

**UNITIL ENERGY SYSTEMS, INC.**

**DIRECT TESTIMONY OF**

**TODD R. DIGGINS**

**EXHIBIT TRD-1**

**New Hampshire Public Utilities Commission**

**Docket No. DE 19-\_\_\_\_**

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## **SCHEDULES**

Schedule TRD-1	2019 Step Adjustment
Schedule TRD-2	MSCR Collection Balance
Schedule TRD-3	SRAF Amortization
Schedule TRD-4	NH PUC 2018 F-1
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1    **I. INTRODUCTION**

2    **Q.     Please state your name and business address.**

3    A.     Todd R. Diggins, 6 Liberty Lane West, Hampton, New Hampshire 03842.

4

5    **Q.     What is your position and what are your responsibilities?**

6    A.     I am Director of Finance for Unitil Service Corp. (“Unitil Service”), a subsidiary  
7           of Unitil Corporation that provides a variety of administrative and professional  
8           services including, regulatory, financial, accounting, human resources,  
9           engineering, operations, information systems technology and energy supply  
10          management services to Unitil Corporation’s utility subsidiaries. My  
11          responsibilities are primarily in the areas of financial planning and analyses,  
12          regulatory projects, treasury operations, banking relationships, and insurance /  
13          loss control programs.

14

15   **Q.     Please describe your business and educational background.**

16   A.     I have over 20 years of professional experience in the utility industry focused  
17          within the finance, accounting and regulatory areas. I joined Unitil Service in  
18          1998 as a Systems Financial Analyst. In 2004 I accepted a position within the  
19          Accounting Department as a General Accountant and was promoted to Corporate  
20          Accounting Manager in 2009. In 2018 I assumed my current responsibilities as  
21          Director of Finance. I hold a Bachelor of Science degree from the University of

1 New Hampshire and a Master of Science in Finance from Southern New  
2 Hampshire University as well as a Master of Global Business Administration  
3 from Southern New Hampshire University.

4 **II. SUMMARY OF TESTIMONY**

5 **Q. What is the purpose of your testimony?**

6 A. The purpose of my testimony is to present and support Unitil Energy Systems,  
7 Inc. (hereinafter referred to as “Unitil Energy” or the “Company”) revenue  
8 requirement for its 2019 Step Adjustment based on 2018 capital spending. I also  
9 support and explain proposed changes to the Storm Recovery Adjustment Factor  
10 (“SRAF”) and the Major Storm Cost Reserve (“MSCR”). Lastly, I provide  
11 calculations pertaining to the Reliability Enhancement Plan / Vegetation  
12 Management Program (“REP / VMP”) reconciliation, Earnings Sharing,  
13 Exogenous Events, Rate Design and Bill Impacts. I also support the Company’s  
14 proposed tariff changes associated with this filing.

15  
16 **Q. Please explain the increase for the 2019 Step Adjustment.**

17 A. The calculated 2019 Step Adjustment exclusive of any cap is \$1,443,072 for 2018  
18 capital spending and is included in this testimony pursuant to the Settlement  
19 Agreement in DE 16-384. The 2019 Step Adjustment was derived by calculating  
20 the revenue requirement associated with 80% of the changes in Net Plant in

1 Service for the period January 1, 2018 through December 31, 2018. Additional  
2 details for the 2019 Step Adjustment will be provided later in this testimony.  
3

4 **Q. Are you proposing any changes to the SRAF and MSCR?**

5 A. Yes. The Company is proposing that the costs of \$1,550,964 from Winter Storm  
6 Quinn in March 2018 plus associated carrying charges be removed from the  
7 MSCR and transferred to the SRAF effective May 1, 2019.  
8

9 **Q. What other topics do you address in your testimony?**

10 A. Later in my testimony, I discuss and quantify Earnings Sharing, Exogenous  
11 Events, Rate Design and Bill Impacts.

12 **III. 2019 STEP ADJUSTMENT**

13 **Q. How is Net Utility Plant derived?**

14 A. Page 1 of Schedule TRD-1 shows Beginning Utility Plant, Plant Additions,  
15 Retirements, and Ending Utility Plant on Lines 1-4. Plant Additions and  
16 Retirements are detailed on Page 2 by FERC account. Then Page 1, Lines 5-9  
17 show Beginning Accumulated Depreciation, Depreciation, Retirements, Cost of  
18 Removal, and Ending Accumulated Depreciation. The difference between  
19 Ending Utility Plant and Ending Accumulated Depreciation results in Ending Net  
20 Utility Plant shown on Line 10.  
21

1     **Q.     What is the change in the Net Utility Plant in Service for calendar year 2018?**

2     A.     The Ending Net Utility Plant seen on Page 1 of Schedule TRD-1, Line 10, is  
3           \$217,368,817. This figure will be the amount filed in the Company's 2018 FERC  
4           Form 1. The Beginning Net Utility Plant of \$209,795,605, the difference of Line  
5           1 and Line 5, matches the Ending Net Utility Plant from the Company's 2018  
6           Step Adjustment filing in DE 18-036. Line 11 shows the Change in Net Utility  
7           Plant of \$7,573,212.

