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 17-150

Joint Technical Statement of
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December 8, 2017

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, 2018. This filing updates the Company's ES initial filing that was submitted on September 29, 2017.

B. Proposed Rate

In this filing, Eversource is proposing a 3-month 2018 ES rate (consistent with the settlement filed in Docket No. DE 17-113) of 11.25 cents/kWh calculated in Attachment CJG-1, Page 1.

Also for comparison purposes, Eversource is providing an updated illustrative 2018 ES rate of 11.07 cents/kWh calculated on an annual basis in Attachment CJG-1, Page 2. As Eversource's September 29, 2017 preliminary 2018 ES rate filing was calculated on an annual basis, this joint technical statement compares the September 29, 2017 preliminary 2018 ES rate with the updated 2018 illustrative annual-basis ES rate in Attachment CJG-1, Page 2.

On September 29, 2017, Eversource filed a preliminary 2018 ES rate of 10.50 cents/kWh to be effective for the 12-month period January 1 through December 31, 2018. In Attachment CJG-2, Page 2, of this filing, Eversource has calculated an illustrative January 1, 2018 12-month ES rate of 11.07 cents/kWh, which is an increase of 0.57 cents/kWh from the September 29, 2017 filed ES rate.

The 0.57 cents/kWh increase in the ES rate from the September 29, 2017 filing to this filing is attributable to an increase in forecasted costs of $16.9 million in addition to a decrease in forecasted retail sales of 19 GWh.

C. Changes in Forecasted ES Sales

For the forecast period January through December 2018, an updated load forecast and an updated migration forecast were utilized, which results in forecasted ES sales decreasing from 3,252 GWh in the initial filing to 3,233 GWh in the updated filing, a decrease of 19 GWh. The updated base load forecast is 0.7% lower than the forecast used in the September filing. In addition, forecasted migration has been updated for all months of the forecast period, using the results of econometric modeling. For 2018 the forecasted average migration rate decreased from 58.6% to 58.5%. The table below identifies the monthly migration rates utilized in the preliminary ES rate filed in September and for this filing.

Eversource ES Migration Forecast

	Filing Dates		
2018	September 29, 2017	December 8, 2017	Change
Jan	53.9%	53.8%	-0.1%
Feb	53.4%	56.5%	3.0%
Mar	57.1%	55.8%	-1.3%
Apr	60.1%	59.5%	-0.7%
May	61.8%	61.6%	-0.2%
Jun	60.7%	60.5%	-0.2%
Jul	58.9%	58.7%	-0.2%
Aug	59.2%	59.0%	-0.2%
Sep	61.0%	60.8%	-0.2%
Oct	62.0%	61.8%	-0.2%
Nov	59.1%	58.9%	-0.2%
Dec	56.8%	56.6%	-0.2%
Total	58.6%	58.5%	-0.1%

D. Changes from September 29, 2017 Filing, Attachment CJG-2, Page 3

For the forecast period January through December 2018, the impact of power supply variable cost updates increases ES costs by $ 2.2 million. Following is a discussion of the major changes (numbers may not add due to rounding):

1. Lines 10 and 11 – Projected coal generation increased 65 GWh and coal fuel expense increased $3.3 million primarily in March due to higher forward prices.

2. Lines 17 and 18 – Newington generation decreased by 1 GWh due to higher delivered fuel prices, relative to forward electricity market prices. Lower projected generation resulted in decreased fuel expense of $0.9 million.

3. Line 21 – IPP energy expenses increased by $0.4 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

2018	September 29, 2017 (9/19/17 Prices)	December 8, 2017 (11/30/17 Prices)	Change $/MWh	Change %
Jan	71.2	72.0	0.8	1.1%
Feb	69.6	69.4	(0.3)	-0.4%
Mar	45.3	47.3	2.0	4.4%
Apr	28.5	31.0	2.5	8.8%
May	25.7	27.4	1.6	6.4%
Jun	26.3	28.3	2.0	7.6%
Jul	31.7	32.9	1.3	4.0%
Aug	30.5	31.3	0.7	2.5%
Sep	25.0	27.0	2.0	8.0%
Oct	25.7	28.3	2.6	10.0%
Nov	30.2	32.7	2.6	8.5%
Dec	47.1	50.1	3.0	6.4%
Total	38.1	39.8	1.7	4.6%

4. Lines 28 thru 30, 32 and 33, and 35 and 36 – Purchases decreased by 37 GWh due to greater coal generation and lower loads, and expenses increased by $0.7 million, due to greater increases in forward electricity market prices relative to decreases in purchase volumes. Sales increased by 47 GWh decreasing expenses by $2.7 million.

