

PROFORMED

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE
2013 ENERGY SERVICE RATE CALCULATION
(Dollars in 000's)

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Summary of Forecasted Energy Service

Cost For January 2013 Through December 2013

TOTAL COST Cents per KWH Reference

	TOTAL COST	Cents per KWH	Reference
Fossil energy costs	\$ 64,982	\$ 1.45	page 3 of 7
F/H O&M, depreciation & taxes	116,796	2.61	page 3 of 7
Return on rate base - PRO FORMED	40,159	0.90	page 2 of 7
ISO-NE ancillary	3,968	0.09	page 3 of 7
Capacity	3,531	0.08	page 3 of 7
NH RPS	19,217	0.43	page 3 of 7
RGGI costs	1,122	0.03	page 3 of 7
IPP costs	24,104	0.54	page 3 of 7
Wood IPPs	18,332	0.41	page 3 of 7
Purchases and sales	77,401	1.73	page 3 of 7
Return on ES Deferral	(50)	(0.00)	page 3 of 7
Total Forecasted Energy Service Cost	\$ 369,562	\$ 8.25	
2012 ES Over/Under Recovery	12,497	0.28	page 3 of 7
Net Forecasted Energy Service Cost	\$ 382,059		
Forecasted Retail MWH Sales	4,476,904	8.53	
Forecasted Energy Service Rate - cents Per KWH (line 29 / Line 31)	8.53		
Plus Scrubber ES Rate cents per kwh per DE 11-250	0.98		page 3 of 7
Total Energy Service Rate - cents per kwh, proformed	9.51		← Based on Q3 2012 Capital Structure, pro forma adjustments
Total Energy Service Rate - cents per kwh, as filed	9.54		← Based on Q3 2012 Capital Structure (page 3 of 7)
Difference (Decrease)/Increase - cents per kwh	(0.03)		

PRO FORMED

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE
2013 ENERGY SERVICE RATE CALCULATION
FOSSIL/HYDRO RETURN ON RATE BASE
(Dollars in 000's)

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	January 2013 Estimate	February 2013 Estimate	March 2013 Estimate	April 2013 Estimate	May 2013 Estimate	June 2013 Estimate	July 2013 Estimate	August 2013 Estimate	September 2013 Estimate	October 2013 Estimate	November 2013 Estimate	December 2013 Estimate	Total
Return on Rate Base													
Rate base (page 4 of 7)													
Net Plant	302,485	301,342	300,451	299,777	298,731	298,712	299,728	304,249	304,840	310,515	310,646	311,186	
Working Capital Allow. (45 days of O&M)	10,225	10,225	10,225	10,225	10,225	10,225	10,225	10,225	10,225	10,225	10,225	10,225	10,225
Fossil Fuel Inventory	56,340	54,940	53,239	53,239	53,239	53,239	51,537	51,537	51,537	51,537	54,940	57,740	
Mat'ls and Supplies	54,535	54,641	54,901	55,205	55,649	56,460	56,654	56,893	57,500	57,713	58,390	60,141	
Prepayments	1,694	1,694	1,694	1,694	1,694	1,694	1,694	1,694	1,694	1,694	1,694	1,694	
Deferred Taxes	(36,176)	(35,974)	(33,870)	(36,881)	(36,935)	(40,131)	(36,971)	(34,022)	(30,248)	(29,808)	(26,576)	(23,498)	
Other Regulatory Obligations	(18,808)	(19,848)	(21,170)	(22,307)	(23,462)	(9,823)	(11,210)	(12,524)	(15,824)	(16,839)	(17,864)	(20,758)	
Total Rate Base (L15 thru L22)	370,295	367,020	365,469	360,950	359,141	370,375	371,657	378,052	379,723	385,038	391,455	396,730	
Average Rate Base (prev + curr month)	375,499	368,658	366,245	363,210	360,045	364,758	371,016	374,855	378,888	382,380	388,246	394,092	
x Return - PRO FORMED (page 5 of 7)	0.8948%	0.8948%	0.8948%	0.8948%	0.8948%	0.8948%	0.8948%	0.8948%	0.8948%	0.8948%	0.8948%	0.8948%	
Return (L25 x L26)	\$ 3,360	\$ 3,299	\$ 3,277	\$ 3,250	\$ 3,222	\$ 3,264	\$ 3,320	\$ 3,354	\$ 3,390	\$ 3,422	\$ 3,474	\$ 3,526	\$ 40,159

Amounts shown above may not add due to rounding.

