

UNITIL ENERGY SYSTEMS, INC.

DIRECT TESTIMONY OF  
DANIEL T. NAWAZELSKI

New Hampshire Public Utilities Commission  
Docket No. DE 23-054

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.	2022 STUDY RESULTS	Page 3
VI.	CONCLUSION	Page 9

LIST OF SCHEDULES

Schedule DTN-1: Unitil Energy Systems, Inc. 2022 Default Service and  
Renewable Energy Credits Lead Lag Study

Schedule DTN-2: Confidential/Redacted Workpapers for the Unitil Energy Systems, Inc.  
2022 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 **Q. What is your position and what are your responsibilities?**

5 A. I am the Manager of Revenue Requirements for Unitil Service Corp., a  
6 subsidiary of Unitil Corporation that provides managerial, financial,  
7 regulatory and engineering services to Unitil Corporation’s principal  
8 subsidiaries: Fitchburg Gas and Electric Light Company, Granite State Gas  
9 Transmission, Inc., Northern Utilities, Inc., and Unitil Energy Systems, Inc.  
10 (“UES” or the “Company”). In this capacity I am responsible for the  
11 preparation and presentation of distribution rate cases and in support of other  
12 various regulatory proceedings.

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

14 A. I began working for Unitil Service in June of 2012 as an Associate Financial  
15 Analyst, progressing to the role of Manager of Revenue Requirements in  
16 2021. I earned a Bachelor of Science degree in Business with a concentration  
17 in Finance and Operations Management from the University of Massachusetts,  
18 Amherst in May of 2012. I am also currently pursuing my Masters in Business  
19 Administration at the University of New Hampshire.

20 **II. PURPOSE OF TESTIMONY**

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

1 A. I will discuss the development of the 2022 UES Default Service and Renewable  
2 Energy Credits Lead Lag Study (“2022 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 **III. SUMMARY OF TESTIMONY**

6 **Q. Please summarize your testimony.**

7 A. My testimony presents and supports UES’ 2022 Default Service (“DS”) and  
8 Renewable Energy Credits (“RECs”) Lead Lag Study. The 2022 Study, presented  
9 in this filing as Schedule DTN-1, is based upon data for the period January 1,  
10 2022 through December 31, 2022 and calculates the net lead period for G1  
11 customers to be 12.55 days and net lag period for Non-G1 customers to be 2.65  
12 days.

13 **Q. Are the results of the 2022 Study included in the DS rates proposed in this**  
14 **filing?**

15 A. Yes, the 2022 Study results are used to derive supply-related working capital  
16 costs included in DS rates beginning August 1, 2023, as described in the  
17 testimony of UES witness Linda S. McNamara.

18 **IV. LEAD LAG STUDY METHODOLOGY**

19 **Q. How was the 2022 Study conducted?**

20 A. The 2022 Study follows similar methodology as in UES’ 2021 Default Service  
21 and Renewable Energy Credits Lead Lag Study (“2021 Study”) that was  
22 submitted in Docket No. DE 22-017. The 2022 Study determines the number of

1 days between the time funds are required to pay for DS purchased power and  
2 REC purchases (expense lead) and the time that those funds are available from the  
3 payment of customer bills (revenue lag). The revenue lag period includes four  
4 calculations: “receipt of electric service to meter reading”, “meter reading to  
5 recording of accounts receivable”, “billing to collection”, and “collection to  
6 receipt of available funds”. The expense lead period consists of the lead in  
7 payment of DS purchased power costs and REC costs based upon the following  
8 calculations: lead period, average days lead, weighted cost, days lead and  
9 weighted days lead. Each of these steps is explained in more detail below. UES  
10 based its 2022 Study upon data for the twelve months ended December 31, 2022,  
11 and calculated net lead lag days separately for the G1 and Non-G1 customer  
12 classes.

13 **Q. Does the 2022 Study incorporate the requirements of the Lead Lag**  
14 **Settlement Letter dated July 16, 2009, under docket DE 09-009?**

15 A. Yes, the 2022 Study conforms to the requirements specified in the Settlement  
16 Letter under Docket No. DE 09-009. The 2022 Study follows the same  
17 methodology as used in the 2009 - 2021 Studies which conform to the  
18 requirements of the Settlement.

19 **V. 2022 STUDY RESULTS**

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

21 A. Lag days are the number of days between delivery of electric service by UES to  
22 its customers and the receipt by the Company of available funds from customers’

1 payments (revenue lag). Lead days are the number of days between the mid-point  
2 of the energy delivery period to UES and the payment date by UES to DS  
3 suppliers or for RECs (expense lead).

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

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

12 **Q. What is the lag period for the component "receipt of electric service to meter  
13 reading" in the 2022 Study?**

14 A. The 2022 average lag for "receipt of electric service to meter reading" is 15.21  
15 days. This lag was obtained by dividing the number of days in the test year (365  
16 days) by 24 to determine the average monthly service period. This result is  
17 applicable to both the G1 and Non-G1 customer classes. See Schedule DTN-1,  
18 page 5 of 23.

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

21 A. The 2022 average "meter reading to recording of accounts receivable" lag is 1.05  
22 days, which is applicable to both the G1 and the Non-G1 customer classes. This

1 lag determines the time required to process the meter reading data and record  
2 accounts receivable. See Schedule DTN-1, pages 6 through 10 of 23.

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

4 A. The 2022 average "billing to collection" lag is 24.78 days for G1 customers and  
5 38.50 days for Non-G1 customers. This component was calculated separately for  
6 the G1 and Non-G1 customer groups and is derived by the accounts receivable  
7 turnover method. The lag reflects the time delay between the mailing of customer  
8 bills and the receipt of the billed revenues from customers. See Schedule DTN-1,  
9 pages 11 and 12 of 23 for G1 and Non-G1 results, respectively.

