

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE
2009 ENERGY SERVICE RATE CALCULATION--KWH BASIS

(Dollars in 000's, except for KWH data)

Summary of Forecasted Energy Service

Cost For January 2009 Through December 2009	TOTAL COST	Cents per KWH (2)	Reference
Fossil energy costs	\$ 153,577	2.28	Attachment RAB-2, page 2
F/H O&M, Depreciation & Taxes	136,114	2.02	Attachment RAB-2, page 2
Return on rate base	42,700	0.63	Attachment RAB-2, page 2
ISO-NE Ancillary	5,918	0.09	Attachment RAB-2, page 2
Capacity	33,790	0.50	Attachment RAB-2, page 2
NH RPS	9,648	0.14	Attachment RAB-2, page 2
RGGI Costs	7,175	0.11	Attachment RAB-2, page 2
Vermont Yankee	7,463	0.11	Attachment RAB-2, page 2
IPP costs (1)	22,469	0.33	Attachment RAB-2, page 2
Purchases and Sales	264,708	3.93	Attachment RAB-2, page 2
SO2 Proceeds	(124)	(0.00)	Attachment RAB-2, page 2
Return on ES Deferral	(511)	(0.01)	Attachment RAB-2, page 2
Merrimack Incremental O&M Costs, net of proj. proceeds	5,480	0.08	Attachment RAB-2, page 2
Merrimack Projected RPC Insurance Proceeds.	(6,150)	(0.09)	Attachment RAB-2, page 2
2008 Actual ES under/(over) recovery	(41,477)	(0.62)	Attachment RAB-2, page 2
Total Updated Energy Service Cost	640,781	9.51	
Total Updated Revenue at 9.92 cents per kwh	\$ 667,818		
Energy Service Over/Under Recovery	(27,037)		
Forecasted Retail MWH Sales August - December 2009	\$ 2,761,319		
Decrease in Energy Service Rate - cents per kwh (L32/L34)	(0.98)		
Energy Service Rate as approved in DE 08-113 - cents per kwh	\$ 9.92		
Updated Energy Service Rate - cents per kwh	8.94		

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

(2) Cents per kWh was calculated using the 2009 actual and forecasted sales from Attachment RAB-2, P2, Line 35.

Amounts shown above may not add due to rounding.

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

	January 2009 Actual	February 2009 Actual	March 2009 Actual	April 2009 Actual	May 2009 Re-Estimate	June 2009 Re-Estimate	Reference
10 Energy Service Cost							
12 Fossil Energy Costs	\$ 24,336	\$ 15,179	\$ 17,189	\$ 13,637	\$ 14,896	\$ 14,399	RAB-2, P3
13 F/H O&M, Depreciation & Taxes	11,748	9,116	10,133	12,429	8,140	10,266	RAB-2, P5
14 Return on Rate Base	3,520	3,514	3,490	3,518	3,503	3,558	RAB-2, P6
15 ISO-NE Ancillary	461	782	727	616	790	486	RAB-2, P3
16 Capacity	3,525	3,143	3,028	2,812	2,501	2,273	RAB-2, P3
17 NH RPS	988	988	988	988	712	712	RAB-2, P3
18 RGGI Costs	771	626	681	628	843	811	RAB-2, P3
19 Vermont Yankee	635	581	590	626	640	605	RAB-2, P3
20 IPP Costs (1)	3,708	1,445	2,139	2,154	1,732	1,480	RAB-2, P4
21 Purchases and Sales	16,598	17,924	17,481	21,993	13,597	18,603	RAB-2, P3
22 SO2 Proceeds	-	-	-	-	(124)	-	
23 Return on ES Deferral	(69)	(58)	(58)	(54)	(52)	(53)	
24 Merrimack Incremental O&M Costs, 25 net of projected insurance proceeds	-	-	-	-	-	-	
26 Merrimack Projected RPC Insurance Proceeds.	-	-	-	-	-	-	
27 2008 Actual ES under/(over) recovery	(41,477)	-	-	-	-	-	
29 Total Energy Service Cost Re-estimate	\$ 24,744	\$ 53,241	\$ 56,389	\$ 59,349	\$ 47,177	\$ 53,140	
31 Total Energy Service Revenue at 9.92	\$ 69,283	\$ 55,110	\$ 56,133	\$ 49,585	\$ 49,134	\$ 52,598	
33 ES Under/(Over) Recovery	\$ (44,539)	\$ (1,869)	\$ 255	\$ 9,764	\$ (1,957)	\$ 543	
35 Retail MWH Sales	706,849	548,954	566,142	500,446	495,306	530,217	
37 Energy Service Cost - cents per kwh	3.50	9.70	9.96	11.86	9.52	10.02	

