

REDACTED

**UNITIL ENERGY SYSTEMS, INC.**

**DIRECT TESTIMONY OF  
DANIEL T. NAWAZELSKI**

**EXHIBIT DTN-1**

**NEW HAMPSHIRE PUBLIC UTILITIES COMMISSION**

**Docket No. DE 24-065**

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**List of Schedules**

Schedule DTN-1: Unitil Energy Systems, Inc. 2023 Default Service and  
Renewable Energy Credits Lead Lag Study

Schedule DTN-2: Confidential/Redacted Workpapers for the Unitil Energy Systems, Inc.  
2023 Default Service and Renewable Energy Credits Lead Lag Study

Schedule DTN-3: Unitil Energy Systems, Inc. 2023 Self-Supply Lead Lag Study

1     **I.     INTRODUCTION**

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

3     **A.**     My name is Daniel T. Nawazelski, and my business address is 6 Liberty Lane West,  
 4             Hampton, New Hampshire 03842.

5     **Q.     Mr. Nawazelski, what is your position and what are your responsibilities?**

6     **A.**     I am the Manager of Revenue Requirements for Unitil Service Corp. (“Unitil  
 7             Service”) a subsidiary of Unitil Corporation that provides managerial, financial,  
 8             regulatory and engineering services to Unitil Corporation’s utility subsidiaries  
 9             including Unitil Energy Systems, Inc., ( “UES” or the “Company”). In this  
 10            capacity I am responsible for the preparation and presentation of distribution rate  
 11            cases and in support of other various regulatory proceedings.

12    **Q.     Mr. Nawazelski, please describe your business and educational background.**

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

1 **Q. Have you previously testified before the Commission or other regulatory**  
 2 **agencies?**

3 **A.** Yes, I testified before this Commission on various financial, ratemaking and  
 4 utility regulation matters. I have also testified in proceedings before the Maine  
 5 Public Utilities Commission and the Massachusetts Department of Public  
 6 Utilities.

7 **II. PURPOSE OF TESTIMONY**

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

9 **A.** I will discuss the development of the 2023 UES Default Service and Renewable  
 10 Energy Credits Lead Lag Study (“2023 Study”), which is integral to the  
 11 calculation of cash working capital to be recovered in Default Service rates for G1  
 12 and Non-G1 customers.

13 **III. SUMMARY OF TESTIMONY**

14 **Q. Please summarize your testimony**

15 **A.** My testimony presents and supports UES’ 2023 Default Service (“DS”) and  
 16 Renewable Energy Credits (“RECs”) Lead Lag Study. The 2023 Study, presented  
 17 in this filing as Schedule DTN-1, is based upon data for the period January 1,  
 18 2023 through December 31, 2023 and calculates the net lead period for G1  
 19 customers to be 37.59 days and net lag period for Non-G1 customers to be 5.64  
 20 days. Finally, as shown in Schedule DTN-3 and described in greater detail below,  
 21 I have also calculated 48.28 net lag days when the Company is purchasing power

1 directly from the ISO-NE markets (“Self-Supply”) consistent with the directives  
2 of Order No. 26,973 in Docket No. DE 23-054.

3 **Q. Are the results of the 2023 Study included in the DS rates proposed in this**  
4 **filing?**

5 A. Yes, the 2023 Study results are used to derive supply-related working capital  
6 costs included in DS rates beginning August 1, 2024, as described in the  
7 testimony of UES witness Linda S. McNamara.

#### 8 **IV. LEAD LAG STUDY METHODOLOGY**

9 **Q. How was the 2023 Study conducted?**

10 A. The 2023 Study follows similar methodology as in UES’ 2022 Default Service  
11 and Renewable Energy Credits Lead Lag Study (“2022 Study”) that was  
12 submitted in Docket No. DE 23-054. The 2023 Study determines the number of  
13 days between the time funds are required to pay for DS purchased power and  
14 REC purchases (expense lead) and the time that those funds are available from the  
15 payment of customer bills (revenue lag). The revenue lag period includes four  
16 calculations: “receipt of electric service to meter reading”, “meter reading to  
17 recording of accounts receivable”, “billing to collection”, and “collection to  
18 receipt of available funds”. The expense lead period consists of the lead in  
19 payment of DS purchased power costs and REC costs based upon the following  
20 calculations: lead period, average days lead, weighted cost, days lead and  
21 weighted days lead. Each of these steps is explained in more detail below. UES

1 based its 2023 Study upon data for the twelve months ended December 31, 2023,  
 2 and calculated net lead lag days separately for the G1 and Non-G1 customer  
 3 classes.

4 **Q. Does the 2023 Study incorporate the requirements of the Lead Lag**  
 5 **Settlement Letter dated July 16, 2009, under docket DE 09-009?**

6 A. Yes, the 2023 Study conforms to the requirements specified in the Settlement  
 7 Letter under Docket No. DE 09-009. The 2023 Study follows the same  
 8 methodology as used in the 2009 - 2022 Studies which conform to the  
 9 requirements of the Settlement.