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

12 A. The 2022 average "collection to receipt of available funds" lag is 1.63 days. This  
13 represents the average weighted check-float period, or the lag that takes place  
14 during the period from when payment is received from customers to the time such  
15 funds are available for use by the Company. This result is applicable to both the  
16 G1 and Non-G1 customer classes. See Schedule DTN-1, pages 13 through 19 of  
17 23.

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

19 A. Yes. The total revenue lag of 42.67 days for G1 customers and 56.39 days for  
20 Non-G1 customers is computed by adding the number of days associated with  
21 each of the four revenue lag components described above. This total number of  
22 lag days represents the amount of time between the recorded delivery of service to

1 customers and the receipt of the related revenues from customers. See Schedule  
2 DTN-1, page 4, line 6.

3 **Q. Please turn to the lead periods in the 2022 Study. In determining the expense**  
4 **lead period, how is the weighted days lead in payment of DS purchased**  
5 **power costs determined?**

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

9  
10 The aggregate lead days are then weighted by the dollar amount of the billings.  
11 Weighted days lead are calculated separately for G1 and Non-G1 customers, by  
12 supplier, and are shown in the Confidential Workpapers to the 2022 Study,  
13 Schedule DTN-2.

14  
15 As of June 1, 2023, prior period adjustments made in 2023 related to 2022 were  
16 included in the calculation. Prior year adjustments made in 2022 that relate to  
17 2021 were not included in the calculation.

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

19 A. The weighted days lead in payment for RECs was determined using the same  
20 methodology applicable to DS power suppliers described above. In applying this  
21 methodology to 2022 RECs, three assumptions were made to reflect actual  
22 payment activity towards the Company's 2022 REC commitment. First, the

1 monthly cost of the RECs was assumed to be equivalent to the estimated costs of  
2 RECs included in rates in 2022. Second, actual payment activity as of June 1,  
3 2023 towards the Company's 2022 REC commitment was applied in  
4 chronological order to the earliest month's estimated cost. Third, a payment date  
5 of July 1, 2023 was used for all remaining 2022 REC commitments, which is the  
6 last day to obtain 2022 RECs and/or make alternative compliance payments. See  
7 Schedule DTN-1, page 21 of 23 for the REC summary related to G1 customers  
8 and page 23 of 23 for the REC summary related to Non-G1 customers.

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

11 A. The weighted days lead for G1 customers is 55.22 days, as shown on Schedule  
12 DTN-1, page 20 of 23. The weighted days lead for Non-G1 customers is 53.74  
13 days, as shown on Schedule DTN-1, page 22 of 23.

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

15 A. For G1 customers, the DS and REC expense lead of 55.22 days is subtracted from  
16 the lag in receipt of revenue of 42.67 days to produce the total DS and REC net  
17 lead of 12.55 days. For Non-G1 customers, the DS and REC expense lead of  
18 53.74 days is subtracted from the lag in receipt of revenue of 56.39 days to  
19 produce the total DS and REC net lag of 2.65 days. See Schedule DTN-1, page 4  
20 of 23.

21 **Q. How do the results of the 2022 Study compare to the 2021 Study for G1**  
22 **customers?**

1 A. For G1 customers, the net lead in the 2022 Study of 12.55 days represents a  
2 decrease of 5.80 days from the net lead in the 2021 Study of 18.35 days. The  
3 difference was driven by a decrease in total DS and REC expense lead of 6.38  
4 days slightly offset by an overall revenue lag decrease of 0.58 days.

5  
6 The revenue lag component, “billing to collection” in the 2022 Study is 24.78  
7 days compared to 25.38 days in the 2021 Study, a decrease of 0.60 days. All of  
8 the other components in revenue lag net to a total increase of 0.02 days in the  
9 2022 Study compared to the 2021 Study. The combined change in all of the  
10 revenue lag components resulted in an overall revenue lag decrease of 0.58 days.

11  
12 The DS and REC expense lead is 55.22 days in the 2022 Study compared to 61.60  
13 days in the 2021 Study, a decrease of 6.38 days. In 2022, the DS portion of the  
14 expense lead increased 1.07 weighted days which was primarily driven by an  
15 increase in the DS portion of total costs compared to the prior year. The REC  
16 portion of the expense lead decreased 7.45 weighted days which was primarily  
17 driven by a decrease in the REC portion of total costs compared to the prior year.

18 **Q. How do the results of the 2022 Study compare to the 2021 Study for Non-G1**  
19 **customers?**

20 A. For Non-G1 customers, the net lag in the 2022 Study of 2.65 days is 4.53 days  
21 more lag than the net lag in the 2021 Study of 1.88 days. The increase in net lag

1 is attributable to a decrease in total DS and REC expense lead of 6.42 days offset  
2 by an overall revenue lag decrease of 1.89 days.

3  
4 The revenue lag component, “billing to collection” in the 2022 Study is 38.50  
5 days compared to 40.41 days in the 2021 Study, a decrease of 1.91 days. All  
6 other revenue lag components increased by of 0.02 days in the 2022 Study  
7 compared to the 2021 Study. The net effect of all of the changes in the revenue  
8 lag components resulted in a 1.89 day decrease in the 2022 revenue lag compared  
9 to 2021.

10  
11 The DS and REC expense lead is 6.42 days lower in 2022 compared to 2021. In  
12 2022, the DS portion of the expense lead increased 4.43 weighted days which was  
13 driven by an increase in the DS portion of total costs. The REC portion of the  
14 expense lead decreased 10.85 weighted days which was primarily driven by a  
15 decrease in the REC portion of total costs compared to the prior year.

16 **VI. CONCLUSION**

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

18 A. Yes, it does.