38 Amounts shown above may not add due to rounding.

39 (1) January 2009 IPP costs include \$210K of ES true-up to actual.

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

	July 2009	August 2009	September 2009	October 2009	November 2009	December 2009	Total	Reference
10 <u>Energy Service Cost</u>	Re-Estimate	Re-Estimate	Re-Estimate	Re-Estimate	Re-Estimate	Re-Estimate		
11								
12 Fossil Energy Costs	\$ 14,878	\$ 6,929	\$ 6,706	\$ 6,071	\$ 5,570	\$ 13,787	\$ 153,577	RAB-2, P3
13 F/H O&M, Depreciation & Taxes	10,645	10,013	12,147	14,395	13,813	13,268	136,114	RAB-2, P5
14 Return on Rate Base	3,622	3,610	3,594	3,579	3,571	3,621	42,700	RAB-2, P6
15 ISO-NE Ancillary	383	185	291	342	339	517	5,918	RAB-2, P3
16 Capacity	2,273	3,499	2,273	2,734	2,734	2,994	33,790	RAB-2, P3
17 NH RPS	712	712	712	712	712	712	9,648	RAB-2, P3
18 RGGI Costs	838	328	317	297	265	770	7,175	RAB-2, P3
19 Vermont Yankee	636	621	606	644	628	650	7,463	RAB-2, P3
20 IPP Costs	1,499	1,304	1,183	1,662	1,975	2,189	22,469	RAB-2, P4
21 Purchases and Sales	23,871	31,978	27,644	27,452	27,258	20,308	264,708	RAB-2, P3
22 SO2 Proceeds	-	-	-	-	-	-	(124)	
23 Return on ES Deferral	(54)	(52)	(39)	(22)	(6)	6	(511)	
24 Merrimack Incremental O&M Costs, 25 net of projected insurance proceeds	-	-	-	-	-	5,480	5,480	
26 Merrimack Projected RPC Insurance Proceeds.	-	-	-	-	-	(6,150)	(6,150)	
27 2008 Actual ES under/(over) recovery	-	-	-	-	-	-	(41,477)	
28								
29 Total Energy Service Cost Re-estimate	\$ 59,303	\$ 59,127	\$ 55,434	\$ 57,866	\$ 56,860	\$ 58,152	\$ 640,781	
30								
31 Total Energy Service Revenue at 9.92 / 8.94	\$ 62,052	\$ 59,564	\$ 50,226	\$ 52,197	\$ 53,165	\$ 58,772	\$ 667,818	
32								
33 ES Under/(Over) Recovery	\$ (2,749)	\$ (437)	\$ 5,208	\$ 5,669	\$ 3,695	\$ (620)	\$ (27,037)	
34								
35 Forecasted Retail MWH Sales	625,524	600,439	506,313	526,175	535,934	592,458	6,734,757	
36								
37 Energy Service Cost - cents per kwh	9.48	9.85	10.95	11.00	10.61	9.82	9.51	

