UNITIL ENERGY SYSTEMS, INC.

DIRECT TESTIMONY

OF

DANIEL J. HURSTAK

EXHIBIT DJH-1

New Hampshire Public Utilities Commission

Docket No. DE 21-030

TABLE OF CONTENTS

Attachments

Exhibit DJH-2   Pro Forma Lead-Lag Summary
Exhibit DJH-3   Supporting Workpapers

1 **I.**   **INTRODUCTION**

2 **Q.**   **State your name and business address.**

3 A.   My name is Daniel J. Hurstak and my business address is 6 Liberty Lane West,

4   Hampton, New Hampshire 03842.

5 **Q.**   **What is your position and what are your responsibilities?**

6 A.   I am the Chief Accounting Officer and Controller for Unitil Corporation and the

7   Controller for Unitil Energy Systems, Inc ("UES" or the "Company"). I am also

8   the Controller for Unitil Service Corp. ("Unitil Service"), a subsidiary of Unitil

9   Corporation that provides managerial, financial, regulatory and engineering

10   services to Unitil's utility subsidiaries including UES. I am responsible for the

11   accounting and financial reporting activities for Unitil and its subsidiaries.

12 **Q.**   **Describe your business and educational background.**

13 A.   Prior to joining Unitil Service in March 2020, I was Vice President, Corporate

14   Accounting, at Fidelity Investments (a multinational financial services

15   corporation headquartered in Boston, Massachusetts), from June 2016 until

16   February 2020. Prior to Fidelity, I was a senior manager at

17   PricewaterhouseCoopers LLP ("PwC") (a multinational professional services

18   network of firms operating as partnerships under the PwC brand) from September

19   2009 until May 2016, and I began my career at PwC in September 2001. I have a

20   Bachelor of Science degree in Accounting from Bentley College, Waltham,

1   Massachusetts, and I am a Certified Public Accountant in the Commonwealth of

2   Massachusetts.

3   **Q.**   **Have you previously testified before the Commion or other regulatory**

4   **agencies?**

5   A.   No, I have not previously testified before the New Hampshire Public Utilities

6   Commion or other regulatory agencies.

7   **II.**   **PURPOSE OF TESTIMONY**

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

9   A.   The purpose of my testimony is to present the cash working capital requirements

10   of UES for its delivery services. UES has identified its revenue requirements on a

11   pro forma basis and computed the cash working capital for the test year ending

12   December 31, 2020.

13   **III.**   **CASH WORKING CAPITAL**

14   **Q.**   **Define the term "cash working capital" as used in utility ratemaking.**

15   A.   Cash working capital is the amount of investor-supplied capital required by the

16   Company to fund operations in the time period between when expenditures are

17   incurred to provide service to customers and when payment is actually received

18   from customers. Cash working capital represents dollar amounts funded by

19   investors to provide safe and reliable electric distribution services prior to receipt

1   of payment for those services from customers. As such, cash working capital is

2   an appropriate addition to the Company's rate base.

3   **Q.**   **Did you perform analyses to estimate the cash working capital of UES for the**

4   **adjusted test year?**

5   A.   Yes. Exhibit DJH-2 summarizes the results of the UES lead-lag study using the

6   pro forma revenue requirements for the test year ending December 31, 2020. As

7   shown in these schedules, the rate base addition for the delivery cash working

8   capital is $3,350,303, reflecting a net lag of 32.17 days.

9   **Q.**   **What is a lead-lag study?**

10   A.   A lead-lag study is an analysis designed to determine the funding required to

11   operate a company on a day-to-day basis. A lead-lag study compares (1) the

12   timing difference between the receipt of service by customers and their

13   subsequent payment for these same services and (2) the timing difference between

14   the incurrence of costs by the Company and its subsequent payment of these

15   costs.

16   A lead-lag study therefore must compute a revenue lag or (lead), and an expense

17   lag or (lead). Cash working capital was developed using systematic reviews of

18   cash flows for the Company's revenues and operating expenses. The lead-lag

19   study measures the base revenue requirement cash working capital needed for the

20   Company's day-to-day electric operations for the 12-month pro forma period

1   ending December 31, 2020. Exhibit DJH-2, page 1 of 3, summarizes the lead-lag

2   study results.

