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PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE D/B/A EVERSOURCE ENERGY
2016 ENERGY SERVICE RATE CALCULATION
RATE EFFECTIVE JULY 1, 2016
(Dollars in 000's)

Cost For January 2016 Through December 2016	TOTAL COST	Cents per KWH	Reference
Fossil energy costs	\$ 31,163	\$ 0.86	Attachment C/JG-2, page 2
F/H O&M, depreciation & taxes	119,200	\$ 3.29	Attachment C/JG-2, page 2
Return on rate base	43,358	\$ 1.20	Attachment C/JG-2, page 2
ISO-NE ancillary	(54)	\$ (0.00)	Attachment C/JG-2, page 2
Capacity	(10,097)	\$ (0.28)	Attachment C/JG-2, page 2
NH RPS	11,117	\$ 0.31	Attachment C/JG-2, page 2
Seabrook costs / (credits)	(182)	\$ (0.01)	Attachment C/JG-2, page 2
Vermont Yankee	(18)	\$ (0.00)	Attachment C/JG-2, page 2
RGI costs	1,066	\$ 0.03	Attachment C/JG-2, page 2
IPP costs (*)	9,605	\$ 0.27	Attachment C/JG-2, page 2
Burgess BioPower	38,020	\$ 1.05	Attachment C/JG-2, page 2
Purchases and sales	68,561	\$ 1.89	Attachment C/JG-2, page 2
Return on ES Deferral	65	\$ 0.00	Attachment C/JG-2, page 2
2015 Actual ES under recovery	<u>5,961</u>		
Total Updated Energy Service Cost	\$ 317,765		
Total Updated Revenue	<u>300,325</u>		
2016 ES (Over)/Under Recovery	17,440		
Forecasted Retail MWH Sales July - December 2016	1,833,199		
Change to Energy Service Rate - cents per kwh	0.95		
Energy Service Rate as approved in DE 14-235 - cents per kwh	<u>8.27</u>		
Updated Energy Service Rate w/o Scrubber - cents per kwh	9.22		
Plus Scrubber ES Rate cents per kwh per DE 11-250	<u>1.72</u>		
Total Updated Energy Service Rate Effective 7/1/16 - cents per kwh	<u>10.94</u>		

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

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE D/B/A EVERSOURCE ENERGY
2016 ENERGY SERVICE RATE CALCULATION
RATE EFFECTIVE JULY 1, 2016
(Dollars in 000's)

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	January 2016 Actual	February 2016 Actual	March 2016 Actual	April 2016 Estimate	May 2016 Estimate	June 2016 Estimate	Reference
Energy Service Cost							
Fossil energy costs	\$ 5,104	\$ 4,505	\$ 1,670	\$ 324	\$ 635	\$ 1,267	CJK-2, P3
F/H O&M, depreciation & taxes	9,238	8,490	9,689	11,527	8,472	9,740	CJK-2, P5
Return on rate base	3,538	3,682	3,698	3,653	3,596	3,596	CJK-2, P6
ISO-NE ancillary	436	611	494	(2,158)	84	(236)	CJK-2, P3
Capacity	(610)	(668)	(674)	(854)	(1,064)	(925)	CJK-2, P3
NH RPS	1,011	(1,719)	1,023	1,137	1,060	1,165	CJK-2, P3
Seabrook costs / (credits)	-	-	-	(182)	-	-	
Vermont Yankee	(8)	(6)	(4)	-	-	-	
RGGI costs	128	226	31	30	-	13	CJK-2, P3
IPP costs (*)	1,047	714	549	938	755	784	CJK-2, P3
Burgess BioPower	3,934	2,913	3,690	1,622	3,396	3,296	CJK-2, P3
Purchases and sales (inc. Congestion and Loss Adj.)	6,666	5,234	4,782	6,317	4,514	5,495	CJK-2, P3
Return on ES Deferral	11	10	8	8	7	7	
2015 Actual ES under recovery	5,961						
Total Energy Service Cost	\$ 36,455	\$ 23,992	\$ 24,956	\$ 22,360	\$ 21,455	\$ 24,201	
Total Energy Service Revenue at 8.27 cents/kwh	\$ 28,880	\$ 26,813	\$ 24,512	\$ 23,163	\$ 21,606	\$ 23,745	
ES Under/(Over) Recovery	7,575	(2,822)	444	(802)	(151)	456	
Forecasted Retail MWH Sales	348,059	311,831	296,997	280,080	261,257	287,126	
Energy Service Cost - cents per kwh	10.47	7.69	8.40	7.98	8.21	8.43	

