

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

ORIGINAL	
N.H.P.U.C. Case No.	DE 10-257
Exhibit No.	#60
Witness	Par 12
DO NOT REMOVE FROM FILE	

**Public Service Company of New Hampshire
Energy Service Rate – Preliminary Mid-year Adjustment**

Docket No. DE 10-257

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

May 4, 2011

A. Purpose of Technical Statement

This Technical Statement is being submitted to explain the changes to Public Service Company's proposed Default Energy Service (ES) Rate effective July 1, 2011. This filing updates the Company's ES filing that was submitted on December 16, 2010.

B. Proposed Rate

On December 16, 2010, PSNH filed the updated 2011 ES rate of 8.67 cents/kWh to be effective for the 12 month period January 1 through December 31, 2011. In this filing, PSNH is proposing an ES rate of 8.74 cents/kWh to be effective July 1, 2011, which is an increase of 0.07 cents/kWh from the currently effective ES rate of 8.67 cents/kWh.

The slight increase in the ES rate from the December 16, 2010 filing to this May 4, 2011 filing is attributable to a net under-recovery of \$1.9 million [a decrease of \$0.8 million in expense, net of a revenue decrease of \$2.7 million] which is contained in Attachment RAB-1.

The forecasted cost changes are contained in Attachment RAB-2, page 3, and are specifically referenced below. The forecasted cost changes are attributable to a slight change in forward electricity prices as of April 8, 2011 and the lower revenues are attributable to lower sales due to customer migration and other changes as noted below.

C. Changes from December 16, 2010 Filing

Attachment RAB-2, Page 3:

For the forecast period April through December, 2011, the impact of updated forward electricity prices, coal prices, oil prices, migration, RPS compliance, RGGI, etc. lowers the overall ES costs by \$3.9 million. Following is a line by line discussion of what changed and why.

1. Lines 4 and 5 – Projected coal generation decreased by 67 GWh (2.9%) to 2,222 GWh due primarily to more planned outage hours at Merrimack 2. Coal fuel expense decreased \$2.8 million reflecting the net of lower generation, higher dispatch prices, and an estimated additional \$1.5 million of benefit from the planned sale of coal.
2. Lines 7 through 9 – Wood generation remained the same but net costs were reduced by \$0.4 million due to production tax credits offsetting lower REC revenues.
3. Lines 14 and 15 – Newington fuel expense increased by \$4.8 million reflecting increased operation of 85 GWh and lower dispatch prices.
4. Lines 18 and 19 – IPP Energy Expense increased by \$0.5 million due to forward electricity price changes. A table showing forecasted forward electricity prices is provided in Item 12 below.
5. Lines 21 and 22, 27 and 28, and 30 & 31 – Peak Purchases decreased by 31 GWh decreasing expenses by \$1.9 million. Off-peak Purchases increased by 32 GWh increasing expenses by \$1.3 million. Surplus sales increased 43 GWh and revenues increased \$3.1 million.
6. Line 33 – Congestion and Loss Adjustment increased by \$0.2 million due to updated price assumptions, generation and purchases volume changes, and updated migration.
7. Line 35 – Total Energy GWh decreased 24 GWh due to updating migration from 31.8% to 32.2%. Total ES sales are lower by 23 GWh. The table below shows the forecasted sales and migration (Non-ES sales) used for calculating the ES rate filed in December 16, 2010, and for this filing. For consistency rate setting values are shown as measured at the customer meter. The amount of migration modeled in this update is as of the end of March, 2011 and is 32.2% of forecasted total PSNH sales. Overall, ES sales are lower by 0.6% from the estimates used in the December 16, 2010 ES rate filing.