3 **Q. Define the terms "lag days" and "lead days" as used in your testimony.**

4 A.   Revenue lag is the number of days between delivery of service to the Company's

5   customers and subsequent receipt by the Company of payment for the service.

6   Expense lag is the number of days between the receipt of goods or services

7   provided to the Company by vendors and payment for such goods or services by

8   the Company. Because the Company's electric customers receive service prior to

9   paying for it, the Company experiences a revenue lag in its daily operations. The

10   Company typically pays expenses after vendors have provided their goods or

11   services, which results in an expense lag. The Company will occasionally pay for

12   goods or services before they are provided, which results in an expense lead. As

13   shown on Exhibit DJH-2, page 1 of 3, line 31, column 5, the Company's net lag

14   days are 32.17 days.

15 **Q. Describe the approach you used in preparing your lead-lag study.**

16 A.   The lead-lag study starts with the identification of revenues and expenses

17   recorded in the Company's books ("per-books") for the 12-month period ended

18   December 31, 2020 as the basis for the analysis. First, the lag days for the

19   recovery of revenue were calculated. Next, for operating and maintenance

20   ("O&M") expenses, lag or lead days for each of several types of expenses,

21   including labor, employee benefits, insurances (general, fiduciary, property),

22   regulatory commission expenses, other O&M expenses and service company

1   charges were calculated. In addition, lag or lead days for property taxes, other

2   taxes, and income taxes were calculated. Once the net lag days for the test year

3   are established on a per-books basis, they are applied to the test year pro forma

4   revenue requirements. The lead or lag days for each of the items described in this

5   testimony are then multiplied by the test year pro forma amounts to determine the

6   dollar-days of cash working capital. The net dollar-days of revenue less expenses

7   and taxes are then divided by 366 days to obtain the average daily cash working

8   capital.

9   **Q.**   **Describe your calculation of revenue lag.**

10   A.   The calculation of the revenue lag is summarized on page 2 of Exhibit DJH-2. As

11   previously described, "revenue lag" is the length of time that occurs between the

12   Company's provision of service to its customers and the subsequent receipt of

13   payment for those services. The existence of a revenue lag makes it necessary for

14   investors to provide funding for the Company to pay its operating costs during the

15   lag period.

16   The measurement of revenue lag consists of four components: (1) service lag, (2)

17   billing lag, (3) collection lag, and (4) collection to receipt of available funds

18   ("revenue float"). Since the time periods for these four components are mutually

19   exclusive, revenue lag is computed by adding the total number of days associated

20   with each of the four revenue lag components. This total number of lag days

21   represents the amount of time between the recorded delivery of service to

22   customers and the receipt of the related revenues from customers.

1   **Q.**   **Describe how you calculate service lag.**

2   A.   The service lag is the average time span between the mid-point of the customer's

3   consumption interval, also known as the usage period, and the time that such

4   usage is recorded by the Company for billing purposes. This usage period

5   determines the average length of time over which the billed services are provided

6   and establishes a common point in time from which to measure (1) the time of

7   reimbursement for the billed services, and (2) the time at which the accrued costs

8   for the usage period are actually paid. For the Company, the service lag is one-

9   half of an average month for the year ended December 31, 2020 or 15.25 days

10   (366/12/2). Refer to Exhibit DJH-2, page 2 for the service lag analysis.

11   **Q.**   **Describe the calculation of billing lag.**

12   A.   The billing lag is the time required to process and send out customer bills. The

13   billing lag begins at the end of the service period when customer consumption is

14   metered, and it ends when the bills are rendered and billings are posted to

15   accounts receivable. The billing lag may be influenced by factors such as whether

16   automated or manual meter reading systems are employed, the generation of

17   invoices from this metering data and other processes affecting the time to post

18   billings to accounts receivable. The Company uses an automated meter reading

19   system that posts meter readings daily for billing the next day, and the meter

20   reading is recorded into accounts receivable on the same day. The UES billing

21   lag was approximately 1.01 days after considering the delay for weekends and

22   holidays. Refer to Exhibit DJH-2, page 2 for the billing lag analysis.