38 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

			May-09	Jun-09	Jul-09	Aug-09	Sep-09	Oct-09	Nov-09	Dec-09	Total
2	Hydro:	Energy	38.111	28.669	20.989	18.776	16.679	23.443	32.325	31.009	210.001
3											
4	Coal:	Energy	333.906	321.531	332.249	129.881	125.691	117.606	104.959	305.133	1,770.956
5		Energy Expense	\$ 14,362	13,821	14,281	6,332	6,128	5,656	4,992	13,190	78,762
6											
7	Wood:	Energy	25.475	27.540	28.458	28.458	27.540	19.814	27.540	28.458	213.283
8		Energy Expense	\$ 1,475	1,595	1,648	1,648	1,595	1,147	1,595	1,648	12,351
9		Schiller Revenue Credit	\$ (941)	(1,017)	(1,051)	(1,051)	(1,017)	(732)	(1,017)	(1,051)	(7,877)
10											
11	IC/Jets:	Energy	0	0	0	0	0	0	0	0	0
12		Energy Expense	\$ 0	0	0	0	0	0	0	0	0
13											0
14	Nuclear:	Energy	15.126	14.285	15.029	14.664	14.314	15.207	14.846	15.349	118.820
15		Energy Expense	\$ 640	605	636	621	606	644	628	650	5,030
16											
17	Newington:	Energy	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
18		Energy Expense	\$ -	-	-	-	-	-	-	-	0
19											
20	IPP's:	Energy	40.427	31.627	25.853	23.728	23.628	27.877	34.052	38.403	245.595
21		Energy Expense	\$ 1,472	1,284	1,303	1,108	987	1,378	1,691	1,905	11,128
22		ICAP	\$ 260	196	196	196	196	284	284	284	1,896
23											
24	Peak Purchase:	Energy	0.000	16.353	69.159	53.193	16.609	27.824	37.397	50.181	270.716
25		Expense	\$ -	763	4,476	3,008	803	1,582	2,186	2,929	15,747
26											
27	Known Purchases	Energy	151.667	187.792	174.955	318.955	328.592	304.432	295.336	158.973	1,920.702
28		Expense	\$ 16,329	20,068	19,253	26,472	27,207	24,670	23,801	17,053	174,853
29											
30	Offpeak Purchase:	Energy	0.342	9.748	22.854	55.035	17.699	26.110	28.202	22.437	182.427
31		Expense	\$ 13	411	1,123	2,672	774	1,328	1,484	1,165	8,970
32											
33	Surplus Energy Sales	Energy	(78.694)	(74.193)	(25.155)	(4.822)	(32.809)	(3.279)	(5.391)	(20.790)	(245.133)
34		(Credit)	\$ (2,745)	(2,639)	(981)	(174)	(1,140)	(128)	(213)	(839)	(8,859)
35											
36	Congestion & Loss Adjustment		\$ 15	(31)	(124)	(332)	(226)	(254)	(257)	(79)	(1,288)
37											
38	Total Energy		526.360	563.352	664.391	637.868	537.943	559.034	569.266	629.153	4687.367
39	Total Energy Expense	\$	30,880	35,056	40,760	40,500	35,913	35,575	35,174	36,855	290,713
40											
41											
42	ISO-NE Ancillary (including Congestion and Loss Adjustment)	\$	790	486	393	185	291	342	339	517	3,343
43	NHRPS	\$	712	712	712	712	712	712	712	712	5,693
44	RGGI Costs	\$	843	811	838	328	317	297	265	770	4,469
45											
46	Capacity (sold)/bought Cost (\$000)	\$	2,501	2,273	2,273	3,499	2,273	2,734	2,734	2,994	21,282
47	Capacity (sold)/bought MW-mo		667	554	554	853	554	667	667	730	5,248
48											
49											