PSNH ES Sales Forecast

MWh

<u>2011</u>	<u>Filing Dates</u>			<u>Filing Dates</u>			<u>Change</u>			
	<u>December 16, 2010</u>	<u>Non-ES</u>	<u>ES</u>	<u>May 4, 2011</u>	<u>Non-ES</u>	<u>ES</u>	<u>Total</u>	<u>Non-ES</u>	<u>ES</u>	<u>ES %</u>
	<u>Total</u>			<u>Total</u>						
Apr	596,134	189,571	406,564	596,134	191,955	404,179	0	2,385	(2,385)	-0.6%
May	597,875	190,124	407,751	597,875	192,516	405,359	0	2,391	(2,391)	-0.6%
Jun	631,143	200,703	430,440	631,143	203,228	427,915	0	2,525	(2,525)	-0.6%
Jul	716,126	227,728	488,398	716,126	230,593	485,533	0	2,865	(2,865)	-0.6%
Aug	693,393	220,499	472,894	693,393	223,273	470,120	0	2,774	(2,774)	-0.6%
Sep	625,333	198,856	426,477	625,333	201,357	423,976	0	2,501	(2,501)	-0.6%
Oct	615,358	195,684	419,674	615,358	198,145	417,213	0	2,461	(2,461)	-0.6%
Nov	617,120	196,244	420,876	617,120	198,713	418,407	0	2,468	(2,468)	-0.6%
Dec	689,540	219,274	470,266	689,540	222,032	467,508	0	2,758	(2,758)	-0.6%
Total	5,782,022	1,838,683	3,943,339	5,782,022	1,861,811	3,920,211	0	23,128	(23,128)	-0.6%

8. Line 39 – ISO-NE Ancillary costs decreased \$1.3 million due to updated price and migration assumptions. The major driver of this change is lower forecasted reserve costs.

9. Line 40 – RPS expense decreased by \$0.2 million. This change encompasses the impact of reduced sales requirements, and REC portfolio and price changes.

10. Line 41 – RGGI costs increased minimally \$26 thousand consistent with slightly higher generation amounts (increased Newington generation slightly exceeded decreased coal generation).

11. Line 43 and 44 – Capacity costs decreased by \$0.9 million due to increased migration and updated capacity market peak energy rent adjustments.

12. The following table compares forward electricity prices used in the December 16, 2010 filing to those used in this update. The updated prices were as of April 8, 2011.

Forward Electricity Prices for Delivery at Massachusetts Hub

All Hours - \$/MWh

<u>2011</u>	<u>Filing Dates</u>		<u>Change</u>	
	<u>December 16, 2010</u>	<u>May 4, 2011</u>	<u>\$/MWh</u>	<u>%</u>
	<u>(11/30/10 Closing Prices)</u>	<u>(4/8/11 Closing Prices)</u>		
Apr	42.6	43.8	1.1	2.7%
May	41.4	41.5	0.1	0.1%
Jun	42.0	42.8	0.8	1.9%
Jul	47.7	48.7	1.0	2.0%
Aug	48.2	49.3	1.1	2.2%
Sep	41.8	42.5	0.6	1.5%
Oct	41.2	42.8	1.6	3.8%
Nov	46.5	45.6	(0.9)	-1.9%
Dec	51.0	56.0	5.0	9.8%
Total	44.7	45.9	1.2	2.6%

D. Other Cost Changes (\$3.1 million costs increase)

13. The total decrease of all of the expense changes noted in items 1-12 above total \$3.9 million. All other actual and forecasted costs increased by \$3.1 million, resulting in a total net expense decrease of \$0.8 million. The \$3.1 million increase is primarily due to the estimate to actual true up for December 2010 through March 2011.

E. Revenue Changes (\$2.7 million decrease)

14. The updated ES revenues for 2011 decreased by \$2.5 million, due to lower sales caused by additional customer migration. The updated 2011 sales are lower by 29 GWH.