AS FILED

Docket No. DE 12-292
Dated: 12/12/2012
Attachment RAB-1
Page 1

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PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE
2013 ENERGY SERVICE RATE CALCULATION
(Dollars in 000's)

Cost For January 2013 Through December 2013	TOTAL COST	Cents per KWH	Reference
Fossil energy costs	\$ 64,982	\$ 1.45	Attachment RAB-2, page 2
F/H O&M, depreciation & taxes	116,796	2.61	Attachment RAB-2, page 2
Return on rate base (page 4 of 7)	41,367	0.92	Attachment RAB-2, page 2
ISO-NE ancillary	3,968	0.09	Attachment RAB-2, page 2
Capacity	3,531	0.08	Attachment RAB-2, page 2
NH RPS	19,217	0.43	Attachment RAB-2, page 2
RGGI costs	1,122	0.03	Attachment RAB-2, page 2
IPP costs (1)	24,104	0.54	Attachment RAB-2, page 2
Wood IPPs (1)	18,332	0.41	Attachment RAB-2, page 2
Purchases and sales	77,401	1.73	Attachment RAB-2, page 2
Return on ES Deferral	(50)	(0.00)	Attachment RAB-2, page 2
Total Forecasted Energy Service Cost	\$ 370,770	\$ 8.28	
2012 ES Over/Under Recovery	12,497	0.28	Attachment RAB-3, page 1
Net Forecasted Energy Service Cost	\$ 383,267		
Forecasted Retail MWH Sales	4,476,904	8.56	
Forecasted Energy Service Rate - cents Per KWH (line 29 / Line 31)	8.56		
Plus Scrubber ES Rate cents per kwh per DE 11-250	0.98		
Total Energy Service Rate - cents per kwh	9.54		

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

AS FILED

**PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE
2013 ENERGY SERVICE RATE CALCULATION
FOSSIL/HYDRO RETURN ON RATE BASE
(Dollars in 000's)**

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Return on Rate Base													
Rate base													
Net Plant	302,485	301,342	300,451	299,777	298,731	298,712	299,728	304,249	304,840	310,515	310,646	311,186	
Working Capital Allow. (45 days of O&M)	10,225	10,225	10,225	10,225	10,225	10,225	10,225	10,225	10,225	10,225	10,225	10,225	10,225
Fossil Fuel Inventory	56,340	54,940	53,239	53,239	53,239	53,239	51,537	51,537	51,537	51,537	54,940	57,740	
Mat'ls and Supplies (1)	54,535	54,641	54,901	55,205	55,649	56,460	56,654	56,893	57,500	57,713	58,390	60,141	
Prepayments	1,694	1,694	1,694	1,694	1,694	1,694	1,694	1,694	1,694	1,694	1,694	1,694	
Deferred Taxes	(36,176)	(35,974)	(33,870)	(36,881)	(36,935)	(40,131)	(36,971)	(34,022)	(30,248)	(29,808)	(26,576)	(23,498)	
Other Regulatory Obligations	(18,808)	(19,848)	(21,170)	(22,307)	(23,462)	(9,823)	(11,210)	(12,524)	(15,824)	(16,839)	(17,864)	(20,758)	
Total Rate Base (L15 thru L22)	370,295	367,020	365,469	360,950	359,141	370,375	371,657	378,052	379,723	385,038	391,455	396,730	
Average Rate Base (prev + curr month)	375,499	368,658	366,245	363,210	360,045	364,758	371,016	374,855	378,888	382,380	388,246	394,092	
x Return (page 7 of 7)	0.9217%	0.9217%	0.9217%	0.9217%	0.9217%	0.9217%	0.9217%	0.9217%	0.9217%	0.9217%	0.9217%	0.9217%	
Return (L25 x L26)	\$ 3,461	\$ 3,398	\$ 3,376	\$ 3,348	\$ 3,319	\$ 3,362	\$ 3,420	\$ 3,455	\$ 3,492	\$ 3,525	\$ 3,579	\$ 3,633	\$ 41,367

(1) As addressed in Data Request OCA-01, Q-OCA-007, PSNH has removed the estimated Clean Air Project spare parts inventory from Materials and Supplies of \$2.65M.

Amounts shown above may not add due to rounding.

**Public Service Company of New Hampshire and Subsidiaries
Capitalization @ 9/30/2012 - for FH Purposes Only
Adjusted for Proposed Financing Adjustments**

