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

Public Service Company of New Hampshire d/b/a Eversource Energy Energy Service Rate

Docket No. DE 16-822

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

December 9, 2016

A. Purpose of Technical Statement

This Technical Statement is being submitted to explain the major changes to Public Service Company of New Hampshire d/b/a Eversource Energy's ("Eversource") proposed Default Energy Service (ES) Rate effective January 1, 2017. This filing updates the Company's ES initial filing that was submitted on September 30, 2016.

B. Proposed Rate

On September 30, 2016, Eversource filed a preliminary 2017 ES rate of 10.99 cents/kWh to be effective for the 12 month period January 1 through December 31, 2017. In this filing, Eversource has calculated an ES rate of 11.17 cents/kWh for effect on January 1, 2017, which is an increase of 0.18 cents/kWh from the September 30, 2016 filed ES rate.

The 0.18 cents/kWh increase in the ES rate from the September 30, 2016 filing to this filing is attributable to a decrease in forecasted retail sales of 84.5 GWh as contained in Attachment CJG-1 and shown below in Section D, Item 6, partially offset by a net decrease in actual and forecasted costs of \$1.9 million and a decrease in forecasted retail sales of 84.5 GWh as contained in Attachment CJG-1.

C. Changes in Forecasted ES Sales

For the forecast period January through December 2017, an updated load forecast and an updated migration forecast were utilized, which results in forecasted ES sales to decrease from 3,462 GWh in the initial filing to 3,377 GWh in the updated filing, a decrease of 85 GWh. The updated base load forecast is 2.4% lower than the forecast used in the September filing. In addition forecasted migration has been updated for all months of the forecast period, the results of econometric modeling. For 2017 the forecasted average migration rate remains 56.9%. The following table identifies the monthly migration rates utilized in the preliminary ES rate filed in September and for this filing.

Eversource ES Migration Forecast

Filing Dates							
<u>2017</u>	September 30, 2016	<u>December 9, 2016</u>	<u>Change</u>				
Jan	51.6%	52.0%	0.4%				
Feb	54.4%	54.5%	0.1%				
Mar	54.3%	53.9%	-0.4%				
Apr	56.4%	57.4%	1.0%				
May	59.3%	59.5%	0.3%				
Jun	58.7%	59.0%	0.3%				
Jul	57.0%	57.2%	0.2%				
Aug	57.7%	57.4%	-0.3%				
Sep	59.3%	59.3%	0.0%				
Oct	60.8%	60.4%	-0.4%				
Nov	57.9%	57.6%	-0.3%				
Dec	55.4%	54.9%	-0.5%				
Total	56.9%	56.9%	0.0%				

D. Changes from September 30, 2016 Filing, Attachment CJG-2, Page 3

For the forecast period January through December 2017, the impact of power supply variable cost updates is to decrease ES costs by \$ 0.8 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 1 GWh and coal fuel expense increased \$0.3 million.
- 2. Lines 13 thru 15 Projected wood generation costs increased \$0.6 million due to lower revenue credit resulting from a lower assumed Class I REC value.
- 3. Lines 17 and 18 Newington generation decreased by 20 GWh due to higher delivered fuel prices, relative to forward electricity market prices. Lower projected generation resulted in decreased fuel expense of \$3.2 million.
- 4. Line 21 IPP energy expenses increased by \$0.3 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 on the following page.

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

Filing Dates

	September 30, 2016	December 9, 2016	<u>Cha</u>	<u>Change</u>		
<u>2017</u>	(9/20/16 Prices)	(12/1/16 Prices)	\$/MWh	<u>%</u>		
Jan	66.2	66.4	0.3	0.4%		
Feb	65.2	68.0	2.8	4.3%		
Mar	44.6	43.1	(1.4)	-3.2%		
Apr	29.2	31.5	2.2	7.7%		
May	25.9	27.5	1.6	6.1%		
Jun	26.9	28.6	1.7	6.3%		
Jul	32.5	34.3	1.8	5.5%		
Aug	30.1	31.7	1.6	5.4%		
Sep	25.2	26.4	1.3	5.0%		
Oct	26.1	27.9	1.8	6.9%		
Nov	31.4	32.3	0.9	3.0%		
Dec	45.4	45.7	0.3	0.6%		
Total	37.4	38.6	1.2	3.3%		

- 5. Lines 28 thru 30, 32 and 33, and 35 and 36 Purchases decreased by 72 GWh due to lower loads and expenses increased by \$0.7 million due to higher forward electricity market prices relative to purchase volume changes. Sales decreased by 2 GWh increasing expenses by \$0.6 million.
- 6. Line 40 Total Energy decreased 90 GWh due to a lower base load forecast. Total ES sales are lower by 85 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 2.4% from the estimates used in the September 30, 2016 preliminary ES rate filing.