50 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**

		IPP Energy at						
		IPP	Mkt Value	Capacity	ICAP Value	ICAP	Total	Total
		GWh	(\$000)	MW	\$/kw-mo	(\$000)	(\$000)	\$/MWh
5	Month							
6	May	40.427	1,472	69.2	3.75	260.0	1,732	42.84
7	June	31.627	1,284	47.9	4.1	196.0	1,480	46.80
8	July	25.853	1,303	47.9	4.1	196.0	1,499	57.98
9	August	23.728	1,108	47.9	4.1	196.0	1,304	54.96
10	September	23.628	987	47.9	4.1	196.0	1,183	50.07
11	October	27.877	1,378	69.2	4.1	284.0	1,662	59.62
12	November	34.052	1,691	69.2	4.1	284.0	1,975	58.00
13	December 2009	38.403	1,905	69.2	4.1	284.0	2,189	57.00
14	Total	245.595	11,128			1,896	13,024	53.03

Amounts shown above may not add due to rounding.

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

1														
2														
3														
4														
5														
6														
7														
8														
9		January	February	March	April	May	June	July	August	September	October	November	December	
10		2009	2009	2009	2009	2009	2009	2009	2009	2009	2009	2009	2009	Total
11	Fossil / Hydro O&M, Depr. & Taxes	Actual	Actual	Actual	Actual	Re-Estimate	Re-Estimate	Re-Estimate	Re-Estimate	Re-Estimate	Re-Estimate	Re-Estimate	Re-Estimate	
12														
13	F/H Operation & Maintenance Cost	\$ 9,190	\$ 6,573	\$ 7,314	\$ 9,940	\$ 5,563	\$ 7,642	\$ 8,103	\$ 7,490	\$ 9,506	\$ 11,782	\$ 11,279	\$ 10,600	\$ 104,983
14	F/H Depreciation Cost	1,710	1,712	1,715	1,719	1,737	1,744	1,749	1,752	1,755	1,759	1,763	1,774	20,889
15	F/H Property Taxes	684	684	684	729	647	647	647	647	647	647	647	647	7,957
16	F/H Payroll Taxes	164	147	317	42	193	120	146	124	124	207	124	130	1,837
17	Amort. of Asset Retirement Obligation	-	-	103	-	-	113	-	-	115	-	-	117	448
18														
19	Total F/H O&M, Depr. and Taxes	\$ 11,748	\$ 9,116	\$ 10,133	\$ 12,429	\$ 8,140	\$ 10,266	\$ 10,645	\$ 10,013	\$ 12,147	\$ 14,395	\$ 13,813	\$ 13,268	\$ 136,114

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)

	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>Return on Rate Base</u>	<u>Actual</u>	<u>Actual</u>	<u>Actual</u>	<u>Actual</u>	<u>Re-Estimate</u>	<u>Re-Estimate</u>	<u>Re-Estimate</u>	<u>Re-Estimate</u>	<u>Re-Estimate</u>	<u>Re-Estimate</u>	<u>Re-Estimate</u>	<u>Re-Estimate</u>	
<u>Rate base</u>													
Net Plant	277,119	277,119	276,979	276,979	275,573	277,855	278,879	279,131	279,245	279,502	280,591	292,607	
Working Capital Allow. (45 days of O&M)	13,253	13,253	13,253	13,253	14,570	14,570	14,570	14,570	14,570	14,570	14,570	14,570	
Fossil Fuel Inventory	73,769	73,769	70,428	70,428	74,321	74,321	74,321	74,321	74,321	74,321	74,321	74,321	
Mat'ls and Supplies	53,221	53,221	52,028	52,028	58,981	59,237	59,336	59,394	59,464	59,518	59,656	59,999	
Prepayments	376	376	1,190	1,190	376	376	376	376	376	376	376	376	
Deferred Taxes	(16,817)	(16,817)	(15,763)	(15,763)	(7,289)	(10,363)	(10,475)	(10,248)	(10,281)	(10,308)	(9,776)	(8,941)	
Other Regulatory Obligations	(10,509)	(10,509)	(10,384)	(10,384)	(32,145)	(16,147)	(18,335)	(20,489)	(22,426)	(24,294)	(26,162)	(28,357)	
Total Rate Base (L15 thru L22)	390,412	390,412	387,732	387,732	384,387	399,849	398,672	397,055	395,269	393,685	393,576	404,575	
Average Rate Base (prev + curr month)	391,070	390,412	389,072	387,732	386,059	392,118	399,260	397,863	396,162	394,477	393,630	399,075	
x Return	0.9001%	0.9001%	0.9001%	0.9073%	0.9073%	0.9073%	0.9073%	0.9073%	0.9073%	0.9073%	0.9073%	0.9073%	
Return (L25 x L26)	\$ 3,520	\$ 3,514	\$ 3,490	\$ 3,518	\$ 3,503	\$ 3,558	\$ 3,622	\$ 3,610	\$ 3,594	\$ 3,579	\$ 3,571	\$ 3,621	\$ 42,700

