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

Public Service Company of New Hampshire Energy Service Rate

Docket No. DE 14-235

Joint Technical Statement of Christopher J. Goulding and Frederick B. White

December 15, 2014

A. Purpose of Technical Statement

This Technical Statement is being submitted to explain the major changes to Public Service Company of New Hampshire's proposed Default Energy Service (ES) Rate effective January 1, 2015. This filing updates the Company's ES initial filing that was submitted on September 15, 2014.

B. Proposed Rate

On September 15, 2014, PSNH filed a revised preliminary 2015 ES rate of 9.61 cents/kWh to be effective for the 12 month period January 1 through December 31, 2015. In this filing, PSNH has calculated an ES rate of 10.56 cents/kWh for effect on January 1, 2015, which is an increase of 0.95 cents/kWh from the September 15, 2014 filed ES rate. The rates above include the temporary recovery of Scrubber costs at a rate of 0.98 cents/kWh as ordered in DE 11-250, Order No. 25,346.

The 0.95 cents/kWh increase in the ES rate from the September 15, 2014 filing to this filing is attributable to a decrease in forecasted retail sales of 163 GWh and a net increase in actual and forecasted costs of \$22.2 million as contained in Attachment CJG-1.

C. Changes in Forecasted ES Sales

For the forecast period January through December 2015, an updated load forecast and an updated migration forecast were utilized, which results in forecasted ES sales to decrease from 4,009 GWh in the initial filing to 3,846 GWh in the updated filing, a decrease of 163 GWh. The updated base load forecast is 1.4% lower than the forecast used in the September filing. Regarding migration, rather than utilizing a constant migration rate for all months of the forecast period, the results of econometric modeling have been used which forecasts varying levels by month, for November, 2014 through December, 2015. This method of a varying monthly migration forecast is consistent with the prepared testimony of Christopher A. Plecs in the Company's September 15 filing. This forecast method was discussed during the November 20 technical session, and the Company received support from the

PUC Staff for the forecast's use in this updated filing. The table below identifies the monthly migration rates utilized in the forecast:

Month-Year	<u>Migration</u>			
Nov-14	50.0%			
Dec-14	44.6%			
Jan-15	43.9%			
Feb-15	44.9%			
Mar-15	48.2%			
Apr-15	52.3%			
May-15	54.4%			
Jun-15	53.5%			
Jul-15	51.3%			
Aug-15	53.5%			
Sep-15	55.9%			
Oct-15	57.6%			
Nov-15	54.4%			
Dec-15	50.4%			

For 2015 the average migration rate increased from 50.2% in the initial filing to an average migration rate of 51.6% in the updated filing.

D. Changes from September 15, 2014 Filing, Attachment CJG-2, Page 3

For the forecast period January through December 2015, the impact of power supply variable cost updates is to increase ES costs by \$ 10.0 million. Following is a discussion of the major changes (numbers may not add due to rounding):

- 1. Lines 10 and 11 Projected coal generation increased 162 GWh to 1,963 GWh due to higher forward electricity market prices. Coal fuel expense increased \$7.5 million due to higher forecasted generation.
- 2. Lines 13 thru 15 Projected wood generation decreased 13 GWh to 314 GWh due to an update in the modeled MWh/Hr generation level. Wood fuel expense decreased \$0.8 million and revenue credits decreased \$0.4 million due to lower forecasted generation.
- 3. Lines 17 and 18 Newington generation increased by 38 GWh due to higher forward electricity market prices, relative to delivered fuel prices. Higher forecasted generation and higher fuel prices resulted in increased fuel expense of \$3.9 million.
- 4. Line 21 IPP energy expenses increased by \$1.0 million due to higher forward electricity market prices. A table showing forecasted forward electricity market prices used for calculating the preliminary ES rate filed in September and for this filing is provided below.

Forward Electricity Prices for Delivery at Massachusetts Hub All Hours - \$/MWh Filing Dates

	September 15, 2014	December 15, 2014	<u>Cha</u>	<u>Change</u>		
<u>2015</u>	(8/20/14 Prices)	(11/20/14 Prices)	\$/MWh	<u>%</u>		
Jan	149.5	148.3	(1.2)	-0.8%		
Feb	140.7	144.9	4.1	2.9%		
Mar	84.5	92.7	8.2	9.7%		
Apr	43.8	47.2	3.4	7.8%		
May	33.5	35.7	2.3	6.8%		
Jun	42.2	48.2	6.0	14.1%		
Jul	45.3	50.1	4.8	10.5%		
Aug	39.0	43.9	4.9	12.6%		
Sep	33.6	36.9	3.3	9.9%		
Oct	34.2	39.6	5.4	15.7%		
Nov	52.1	53.3	1.2	2.3%		
Dec	100.7	100.4	(0.2)	-0.2%		
Total	66.2	69.8	3.5	5.3%		