10 **V. 2023 STUDY RESULTS**

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

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

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

18 A. Revenue lag is computed in days, consisting of four time components: (1) days  
 19 from receipt of electric service to meter reading; (2) days from meter reading to  
 20 recording of accounts receivable; (3) days from billing to collection; and (4) days  
 21 from collection to receipt of available funds. The sum of the days associated with

1 these four lag components is the total revenue lag. The calculations are  
 2 performed separately for G1 and Non-G1 customer classes, as appropriate. Refer  
 3 to Schedule DTN-1, pages 4 through 19 of 23.

4 **Q. What is the lag period for the component "receipt of electric service to meter**  
 5 **reading" in the 2023 Study?**

6 A. The 2023 average lag for "receipt of electric service to meter reading" is 15.21  
 7 days. This lag was obtained by dividing the number of days in the test year (365  
 8 days) by 24 to determine the average monthly service period. This result is  
 9 applicable to both the G1 and Non-G1 customer classes. See Schedule DTN-1,  
 10 page 5 of 23.

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

13 A. The 2023 average "meter reading to recording of accounts receivable" lag is 1.04  
 14 days, which is applicable to both the G1 and the Non-G1 customer classes. This  
 15 lag determines the time required to process the meter reading data and record  
 16 accounts receivable. See Schedule DTN-1, pages 6 through 10 of 23.

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

18 A. The 2023 average "billing to collection" lag is 20.51 days for G1 customers and  
 19 38.95 days for Non-G1 customers. This component was calculated separately for  
 20 the G1 and Non-G1 customer groups and is derived by the accounts receivable  
 21 turnover method. The lag reflects the time delay between the mailing of customer

1 bills and the receipt of the billed revenues from customers. See Schedule DTN-1,  
2 pages 11 and 12 of 23 for G1 and Non-G1 results, respectively.

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

5 A. The 2023 average "collection to receipt of available funds" lag is 1.63 days. This  
6 represents the average weighted check-float period, or the lag that takes place  
7 during the period from when payment is received from customers to the time such  
8 funds are available for use by the Company. This result is applicable to both the  
9 G1 and Non-G1 customer classes. See Schedule DTN-1, pages 13 through 19 of  
10 23.

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

12 A. Yes. The total revenue lag of 38.39 days for G1 customers and 56.83 days for  
13 Non-G1 customers is computed by adding the number of days associated with  
14 each of the four revenue lag components described above. This total number of  
15 lag days represents the amount of time between the recorded delivery of service to  
16 customers and the receipt of the related revenues from customers. See Schedule  
17 DTN-1, page 4, line 6.

18 **Q. Please turn to the lead periods in the 2023 Study. In determining the expense**  
19 **lead period, how is the weighted days lead in payment of DS purchased**  
20 **power costs determined?**



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

4

5 The aggregate lead days are then weighted by the dollar amount of the billings.  
6 Weighted days lead are calculated separately for G1 and Non-G1 customers, by  
7 supplier, and are shown in the Confidential Workpapers to the 2023 Study,  
8 Schedule DTN-2.

9

10 As of May 29, 2024, prior period adjustments made in 2024 related to 2023 were  
11 included in the calculation. Prior year adjustments made in 2023 that relate to  
12 2022 were not included in the calculation.

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

14 A. The weighted days lead in payment for RECs was determined using the same  
15 methodology applicable to DS power suppliers described above. In applying this  
16 methodology to 2023 RECs, three assumptions were made to reflect actual  
17 payment activity towards the Company's 2023 REC commitment. First, the  
18 monthly cost of the RECs was assumed to be equivalent to the estimated costs of  
19 RECs included in rates in 2023. Second, actual payment activity as of May 29,  
20 2024 towards the Company's 2023 REC commitment was applied in  
21 chronological order to the earliest month's estimated cost. Third, a payment date  
22 of July 1, 2024 was used for all remaining 2023 REC commitments, which is the

1 last day to obtain 2023 RECs and/or make alternative compliance payments. See  
 2 Schedule DTN-1, page 21 of 23 for the REC summary related to G1 customers  
 3 and page 23 of 23 for the REC summary related to Non-G1 customers.

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

6 A. The weighted days lead for G1 customers is 75.98 days, as shown on Schedule  
 7 DTN-1, page 20 of 23. The weighted days lead for Non-G1 customers is 51.19  
 8 days, as shown on Schedule DTN-1, page 22 of 23.

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

10 A. For G1 customers, the DS and REC expense lead of 75.98 days is subtracted from  
 11 the lag in receipt of revenue of 38.39 days to produce the total DS and REC net  
 12 lead of 37.59 days. For Non-G1 customers, the DS and REC expense lead of  
 13 51.19 days is subtracted from the lag in receipt of revenue of 56.83 days to  
 14 produce the total DS and REC net lag of 5.64 days. See Schedule DTN-1, page 4  
 15 of 23.