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 08-113

Joint Technical Statement of Robert A. Baumann and David A Errichetti

Actual ES Over-Recovery through April 2009 is \$4.1 million greater than original forecast, primarily due to lower IPP and purchased power costs as a result of lower market prices and a higher 2008 actual Merrimack inventory adjustment than previously forecasted, partially offset by lower revenues due to migration and lower sales.

Projected ES over recovery for the balance of the year, May through December 2009, is now forecasted to be \$22.9 million higher than currently reflected in rates. The principal reasons for this over recovery are lower costs as detailed below including lower sales, increased migration, lower delivered price of coal, lower forward electricity prices and lower F/H O&M.

The following notes identify where changes have occurred and details are provided as appropriate. Notes 1 through 13 address the forecast period expenses which decreased by \$78.2 million. Note 14 addresses the forecast period revenues which decreased by \$55.3 million. As a result of these changes, May through December 2009 shows a net over recovery of \$22.9 million.

The total over recovery for 2009 is now projected to be \$27 million (\$4.1 million actual over recovery plus the \$22.9 million forecasted over recovery), resulting in an updated ES rate of 8.94 cents per kWh for customer billing from August through December 2009.

1. Coal costs are lower by \$8.5 million. Price was updated to reflect current forecast through December. The table below shows prices assumed in January rate and currently forecast.

	Jan-09	May-09	Change
	\$/MWh	\$/MWh	\$/MWh
MK1	45.73	44.44	-1.29
MK2	44.15	39.28	-4.87
SR4	64.74	54.80	-9.94
SR6	64.20	54.33	-9.87

2. Wood costs are lower by \$0.3 million reflecting a wood price of \$34.00/ton down from \$35.00/ton.

3. Nuclear costs are lower by \$0.06 million and generation is lower 1 GWh reflecting updated budget information.
4. Newington costs are lower by \$9.8 million and generation is lower by 118 GWh. This reflects current forward electricity market prices that under normal weather conditions suggest that Newington will be maintained on stand-by and thus its operation was removed from the forecast. Newington continues to serve as a physical hedge against high energy prices caused by abnormal system conditions such as extreme weather and / or high unit outages. The table below shows the forward electricity market prices used in the January rates, current values for May through December 2009 and the change for each month.

**Forward Electricity Prices and Changes Between
January 2009 and May 2009
(\$/MWh)**

	Jan-09		May-09		Change	
	<u>Peak</u>	<u>Off-peak</u>	<u>Peak</u>	<u>Off-peak</u>	<u>Peak</u>	<u>Off-peak</u>
May-09	69.00	55.00	41.38	33.00	(27.63)	(22.00)
Jun-09	73.40	56.00	45.75	35.75	(27.65)	(20.25)
Jul-09	81.25	61.75	55.00	41.00	(26.25)	(20.75)
Aug-09	81.25	61.75	55.00	41.00	(26.25)	(20.75)
Sep-09	70.67	56.17	46.75	37.75	(23.92)	(18.42)
Oct-09	68.80	56.10	55.25	45.75	(13.55)	(10.35)
Nov-09	74.29	60.57	55.25	45.75	(19.04)	(14.82)
Dec-09	84.45	68.86	55.25	45.75	(29.20)	(23.11)