(*) 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 D/B/A EVERSOURCE ENERGY
2016 ENERGY SERVICE RATE CALCULATION
RATE EFFECTIVE JULY 1, 2016
(Dollars in 000's)

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	July 2016 Estimate	August 2016 Estimate	September 2016 Estimate	October 2016 Estimate	November 2016 Estimate	December 2016 Estimate	Total	Reference
Energy Service Cost								
Fossil energy costs	\$ 4,285	\$ 866	\$ 1,054	\$ 866	\$ 911	\$ 9,676	\$ 31,163	CJG-2, P3
F/H O&M, depreciation & taxes	9,789	9,372	11,690	11,630	10,185	9,378	119,200	CJG-2, P5
Return on rate base	3,590	3,575	3,587	3,604	3,609	3,630	43,358	CJG-2, P6
ISO-NE ancillary	100	114	162	261	203	(125)	(54)	CJG-2, P3
Capacity	(812)	(849)	(968)	(1,062)	(887)	(723)	(10,097)	CJG-2, P3
NH RPS	1,372	1,351	1,110	1,074	1,146	1,387	11,117	CJG-2, P3
Seabrook costs / (credits)	-	-	-	-	-	-	(182)	
Vermont Yankee	-	-	-	-	-	-	(18)	
RGGI costs	162	-	7	-	5	464	1,066	CJG-2, P3
IPP costs (*)	960	749	534	653	780	1,143	9,605	CJG-2, P3
Burgess BioPower	3,396	3,396	3,296	2,390	3,296	3,396	38,020	CJG-2, P3
Purchases and sales (inc. Congestion and Loss Adj.)	6,179	9,593	5,752	5,681	6,796	1,552	68,561	CJG-2, P3
Return on ES Deferral	6	2	1	2	3	1	65	
2015 Actual ES under recovery							5,961	
Total Energy Service Cost	\$ 29,027	\$ 28,169	\$ 26,224	\$ 25,100	\$ 26,047	\$ 29,779	\$ 317,765	
Total Energy Service Revenue at 8.27 cents/kwh	\$ 27,956	\$ 27,523	\$ 22,621	\$ 21,887	\$ 23,351	\$ 28,268	\$ 300,325	
ES Under/(Over) Recovery	1,071	646	3,603	3,214	2,696	1,511	\$ 17,440	
Forecasted Retail MWH Sales	338,038	332,805	273,531	264,653	282,356	341,817	3,618,548	
Energy Service Cost - cents per kwh	8.59	8.46	9.59	9.48	9.22	8.71	8.78	

(*) 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 D/B/A EVERSOURCE ENERGY
2016 ENERGY SERVICE RATE CALCULATION
RATE EFFECTIVE JULY 1, 2016

