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

Public Service Company of New Hampshire Energy Service Rate

Docket No. DE 15-415

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

December 11, 2015

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, 2016. This filing updates the Company's ES initial filing that was submitted on September 28, 2015.

B. Proposed Rate

On September 28, 2015, PSNH filed a preliminary 2016 ES rate of 10.39 cents/kWh to be effective for the 12 month period January 1 through December 31, 2016. In this filing, PSNH has calculated an ES rate of 9.99 cents/kWh for effect on January 1, 2016, which is a decrease of 0.40 cents/kWh from the September 28, 2015 filed ES rate.

The 0.40 cents/kWh decrease in the ES rate from the September 28, 2015 filing to this filing is attributable to a net decrease in actual and forecasted costs of \$88.9 million and a decrease in forecasted retail sales of 119.5 GWh as contained in Attachment CJG-1.

The September 28 filing did not include a separate temporary rate attributable to Scrubber, as the schedules included 2016 Scrubber costs in the overall rate calculation. This revised filing has removed 2016 Scrubber costs from the support schedules, and has included a temporary rate of 1.72 cents/kWh on CJG-1, Page 1, Line 39. This proposed revised temporary rate (filed in Docket No. DE 11-250 on November 2, 2015) was calculated based on 2016 Scrubber costs as well as \$17.6 million (or one-seventh) of previously deferred Scrubber costs. The proposed ES rate of 9.99 cents/kWh includes the proposed 1.72 cents/kWh temporary Scrubber rate.

C. Changes in Forecasted ES Sales

For the forecast period January through December 2016, an updated load forecast and an updated migration forecast were utilized, which results in forecasted ES sales to decrease from 3,728 GWh in the initial filing to 3,608 GWh in the updated

filing, a decrease of 119.5 GWh. The updated base load forecast is 1.1% lower than the forecast used in the September filing. In addition, forecasted migration has been updated for all months of the forecast period, based upon the results of econometric modeling. For 2016, the average migration rate increased from 53.6% in the initial filing to an average migration rate of 54.6% in the updated filing. The table below identifies the monthly migration rates utilized in the preliminary ES rate filed in September and for this filing.

PSNH ES Migration Forecast

	Filing [<u>Dates</u>	
<u>2016</u>	September 28, 2015	December 11, 2015	<u>Change</u>
Jan	52.2%	53.7%	1.5%
Feb	51.9%	53.3%	1.5%
Mar	52.2%	53.4%	1.2%
Apr	53.1%	53.7%	0.6%
May	53.9%	54.1%	0.2%
Jun	54.2%	54.9%	0.6%
Jul	54.3%	55.9%	1.6%
Aug	54.3%	55.7%	1.4%
Sep	54.7%	55.1%	0.4%
Oct	54.4%	55.1%	0.7%
Nov	54.6%	55.0%	0.5%
Dec	53.6%	54.8%	1.2%
Total	53.6%	54.6%	0.9%

D. Changes from September 28, 2015 Filing, Attachment CJG-2, Page 3

For the forecast period January through December 2016, the impact of power supply variable cost updates is to decrease ES costs by \$ 26.2 million. Following is a discussion of the major changes (numbers may not add due to rounding):

- 1. Lines 10 and 11 Projected coal generation decreased 233 GWh to 916 GWh due to lower forward electricity market prices. Coal fuel expense decreased \$13.4 million due to lower projected generation.
- 2. Lines 17 and 18 Newington generation decreased by 70 GWh due to lower forward electricity market prices, relative to delivered fuel prices. Lower projected generation and lower fuel prices resulted in decreased fuel expense of \$9.2 million.
- 3. Line 21 IPP energy expenses decreased by \$1.8 million due to lower 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 28, 2015	December 11, 2015	<u>Cha</u>	<u>inge</u>
<u>2016</u>	(9/14/15 Prices)	(11/30/15 Prices)	<u>\$/MWh</u>	<u>%</u>
Jan	86.4	57.2	(29.3)	-33.9%
Feb	83.4	63.2	(20.3)	-24.3%
Mar	60.9	49.1	(11.8)	-19.3%
Apr	40.8	34.2	(6.6)	-16.2%
May	31.0	28.2	(2.9)	-9.3%
Jun	34.2	34.2	(0.0)	-0.1%
Jul	38.6	37.7	(0.9)	-2.4%
Aug	34.5	35.2	0.7	2.1%
Sep	29.3	30.1	0.8	2.7%
Oct	32.1	34.0	1.9	5.8%
Nov	41.7	40.4	(1.3)	-3.0%
Dec	55.4	51.6	(3.7)	-6.8%
Total	47.4	41.3	(6.1)	-12.9%

- 4. Lines 28 thru 30, 32 and 33, and 35 and 36 Purchases increased by 40 GWh due to lower generation amounts, and expenses decreased by \$2.4 million due to lower forward electricity market prices. Sales decreased by 139 GWh due to lower generation amounts increasing expenses by \$17.0 million.
- 5. Lines 38 and 46 Congestion and loss adjustments and RGGI costs decreased by \$1.3 and \$0.8 million, respectively, primarily due to decreased generation amounts.
- 6. Line 40 Total Energy decreased 115 GWh due to a lower base load forecast and an increase in average migration from 53.6% to 54.6%. Total ES sales are lower by 119.5 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 3.2% from the estimates used in the September 28, 2015 preliminary ES rate filing.