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE
2011 ENERGY SERVICE RATE CALCULATION
(Dollars in 000s)

Summary of Actual and Forecasted Energy Service			
Cost For January 2011 Through December 2011	TOTAL COST	Cents per KWH	Reference
Fossil energy costs	\$ 140,842	2.66	Attachment RAB-2, page 2
F/H O&M, depreciation & taxes	148,153	2.80	Attachment RAB-2, page 2
Return on rate base	43,734	0.83	Attachment RAB-2, page 2
ISO-NE ancillary (inc. Congestion and Loss Adj.)	2,602	0.05	Attachment RAB-2, page 2
Capacity	12,657	0.24	Attachment RAB-2, page 2
NH RPS	10,278	0.19	Attachment RAB-2, page 2
RGGI costs	3,321	0.06	Attachment RAB-2, page 2
Vermont Yankee	7,527	0.14	Attachment RAB-2, page 2
IPP costs (1)	29,662	0.56	Attachment RAB-2, page 2
Purchases and sales	54,467	1.03	Attachment RAB-2, page 2
Return on ES Deferral	170	0.00	Attachment RAB-2, page 2
Merrimack projected RPC insurance proceeds	(3,200)	(0.06)	Attachment RAB-2, page 3
2010 Actual ES underrecovery	10,366	0.20	Attachment RAB-2, page 2
Total Updated Energy Service Cost	\$ 460,579	8.71	
Total Updated Revenue	458,633		
2011 ES (Over)/Under Recovery	1,946		
Forecasted Retail MWH Sales July - December 2011	2,682,757		
Increase in Energy Service Rate - cents per kwh (L29/L31)	0.07		
Energy Service Rate as approved in DE 10-257 - cents per kwh	8.67		
Updated Energy Service Rate - cents per kwh	\$ 8.74		

(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
2011 ENERGY SERVICE RATE CALCULATION
(Dollars in 000s)**

	January 2011 Actual	February 2011 Actual	March 2011 Actual	April 2011 Estimate	May 2011 Estimate	June 2011 Estimate	Reference
10 Energy Service Cost							
12 Fossil energy costs	\$ 19,097	\$ 14,540	\$ 13,165	\$ 7,225	\$ 7,608	\$ 11,712	RAB-2, P3
13 F/H O&M, depreciation & taxes	9,386	8,886	10,808	14,729	13,184	11,769	RAB-2, P5
14 Return on rate base	3,639	3,652	3,652	3,632	3,614	3,668	RAB-2, P6
15 ISO-NE ancillary (inc. Congestion and Loss Adj.)	(561)	184	(798)	369	312	429	RAB-2, P3
16 Capacity	1,200	1,085	1,049	685	685	1,065	RAB-2, P3
17 NH RPS	873	864	869	791	793	837	RAB-2, P3
18 RGGI costs	567	115	279	202	201	295	RAB-2, P3
19 Vermont Yankee	688	623	648	669	683	645	RAB-2, P3
20 IPP costs (1)	4,115	2,090	2,341	2,493	2,140	1,919	RAB-2, P4
21 Purchases and sales	495	2,505	3,655	6,679	6,266	3,667	RAB-2, P3
22 Return on ES Deferral	22	17	13	12	14	13	
23 Merrimack projected RPC insurance proceeds	-	-	-	-	-	-	
24 2010 Actual ES under-recovery	10,366	-	-	-	-	-	
26 Total Energy Service Cost	\$ 49,887	\$ 34,560	\$ 35,681	\$ 37,486	\$ 35,501	\$ 36,020	
28 Total Energy Service Revenue at 8.67	43,283	37,414	38,054	35,042	35,145	37,100	
30 ES Under/(Over) Recovery	6,605	(2,854)	(2,373)	2,443	356	(1,080)	
32 Retail MWH Sales	499,353	431,507	438,899	404,179	405,359	427,915	
34 Energy Service Cost - cents per kwh	9.99	8.01	8.13	9.27	8.76	8.42	

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

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE
2011 ENERGY SERVICE RATE CALCULATION
(Dollars in 000s)