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

		Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Total
9 Hydro:	Energy	39.496	37.401	43.267	40.706	37.620	30.127	24.247	19.277	15.416	23.465	30.894	32.142	374.057
11 Coal:	Energy	81.695	65.146	1.642	5.393	0.000	1.859	60.552	0.000	1.239	0.000	1.239	196.209	414.974
12	Energy Expense	\$ 4,037	3,449	696	324	-	109	2,786	-	73	-	73	8,809	20,357
14 Wood:	Energy	30.454	27.873	22.963	0.000	20.857	27.554	28.473	28.473	27.554	28.473	27.554	28.473	298.702
15	Energy Expense	\$ 1,793	1,779	1,492	-	1,274	1,684	1,740	1,740	1,684	1,740	1,684	1,740	18,348
16	Revenue Credit	\$ (917)	(857)	(743)	-	(640)	(845)	(873)	(873)	(845)	(873)	(845)	(873)	(9,184)
18 IC/Jets	Energy	0.272	(0.063)	0.224	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0
19	Energy Expense	\$ 88	5	70	-	-	-	-	-	-	-	-	-	164
21 Newington:	Energy	(0.782)	0.883	(1.186)	0.000	0.000	4.560	9.500	0.000	1.900	0.000	0.000	0.000	14.874
22	Energy Expense	\$ 102	128	154	-	-	319	633	0	142	-	-	-	1,478
24 IPP's:	Energy	26.379	23.864	26.071	29.398	24.640	24.778	24.072	19.589	16.663	20.052	20.303	23.217	279.026
25	Energy Expense	\$ 953	622	459	843	661	723	900	689	473	569	697	1,059	8,647
26	ICAP	\$ 94	92	91	95	95	60	60	60	60	84	84	83	957
28 Burgess BioPower	Energy	50.196	36.175	46.847	18.612	43.189	41.796	43.189	43.189	41.796	29.257	41.796	43.189	479.231
29	Expense	\$ 3,656	2,635	3,412	1,344	3,118	3,018	3,118	3,118	3,018	2,112	3,018	3,118	34,686
30	ICAP	\$ 278	278	278	278	278	278	278	278	278	278	278	278	3,334
32 Contract Purchases	Energy	8.083	7.568	7.062	6.205	4.841	3.919	2.952	2.663	3.332	5.212	6.829	5.757	64.423
33	Expense	\$ 569	534	567	326	254	206	155	140	175	274	359	302	3,860
34	ICAP	\$ 25	26	26	21	21	8	8	8	8	19	19	19	208
36 Energy Purchases	Energy	201.476	190.616	212.064	197.643	146.784	170.861	179.985	240.857	183.089	175.087	171.763	81.772	2,151.998
37	Expense	\$ 8,047	5,782	4,885	5,959	4,204	5,241	6,560	9,415	5,550	5,369	6,364	3,315	70,690
39 Energy Sales	Energy	(17.094)	(44.913)	(32.631)	0.000	0.000	0.000	(13.356)	0.000	0.000	0.000	0.000	(47.123)	(155.117)
40	(Credit)	\$ (1,975)	(1,107)	(697)	-	-	-	(664)	-	-	-	0	(2,420)	(6,863)
42 Congestion and Loss Adjustment		\$ -	-	-	11	35	40	120	31	19	20	55	336	667
44 Total Energy GWH		420.175	344.548	326.323	297.957	277.933	305.453	359.615	354.048	290.990	281.545	300.379	363.635	3,922.601
45 Total Energy Expense		\$ 16,751	13,366	10,691	9,201	9,300	10,840	14,820	14,605	10,635	9,591	11,783	15,767	147,349
48 ISO-NE Ancillary		\$ 436	611	494	(2,158)	84	(236)	100	114	162	261	203	(125)	(54)
49 NH RPS		\$ 1,011	(1,719)	1,023	1,137	1,060	1,165	1,372	1,351	1,110	1,074	1,146	1,387	11,117
50 RGGI Costs		\$ 128	226	31	30	0	13	162	0	7	0	5	464	1,066
52 Capacity (sold)/bought MW-mo		(203)	(205)	(217)	(258)	(322)	(304)	(267)	(281)	(317)	(345)	(289)	(236)	(3,245)
53 Capacity (sold)/bought Cost (\$000)		\$ (610)	(668)	(674)	(854)	(1,064)	(925)	(812)	(849)	(968)	(1,062)	(887)	(723)	(10,097)

Amounts shown above may not add due to rounding.

1 PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE D/B/A EVERSOURCE ENERGY
2 2016 ENERGY SERVICE RATE CALCULATION
3 RATE EFFECTIVE JULY 1, 2016
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6 **Forecasted PSNH IPP Market Value - April - December 2016**
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8	IPP Energy at							
9	IPP	Mkt Value	Capacity	ICAP Value	ICAP	Total	Total	
10	Month	GWh	(\$000)	MW	\$/kw-mo	(\$000)	(\$000)	\$/MWh
11	April	29.398	843	28.6	3.31	95	938	31.89
12	May	24.640	661	28.6	3.30	95	755	30.65
13	June	24.778	723	19.8	3.04	60	784	31.62
14	July	24.072	900	19.8	3.03	60	960	39.88
15	August	19.589	689	19.8	3.03	60	749	38.24
16	September	16.663	473	19.8	3.06	60	534	32.03
17	October	20.052	569	27.3	3.08	84	653	32.54
18	November	20.303	697	27.3	3.07	84	780	38.44
19	December	23.217	1,059	27.3	3.06	83	1,143	49.22
20	Total	202.713	6,614			681	7,295	35.99

Amounts shown above may not add due to rounding.