		[A]	[B]	[C]	[D]	[E]	[F]	[G]	[H]
		Balance-LTD	Unamor Issuance Expense	Net Balance [A] + [B]	Annualized Amor. Expense	Int Rate*	Ann. Int. Exp. [A] X [E]	Total Ann. Exp. [D] + [F]	Eff. Int. Rate [G]/[C]
Series A is variable rate debt									
PCRB Series A Tax-Exempt	(1)	89,250,000	(2,657,568)	86,592,432	413,404	0.22%	196,350	609,754	
PCRB Series B Tax-Exempt-REFIN	(2)	89,250,000	(5,782,137)	83,467,863	722,767	2.16%	1,927,800	2,650,567	
PCRB Series C Tax-Exempt-CALL	(2)	-	-	-	-		-	-	
FMB Series L - 2004 - MATURE	(2)	-	-	-	-		-	-	
FMB Series M - 2005	(1)	50,000,000	(532,676)	49,467,324	23,160	5.60%	2,800,000	2,823,160	
FMB Series N - 2007	(1)	70,000,000	(440,069)	69,559,931	89,603	6.15%	4,305,000	4,394,603	
FMB Series O - 2008	(1)	110,000,000	(1,482,271)	108,517,729	265,481	6.00%	6,600,000	6,865,481	
FMB Series P - 2009	(1)	150,000,000	(1,261,274)	148,738,726	175,949	4.50%	6,750,000	6,925,949	
FMB Series Q - 2011	(1)	122,000,000	(5,450,840)	116,549,160	628,943	4.05%	4,941,000	5,569,943	
FMB Series R - 2011	(1)	160,000,000	(15,267,493)	144,732,507	1,712,243	3.20%	5,120,000	6,832,243	
NEW LTD ISSUE	(2)	315,000,000	(6,737,150)	308,262,851	224,572	3.87%	12,190,500	12,415,072	
Total Debt	(1)	<u>1,155,500,000</u>	<u>(39,611,478)</u>	<u>1,115,888,522</u>	<u>4,256,123</u>		<u>44,830,650</u>	<u>49,086,773</u>	<u>4.3989% Pro forma</u>

4.9542% Actual Q3 2012 (1)

		[A]	[B]	[C]	[D]	[E]	[F]	[G]
		Balance-LTD	Capitalization Percentage	Embedded Cost/Return	Pro forma Weighted Avg. [B] * [C]	Tax Gross-up [D]/ [1-TR]	Pro forma Tax-Adjusted Return	Pro forma Return By Month
Capitalization---								
LTD--use net of issuance exp-above		1,115,888,522	47.5921%	4.3989%	2.0935%	N/A	2.0935%	
Total Equity-REBALANCE	(2)	1,228,802,000	52.4079%	9.8100%	5.1412%	8.6443%	8.6443%	
Total		<u>2,344,690,522</u>	<u>100.0000%</u>		<u>7.2347%</u>		<u>10.7379%</u>	<u>0.894821%</u>
*Series A is variable rate debt				Actual Q3 2012 (1)	<u>7.5237%</u>		<u>11.0609%</u>	<u>0.921742%</u>
TR = 40.525%				(Decrease)	<u>-0.2890%</u>		(Decrease)	<u>-0.026921%</u>

(1) Page 7 of 7.

(2) Page 6 of 7.

**Public Service Company of New Hampshire and Subsidiaries
Capitalization @ 09/30/2012 - for Fossil Hydro Purposes Only
Adjustments for Proposed Refinancing**

	[A]	[B]	[C]	[D]	[E]	[F]	[G]
	Balance-LTD	Unamor Issuance Expense	Net Balance [A] + [B]	Annualized Amor. Expense	Int Rate*	Ann. Int. Exp. [A] X [E]	Total Ann. Exp. [D] + [F]
PCRB Series B Tax-Exempt at 9/30/2012	(1) \$ 89,250,000	\$ (3,410,635)	\$ 85,839,365	\$ 501,744	4.75%	\$ 4,239,375	\$ 4,741,119
Amortization of Series B issue expense through 5/1/2013	(2)	292,684					
New issue costs and call premium	(2)	(2,664,186)					
Recalculated new bonds with new costs and rate and 8 year term	(2) \$ 89,250,000	\$ (5,782,137)	\$ 83,467,863	\$ 722,767	2.16%	\$ 1,927,800	\$ 2,650,567
(Inc)/Decr in int costs - Series B							\$ 2,090,552 a
PCRB Series C Tax-Exempt at 9/30/2012	(1) \$ 108,985,000	\$ (3,667,668)	\$ 105,317,332	\$ 427,301	5.45%	\$ 5,939,683	\$ 6,366,984
Redeem Series C and fund with new LTD series	(3) (108,985,000)	3,667,668	(105,317,332)	(427,301)		(5,939,683)	(6,366,984)
Removal of PCRB Series C Tax-Exempt	\$ -	\$ -	\$ -	\$ -		\$ -	\$ -
(Inc)/Decr in int costs - Series C							6,366,984 a
FMB Series L - 2004 at 9/30/2012	(1) \$ 50,000,000	\$ (116,409)	\$ 49,883,591	\$ 63,496	5.25%	\$ 2,625,000	\$ 2,688,496
Series L matures and is funded with new LTD series	(3) (50,000,000)	116,409	(49,883,591)	(63,496)		(2,625,000)	(2,688,496)
Removal of Series L	\$ -	\$ -	\$ -	\$ -		\$ -	\$ -
(Inc)/Decr in int costs - Series L							2,688,496 a
New LTD Issue	(4) \$ 315,000,000	\$ (6,737,150)	\$ 308,262,851	\$ 224,572	3.87%	\$ 12,190,500	\$ 12,415,072
(Inc)/Decr in int costs - New LTD Series							(12,415,072) a
Total (Inc)/Decr in LTD interest costs							\$ (1,269,040) total a
Common Equity at 9/30/2012	(1) \$ 1,084,802,000						
Equity adjustments	(5) 144,000,000						
Adjusted Common Equity after proposed refinancing	\$ 1,228,802,000						

