770	383,698	382,912	382,604	380,718	380,219	394,575	405,926	
Average Rate Base ( prev + curr month)	400,662	400,289	388,530	376,770	376,770	380,234	383,305	382,758	381,661	380,469	387,397	400,251	
x Return	0.8765%	0.8765%	0.8765%	0.8860%	0.8860%	0.8860%	0.8860%	0.8860%	0.8860%	0.8860%	0.8860%	0.8860%	
Return (L25 x L26)	\$ 3,512	\$ 3,509	\$ 3,205	\$ 3,338	\$ 3,338	\$ 3,369	\$ 3,396	\$ 3,391	\$ 3,381	\$ 3,371	\$ 3,432	\$ 3,546	\$ 40,788

Amounts shown above may not add due to rounding.

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

Public Service Company of New Hampshire  
Energy Service Rate Mid-year Adjustment  
Docket No. DE 09-180

Joint Technical Statement of Robert A. Baumann and Frederick B. White

June 11, 2010

**A. Purpose of Technical Statement**

This technical Statement is being submitted to explain the changes to PSNH's proposed Default Energy Service (ES) Rate effective July 1, 2010. This filing updates PSNH's ES filing that was submitted on May 4, 2010.

**B. Proposed Rate**

On May 4, 2010, PSNH filed a proposed mid-year ES rate of 8.57¢/kWh to be effective for the six month period July 1 through December 31, 2010. In this filing, PSNH is proposing a mid-year ES rate of 8.78¢/kWh to be effective July 1, 2010, which is a decrease of 0.18 cents from the currently effective ES rate of 8.96¢/kWh.

The increase from the May 4, 2010 filing to the June 11, 2010 filing is attributable to net additional actual and forecasted costs of \$6.2 million [a \$13.8 million revenue decrease, net of cost decrease of \$7.6 million]. The forecasted revenue decrease is primarily due to additional customer migration. The forecasted cost decrease is also primarily attributable to additional customer migration, offset in part with higher forward market electricity prices as of June 4, 2010.

**C. Changes From May 4, 2010 Filing (Attachment RAB-2, page 3)**

For the forecast period June through December 2010, the impact of updated higher forward market electricity prices and additional migration is an \$8.3 million decrease to overall ES costs, as explained below:

1. Forecasted coal costs are lower by \$1.3 million and coal generation is unchanged. \$2.3 million of lower costs is due to a credit for non-delivery and resale of previously scheduled contract coal. The initial filing reflected this resale in May 2010 but it will now occur in the June-December forecast period. This cost reduction is offset by the increase in cost in May (see item 11 below), resulting in no impact on the change to the rate as compared to the May 4, 2010 filing. This credit was partially offset by \$1.05 million of higher net coal costs at Merrimack and Schiller due to higher coal prices.

2. Wood costs are lower by \$0.9 million due to lower wood prices.

3. The table below shows the forward market electricity prices used in the May, 2010 filing, and current values for June through December, 2010, and the change for each month.

**Forward Electricity Prices and Changes Between  
May, 2010 Filing and June, 2010 Forecasts  
(\$/MWh)**

	May-10		Jun-10		Change	
	<u>Peak</u>	<u>Off-peak</u>	<u>Peak</u>	<u>Off-peak</u>	<u>Peak</u>	<u>Off-peak</u>
Jun-10	43.33	33.17	47.75	36.16	4.42	2.99
Jul-10	49.69	36.38	56.05	42.04	6.36	5.66
Aug-10	49.69	36.38	57.08	41.66	7.39	5.28
Sep-10	44.13	34.02	50.70	37.82	6.57	3.80
Oct-10	44.60	35.13	50.06	38.95	5.46	3.82
Nov-10	48.40	38.13	53.60	41.89	5.20	3.76
Dec-10	54.03	43.30	58.65	48.48	4.62	5.18

4. IPP costs “at market” are higher by \$1.5 million reflecting higher forward electricity market prices, while volumes remain the same.

5. The cost of purchases, sales and congestion changed as follows:

- a. Peak and off-peak purchased power costs are lower by \$1.6 million and volumes are lower by 62 GWh.
- b. Surplus energy sales revenues are higher by \$4.5 million and volumes are higher by 70 GWh.
- c. Congestion and loss adjustment costs are higher by \$0.3 million.

