UNITIL ENERGY SYSTEMS, INC.

DIRECT TESTIMONY OF

DANIEL T. NAWAZELSKI

New Hampshire Public Utilities Commission
Docket No. DE 17-038

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Renewable Energy Credits Lead Lag Study

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2016 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 two times, the most recent

17   promotion was to the role of Senior Financial Analyst in 2016. 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 2016 UES Default Service and Renewable

2   Energy Credits Lead Lag Study ("2016 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' 2016 Default Service ("DS") and

9   Renewable Energy Credits ("RECs") Lead Lag Study. The 2016 Study, presented

10   in this filing as Schedule DN-1, is based upon data for the period January 1, 2016

11   through December 31, 2016 and calculates the net lead period for G1 customers to

12   be 30.80 days and net lag period for Non-G1 customers to be 1.93 days.

13

14   **Q.**   **Are the results of the 2016 Study included in the DS rates proposed in this**

15   **filing?**

16   A.   Yes, the 2016 Study results are used to derive supply-related working capital

17   costs included in DS rates beginning May 1, 2017, as described in the testimony

18   of UES witness Linda S. McNamara.

19

20   **IV.**   **LEAD LAG STUDY METHODOLOGY**

21   **Q.**   **How was the 2016 Study conducted?**

1 A. The 2016 Study follows similar methodology as in UES' 2015 Default Service

2   and Renewable Energy Credits Lead Lag Study ("2015 Study") that was

3   submitted in Docket No. DE 16-250. The 2015 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 2016 Study upon data for the twelve months ended December 31, 2016,

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

15   classes.

16

17 **Q. Does the 2016 Study incorporate the requirements of the Lead Lag**

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

19 A. Yes, the 2016 Study conforms to the requirements specified in the Settlement

20   Letter under Docket No. DE 09-009. The 2016 Study follows the same

21   methodology as used in the 2009 - 2015 Studies which conform to the

22   requirements of the Settlement.

1

2 **V.**   **2016 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 performed

16   separately for G1 and Non-G1 customer classes, as appropriate. Refer to Schedule

17   DN-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 2016 Study?**

21 A.   The 2016 average lag for "receipt of electric service to meter reading" is 15.25

22   days. This lag was obtained by dividing the number of days in the test year (366

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 DN-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 2016 average "meter reading to recording of accounts receivable" lag is 1.07

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 DN-1, pages 6 through 10 of 23.

11

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

13 A. The 2016 average "billing to collection" lag is 24.89 days for G1 customers and

14   43.14 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 DN-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 2016 average "collection to receipt of available funds" lag is 1.69 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 DN-1, pages 13 through 19 of 23.

6

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

8   A.   Yes. The total revenue lag of 42.90 days for G1 customers and 61.15 days for

9   Non-G1 customers is computed by adding the number of days associated with

10   each of the four revenue lag components described above. This total number of

11   lag days represents the amount of time between the recorded delivery of service to

12   customers and the receipt of the related revenues from customers. See Schedule

13   DN-1, page 4, line 6.

14

15   Q.   **Please turn to the lead periods in the 2016 Study. In determining the expense**

16   **lead period, how is the weighted days lead in payment of DS purchased**

17   **power costs determined?**

18   A.   First, the monthly expense lead for each DS power supply vendor is determined

19   by aggregating (1) the average days in the period that the energy or service is

20   received and (2) the additional billing period including the payment day.

21

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 2016 Study,

4   Schedule DN-2.

5

6   As of March 24, 2017, prior period adjustments made in 2017 related to 2016

7   were included in the calculation. Prior year adjustments made in 2016 that relate

8   to 2015 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 2016 RECs, three assumptions were made to reflect actual

14   payment activity towards the Company's 2016 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 2016. Second, actual payment activity as of March 24,

17   2017 towards the Company's 2016 REC commitment was applied in

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

19   of July 1, 2017 was used for all remaining 2016 REC commitments, which is the

20   last day to obtain 2016 RECs and/or make alternative compliance payments. See

21   Schedule DN-1, page 21 of 23 for the REC summary related to G1 customers and

22   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 73.70 days, as shown on Schedule

5 DN-1, page 20 of 23. The weighted days lead for Non-G1 customers is 59.22

6 days, as shown on Schedule DN-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 73.70 days is subtracted from

10 the lag in receipt of revenue of 42.90 days to produce the total DS and REC net

11 lead of 30.80 days. For Non-G1 customers, the DS and REC expense lead of

12 59.22 days is subtracted from the lag in receipt of revenue of 61.15 days to

13 produce the total DS and REC net lag of 1.93 days. See Schedule DN-1, page 4 of

14 23.

15

16 **Q.** **How do the results of the 2016 Study compare to the 2015 Study for G1**

17 **customers?**

18 A. For G1 customers, the net lead in the 2016 Study of 30.80 days represents a

19 decrease of 8.74 days from the net lead in the 2015 Study of 39.53 days. The

20 difference was driven by a decrease in DS and REC expense lead of 8.71 days,

21 which was primarily driven by a decrease in the DS portion of average days lead

22 and a decrease in the REC portion of total costs.

1

2   The revenue lag component, "billing to collection" in the 2016 Study is 24.89

3   days compared to 25.19 days in the 2015 Study, a decrease of 0.30 days.

4   Offsetting this was an increase of 0.29 days to the revenue lag component,

5   "Collection to Receipt of Available Funds" in the 2016 Study. All of the other

6   components in revenue lag increased a total of 0.04 days in the 2016 Study

7   compared to the 2015 Study. The combined change in all of the revenue lag

8   components resulted in an overall revenue lag increase of 0.03 days.

9

10   The DS and REC expense lead is 73.70 days in the 2016 Study compared to 82.41

11   days in the 2015 Study, a decrease of 8.71 days. In 2016, the DS portion of the

12   expense lead decreased 4.47 weighted days which was driven by a decrease in the

13   average days lead. The REC portion of the expense lead decreased 4.24 weighted

14   days which was primarily driven by a decrease in the REC portion of total costs.

15

16 **Q.**   **How do the results of the 2016 Study compare to the 2015 Study for Non-G1**

17   **customers?**

18 A.   For Non-G1 customers, the net lag in the 2016 Study of 1.93 days is 9.74 days

19   less than the net lag in the 2015 Study of 11.68 days. The decrease in net lag is

20   attributable to a 1.09 day decrease in revenue lag and an 8.65 day increase in the

21   DS and REC expense lead.

22

1   The revenue lag component, "billing to collection" was 1.42 days lower and

2   "Collection to Receipt of Available Funds" increased 0.29 days. All other revenue

3   lag components increased 0.04 days in the 2016 Study compared to the 2015

4   Study. The net effect of all of the changes in the revenue lag components resulted

5   in a 1.09 day decrease in the 2016 revenue lag compared to 2015.

6

7   The DS and REC expense lead is 8.65 days higher in 2016 compared to 2015. In

8   2016, the DS portion of the expense lead decreased 2.09 weighted days which

9   was primarily driven by a decrease in the average days lead. The REC portion of

10   the expense lead increased 10.74 weighted days which was driven by an increase

11   in the REC portion of total costs and an increase in the average days lead.

12

13   **VI.   CONCLUSION**

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

15   A.   Yes, it does.