	July 2011 Estimate	August 2011 Estimate	September 2011 Estimate	October 2011 Estimate	November 2011 Estimate	December 2011 Estimate	Total	Reference
10 Energy Service Cost								
12 Fossil energy costs	\$ 14,503	\$ 14,297	\$ 10,503	\$ 6,286	\$ 6,896	\$ 15,009	\$ 140,842	RAB-2, P3
13 F/H O&M, depreciation & taxes	11,129	11,297	23,696	13,014	10,214	10,041	148,153	RAB-2, P5
14 Return on rate base	3,668	3,625	3,584	3,582	3,676	3,742	43,734	RAB-2, P6
15 ISO-NE ancillary (inc. Congestion and Loss Adj.)	550	552	421	184	262	699	2,602	RAB-2, P3
16 Capacity	1,087	1,136	1,194	1,156	1,156	1,159	12,657	RAB-2, P3
17 NH RPS	950	920	830	817	819	915	10,278	RAB-2, P3
18 RGGI costs	352	348	266	155	173	366	3,321	RAB-2, P3
19 Vermont Yankee	679	662	646	221	670	693	7,527	RAB-2, P3
20 IPP costs (1)	2,365	2,346	1,899	2,247	2,503	3,205	29,662	RAB-2, P4
21 Purchases and sales	3,806	3,577	5,275	9,382	8,118	1,042	54,467	RAB-2, P3
22 Return on ES Deferral	9	4	12	21	20	13	170	
23 Merrimack projected RPC insurance proceeds	-	-	-	-	-	(3,200)	(3,200)	
24 2010 Actual ES under-recovery	-	-	-	-	-	-	10,366	
26 Total Energy Service Cost	\$ 39,097	\$ 38,763	\$ 48,327	\$ 37,065	\$ 34,508	\$ 33,684	\$ 460,579	
28 Total Energy Service Revenue at 8.67	42,096	40,759	36,759	36,172	36,276	40,533	458,633	
30 ES Under/(Over) Recovery	(2,998)	(1,997)	11,568	893	(1,768)	(6,849)	1,946	
32 Retail MWH Sales	485,533	470,120	423,976	417,213	418,407	467,508	5,289,969	
34 Energy Service Cost - cents per kwh	8.05	8.25	11.40	8.88	8.25	7.21	8.71	

