

UNITIL ENERGY SYSTEMS, INC.

DIRECT TESTIMONY OF  
DANIEL T. NAWAZELSKI

New Hampshire Public Utilities Commission  
Docket No. DE 20-039

TABLE OF CONTENTS

I.	INTRODUCTION	Page 1
II.	PURPOSE OF TESTIMONY	Page 1
III.	SUMMARY OF TESTIMONY	Page 2
IV.	LEAD LAG STUDY METHODOLOGY	Page 2
V.	2019 STUDY RESULTS	Page 4
VI.	CONCLUSION	Page 10

LIST OF SCHEDULES

Schedule DTN-1: Unitil Energy Systems, Inc. 2019 Default Service and  
Renewable Energy Credits Lead Lag Study

Schedule DTN-2: Confidential/Redacted Workpapers for the Unitil Energy Systems, Inc.  
2019 Default Service and Renewable Energy Credits Lead Lag Study

1 **I. INTRODUCTION**

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

3 A. Daniel T. Nawazelski, 6 Liberty Lane West, Hampton, New Hampshire 03842.

4

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

6 A. I am the Lead Financial Analyst for Unitil Service Corp., a subsidiary of  
7 Unitil Corporation that provides managerial, financial, regulatory and  
8 engineering services to Unitil Corporation's principal subsidiaries: Fitchburg  
9 Gas and Electric Light Company, Granite State Gas Transmission, Inc.,  
10 Northern Utilities, Inc., and Unitil Energy Systems, Inc. ("UES" or the  
11 "Company"). In this capacity I perform complex financial planning,  
12 forecasting and analyses for internal use and in support of regulatory  
13 proceedings.

14

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

16 A. I began working for Unitil Service Corp. in June of 2012 as an Associate  
17 Financial Analyst. Since then I have held progressing positions in the Finance  
18 department and am currently Lead Financial Analyst. I earned a Bachelor of  
19 Science degree in Business with a concentration in Finance and Operations  
20 Management from the University of Massachusetts, Amherst in May of 2012.

21 **II. PURPOSE OF TESTIMONY**

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

1 A. I will discuss the development of the 2019 UES Default Service and Renewable  
2 Energy Credits Lead Lag Study (“2019 Study”), which is integral to the  
3 calculation of cash working capital to be recovered in Default Service rates for G1  
4 and Non-G1 customers.

5

6 **III. SUMMARY OF TESTIMONY**

7 **Q. Please summarize your testimony.**

8 A. My testimony presents and supports UES’ 2019 Default Service (“DS”) and  
9 Renewable Energy Credits (“RECs”) Lead Lag Study. The 2019 Study, presented  
10 in this filing as Schedule DTN-1, is based upon data for the period January 1,  
11 2019 through December 31, 2019 and calculates the net lead period for G1  
12 customers to be 14.83 days and net lag period for Non-G1 customers to be 14.82  
13 days.

14

15 **Q. Are the results of the 2019 Study included in the DS rates proposed in this**  
16 **filing?**

17 A. Yes, the 2019 Study results are used to derive supply-related working capital  
18 costs included in DS rates beginning June 1, 2020, as described in the testimony  
19 of UES witness Linda S. McNamara.

20

21 **IV. LEAD LAG STUDY METHODOLOGY**

22 **Q. How was the 2019 Study conducted?**

1 A. The 2019 Study follows similar methodology as in UES' 2018 Default Service  
2 and Renewable Energy Credits Lead Lag Study ("2018 Study") that was  
3 submitted in Docket No. DE 19-049. The 2019 Study determines the number of  
4 days between the time funds are required to pay for DS purchased power and  
5 REC purchases (expense lead) and the time that those funds are available from the  
6 payment of customer bills (revenue lag). The revenue lag period includes four  
7 calculations: "receipt of electric service to meter reading", "meter reading to  
8 recording of accounts receivable", "billing to collection", and "collection to  
9 receipt of available funds". The expense lead period consists of the lead in  
10 payment of DS purchased power costs and REC costs based upon the following  
11 calculations: lead period, average days lead, weighted cost, days lead and  
12 weighted days lead. Each of these steps is explained in more detail below. UES  
13 based its 2019 Study upon data for the twelve months ended December 31, 2019,  
14 and calculated net lead lag days separately for the G1 and Non-G1 customer  
15 classes.