000758

1   **Q.**   **Describe the calculation of collection lag.**

2   A.   The collection lag identifies the time between the posting of customer bills to

3   accounts receivable and the receipt of these billed revenues. Collection lag,

4   which begins with the posting of bills and ends with the receipt of payment, may

5   be influenced by payment arrangements, contract terms, postal delivery delays,

6   customer inquiries, delinquent accounts, service termination practices, and other

7   factors. The Company has employed the accounts receivable turnover ratio

8   method to determine the collection lag. Using this approach, the average monthly

9   accounts receivable balances (as measured by the average of the month-end

10   balances for the 12 months from January 2020 to December 2020) were divided

11   by the average daily revenues for the 12 months ended December 31, 2020.

12   Using the accounts receivable turnover method, a collection lag of 39.02 days was

13   computed. Refer to Exhibit DJH-2, page 2 for the collection lag analysis.

14   **Q.**   **Describe the final component of revenue lag, revenue float.**

15   A.   Revenue float is the time between when funds are received from customers until

16   customer payments clear the banks and are available to the Company. Certain

17   funds are available the day payment is received while other funds are generally

18   available within one or two days of receipt by the bank. The following day's

19   bank statement reflects the prior day's bank availability of funds. Refer to Exhibit

20   DJH-2, page 2 for the revenue float analysis.

21   **Q.**   **Are there other components of revenue lag for UES?**

1   A.   Yes, refer to page 2 of Exhibit DJH-2. This page includes other components such

2   as late payment charges, disconnect / reconnect fees, and other miscellaneous

3   revenues.

4   **Q.**   **What is the total revenue lag component for the lead-lag calculation?**

5   A.   The revenue lag components were combined to arrive at the total revenue lag of

6   56.17 days, as shown on Exhibit DJH-2, page 2.

7   **Q.**   **How is the lag for labor expense determined?**

8   A.   The Company's employees are paid either weekly or monthly. Using sample

9   data, the Company measured the lag between the mid-point of the pay period and

10   the pay date. However, not all labor costs earned by employees in the pay period

11   are paid out as salary, the difference being payroll withholdings. In order to make

12   an accurate calculation of total labor costs, all labor-related costs were identified,

13   including the dates when the Company actually expended the cash for these labor

14   costs. These labor-related costs reflect all salary components including incentive

15   compensation, payroll taxes including withholding taxes, and a wide range of

16   benefits. Regular payroll (weekly and monthly) costs are the largest component

17   of labor costs and have the shortest payment lag. However, other components of

18   labor costs have longer delays. For example, incentive compensation pay was

19   earned from January 2020 to December 2020 and was paid in February 2021,

20   resulting in a much longer expense lag. In addition to direct labor expense, the

21   Company examined other labor-related costs, including payroll taxes.

1 **Q. Describe how the lag is calculated for employee benefits.**

2 A. The method for calculating expense lags for employee benefits uses a benefit

3 payments approach. For each benefit payment, the service period and its mid-

4 point were determined. The payment date was then established. The lag was then

5 computed as the difference between the payment date and the mid-point of the

6 service period. A weighted average of each benefit payment was then computed

7 to determine the overall average for this category.

8 **Q. Were other categories of O&M expense analyzed separately and included in**

9 **the expense lag?**

10 A. Yes, insurance (general, fiduciary, property) expenses, and regulatory commission

11 expense were analyzed separately and included in the calculation of the expense

12 lag. The lag for these expense items was also computed as the difference between

13 the payment date and the mid-point of the service period.

14 **Q. How was the expense lag calculated for expenses allocated from Unitil**

15 **Service?**

16 A. The expenses allocated from Unitil Service consist of Labor and Other O&M

17 expenses that are charged to O&M accounts. The expense lag of 36.44 days

18 assigned to these expenses was computed as the difference between the payment

19 date for Unitil Service charges, and the mid-point of the service period, which is

20 the mid-point of the calendar month being billed.

1 **Q.** **Are Other O&M expenses included in the calculation of expense lag?**

2 A. Yes, there are additional O&M (referred to as "Other O&M" expenses) directly

3 paid by the Company. Because these expenses are made up of thousands of

4 vouchers processed throughout the course of the test year, a sample was used to

5 estimate the lags for the Company. The sample produced a lag of 54.93 days for

6 these Other O&M direct expenses.