**PUBLIC SERVICE RATE COMPANY OF NEW HAMPSHIRE
2011 ENERGY SERVICE RATE CALCULATION**

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

			Actual						Estimate						Total
			Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	
1															
2	Hydro:	Energy	31.741	24.119	40.788	39.686	37.382	28.327	22.178	19.888	16.457	23.078	32.32	31.206	347.170
3															
4	Coal:	Energy	331.457	326.273	280.045	202.336	189.148	286.229	307.882	307.882	259.499	151.112	173.318	344.472	3,159.653
5		Energy Expense	\$ 14,253	12,069	12,266	7,203	6,589	10,510	11,282	11,282	9,425	5,272	6,157	12,633	118,941
6															
7	Wood:	Energy	30.013	26.223	26.449	0.827	14.164	25.436	26.283	26.283	25.436	27.951	27.050	27.951	284.066
8		Energy Expense	\$ 1,546	1,294	1,350.0	40	686	1,232	1,273	1,232	1,232	1,353	1,310	1,353	13,941
9		Revenue Credit	\$ (764)	(708)	(711)	(17)	(299)	(537)	(555)	(555)	(537)	(590)	(571)	(590)	(6,437)
10															
11	Nuclear:	Energy	15.523	13.875	15.487	14.818	15.126	14.285	15.029	14.664	14.314	4.906	14.846	15.349	168.220
12		Energy Expense	\$ 688	623	648	669	683	645	679	662	646	221	670	693	7,527
13															
14	IC/Jets	Energy	0.174	0.033	(0.056)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.151
15		Energy Expense	\$ 55	16	4	-	-	-	-	-	-	-	-	-	75
16															
17	Newington:	Energy	43.646	14.348	1.433	0.000	11.486	9.068	44.129	40.502	6.650	4.232	0.000	21.762	197.253
18		Energy Expense	\$ 4,007	1,869	254	-	633	508	2,504	2,297	384	252	-	1,613	14,321
19															
20	IPP's:	Energy	53.858	35.862	51.296	52.328	46.705	42.718	46.731	45.667	42.349	48.492	51.180	54.130	571.316
21		Energy Expense	\$ 3,853	1,885	2,136	2,290	1,938	1,829	2,274	2,250	2,076	2,332	2,332	3,034	27,696
22		ICAP	\$ 262	205	205	202	202	90	91	95	100	171	171	171	1,967
23															
24	Peak Purchase:	Energy	0.000	0.000	0.000	41.199	32.078	12.334	16.151	13.503	27.050	69.419	55.529	6.496	273.758
25		Expense	\$ -	-	-	1,983	1,479	653	888	789	1,393	3,364	2,856	440	13,845
26															
27	Known Purchases	Energy	55.906	43.997	51.050	39.432	38.287	39.088	34.678	39.478	37.488	37.618	39.432	40.296	496.751
28		Expense	\$ 3,964	4,009	4,466	3,213	3,152	3,249	2,909	3,324	3,111	3,117	3,213	3,258	40,984
29															
30	Offpeak Purchase:	Energy	0.000	0.000	0.000	45.564	48.257	13.584	22.643	22.170	27.518	78.044	57.864	7.134	322.777
31		Expense	\$ 0	0	0	1,872	1,879	540	1,066	1,070	1,137	3,122	2,445	457	13,587
32															
33	ISO-NE Net	Energy	(42.974)	(28.000)	(9.809)	(8.931)	(4.127)	(18.718)	(22.446)	(33.073)	(8.575)	(3.815)	(9.240)	(54.593)	(244.302)
34		(Credit)	\$ (3,469)	(1,504)	(811)	(390)	(244)	(775)	(1,056)	(1,606)	(367)	(221)	(395)	(3,113)	(13,949)
35															
36	Congestion and Loss Adjustment		\$ 0	0	0	62	53	185	270	281	119	(42)	35	442	1,404
37															
38	Total Energy GWH		519.344	456.730	456.683	427.258	428.505	452.349	513.257	496.964	448.185	441.036	442.298	494.203	5,576.812
39	Total Energy Expense	\$	24,395	19,758	19,807	17,127	16,751	18,128	21,622	21,162	18,442	18,095	18,223	20,391	233,901
40															
41															
42	ISO-NE Ancillary	\$	(561)	184	(798)	307	259	244	280	270	302	226	227	257	1,197
43	NH RPS	\$	873	864	869	791	793	837	950	920	830	817	819	915	10,278
44	RGGI Costs	\$	567	115	279	202	201	295	352	348	266	155	173	366	3,321
45															
46	Capacity (sold)/bought MW		271	271	182	174	174	341	341	341	341	322	322	322	3,400
47	Capacity (sold)/bought Cost (\$000)	\$	1,200	1,085	1,049	685	685	1,065	1,087	1,136	1,194	1,156	1,156	1,159	12,657

Amounts shown above may not add due to rounding.

**PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE
2011 ENERGY SERVICE RATE CALCULATION**

Forecasted PSNH IPP Market Value - April - December 2011

IPP Energy at							
Month	IPP GWh	Mkt Value (\$000)	Capacity MW	ICAP Value \$/kw-mo	ICAP (\$000)	Total (\$000)	Total \$/MWh
April	52.328	2,290	51.3	3.95	202	2,493	47.63
May	46.705	1,938	51.3	3.95	202	2,140	45.83
June	42.718	1,829	28.7	3.12	90	1,919	44.91
July	46.731	2,274	28.7	3.19	91	2,365	50.61
August	45.667	2,250	28.7	3.33	95	2,346	51.36
September	42.349	1,798	28.7	3.50	100	1,899	44.83
October	48.492	2,076	47.6	3.59	171	2,247	46.35
November	51.180	2,332	47.6	3.59	171	2,503	48.91
December	54.130	3,034	47.6	3.60	171	3,205	59.21
Total	430.300	19,822			1,295	21,116	49.07

Amounts shown above may not add due to rounding.