5. IPP costs “at market” are lower by \$5.3 million reflecting lower forward electricity market prices while volumes remain the same.
6. Peak, off-peak, surplus energy sales, net of congestion and loss adjustment are lower by \$72.4 million and net volumes are lower by 1,050 GWh. These activities are all changing as a result of lower ES loads (due to the economy and migration), reduced Newington operation, updated forward electricity prices and firming up of purchases to cover a fall outage at Merrimack Unit 2. Changes in forward electricity market prices are shown above; changes in load and migration are shown below.
7. Known purchase costs are higher by \$29.9 million and volume increased 586 GWh reflecting firming up of purchases to cover a fall outage at Merrimack Unit 2, and the value of the Lempster purchase which is partly tied to market prices.
8. Total energy requirements are lower by 583 GWh. The table below shows loads and migration (Non-ES load) used for calculating the current ES rate and in the update. For consistency with modeling, values are measured at

the low side of PTF where wholesale settlements occur, rather than at the customer meter. The amount of migration modeled in the update is as of May 4, 2009 and is about 16%, measured at the time of the ISO-NE 2008 annual peak. Overall, May through December 2009 ES loads are down 11% from the estimate used for calculating the current ES Rate.

Changes to PSNH ES Load Forecast

	January 2009 Rate (MWh)			May 2009 Update (MWh)			Change From January (MWh)			% Change
	PSNH Load	Non-ES Load	ES Load	PSNH Load	Non-ES Load	ES Load	PSNH Load	Non-ES Load	ES Load	
May-09	650,434	49,001	601,433	641,725	115,366	526,359	(8,709)	66,365	(75,075)	-12%
Jun-09	685,525	52,773	632,752	679,576	116,223	563,353	(5,950)	63,450	(69,400)	-11%
Jul-09	779,808	56,682	723,126	785,815	121,425	664,391	6,007	64,742	(58,735)	-8%
Aug-09	769,607	54,694	714,913	762,839	124,970	637,869	(6,768)	70,276	(77,044)	-11%
Sep-09	674,347	50,371	623,976	648,109	110,166	537,942	(26,238)	59,796	(86,034)	-14%
Oct-09	688,970	51,796	637,174	672,652	113,618	559,034	(16,317)	61,822	(78,140)	-12%
Nov-09	686,414	46,762	639,652	675,580	106,314	569,267	(10,834)	59,552	(70,385)	-11%
Dec-09	746,107	48,551	697,556	736,005	106,853	629,152	(10,102)	58,302	(68,403)	-10%
Subtotal	5,681,211	410,630	5,270,582	5,602,301	914,935	4,687,366	(78,910)	504,305	(583,216)	-11%

9. Reserve market costs are lower by \$1.2 million reflecting updated forecasted unit operation in May, lower ES loads, and results of the summer 2009 auction which covers the commitment period June through September 2009.
10. RGGI costs are lower by \$0.6 million reflecting a refined estimate of cost of compliance.
11. RPS costs are lower by \$1.5 million reflecting the lower ES sales forecast, including increased migration, and a reassessment of how PSNH is going to comply with its 2009 obligations.
12. Capacity costs are lower by \$7.2 million resulting from lower capacity obligations almost entirely due to increased migration, which lowers the ES peak load share that is the allocator of capacity obligations.
13. The net F/H O&M and return on rate base are lower by \$1.3 million in the May through December 2009 forecasted period. The F/H O&M, Depreciation, and Taxes are lower by \$2.9 million primarily due to outage timing while the return on rate base increased by \$1.6 million as a result of higher updated rate base due to higher fossil fuel inventory.
14. The updated ES revenues decreased by \$55.3 million due to migration and lower sales.