7 The sampling method used was a random sequential sample of the population

8 using three strata. The population was sorted by dollar amounts, and the

9 following strata were used to generate the sample:

10 Stratum 1: Every 3rd voucher greater than $20,000;

11 Stratum 2: Every 25th voucher less than $20,000 and more than $1,500;

12 Stratum 3: Every 150th voucher under $1,500.

13 The resulting sample, which accounted for 19.94% of the dollars in the

14 population, indicated a lag of 54.93 days.

15 **Q.** **Did you exclude any voucher selections from the calculation of lag days?**

16 A. Yes. One of the selected invoices was determined to be an outlier and not

17 representative of the Other O&M expense population. In that instance, the

18 Company experienced a significant payment lag (in excess of 300 days) as a

19 result of the vendor initially submitting an incorrect invoice for services which

20 was not corrected in a timely manner. This invoice was ultimately re-submitted

21 over eight months after the services were provided which is not typical for this

22 vendor. The Company does a significant level of work with this vendor and other

1   invoices from this vendor have been identified as part of the population selected

2   to compute the Other O&M expense lag. Given the atypical nature of the

3   payment experience, the Company excluded this invoice from the sample.

4   **Q.**   **Did you include any other expenses besides O&M expenses in the calculation**

5   **of expense lag?**

6   A.   Yes. Since Property Taxes, Other Taxes, and Federal and State Income Taxes

7   represent cash outlays, they were included in the calculation. All property tax

8   payments made during 2020 were analyzed, and the expense lags computed.

9   Other Taxes consist mostly of Payroll Taxes and Unemployment Taxes. Each

10   type of tax was analyzed separately and assigned a lag based on the service

11   periods and payment dates. Federal and State Income Taxes were assigned lags

12   based on the statutory required fiscal tax year tax payments.

13   **Q.**   **Did the COVID-19 pandemic have an impact on the calculation of lag days**

14   **for any expense category?**

15   A.   The CARES Act enacted the Employment Retention Credit ("ERC") to encourage

16   companies to retain employees during the pandemic. The ERC is a 50% credit on

17   employee wages for employees that are retained and cannot perform their job

18   duties at 100% capacity as a result of pandemic restrictions. The ERC is applied

19   as a credit to employment taxes on the Company's Form 941. In the third quarter

20   of 2020, UES recorded an ERC of approximately $32,500 as a reduction to

1   employment tax expense. This amount has been reflected as a pro forma

2   adjustment to employment tax expense in this lead-lag analysis.

3   The Families First Coronavirus Response Act ("FFCRA") provided paid sick

4   leave for employees who had to quarantine, care for a quarantined individual, or

5   care for a child whose school or child care provider was closed or unavailable for

6   reasons related to COVID-19. The FFCRA is applied as a credit to employment

7   taxes on the Company's Form 941. In the fourth quarter of 2020, UES recorded a

8   FFCRA of approximately $111,000 as a reduction to employment tax expense.

9   This amount has been reflected as a pro forma adjustment to employment tax

10   expense in this lead-lag analysis.

11 **Q.**   **Where have you presented the results of the cash working capital**

12   **calculations for the pro forma test year?**

13 A.   The results of the lead-lag study are summarized on page 1 of Exhibit DJH-2.

14   This page summarizes the revenue lags from page 2 and the expense lags from

15   page 3, and presents the Company's cash working capital for the test year on a pro

16   forma basis.

17 **Q.**   **Have you identified the net lag days between revenue and expense for UES**

18   **for the twelve months ended December 31, 2020 on a pro forma basis?**

19 A.   Yes. As indicated by the data on page 1 of Exhibit DJH-2, the net lag for cash

20   working capital is 32.17 days (line 31, column 5) which is slightly different than

21   the number included in line 23, column 4 due to rounding. The positive lag

1   indicates that cash working capital is required to compensate for the fact that the

2   lag in the recovery of revenues is greater than the lag in the payment of expenses.

3   On a pro forma basis, UES's cash working capital requirement for December 31,

4   2020 test year is $3,350,303, or 8.79%, as shown on page 1, lines 29 and 33, of

5   the above noted schedule. This cash working capital requirement represents the

6   capital that must be provided and included as an addition to rate base.

7 **IV.   CONCLUSION**

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

9 A.   Yes, it does.

[THIS PAGE INTENTIONALLY LEFT BLANK]