5. Line 40 – Total Energy decreased 20 GWh due to a lower base load forecast. Total ES sales are lower by 19 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 0.6% from the estimates used in the September 29, 2017 preliminary ES rate filing.

Eversource ES Sales Forecast
MWh
Filing Dates

	September 29, 2017			December 8, 2017			Change			
2018	Total	Non-ES	ES	Total	Non-ES	ES	Total	Non-ES	ES	ES %
Jan	707,099	381,280	325,819	705,375	379,658	325,717	(1,724)	(1,622)	(102)	0.0%
Feb	637,194	340,295	296,899	629,288	355,240	274,048	(7,907)	14,945	(22,852)	-7.7%
Mar	664,453	379,123	285,330	646,274	360,609	285,665	(18,179)	(18,514)	335	0.1%
Apr	586,961	352,841	234,119	580,710	345,238	235,472	(6,251)	(7,604)	1,353	0.6%
May	600,078	370,742	229,336	599,942	369,712	230,230	(136)	(1,030)	895	0.4%
Jun	642,677	390,105	252,572	643,796	389,622	254,174	1,119	(483)	1,602	0.6%
Jul	728,035	428,937	299,097	729,120	428,117	301,002	1,085	(820)	1,905	0.6%
Aug	725,424	429,405	296,019	728,243	429,755	298,488	2,819	350	2,469	0.8%
Sep	616,322	375,695	240,626	613,972	373,054	240,918	(2,349)	(2,641)	292	0.1%
Oct	609,947	378,074	231,873	612,335	378,128	234,207	2,387	54	2,333	1.0%
Nov	614,434	363,294	251,140	612,168	360,619	251,549	(2,266)	(2,675)	409	0.2%
Dec	715,194	406,344	308,850	694,243	392,850	301,393	(20,951)	(13,494)	(7,457)	-2.4%
Total	7,847,816	4,596,135	3,251,681	7,795,464	4,562,601	3,232,864	(52,352)	(33,534)	(18,818)	-0.6%

6. Line 44 – ISO-NE Ancillary expenses increased $0.5 million due to updated projected $/MWh costs.

7. Line 45 – RPS expenses decreased $0.1 million due to lower loads.

8. Lines 38 and 46 – Congestion and losses, and RGGI expenses increased $0.4 million primarily due to increased coal generation and lower marginal losses revenue.

9. Line 49 – Capacity expenses increased by $0.8 million due to lower surplus MW due to lower migration .

E. 2018 Other Cost Changes ($0.8 million cost increase)

2018 forecasted Return on Rate Base expenses increased $0.6 million and O&M expense increased $0.2 million.

F. Forecasted 2017 Under Recovery ($13.9 million increase in under recovery)

The updated ES 2017 under recovery increased by $13.9 million due to an $11.4 million increase in costs along with a $2.5 million decrease in revenues. The $11.4 million net increase in costs is due primarily to a $5.4 million increase in fossil energy costs, a $3.8 million increase in O&M expense, a $2.6 million decrease in capacity credit, offset by the net of various other costs being $0.4 million lower than forecasted. The $2.5 million decrease in revenues is primarily due to September and October actual sales lower than forecasted.

G. Summary

The increase of the forecasted expense changes noted in items 1-9 in Section D above totaling $2.2 million, the other cost increase of $0.8 million in Section E, and the 2017 under recovery increase of $13.9 million in Section F, combine to result in a total net expense increase of $19.9 million. Combining this with the decrease in forecasted customer sales for 2018 results in the 0.57 cents/kWh rate increase identified above for the illustrative 12-month rate calculation.