8  
9     **Q.     How is the Revenue Requirement derived?**

10    A.     The method used to calculate the Revenue Requirement matches the two prior  
11           years step adjustments as settled upon in DE 16-384. The annual Change in Net  
12           Utility Plant provided above is multiplied by a factor of 80% and is shown in Line  
13           12. Then, Line 12 is multiplied by Line 13, pre-tax rate of return, to derive the  
14           Return and Taxes on Line 14. The Pre-Tax Rate of Return of 10.15% has been  
15           updated for the Tax Act and is calculated on Page 5, Line 5. Next, Depreciation  
16           Expense is calculated on 80% of the annualized depreciation of Plant Additions  
17           for 2018. Then, Property Taxes are calculated on 80% of the Change in Net  
18           Utility Plant (Line 12). A property tax rate of 3.09% was calculated by dividing  
19           the latest annualized Property Tax Payments of \$6,727,169 by 2018 Net Utility  
20           plant of \$217,368,817. Finally, Return and Taxes, Depreciation Expense and  
21           Property Taxes are added together to arrive at the Revenue Requirement in Line  
22           17.

1

2 **Q. What is the Revenue Requirement that you derived?**

3 A. Page 1 of Schedule TRD-1, Line 17, shows the Revenue Requirement of  
4 \$1,443,072.

5

6 **Q. Is the Revenue Requirement under the cumulative cap for all three step**  
7 **increases?**

8 A. No. A cumulative cap for all three step increases of \$4.5 million was established  
9 in DE 16-384 (see paragraph 2.6 of the Settlement Agreement). As described in  
10 DE 18-036 the Company calculated the remaining revenue requirement cap for  
11 the 2019 Step Adjustment to be \$341,808 as shown in Line 24. The Allowable  
12 Revenue Requirement is calculated on Line 25 and is the minimum of Line 19 or  
13 Line 24. Thus the May 1, 2019 Step Adjustment Allowable Revenue Requirement  
14 is \$341,808.

15 **IV. STORM RECOVERY ADJUSTMENT FACTOR AND MAJOR STORM**  
16 **COST RESERVE**

17 **Q. Are you proposing a change to the SRAF and MSCR?**

18 A. Yes, as outlined in the Company's annual MSCR Fund Report 2018, the  
19 Company experienced Winter Storm Quinn in March of 2018. The capitalized  
20 cost of the storm is currently included in the MSCR, but the Company believes it



1 should be removed to be amortized and collected through the SRAF mechanism  
2 effective May 1, 2019.  
3

4 **Q. Why is the Winter Storm Quinn event considered to be a major storm?**

5 A. The Commission has established criteria for each utility in New Hampshire, based  
6 on the number of “troubles” and the percentage of customers interrupted, under  
7 which a severe weather event would be classified as a “major storm.” Troubles  
8 are defined as interruption events occurring on either primary or secondary lines.  
9 Because the criteria incorporate information about the number of trouble locations  
10 (the number of individual outages) in addition to the number of customers  
11 interrupted, large outages caused by non-storm events cannot exceed the defined  
12 thresholds and are, thus, screened out. These definitions have worked well for  
13 over a decade and ensure that only significant storms meet the criteria for a major  
14 storm.  
15

16 **Q. How does the Commission define a qualifying major storm for Unitil**  
17 **Energy?**

18 A. Consistent with the definition in the Company’s Major Storm Cost Reserve,  
19 qualifying major storms include severe weather events causing 16 concurrent  
20 troubles (interruption events occurring on either primary or secondary lines) and  
21 15 percent of customers interrupted, or 22 concurrent troubles, in either the  
22 Capital or Seacoast regions of Unitil Energy. The Company undertakes planning

1 and preparation activities in advance of known severe weather, if a qualifying  
2 major storm is likely to occur. The Company can also recover preparation costs if  
3 a major storm is considered likely to occur when an Energy Event Index (“EEI”)<sup>1</sup>  
4 from the Company’s professional weather forecaster reaches an EEI level of 3<sup>2</sup> or  
5 greater with a “high” (greater than 60 percent) level of confidence.