PSNH ES Sales Forecast MWh

			<u>Filing</u>	<u>Dates</u>							
•	<u>Ser</u>	tember 28, 2	<u>015</u>	<u>Dec</u>	cember 11, 20	<u>015</u>	ī	<u>Char</u>	<u>nge</u>	•	
<u>2016</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	726,402	379,142	347,260	717,273	385,322	331,952	(9,129)	6,180	(15,309)	-4.4%	
Feb	667,765	346,313	321,453	656,459	350,014	306,446	(11,306)	3,701	(15,007)	-4.7%	
Mar	663,331	346,189	317,141	648,911	346,212	302,699	(14,420)	23	(14,443)	-4.6%	
Apr	595,352	316,238	279,113	593,916	319,209	274,707	(1,436)	2,970	(4,406)	-1.6%	
May	612,655	330,070	282,586	601,011	325,016	275,995	(11,645)	(5,054)	(6,591)	-2.3%	
Jun	666,159	361,262	304,897	652,753	358,162	294,591	(13,406)	(3,100)	(10,306)	-3.4%	
Jul	748,380	406,136	342,244	740,884	413,937	326,947	(7,496)	7,801	(15,297)	-4.5%	

Aug	745,644	405,157	340,487	739,048	411,804	327,243	(6,596)	6,647	(13,244)	-3.9%	
Sep	631,946	345,402	286,544	629,924	346,804	283,119	(2,022)	1,403	(3,425)	-1.2%	
Oct	627,718	341,594	286,123	620,374	341,986	278,389	(7,343)	391	(7,734)	-2.7%	
Nov	630,133	343,754	286,379	624,967	343,844	281,123	(5,166)	90	(5,256)	-1.8%	
Dec	719,351	385,889	333,462	718,932	393,951	324,981	(419)	8,062	(8,481)	-2.5%	j
Total	8,034,836	4,307,145	3,727,691	7,944,452	4,336,261	3,608,191	(90,384)	29,116	(119,499)	-3.2%	

- 7. Line 44 ISO-NE Ancillary expenses decreased \$0.5 million due to lower loads.
- 8. Line $45 \mathrm{RPS}$ expenses decreased \$12.8 million due to a decrease in the Class III REC required percentage of sales as provided in Order No. 25,844 (December 2, 2015) and lower sales.
- 9. Line 49 Capacity expenses decreased \$1.0 million due to lower loads.

E. 2015 Over Recovery (\$ 2.5 million increase in over recovery)

The updated ES 2015 over recovery increased by \$2.5 million due to a \$5.7 million decrease in expenses offset by a \$3.2 million decrease in revenues. The \$5.7 million net decrease in costs is due to market prices lower than forecasted in the initial filing. The \$3.2 million decrease in revenues is primarily due to higher than forecasted actual migration in October 2015, and increased migration for November and December 2015 as compared to the initial filing.

F. 2016 Other Cost Changes (\$60.2 million cost decrease)

O&M expenses decreased \$18.2 million, Return on Rate Base decreased \$24.4 million, and Amortization of previously deferred Scrubber costs decreased \$17.6 million because the initial filing included the 2016 Scrubber costs in the support schedules, and this revised filing includes the 2016 Scrubber costs in the proposed revised Scrubber temporary rate on CJG-1, Page 1, Line 39, and has removed them from the schedules. The proposed revised Scrubber temporary rate was filed in Docket No. DE 11-250 on November 2, 2015. For ease of comparison, the table below removes the 2016 scrubber costs from the September 28th filing.

	SEPTEMBER 28th	SEPTEMBER 28th	SEPTEMBER 28th	DECEMBER 11th	COST
Cost For January 2016 Through December 2016	TOTAL COST	SCRUBBER COST*	ADJUSTED COST	TOTAL COST	CHANGE
F/H O&M, depreciation & taxes**	120,507	(18,155)	102,352	102,356	4
Return on rate base	64,961	(25,682)	39,279	40,561	1,283
Amortization of previouly deferred Scrubber costs	17,612	(17,612)	-	-	-
Total	\$ 203,080	\$ (61,449)	\$ 141,631	\$ 142,917	\$ 1,287
*Please see motion to amend temporary rate in DE 11-250 filed 11/2/15					
**Comprised of \$2,400 of O&M, \$15,540 of depreciation	n, & \$215 of taxes				

After removing the scrubber O&M, Return on Rate Base and the Amortization of the previously deferred Scrubber Costs from the initial filing, the only non-Scrubber change was a \$1.3 million increase in Return on Rate Base which was primarily due to an increase in rate base.

G. Summary

The decrease of the forecasted expense changes noted in items 1-9 in Section D above totaling \$26.2 million along with the 2015 over recovery increase of \$2.5 million in Section E and the other cost decreases of \$60.2 million in Section F results in a total net expense decrease of \$88.9 million. Combining this with the decrease in forecasted customer sales for 2016 results in a 2.12 cents/kWh rate decrease. When this decrease is offset by the inclusion of the 1.72 cents/kWh Scrubber Temporary Rate that was not included in the initial filing, the result is the 0.40 cents/kWh decrease identified above.