(1) Page 7 of 7.

(2) Series B- assumes \$89.25 M taxable debt refinancing with issue expense of \$879,187 plus a 2 % call premium of \$1,785,000, for a total of \$2,664,186 in new costs. This plus the unamortized Series B expense as of 5/1/13 results in \$5,782,137 to be amortized over 8 years (\$722,767/yr).

(3) Series C redemption and Series L maturity will be financed with proceeds from the new LTD issue.

(4) Calculation of unamortized issue expense and annual amortization for New LTD issue is as follows:

Unamortized issue expense Series C at 9/30/12	(3,667,668)
Amortization of Series C issue expense through 5/1/2013	249,259
Issue expense for new LTD	(3,318,741)
Unamortized Issue Expense New LTD issue	(6,737,150)
Amortize over 30 years	30
Annualized Amortization Expense	\$ 224,572

(5) Equity contributions from NU parent to endeavor to maintain 52.4% equity in the capital structure per Section 4.5 of the DE 09-035 Settlement Agreement (rounded to millions).

ACTUAL
Public Service Company of New Hampshire and Subsidiaries
Capitalization @ 9/30/2012 - for Fossil Hydro Purposes Only

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	[A] Balance-LTD	[B] Unamor Issuance Expense	[C] Net Balance [A] + [B]	[D] Annualized Amor. Expense	[E] Int Rate*	[F] Ann. Int. Exp. [A] X [E]	[G] Total Ann. Exp. [D] + [F]	[H] Eff. Int. Rate [G]/[C]
Series A is variable rate debt								
PCRB Series A Tax-Exempt	\$ 89,250,000	\$ (2,657,568)	\$ 86,592,432	\$ 413,404	0.22%	\$ 196,350	\$ 609,754	
PCRB Series B Tax-Exempt	89,250,000	(3,410,635)	85,839,365	501,744	4.75%	4,239,375	4,741,119	
PCRB Series C Tax-Exempt	108,985,000	(3,667,668)	105,317,332	427,301	5.45%	5,939,683	6,366,984	
FMB Series L - 2004	50,000,000	(116,409)	49,883,591	63,496	5.25%	2,625,000	2,688,496	
FMB Series M - 2005	50,000,000	(532,676)	49,467,324	23,160	5.60%	2,800,000	2,823,160	
FMB Series N - 2007	70,000,000	(440,069)	69,559,931	89,603	6.15%	4,305,000	4,394,603	
FMB Series O - 2008	110,000,000	(1,482,271)	108,517,729	265,481	6.00%	6,600,000	6,865,481	
FMB Series P - 2009	150,000,000	(1,261,274)	148,738,726	175,949	4.50%	6,750,000	6,925,949	
FMB Series Q - 2011	122,000,000	(5,450,840)	116,549,160	628,943	4.05%	4,941,000	5,569,943	
FMB Series R - 2011	160,000,000	(15,267,493)	144,732,507	1,712,243	3.20%	5,120,000	6,832,243	
Total Debt	\$ 999,485,000	\$ (34,286,903)	\$ 965,198,097	\$ 4,301,325		\$ 43,516,408	\$ 47,817,733	4.9542%

	[A] Balance-LTD	[B] Capitalization Percentage	[C] Embedded Cost/Return	[D] Weighted Avg. [B] * [C]	[E] Tax Gross-up [D]/ [1-TR]	[F] Tax-Adjusted Return	[G] Return By Month
Capitalization---							
LTD--use net of issuance exp-above	\$ 965,198,097	47.0828%	4.9542%	2.3326%	N/A	2.3326%	
Total Equity	1,084,802,000	52.9172%	9.8100%	5.1912%	8.7283%	8.7283%	
Total	\$ 2,050,000,097	100.0000%		7.5237%		11.0609%	0.921742%

* Series A is variable rate debt
TR=40.525%