6  
7 **Q. Did the March storm meet the definition of a qualifying storm?**

8 **A.** Yes. During Winter Storm Quinn, Unitil Energy experienced the following  
9 impact: 130 concurrent troubles interrupting 48% of customers in the Seacoast  
10 Region. The numbers are significantly greater than the thresholds defined under  
11 the Commission definition of a qualifying storm. In addition, the event was  
12 forecasted on March 6th to have an EEI of 4 with a “High” level of confidence.

13  
14 **Q. What was the capitalized cost of this storm?**

15 **A.** The total cost of Winter Storm Quinn was \$1,550,964 and was deferred in the  
16 MSCR fund.

17  
18 **Q. Did the Company consider adding these costs to its MSCR?**

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<sup>1</sup> EEI levels are indices developed by Unitil’s weather forecast provider – DTN. An EEI level is a qualified indicator of both the possibility and severity of a particular weather event that results in the potential for customer outages.

<sup>2</sup> An EEI level of 3 is defined by weather conditions meeting any combination of the following criteria – strong storms where isolated yet severe pockets are possible with moderate to severe lightning; icing between 3/8 to 3/4 inch accretion; less than 6 inches of heavy wet snow; soil moisture greater than 6 g/kg; sustained winds of 30 to 40 mph with many wind gusts between 40 to 50 mph, and with a few in excess of 50 mph.

1     A.     Yes. However, the MSCR was not designed to include low frequency storms that  
2           are extraordinary in magnitude, such as this storm. The current reserve amount of  
3           \$800,000 annually was set at a level to deal with more frequent storms that are  
4           generally not considered to be extraordinary in magnitude. This level of recovery  
5           was approved in Docket DE 13-065 in Order No. 25,502, issued on April 29,  
6           2013.

7     **Q.     Please provide a brief explanation of the MSCR.**

8     A.     The MSCR was created as a result of the Company's 2010 rate case, Docket No.  
9           DE 10-155. The MSCR fund recovers approved costs for restoring power and  
10          repairing damage following major storms which meet certain criteria. The MSCR  
11          Fund also allows Unitil Energy to recover costs associated with preparing for  
12          storms forecasted to be major storms, but which do not materialize as originally  
13          forecasted.

14

15    **Q.     What is the balance of the MSCR reserve fund at December 31, 2018?**

16    A.     The deferral balance was \$4,992,050 as of December 31, 2018.

17

18    **Q.     How did the MSCR fund become significantly under-collected?**

19    A.     The MSCR fund has ended each year in an under-collected position since its  
20          inception in 2010. MSCR eligible storm costs have exceeded collections in seven  
21          out of the past nine years. This trend of costs surpassing collections has steadily

1 increased the deferral. Schedule TRD-2 illustrates this trend, and shows how the  
2 MSCR fund began 2019 with a \$4,992,050 under-collected position.

3  
4 **Q. Does Unitil Energy consider the MSCR deferral balance to be acceptable?**

5 A. No, the Company does not consider the MSCR deferral position to be acceptable.  
6 The 2019 beginning balance in the MSCR was \$4,992,050. That balance, for  
7 illustrative purposes, is 6.2 times the annual recovery amount of \$800,000. So it  
8 would take 6.2 years without a new storm for the Company to recover its deferral  
9 balance. This would be an unrealistic expectation based on the Company's  
10 historical storm experience since 2010. Furthermore, the deferral balance reflects  
11 5.3% of the Company's long-term debt capitalization as of December 2018,  
12 which presents a large on-going financing requirement for the Company,  
13 negatively impacting the Company's credit statistics and potentially increasing  
14 the cost of borrowing. Overall, the Company does not believe it is beneficial to  
15 the Company or its customers to continue carrying a deferral of this magnitude.

16  
17 **Q. Do you have a recommendation to reduce the MSCR deferral?**

18 A. Yes, the Company recommends reducing the MSCR deferral by transferring the  
19 Winter Storm Quinn costs of \$1,618,723 into the SRAF mechanism. This amount  
20 includes the cost of the storm of \$1,550,964 as well as \$67,759 of capitalized  
21 carrying charges. The proposed adjustment would reduce the beginning 2019  
22 MSCR balance to \$3,373,327 as shown in Schedule TRD-2.