16

17 **Q. Does the 2019 Study incorporate the requirements of the Lead Lag**  
18 **Settlement Letter dated July 16, 2009, under docket DE 09-009?**

19 A. Yes, the 2019 Study conforms to the requirements specified in the Settlement  
20 Letter under Docket No. DE 09-009. The 2019 Study follows the same  
21 methodology as used in the 2009 - 2018 Studies which conform to the  
22 requirements of the Settlement.

1

2 **V. 2019 STUDY RESULTS**

3 **Q. Please define the terms “lag days” and “lead days.”**

4 A. Lag days are the number of days between delivery of electric service by UES to  
5 its customers and the receipt by the Company of available funds from customers’  
6 payments (revenue lag). Lead days are the number of days between the mid-point  
7 of the energy delivery period to UES and the payment date by UES to DS  
8 suppliers or for RECs (expense lead).

9

10 **Q. How is revenue lag computed?**

11 A. Revenue lag is computed in days, consisting of four time components: (1) days  
12 from receipt of electric service to meter reading; (2) days from meter reading to  
13 recording of accounts receivable; (3) days from billing to collection; and (4) days  
14 from collection to receipt of available funds. The sum of the days associated with  
15 these four lag components is the total revenue lag. The calculations are  
16 performed separately for G1 and Non-G1 customer classes, as appropriate. Refer  
17 to Schedule DTN-1, pages 4 through 19 of 23.

18

19 **Q. What is the lag period for the component “receipt of electric service to meter  
20 reading” in the 2019 Study?**

21 A. The 2019 average lag for “receipt of electric service to meter reading” is 15.21  
22 days. This lag was obtained by dividing the number of days in the test year (365

1 days) by 24 to determine the average monthly service period. This result is  
2 applicable to both the G1 and Non-G1 customer classes. See Schedule DTN-1,  
3 page 5 of 23.

4

5 **Q. What is the lag period for the component "meter reading to recording of**  
6 **accounts receivable?"**

7 A. The 2019 average "meter reading to recording of accounts receivable" lag is 1.05  
8 days, which is applicable to both the G1 and the Non-G1 customer classes. This  
9 lag determines the time required to process the meter reading data and record  
10 accounts receivable. See Schedule DTN-1, pages 6 through 10 of 23.

11

12 **Q. What is the lag period for the component "billing to collection?"**

13 A. The 2019 average "billing to collection" lag is 21.37 days for G1 customers and  
14 40.75 days for Non-G1 customers. This component was calculated separately for  
15 the G1 and Non-G1 customer groups and is derived by the accounts receivable  
16 turnover method. The lag reflects the time delay between the mailing of customer  
17 bills and the receipt of the billed revenues from customers. See Schedule DTN-1,  
18 pages 11 and 12 of 23 for G1 and Non-G1 results, respectively.

19

20 **Q. What is the lag period for the component "collection to receipt of available**  
21 **funds?"**

1 A. The 2019 average “collection to receipt of available funds” lag is 1.68 days. This  
2 represents the average weighted check-float period, or the lag that takes place  
3 during the period from when payment is received from customers to the time such  
4 funds are available for use by the Company. This result is applicable to both the  
5 G1 and Non-G1 customer classes. See Schedule DTN-1, pages 13 through 19 of  
6 23.

7

8 **Q. Is the total revenue lag computed from these separate lag calculations?**

9 A. Yes. The total revenue lag of 39.31 days for G1 customers and 58.69 days for  
10 Non-G1 customers is computed by adding the number of days associated with  
11 each of the four revenue lag components described above. This total number of  
12 lag days represents the amount of time between the recorded delivery of service to  
13 customers and the receipt of the related revenues from customers. See Schedule  
14 DTN-1, page 4, line 6.

15

16 **Q. Please turn to the lead periods in the 2019 Study. In determining the expense**  
17 **lead period, how is the weighted days lead in payment of DS purchased**  
18 **power costs determined?**

19 A. First, the monthly expense lead for each DS power supply vendor is determined  
20 by aggregating (1) the average days in the period that the energy or service is  
21 received and (2) the additional billing period including the payment day.

22



1 The aggregate lead days are then weighted by the dollar amount of the billings.  
2 Weighted days lead are calculated separately for G1 and Non-G1 customers, by  
3 supplier, and are shown in the Confidential Workpapers to the 2019 Study,  
4 Schedule DTN-2.

5  
6 As of March 27, 2020, prior period adjustments made in 2020 related to 2019  
7 were included in the calculation. Prior year adjustments made in 2019 that relate  
8 to 2018 were not included in the calculation.