16 **Q. How do the results of the 2023 Study compare to the 2022 Study for G1**  
 17 **customers?**

18 A. For G1 customers, the net lead in the 2023 Study of 37.59 days represents an  
 19 increase of 25.04 days from the net lead in the 2022 Study of 12.55 days. The  
 20 difference was driven by an increase in total DS and REC expense lead of 20.76  
 21 days offset by an overall revenue lag decrease of 4.28 days.  
 22

1 The revenue lag component, “billing to collection” in the 2023 Study is 20.51  
 2 days compared to 24.78 days in the 2022 Study, a decrease of 4.27 days. All of  
 3 the other components in revenue lag net to a total decrease of 0.01 days in the  
 4 2023 Study compared to the 2022 Study. The combined change in all of the  
 5 revenue lag components resulted in an overall revenue lag decrease of 4.28 days.

6  
 7 The DS and REC expense lead is 75.98 days in the 2023 Study compared to 55.22  
 8 days in the 2022 Study, a decrease of 6.38 days. In 2023, the DS portion of the  
 9 expense lead decreased 7.27 weighted days which was driven by a decrease of the  
 10 average days lead as well as a decrease in the REC portion of total costs  
 11 compared to the prior year. The REC portion of the expense lead increased 28.03  
 12 weighted days which was primarily driven by an increase of the average days  
 13 lead.

14 **Q. How do the results of the 2023 Study compare to the 2022 Study for Non-G1**  
 15 **customers?**

16 A. For Non-G1 customers, the net lag in the 2023 Study of 5.64 days is 2.99 days  
 17 more lag than the net lag in the 2022 Study of 2.65 days. The increase in net lag  
 18 is attributable to a decrease in total DS and REC expense lead of 2.55 days and an  
 19 increase of overall revenue lag of 0.44 days.

20  
 21 The revenue lag component, “billing to collection” in the 2023 Study is 38.95  
 22 days compared to 38.50 days in the 2022 Study, an increase of 0.45 days. All

1 other revenue lag components decreased by of 0.01 days in the 2023 Study  
2 compared to the 2022 Study. The net effect of all of the changes in the revenue  
3 lag components resulted in a 0.44 day increase in the 2023 revenue lag compared  
4 to 2022.

5  
6 The DS and REC expense lead is 2.55 days lower in 2023 compared to 2022. In  
7 2023, the DS portion of the expense lead decreased 3.78 weighted days which  
8 was driven by a decrease of the average days lead. The REC portion of the  
9 expense lead increased 1.23 weighted days which was primarily driven by an  
10 increase of the average days lead.

11 **Q. How did the Company calculate the Self-Supply net lag days?**

12 A. First the total revenue lag of 56.83 days for Non-G1 customers is computed by  
13 adding the number of days associated with each of the four revenue lag  
14 components described above. This total number of lag days represents the  
15 amount of time between the recorded delivery of service to customers and the  
16 receipt of the related revenues from customers. See Schedule DTN-3, page 1, line  
17 6. Next, to determine the expense lead period associated with Self-Supply the  
18 Company relied on the lead lag study completed in the Company's Massachusetts  
19 electric base rate case filing in D.P.U. 23-80. The Self-Supply lag of 8.55 days  
20 was calculated based on actual purchase activity during December 2022, which is

1 representative of a normal lag for Self-Supply<sup>1</sup>. As shown in Schedule DTN-3, I  
 2 have calculated 48.28 net lag days for Self-Supply by taking the Non-G1 revenue  
 3 lag days of 56.83 less the Self-Supply expense lag days of 8.55 days, resulting in  
 4 a net Default Service Self-Supply lag of 48.28 days. See Schedule DTN-3, page 1,  
 5 line 8.

6 **Q. Why did the Company use the Self-Supply lag as presented in its**  
 7 **Massachusetts rate case?**

8 A. As the Company has yet to Self-Supply in New Hampshire there is no actual  
 9 payment activity for the Company to analyze. The Company used the Self-Supply  
 10 activity at its Massachusetts's electric subsidiary as a proxy as the purchase  
 11 activity in Massachusetts's will be nearly identical to that in New Hampshire. The  
 12 Company will incorporate New Hampshire Self-Supply payment activity in its  
 13 2024 lead lag study as it will be available then.

14 **VI. CONCLUSION**

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

16 A. Yes, it does.

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<sup>1</sup> Refer to Fitchburg Gas & Electric Light Company rate case filing, D.P.U. 23-80, filed on August 17, 2023, Exhibit-CRD-3, Page 120 of 123. <https://fileservice.eea.comacloud.net/FileService.Api/file/FileRoom/17847752>