1

2 **Q. Does the Company believe Winter Storm Quinn should be considered a**  
3 **major storm that qualifies for the SRAF?**

4 A. Yes. As described above, Winter Storm Quinn qualified as a major storm and due  
5 to the extensive damage caused by the storm the Company believes it should  
6 qualify as an extraordinary storm for inclusion in the SRAF.

7

8 **Q. What is the Company's specific cost recovery proposal?**

9 A. The Company proposes to remove the costs of Winter Storm Quinn from the  
10 MSCR and seeks recovery of costs through an adjustment to its SRAF effective  
11 May 1, 2019. The Company proposes to recover these costs over a three year  
12 period with carrying charges calculated at 5.20%, the annual rate equaling the  
13 Company's currently approved cost of debt, net of deferred taxes reflecting the  
14 Tax and Jobs Act of 2017.

15

16 **Q. Why does the Company propose to recover these costs over three years?**

17 A. The Company proposes to recover these costs over three years consistent with the  
18 time period of recovery approved for the Company's October 2017 wind storm.  
19 This proposal provides the Company with a reasonable timeframe to collect the  
20 deferred balance while providing for reasonable bill impacts. In this instance, the  
21 net change in the SRAF is a decrease because cost recovery of the December  
22 2008 ice storm and February 2010 wind storm ends on May 1, 2019.

1

2 **Q. What is the proposed adjustment to the SRAF related to Winter Storm**  
3 **Quinn?**

4 A. As shown on Schedule TRD-3, Page 1 of 3, the proposed rate adjustment related  
5 to Winter Storm Quinn is \$0.00047 per kWh effective May 1, 2019.

6

7 **Q. Is the Company currently recovering other storm costs through the SRAF?**

8 A. Yes. The costs of the December 2008 ice storm and February 2010 wind storm  
9 are being recovered through the current SRAF over a period of eight years from  
10 May 2011 through April 2019 at a rate of \$0.00096 per kWh. The cost of the  
11 October 2017 wind storm is being recovered through the SRAF over a period of  
12 three years at a rate of \$0.00037 per kWh, and is set to terminate effective April  
13 30, 2021. The total SRAF proposed for effect May 1, 2019 is \$0.00084 per kWh.  
14 This factor reflects termination of the recovery of the December 2008 ice storm  
15 and February 2010 wind storm, continuing recovery of the costs associated with  
16 the October 2017 wind storm, and adding recovery of the costs from Winter  
17 Storm Quinn. The net effect to the SRAF is a decrease of \$0.00049 per kWh on  
18 May 1, 2019, after including Winter Storm Quinn.

19

20 **Q. Will the Company track the account balance of the October 2017 wind storm**  
21 **separately from the account balance of Winter Storm Quinn?**

1     A.     Yes. The recoveries made through the SRAF will be allocated to the October  
2           2017 wind storm and Winter Storm Quinn based on the proportion of the rate as  
3           specified in the Company's tariff, Schedule SRAF (i.e.  $\$0.00037/\$0.00084$  or  
4           44.0% will be charged against the costs from the October 2017 wind storm and  
5            $\$0.00047/\$0.00084$  or 56.0% will be charged against the costs from Winter Storm  
6           Quinn).

7

8     **Q.     Please describe Schedule TRD-3.**

9     A.     Page 1 of Schedule TRD-3 shows the calculation of the SRAF rate based on an  
10           annual levelized cost divided by actual kWh sales for the 12 month period ending  
11           December 31, 2018. Page 2 shows the costs, including carrying charges,  
12           recovered on a levelized basis over a period of three years beginning May 1,  
13           2019. Page 3 shows the calculation of the beginning balance, including carrying  
14           charges, to be recovered. The methodology for calculating the rate is the same as  
15           used in previous storm recovery proposals.

16

17     **Q.     Will the reconciliation of costs and revenues be performed on a monthly**  
18           **basis?**

19     A.     Yes. As discussed above, the Company will apply an allocated portion of actual  
20           revenue from the SRAF to the May 1, 2019 balance. Carrying charges will be  
21           calculated monthly based on the average monthly account balance.

22

1    **Q.     What is the bill impact of this proposed rate change?**

2    A.     Based on the decrease to the SRAF of \$0.00049 per kWh, a residential customer  
3           on Default Service using 600 kWh will see a bill decrease of \$0.29 or 0.2%.