- 5. Line 25 Burgess Biopower generation decreased by 2 GWh and expenses decreased by \$0.2 million due to a reduction in the assumed MWh/Hr generation level in January, 2015.
- 6. Lines 28 thru 30, 32 and 33, and 35 and 36 Purchases decreased by 399 GWh decreasing expenses by \$11.4 million. Of note, PSNH has since the September filing, entered into a fixed price purchase for 32 GWh (100 MW) of peak energy for May, 2015. Sales decreased by 42 GWh increasing expenses by \$11.0 million. The decreases in purchases and sales are primarily due to higher generation and lower loads.
- 7. Lines 38 and 46 Congestion and loss adjustments and RGGI costs increased by \$0.5 and \$0.4 million, respectively, primarily due to increased generation amounts.
- 8. Line 40 Total Energy decreased 173 GWh due to a lower base load forecast and an increase in average migration from 50.2% to 51.6%. Total ES sales are lower by 163 GWh. The table below shows the forecasted sales and migration (Non-ES sales) as measured at the customer meter used for calculating the preliminary ES rate filed in September and for this filing. Overall, ES sales are lower by 4.1% from the estimates used in the September 15, 2014 preliminary ES rate filing.

<u>PSNH ES Sales Forecast</u> MWh

Filing Dates

	<u>September 15, 2014</u>			<u>December 15, 2014</u>		<u>Change</u>				
<u>2015</u>	<u>Total</u>	Non-ES	<u>ES</u>	<u>Total</u>	Non-ES	<u>ES</u>	<u>Total</u>	Non-ES	<u>ES</u>	<u>ES %</u>
Jan	729,283	366,100	363,183	722,900	317,343	405,558	(6,383)	(48,757)	42,374	11.7%
Feb	654,669	328,644	326,025	641,123	287,547	353,577	(13,546)	(41,097)	27,552	8.5%
Mar	656,262	329,444	326,819	658,773	317,506	341,267	2,511	(11,937)	14,448	4.4%
Apr	604,235	303,326	300,909	590,381	308,723	281,658	(13,854)	5,397	(19,251)	-6.4%
May	622,693	312,592	310,101	606,963	330,154	276,810	(15,729)	17,562	(33,291)	-10.7%
Jun	676,553	339,630	336,924	659,411	352,832	306,579	(17,142)	13,202	(30,344)	-9.0%
Jul	757,030	380,029	377,001	741,044	380,439	360,605	(15,985)	410	(16,396)	-4.3%
Aug	739,390	371,174	368,216	738,382	394,717	343,665	(1,008)	23,543	(24,552)	-6.7%
Sep	637,136	319,842	317,294	625,160	349,174	275,987	(11,975)	29,332	(41,307)	-13.0%
Oct	627,905	315,208	312,696	621,033	357,998	263,036	(6,871)	42,790	(49,661)	-15.9%
Nov	627,028	314,768	312,260	623,220	339,292	283,928	(3,808)	24,524	(28,332)	-9.1%
Dec	718,283	360,578	357,705	711,995	358,841	353,155	(6,288)	(1,738)	(4,550)	-1.3%
Total	8,050,467	4,041,334	4,009,133	7,940,388	4,094,565	3,845,823	(110,079)	53,231	(163,310)	-4.1%

- 9. Line 44 ISO-NE Ancillary expenses decreased \$2.0 million due to lower loads and inclusion of a \$1.7 million Domestic Manufacturing Deduction credit.
- 10. Line 45 RPS expenses decreased \$0.8 million due to lower loads.
- 11. Line 49 Capacity expenses increased \$0.5 million due to greater total MW-mo of capacity responsibility resulting from utilizing the updated methodology for forecasting migration.

E. 2014 Under Recovery (\$ 13.0 million increase in under recovery)

The updated ES 2014 under recovery increased by \$13.0 million due to a \$5.0 million decrease in revenues in addition to net increase in costs of \$8.0 million. The \$5.0 million decrease in revenues is primarily due to higher than forecasted actual migration in August, September and October 2014. The \$8.0 million net increase in costs is due primarily to reverse migration in December 2014 that resulted in much lower net sales into the market due to higher load to be served by generation.

F. 2015 Other Cost Changes (\$0.8 million cost decrease)

All other forecasted costs decreased by \$0.8 million.

G. Summary

The increase of the forecasted expense changes noted in items 1-11 in Section D above totaling \$10.0 million along with the 2014 under recovery increase of \$13.0 million in Section E and the other cost decrease of \$0.8 million in Section F results in a total net expense increase of \$22.2 million. Combining this with the decrease in forecasted customer sales for 2015 results in the 0.95 cents/kWh rate increase identified above.