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE
2011 ENERGY SERVICE RATE CALCULATION
Fossil / Hydro O&M, Depreciation & Taxes Detail
(Dollars in 000s)

	January 2011	February 2011	March 2011	April 2011	May 2011	June 2011	July 2011	August 2011	September 2011	October 2011	November 2011	December 2011	Total
11 Fossil / Hydro O&M, Depr. & Taxes	Actual	Actual	Actual	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	
13 F/H Operation & Maintenance Cost	\$ 6,646	\$ 6,098	\$ 8,022	\$ 11,700	\$ 10,222	\$ 8,788	\$ 8,147	\$ 8,305	\$ 20,711	\$ 9,970	\$ 7,246	\$ 7,051	\$ 112,906
14 F/H Depreciation Cost	1,812	1,814	1,841	1,827	1,834	1,850	1,851	1,854	1,855	1,856	1,856	1,891	22,141
15 F/H Property Taxes	666	744	661	916	916	916	916	916	915	915	915	915	10,311
16 F/H Payroll Taxes	213	182	236	237	163	166	165	172	165	222	146	133	2,200
17 Amort. of Asset Retirement Obligation	48	48	48	49	49	49	50	50	50	51	51	51	594
19 Total F/H O&M, Depr. and Taxes	\$ 9,386	\$ 8,886	\$ 10,808	\$ 14,729	\$ 13,184	\$ 11,769	\$ 11,129	\$ 11,297	\$ 23,696	\$ 13,014	\$ 10,214	\$ 10,041	\$ 148,153

Amounts shown above may not add due to rounding.

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE
2011 ENERGY SERVICE RATE CALCULATION
FOSSIL/HYDRO RETURN ON RATE BASE
(Dollars in 000s)

	January 2011	February 2011	March 2011	April 2011	May 2011	June 2011	July 2011	August 2011	September 2011	October 2011	November 2011	December 2011	Total
Return on Rate Base	Actual	Actual	Actual	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	
Rate base													
Net Plant	301,381	301,381	301,381	298,356	302,805	301,745	301,496	300,371	299,922	300,971	313,246	313,311	
Working Capital Allow. (45 days of O&M)	15,187	15,187	15,187	13,920	13,920	13,920	13,920	13,920	13,920	13,920	13,920	13,920	
Fossil Fuel Inventory	57,962	57,962	57,962	60,689	61,371	60,201	56,856	55,043	56,156	59,221	61,802	59,442	
Mat'ls and Supplies	51,799	51,799	51,799	52,214	52,427	52,817	52,911	53,026	53,318	53,420	53,746	54,589	
Prepayments	2,563	2,563	2,563	2,575	2,575	2,575	2,575	2,575	2,575	2,575	2,575	2,575	
Deferred Taxes	(25,536)	(25,536)	(25,536)	(29,521)	(28,229)	(31,557)	(32,552)	(33,334)	(37,460)	(37,386)	(36,192)	(35,401)	
Other Regulatory Obligations	(12,303)	(12,303)	(12,303)	(17,353)	(17,691)	(7,432)	(7,983)	(8,509)	(9,782)	(10,143)	(10,507)	(11,792)	
Total Rate Base (L15 thru L22)	391,053	391,053	391,053	380,880	387,178	392,269	387,223	383,092	378,649	382,578	398,590	396,644	
Average Rate Base (prev + curr month)	389,664	391,053	391,053	385,966	384,029	389,723	389,746	385,157	380,870	380,613	390,584	397,617	
x Return	0.9339%	0.9339%	0.9339%	0.9411%	0.9411%	0.9411%	0.9411%	0.9411%	0.9411%	0.9411%	0.9411%	0.9411%	
Return (L25 x L26)	\$ 3,639	\$ 3,652	\$ 3,652	\$ 3,632	\$ 3,614	\$ 3,668	\$ 3,668	\$ 3,625	\$ 3,584	\$ 3,582	\$ 3,676	\$ 3,742	\$ 43,734

Amounts shown above may not add due to rounding.