4    **V.     REP / VMP RECONCILIATION**

5    **Q.     Have you calculated 2018's reconciliation of vegetation management**  
6           **program / reliability enhancement plan O&M expenditures?**

7    A.     Yes. As required by Section 7.2 of the DE 16-384 Settlement, Unitil Energy will  
8           continue to reconcile actual VMP and REP program O&M expenses for future  
9           calendar years to an amount of \$4,858,739. For calendar year 2018, the Company  
10          spent \$4,741,775 in VMP expense, \$94,883 of REP expenses related to VMP, and  
11          \$220,000 for reliability inspection and maintenance for a grand total of  
12          \$5,056,658. In calendar year 2018, the Company collected \$952,732 from  
13          Fairpoint Communications, providing for a net total expenditure of \$4,103,926.  
14          The net expenditure of \$4,103,926 is subtracted from the \$4,858,739 for a total  
15          over-collection of \$754,813.

16

17   **Q.     What is the Company's proposal with respect to this over-collection?**

18   A.     As described in Sections 2.2 & 2.3 of the Company's 2018 Reliability Program  
19          and Vegetation Management Program Annual Report, the Company underspent  
20          its 2018 VMP storm resiliency budget by 31% and was unable to complete the  
21          2018 circuit work as proposed. To complete this carry-over work in 2019 the



1 Company is proposing to increase its 2019 VMP storm resiliency budget by  
2 \$267,556. The Company is proposing to credit the remaining \$487,257 over-  
3 collection in the Company's External Delivery Charge ("EDC") mechanism on  
4 May 1, 2019<sup>3</sup>.

5 **VI. EARNINGS SHARING AND EXOGENOUS EVENTS**

6 **Q. What was the Company's return on equity in 2018 per its F-1? Does the**  
7 **Company qualify for earnings sharing in 2018?**

8 A. The Company's return on equity for 2018 was 9.65% as shown in Schedule TRD-  
9 4. The Company does not qualify for earnings sharing in 2018.

11 **Q. Were there exogenous events in 2018?**

12 A. In accordance with Section 8 of the Settlement Agreement, the Company certifies  
13 that no exogenous events occurred in 2018 which caused changes in excess of the  
14 Exogenous Events Rate Adjustment Threshold.

15 **VII. RATE DESIGN**

16 **Q. Please explain the 2019 Step Adjustment rate design.**

17 A. Schedule TRD-5 shows the rate design from current rates to the rates proposed in  
18 this filing. For the purpose of the rate calculations, the 2015 Test Year billing

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<sup>3</sup> Per the Company's Tariff Schedule EDC, "In addition, the EDC shall include the calendar year over- or under-collection from the Company's Vegetation Management Program and Reliability Enhancement Program. The over- or under- collection shall be credited or charged to the EDC on May 1 of the following year, or, with approval of the Commission, the Company may credit unspent amounts to future Vegetation Management Program expenditures.

determinants are shown in Column (b). Columns (c) – (e) show the progressive rate changes for the first step adjustment, the second step adjustment, and the second step adjustment as adjusted for the impacts due to the 2017 Tax Cuts and Job s Act while Columns (f) – (g) demonstrate the May 1, 2018 calculated revenue and percent change. The third step adjustment amount of \$341,808 is applied proportionally to each rate class in such a way that fixed transformer ownership discounts are left unchanged. The increase is applied to proportionally to customer charges, distribution energy charges, distribution demand charges and outdoor lighting luminaire charges such that each class received the same overall percent increase. The resulting rates, revenue, and percent change are shown in Columns (h) – (j).

## **VIII. TARIFF UPDATES**

**Q. Does this filing include a revised Summary of Delivery Service Rates and a revised Summary of Low-Income Electric Assistance Program Discounts?**

A. Yes. Redline versions as well as clean versions of these tariffs reflecting the proposed distribution rate changes as well as the proposed change to the SRAF are included with this filing.

**Q. Does this filing include any other tariff changes associated with the SRAF proposal?**

A. Yes. A redline and clean version of the Company's Storm Recovery Adjustment Factor tariff, Schedule SRAF, is included with this filing.

1

2   **IX.   BILL IMPACTS**

3   **Q.   What are the class bill impacts proposed for May 1, 2019?**

4   A.   Bill impacts are computed and shown in Schedule TRD-6. These reflect the  
5       distribution rates and the Storm Recovery Adjustment Factor as proposed in this  
6       filing versus currently effective rates. As a result of this filing, a typical 600 kWh  
7       residential customer on Default Service will see a monthly bill decrease of \$0.07  
8       or 0.1%. Impacts to other rate classes will be similar, but may vary based on size  
9       and consumption pattern.

10   **X.   CONCLUSION**

11   **Q.   Does this conclude your testimony?**

12   A.   Yes.