

UNITIL ENERGY SYSTEMS, INC.

DIRECT TESTIMONY OF
DANIEL T. NAWAZELSKI

New Hampshire Public Utilities Commission
Docket No. DE 16-250

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LIST OF SCHEDULES

Schedule DN-1: Unitil Energy Systems, Inc. 2015 Default Service and
Renewable Energy Credits Lead Lag Study

Schedule DN-2: Confidential/Redacted Workpapers for the Unitil Energy Systems, Inc.
2015 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 2015 UES Default Service and Renewable
2 Energy Credits Lead Lag Study (“2015 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’ 2015 Default Service (“DS”) and
9 Renewable Energy Credits (“RECs”) Lead Lag Study. The 2015 Study, presented
10 in this filing as Schedule DN-1, is based upon data for the period January 1, 2015
11 through December 31, 2015 and calculates the net lead period for G1 customers to
12 be 39.53 days and net lag period for Non-G1 customers to be 11.68 days.

13

14 **Q. Are the results of the 2015 Study included in the DS rates proposed in this**
15 **filing?**

16 A. Yes, the 2015 Study results are used to derive supply-related working capital
17 costs included in DS rates beginning May 1, 2016, as described in the testimony
18 of UES witness Linda S. McNamara.

19

20 **IV. LEAD LAG STUDY METHODOLOGY**

21 **Q. How was the 2015 Study conducted?**

1 A. The 2015 Study follows similar methodology as in UES' 2014 Default Service
2 and Renewable Energy Credits Lead Lag Study ("2014 Study") that was
3 submitted in Docket No. DE 15-079. The 2014 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 2015 Study upon data for the twelve months ended December 31, 2015,
14 and calculated net lead lag days separately for the G1 and Non-G1 customer
15 classes.

16

17 **Q. Does the 2015 Study incorporate the requirements of the Lead Lag**
18 **Settlement Letter dated July 16, 2009, under docket DE 09-009?**

19 A. Yes, the 2015 Study conforms to the requirements specified in the Settlement
20 Letter under Docket No. DE 09-009. The 2015 Study follows the same
21 methodology as used in the 2009 - 2014 Studies which conform to the
22 requirements of the Settlement.

1

2 **V. 2015 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 2015 Study?**

21 A. The 2015 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 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 2015 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 2015 average "billing to collection" lag is 25.19 days for G1 customers and
14 44.56 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 2015 average “collection to receipt of available funds” lag is 1.41 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 42.88 days for G1 customers and 62.25 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 2015 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 2015 Study,
4 Schedule DN-2.

5
6 As of March 25, 2016, prior period adjustments made in 2016 related to 2015
7 were included in the calculation. Prior year adjustments made in 2015 that relate
8 to 2014 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 2015 RECs, three assumptions were made to reflect actual
14 payment activity towards the Company's 2015 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 2015. Second, actual payment activity as of March 25,
17 2016 towards the Company's 2015 REC commitment was applied in
18 chronological order to the earliest month's estimated cost. Third, a payment date
19 of July 1, 2016 was used for all remaining 2015 REC commitments, which is the
20 last day to obtain 2015 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 82.41 days, as shown on Schedule
5 DN-1, page 20 of 23. The weighted days lead for Non-G1 customers is 50.57
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 82.41 days is subtracted from
10 the lag in receipt of revenue of 42.88 days to produce the total DS and REC net
11 lead of 39.53 days. For Non-G1 customers, the DS and REC expense lead of
12 50.57 days is subtracted from the lag in receipt of revenue of 62.25 days to
13 produce the total DS and REC net lag of 11.68 days. See Schedule DN-1, page 4
14 of 23.

15

16 **Q. How do the results of the 2015 Study compare to the 2014 Study for G1**
17 **customers?**

18 A. For G1 customers, the net lead in the 2014 Study of 39.53 days represents an
19 increase of 18.31 days from the net lead in the 2014 Study of 21.22 days. The
20 difference was driven by an increase in DS and REC expense lead of 20.78 days,
21 which was primarily driven by an increase in the REC portion of total costs
22 offset by an overall revenue lag increase of 2.47 days.

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The revenue lag component, “billing to collection” in the 2015 Study is 25.19 days compared to 22.84 days in the 2014 Study, an increase of 2.35 days. All of the other components in revenue lag increased a total of 0.12 days in the 2015 Study compared to the 2014 Study. The combined change in all of the revenue lag components resulted in an overall revenue lag increase of 2.47 days.

The DS and REC expense lead is 82.41 days in the 2015 Study compared to 61.63 days in the 2014 Study, an increase of 20.78 days. In 2015, the DS portion of the expense lead decreased 6.05 weighted days which was driven by a decrease in the average days lead and a decrease in the DS portion of the total costs. The REC portion of the expense lead increased 26.83 weighted days which was primarily driven by an increase in the REC portion of total costs.

Q. How do the results of the 2015 Study compare to the 2014 Study for Non-G1 customers?

A. For Non-G1 customers, the net lag in the 2015 Study of 11.68 days is 6.03 days more than the net lag in the 2014 Study of 5.65 days. The increase in net lag is attributable to a 7.10 day increase in revenue lag offset by a 1.07 day increase in the DS and REC expense lead.

1 The revenue lag component, “billing to collection” was 6.98 days higher and all
2 other revenue lag components increased 0.12 days in the 2015 Study compared to
3 the 2014 Study. The net effect of all of the changes in the revenue lag components
4 resulted in a 7.10 day increase in the 2015 revenue lag compared to 2014.

5

6 The DS and REC expense lead is 1.07 days higher in 2015 compared to 2014. In
7 2015, the DS portion of the expense lead increased 4.19 weighted days which was
8 primarily driven by an increase in the average days lead. The REC portion of the
9 expense lead decreased 3.12 weighted days which was largely driven by decreases
10 in the average days lead.

11

12 **VI. CONCLUSION**

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

14 **A.** Yes, it does.