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE D/B/A EVERSOURCE ENERGY
2016 ENERGY SERVICE RATE CALCULATION
Fossil / Hydro O&M, Depreciation & Taxes Detail
RATE EFFECTIVE JULY 1, 2016
(Dollars in 000's)

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	January 2016	February 2016	March 2016	April 2016	May 2016	June 2016	July 2016	August 2016	September 2016	October 2016	November 2016	December 2016	Total
Fossil / Hydro O&M, Depr. & Taxes	Actual	Actual	Actual	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	
F/H Operation & Maintenance Cost	\$ 6,080	\$ 5,420	\$ 6,496	\$ 8,494	\$ 5,512	\$ 6,780	\$ 6,828	\$ 6,474	\$ 8,727	\$ 8,602	\$ 7,227	\$ 6,415	\$ 83,053
F/H Depreciation Cost	1,795	1,857	1,855	1,614	1,615	1,614	1,616	1,617	1,618	1,630	1,635	1,640	20,105
F/H Property Taxes	1,121	964	1,031	1,092	1,092	1,092	1,092	1,092	1,092	1,092	1,092	1,092	12,943
F/H Payroll and Other Taxes	189	196	255	272	198	198	198	134	198	251	176	176	2,440
Amort. of Asset Retirement Obligation	53	53	53	56	56	56	56	56	56	56	56	56	659
Total F/H O&M, Depr. and Taxes	\$ 9,238	\$ 8,490	\$ 9,689	\$ 11,527	\$ 8,472	\$ 9,740	\$ 9,789	\$ 9,372	\$ 11,690	\$ 11,630	\$ 10,185	\$ 9,378	\$ 119,200

Amounts shown above may not add due to rounding.

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE D/B/A EVERSOURCE ENERGY
2016 ENERGY SERVICE RATE CALCULATION
FOSSIL/HYDRO RETURN ON RATE BASE
RATE EFFECTIVE JULY 1, 2016
(Dollars in 000's)

	January 2016 Actual	February 2016 Actual	March 2016 Actual	April 2016 Estimate	May 2016 Estimate	June 2016 Estimate	July 2016 Estimate	August 2016 Estimate	September 2016 Estimate	October 2016 Estimate	November 2016 Estimate	December 2016 Estimate	Total
Return on Rate Base													
Rate base													
Net Plant	279,228	280,526	281,823	271,720	270,553	269,743	268,835	268,312	272,993	274,131	274,834	276,560	
Working Capital Allow. (45 days of O&M)	10,583	10,583	10,583	10,583	10,583	10,583	10,583	10,583	10,583	10,583	10,583	10,583	
Fossil Fuel Inventory	103,397	103,397	103,397	105,982	105,993	105,534	105,547	105,558	105,099	105,107	105,113	105,470	
Mat'ls and Supplies	57,603	57,603	57,603	57,603	57,603	57,603	57,603	57,603	57,603	57,603	57,603	57,603	
Prepayments	1,741	1,741	1,741	1,741	1,741	1,741	1,741	1,741	1,741	1,741	1,741	1,741	
Deferred Taxes	(34,520)	(34,074)	(33,628)	(33,827)	(33,290)	(32,560)	(33,441)	(33,457)	(34,603)	(35,196)	(34,770)	(33,724)	
Other Regulatory Obligations	(16,145)	(16,145)	(16,145)	(19,990)	(20,351)	(18,753)	(19,287)	(19,822)	(19,233)	(19,602)	(19,980)	(19,239)	
Total Rate Base (L15 thru L22)	401,887	403,630	405,374	393,812	392,832	393,891	391,582	390,519	394,183	394,368	395,124	398,994	
Average Rate Base (prev + curr month)	386,985	402,759	404,502	399,593	393,322	393,362	392,736	391,050	392,351	394,276	394,746	397,059	
x Return	0.9142%	0.9142%	0.9142%	0.9142%	0.9142%	0.9142%	0.9142%	0.9142%	0.9142%	0.9142%	0.9142%	0.9142%	
Return (L25 x L26)	\$ 3,538	\$ 3,682	\$ 3,698	\$ 3,653	\$ 3,596	\$ 3,596	\$ 3,590	\$ 3,575	\$ 3,587	\$ 3,604	\$ 3,609	\$ 3,630	\$ 43,358

Amounts shown above may not add due to rounding.