9  
10 **Q. How is the weighted days lead in payment for RECs determined?**

11 A. The weighted days lead in payment for RECs was determined using the same  
12 methodology applicable to DS power suppliers described above. In applying this  
13 methodology to 2019 RECs, three assumptions were made to reflect actual  
14 payment activity towards the Company's 2019 REC commitment. First, the  
15 monthly cost of the RECs was assumed to be equivalent to the estimated costs of  
16 RECs included in rates in 2019. Second, actual payment activity as of March 27,  
17 2020 towards the Company's 2019 REC commitment was applied in  
18 chronological order to the earliest month's estimated cost. Third, a payment date  
19 of July 1, 2020 was used for all remaining 2019 REC commitments, which is the  
20 last day to obtain 2019 RECs and/or make alternative compliance payments. See  
21 Schedule DTN-1, page 21 of 23 for the REC summary related to G1 customers  
22 and page 23 of 23 for the REC summary related to Non-G1 customers.

1

2 **Q. What are the combined weighted days lead in payment of DS purchased**  
3 **power costs and RECs for G1 and Non-G1 customers?**

4 A. The weighted days lead for G1 customers is 54.14 days, as shown on Schedule  
5 DTN-1, page 20 of 23. The weighted days lead for Non-G1 customers is 43.87  
6 days, as shown on Schedule DTN-1, page 22 of 23.

7

8 **Q. How is the total DS and REC lead lag determined?**

9 A. For G1 customers, the DS and REC expense lead of 54.14 days is subtracted from  
10 the lag in receipt of revenue of 39.31 days to produce the total DS and REC net  
11 lead of 14.83 days. For Non-G1 customers, the DS and REC expense lead of  
12 43.87 days is subtracted from the lag in receipt of revenue of 58.69 days to  
13 produce the total DS and REC net lag of 14.82 days. See Schedule DTN-1, page  
14 4 of 23.

15

16 **Q. How do the results of the 2019 Study compare to the 2018 Study for G1**  
17 **customers?**

18 A. For G1 customers, the net lead in the 2019 Study of 14.83 days represents a  
19 decrease of 14.13 days from the net lead in the 2018 Study of 28.96 days. The  
20 difference was driven by a decrease in DS and REC expense lead of 14.72 days  
21 slightly offset by an overall revenue lag decrease of 0.59 days.

22

1 The revenue lag component, “billing to collection” in the 2019 Study is 21.37  
2 days compared to 21.84 days in the 2018 Study, a decrease of 0.47 days. All of  
3 the other components in revenue lag decreased a total of 0.12 days in the 2019  
4 Study compared to the 2018 Study. The combined change in all of the revenue  
5 lag components resulted in an overall revenue lag decrease of 0.59 days.

6  
7 The DS and REC expense lead is 54.14 days in the 2019 Study compared to 68.86  
8 days in the 2018 Study, a decrease of 14.72 days. In 2019, the DS portion of the  
9 expense lead decreased 10.35 weighted days which was driven by a decrease in  
10 the average days lead. The REC portion of the expense lead decreased 4.37  
11 weighted days which was primarily driven by a decrease in the average days lead.  
12

13 **Q. How do the results of the 2019 Study compare to the 2018 Study for Non-G1**  
14 **customers?**

15 A. For Non-G1 customers, the net lag in the 2019 Study of 14.82 days is 2.62 days  
16 more than the net lag in the 2018 Study of 12.20 days. The increase in net lag is  
17 attributable to a 7.87 day decrease in the DS and REC expense lead, offset by a  
18 5.25 day decrease in revenue lag.

19  
20 The revenue lag component, “billing to collection” in the 2019 Study is 40.75  
21 days compared to 45.88 days in the 2018 Study, a decrease of 5.13 days. All  
22 other revenue lag components decreased 0.12 days in the 2019 Study compared to

1 the 2018 Study. The net effect of all of the changes in the revenue lag  
2 components resulted in a 5.25 day decrease in the 2019 revenue lag compared to  
3 2018.

4

5 The DS and REC expense lead is 7.87 days lower in 2019 compared to 2018. In  
6 2019, the DS portion of the expense lead increased 0.74 weighted days which was  
7 driven by an increase in the DS portion of total costs as well as an increase in the  
8 average days lead. The REC portion of the expense lead decreased 8.61 weighted  
9 days which was primarily driven by a decrease in the average days lead.

10

11 **VI. CONCLUSION**

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

13 **A.** Yes, it does.