Eversource ES Sales Forecast MWh

Filing Dates

- mig sales											
	<u>September 30, 2016</u>			<u>December 9, 2016</u>		<u>Change</u>					
<u>2017</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>	ES %	
Jan	725,421	374,202	351,219	706,072	367,008	339,064	(19,349)	(7,194)	(12,155)	-3.5%	
Feb	644,258	350,345	293,913	635,939	346,553	289,386	(8,319)	(3,792)	(4,526)	-1.5%	
Mar	658,342	357,548	300,794	663,398	357,667	305,731	5,056	119	4,937	1.6%	
Apr	603,055	340,023	263,032	586,224	336,533	249,691	(16,831)	(3,490)	(13,341)	-5.1%	
May	610,749	361,937	248,812	599,333	356,803	242,530	(11,416)	(5,134)	(6,282)	-2.5%	
Jun	661,793	388,743	273,050	641,933	378,743	263,189	(19,860)	(10,000)	(9,861)	-3.6%	
Jul	750,284	427,787	322,496	725,319	415,048	310,271	(24,965)	(12,739)	(12,226)	-3.8%	
Aug	745,138	429,696	315,442	721,980	414,529	307,451	(23,158)	(15,168)	(7,991)	-2.5%	
Sep	635,592	376,614	258,978	612,898	363,196	249,701	(22,694)	(13,418)	(9,276)	-3.6%	
Oct	626,060	380,759	245,301	606,635	366,560	240,075	(19,425)	(14,199)	(5,226)	-2.1%	
Nov	630,587	365,230	265,357	610,673	351,928	258,745	(19,914)	(13,301)	(6,613)	-2.5%	
Dec	725,000	401,728	323,271	712,594	391,282	321,312	(12,406)	(10,446)	(1,959)	-0.6%	
Total	8,016,278	4,554,613	3,461,665	7,822,998	4,445,851	3,377,146	(193,280)	(108,761)	(84,519)	-2.4%	

- 7. Line 44 ISO-NE Ancillary expenses decreased \$0.3 million due to lower loads.
- 8. Line 45 RPS expenses increased \$0.2 million due to an increase in Class I expense offset by a decrease in Class III expense. Class I expense increased due to a greater loss on forecasted sales of surplus RECs due to a lower Class I market price and increased sales of surplus REC's. Class III expense decreased due to a forecasted lower Class III market price.
- 9. Lines 38, 46, and 49 Expenses decreased \$0.1 million overall due to small changes in congestion and losses, RGGI, and capacity expenses.

E. 2017 Other Cost Changes (\$0.8 million cost increase)

2017 forecasted O&M expenses increased \$1.8 million due to higher forecasted depreciation, which was offset by a \$1.0 million reduction in Return on Rate Base primarily due to changing the Working Capital Allowance methodology from the results of the Company's lead/lag study back to the 45/365 standard.

F. Forecasted 2016 Under Recovery (\$ 2.0 million decrease in under recovery)

The updated ES 2016 under recovery decreased by \$2.0 million due to a \$4.2 million decrease in costs offset by a \$2.2 million decrease in revenues. The \$4.2 million net decrease in costs is due primarily to a reduction in forecasted property taxes as compared to the initial filing. The \$2.2 million decrease in revenues is primarily due to October 2016 actual sales lower than forecasted and increased migration for November and December 2016 as compared to the initial filing.

G. Summary

The decrease of the forecasted expense changes noted in items 1-9 in Section D above totaling \$0.8 million along with the 2016 under recovery decrease of \$2.0 million in Section F, offset by the other cost increase of \$0.8 million in Section E, results in a total net expense decrease of \$1.9 million. Combining this with the decrease in forecasted customer sales for 2017 results in the 0.18 cents/kWh rate increase identified above.