UNITIL ENERGY SYSTEMS, INC.

DIRECT TESTIMONY OF

DANIEL T. NAWAZELSKI

New Hampshire Public Utilities Commission
Docket No. DE 18-035

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Renewable Energy Credits Lead Lag Study

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2017 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 a Senior Financial Analyst for Unitil Service Corp., a subsidiary of Unitil

7   Corporation that provides managerial, financial, regulatory and engineering

8   services to Unitil Corporation's principal subsidiaries: Fitchburg Gas and

9   Electric Light Company, Granite State Gas Transmission, Inc., Northern

10   Utilities, Inc., and Unitil Energy Systems, Inc. ("UES" or the "Company"). In

11   this capacity I perform complex financial planning, forecasting and analyses

12   for internal use and in support of regulatory proceedings.

13

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

15   A.   I began working for Unitil Service Corp. in June of 2012 as an Associate

16   Financial Analyst. Since then I have been promoted three times, the most recent

17   promotion was to the role of Senior Financial Analyst II in 2018. I earned a

18   Bachelor of Science degree in Business with a concentration in Finance and

19   Operations Management from the University of Massachusetts, Amherst in May

20   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 2017 UES Default Service and Renewable

2   Energy Credits Lead Lag Study ("2017 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' 2017 Default Service ("DS") and

9   Renewable Energy Credits ("RECs") Lead Lag Study. The 2017 Study, presented

10   in this filing as Schedule DTN-1, is based upon data for the period January 1,

11   2017 through December 31, 2017 and calculates the net lead period for G1

12   customers to be 14.62 days and net lag period for Non-G1 customers to be 7.12

13   days.

14

15   **Q.**   **Are the results of the 2017 Study included in the DS rates proposed in this**

16   **filing?**

17   A.   Yes, the 2017 Study results are used to derive supply-related working capital

18   costs included in DS rates beginning June 1, 2018, as described in the testimony

19   of UES witness Linda S. McNamara.

20

21   **IV.**   **LEAD LAG STUDY METHODOLOGY**

22   **Q.**   **How was the 2017 Study conducted?**

1   A.   The 2017 Study follows similar methodology as in UES' 2016 Default Service

2   and Renewable Energy Credits Lead Lag Study ("2016 Study") that was

3   submitted in Docket No. DE 17-038. The 2017 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 2017 Study upon data for the twelve months ended December 31, 2017,

14   and calculated net lead lag days separately for the G1 and Non-G1 customer

15   classes.

16

17   **Q.   Does the 2017 Study incorporate the requirements of the Lead Lag**

18   **Settlement Letter dated July 16, 2009, under docket DE 09-009?**

19   A.   Yes, the 2017 Study conforms to the requirements specified in the Settlement

20   Letter under Docket No. DE 09-009. The 2017 Study follows the same

21   methodology as used in the 2009 - 2016 Studies which conform to the

22   requirements of the Settlement.

1

2   **V.**   **2017 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 2017 Study?**

21   A.   The 2017 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 2017 average "meter reading to recording of accounts receivable" lag is 1.09

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 2017 average "billing to collection" lag is 28.30 days for G1 customers and

14   46.09 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 2017 average "collection to receipt of available funds" lag is 1.72 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 46.32 days for G1 customers and 64.11 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 2017 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 2017 Study,

4   Schedule DTN-2.

5

6   As of March 27, 2018, prior period adjustments made in 2018 related to 2017

7   were included in the calculation. Prior year adjustments made in 2017 that relate

8   to 2016 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 2017 RECs, three assumptions were made to reflect actual

14   payment activity towards the Company's 2017 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 2017. Second, actual payment activity as of March 27,

17   2018 towards the Company's 2017 REC commitment was applied in

18   chronological order to the earliest month's estimated cost. Third, a payment date

19   of July 1, 2018 was used for all remaining 2017 REC commitments, which is the

20   last day to obtain 2017 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 60.94 days, as shown on Schedule

5   DTN-1, page 20 of 23. The weighted days lead for Non-G1 customers is 56.99

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 60.94 days is subtracted from

10   the lag in receipt of revenue of 46.32 days to produce the total DS and REC net

11   lead of 14.62 days. For Non-G1 customers, the DS and REC expense lead of

12   56.99 days is subtracted from the lag in receipt of revenue of 64.11 days to

13   produce the total DS and REC net lag of 7.12 days. See Schedule DTN-1, page 4

14   of 23.

15

16   **Q.   How do the results of the 2017 Study compare to the 2016 Study for G1**

17   **customers?**

18   A.   For G1 customers, the net lead in the 2017 Study of 14.62 days represents a

19   decrease of 16.18 days from the net lead in the 2016 Study of 30.80 days. The

20   difference was driven by a decrease in DS and REC expense lead of 12.76 days

21   offset by an overall revenue lag increase of 3.42 days.

22

1   The revenue lag component, "billing to collection" in the 2017 Study is 28.30

2   days compared to 24.89 days in the 2016 Study, an increase of 3.41 days. All of

3   the other components in revenue lag increased a total of 0.01 days in the 2017

4   Study compared to the 2016 Study. The combined change in all of the revenue

5   lag components resulted in an overall revenue lag increase of 3.42 days.

6

7   The DS and REC expense lead is 60.94 days in the 2017 Study compared to 73.70

8   days in the 2016 Study, a decrease of 12.76 days. In 2017, the DS portion of the

9   expense lead decreased 7.15 weighted days which was driven by a decrease in the

10   average days lead. The REC portion of the expense lead decreased 5.61 weighted

11   days which was driven by a decrease in the REC average days lead.

12

13   **Q.   How do the results of the 2017 Study compare to the 2016 Study for Non-G1**

14   **customers?**

15   A.   For Non-G1 customers, the net lag in the 2017 Study of 7.12 days is 5.19 days

16   more than the net lag in the 2016 Study of 1.93 days. The increase in net lag is

17   attributable to a 2.96 day increase in revenue lag and an 2.23 day decrease in the

18   DS and REC expense lead.

19

20   The revenue lag component, "billing to collection" in the 2017 Study is 46.09

21   days compared to 43.14 days in the 2016 Study, an increase of 2.95 days. All

22   other revenue lag components increased 0.01 days in the 2017 Study compared to

1   the 2016 Study. The net effect of all of the changes in the revenue lag

2   components resulted in a 2.96 day increase in the 2017 revenue lag compared to

3   2016.

4

5   The DS and REC expense lead is 2.23 days lower in 2017 compared to 2016. In

6   2017, the DS portion of the expense lead increased 3.26 weighted days which was

7   primarily driven by an increase in the average days lead. The REC portion of the

8   expense lead decreased 5.49 weighted days which was driven by a decrease in the

9   average days lead.

10

11   **VI.   CONCLUSION**

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

13   A.   Yes, it does.