These changes are a result of lower ES loads due to slightly lower forecasted sales, additional migration and forward market price changes. Changes in forward market electricity prices are shown above, and changes in the sales forecast and migration are shown below.

6. RPS costs are lower by \$0.3 million reflecting lower ES loads.

7. Capacity costs are lower by \$1.5 million resulting from lower capacity obligations due to lower loads.

8. Total ES sales are lower by 125 GWh. The table below shows the forecasted sales and migration (non-ES sales) used for the May filing and for this update. For consistency with rate setting, values are shown as measured at the customer meter. The amount of migration modeled in the update is as of May, 2010 and is 31.9% of forecasted total retail delivery sales. Overall, June through December 2010 sales are lower by 3.9% from the estimate which was used for calculating the ES Rate in PSNH’s May filing.

### Changes to PSNH ES Sales Forecast

	<u>May, 2010 Filing (MWh)</u>			<u>June, 2010 Update (MWh)</u>			<u>Change From May, 2010 (MWh)</u>			
	<u>PSNH Sales</u>	<u>Non-ES Sales</u>	<u>ES Sales</u>	<u>PSNH Sales</u>	<u>Non-ES Sales</u>	<u>ES Sales</u>	<u>PSNH Sales</u>	<u>Non-ES Sales</u>	<u>ES Sales</u>	<u>% ES Sales Change</u>
Jun-10	629,292	186,670	442,622	627,692	200,234	427,458	(1,600)	13,564	(15,164)	-3.4%
Jul-10	722,162	214,218	507,944	718,562	229,221	489,341	(3,600)	15,003	(18,603)	-3.7%
Aug-10	718,329	213,081	505,248	715,807	228,342	487,465	(2,522)	15,261	(17,783)	-3.5%
Sep-10	625,986	185,689	440,297	621,452	198,243	423,209	(4,534)	12,554	(17,088)	-3.9%
Oct-10	618,109	183,352	434,757	612,071	195,251	416,820	(6,038)	11,899	(17,937)	-4.1%
Nov-10	617,816	183,266	434,550	606,545	193,488	413,057	(11,271)	10,222	(21,493)	-4.9%
Dec-10	683,790	202,836	480,954	681,194	217,301	463,893	(2,596)	14,465	(17,061)	-3.5%
Subtotal	4,615,484	1,369,112	3,246,372	4,583,323	1,462,080	3,121,243	(32,161)	92,968	(125,129)	-3.9%

#### **D. Other Cost Changes (\$0.7 million cost increase)**

9. Actual and forecasted F/H O&M costs decreased by a net of \$1.2 million. This is due to actual F/H O&M decreasing by \$2.7 million from the 5/4/10 filing. In addition, this filing has been updated to reflect increase in costs of \$1.5 million associated with the transfer of the NHPUC Assessment and increased portion of uncollectible expense into the ES rate calculation consistent with the distribution rate case Settlement pending before the Commission. The costs from August 2009 – June 2010 (recoupment period) have been included reflecting a one year period of recovery consistent with the recovery of the recoupment balance in distribution rates.

10. Anticipated insurance proceeds associated with Merrimack have been updated using the latest amounts that have been or will be submitted as part of PSNH's claim to the insurer. Consistent with past filings, these amounts have been reduced by approximately 20% to reflect timing and/or recovery of the insurance proceeds. This resulted in an additional credit of \$3.4 million.

11. All other actual costs increased by \$5.3 million. One major reason for this increase was the delay in the coal resale that was anticipated to take place in May 2010 but has been delayed, accounting for \$2.3 million of this variance. (See the discussion in item 1 above.)

**E. Revenue Changes (\$13.8 million revenue decrease)**

12. The 2010 updated ES revenues decreased by \$13.8 million due to additional customer migration.

**F. Customer Migration Update**

13. The 6/11/2010 updated ES rate assumes a 31.9% migration level which represents the actual current migration level on PSNH's system as of May 31, 2010. PSNH also computed two alternative ES migration scenarios. The results of our calculations are as follows:

<u>Average migration percentage</u>	<u>ES rate</u>
31.9%	8.78 cents/kWh (as filed & proposed)
35.6%	8.90
28.2%	8.68