UNITIL ENERGY SYSTEMS, INC.

DIRECT TESTIMONY OF

DAVID L. CHONG

New Hampshire Public Utilities Commission
Docket No. DE 10-028

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LIST OF SCHEDULES

I. INTRODUCTION

Q. Please state your name and business address.

A. My name is David L. Chong. My business address is 6 Liberty Lane West, Hampton, New Hampshire 03842.

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

A. I am Director of Finance for Unitil Service Corp., a subsidiary of Unitil Corporation that provides managerial, financial, regulatory and engineering services to Unitil Corporation's principal subsidiaries: Fitchburg Gas and Electric Light Company, Granite State Gas Transmission, Inc., Northern Utilities, Inc., and Unitil Energy Systems, Inc. ("UES" or the "Company"). In this capacity I am responsible for the management of treasury operations and banking relationships; planning and execution of financing programs; development, preparation and presentation of financial forecasts and plans; overseeing insurance programs; interfacing with the financial community and investors; and supporting the company's regulatory and ratemaking objectives.

Q. Have you previously testified before the New Hampshire Public Utilities Commission (the "Commission")?

A. Yes, I have previously presented testimony before this Commission in Docket Nos. DE 09-236 and DG 09-239.

II. PURPOSE OF TESTIMONY

Q. What is the purpose of your testimony?

A. I will discuss the development of the 2009 UES Default Service and Renewable Energy Credits Lead Lag Study ("2009 Study"), which is integral to the calculation of cash working capital to be recovered in Default Service rates for G1 and Non-G1 customers.

III. SUMMARY OF TESTIMONY

Q. Please summarize your testimony.

A. My testimony presents and supports UES' 2009 Default Service ("DS") and Renewable Energy Credits ("RECs") Lead Lag Study. The 2009 Study, presented in this filing as Schedule DC-1, is based upon data for the period January 1, 2009 through December 31, 2009 and calculates the net lag periods for G1 and Non-G1 customers to be 6.47 days and 9.40 days, respectively.

Q. Are the results of the 2009 Study included in the DS rates proposed in this filing?

A. Yes, the 2009 Study results are used to derive supply-related working capital costs included in DS rates beginning May 1, 2010, as described in the testimony of UES witness Linda S. McNamara.

IV. LEAD LAG STUDY METHODOLOGY

Q. How was the 2009 Study conducted?

A. The 2009 Study follows similar methodology (with a few exceptions described in the next Q&A) as in UES' 2008 Default Service and Renewable Energy Credits Lead Lag Study ("2008 Study") that was submitted in Docket No. DE 09-009. The 2009 Study determines the number of days between the time funds are required to pay for DS purchased power and REC purchases (expense lead) and the time that those funds are available from the payment of customer bills (revenue lag). The revenue lag period includes four calculations: "receipt of electric service to meter reading", "meter reading to recording of accounts receivable", "billing to collection", and "collection to receipt of available funds". The expense lead period consists of the lead in payment of DS purchased power costs and REC costs based upon the following calculations: lead period, average days lead, weighted cost, days lead and weighted days lead. Each of these steps is explained in more detail below. UES based its 2009 Study upon data for the twelve months ended December 31, 2009, and calculated net lag days separately for the G1 and Non-G1 customer classes.

Q. How does the methodology in the 2009 Study differ from the 2008 Study?

A. In UES' lead lag settlement letter dated July 16, 2009 under Docket No. DE 09-009, UES agreed to address the following four items in future lead lag studies, including the 2009 Study.

(i) UES will remove mailing time from the "meter reading to billing" calculation, and instead calculate "meter reading to recording of accounts receivable".

(ii) UES will reflect actual procurement experience for test year RECs, and use July 1 of the following year as the due date for any test year RECs that have not been procured.

(iii) In May 2009, UES changed its proposed Power Supply Agreement to reflect a monthly payment schedule, with a proposed payment date on the last business day of the following month. UES submits, however, that it is prudent to retain the flexibility to be able to negotiate a change in the language in any final supplier contract should a change result in a lower overall cost for customers. In future lead lag studies, UES will reflect actual test year payment experience related to DS contracts in effect for that test year.

(iv) UES will include the due date in its DS and REC expense lead calculations.

V. 2009 STUDY RESULTS

Q. Please define the terms "lag days" and "lead days."

A. Lag days are the number of days between delivery of electric service by UES to its customers and the receipt by the Company of available funds from customers' payments (revenue lag). Lead days are the number of days between the mid-point

of the energy delivery period to UES and the payment date by UES to DS suppliers or for RECs (expense lead).

Q. How is revenue lag computed?

A. Revenue lag is computed in days, consisting of four time components: (1) days from receipt of electric service to meter reading; (2) days from meter reading to recording of accounts receivable; (3) days from billing to collection; and (4) days from collection to receipt of available funds. The sum of the days associated with these four lag components is the total revenue lag. The calculations are performed separately for G1 and Non-G1 customer classes, as appropriate. Refer to Schedule DC-1, pages 4 through 19 of 23.

Q. What is the lag period for the component "receipt of electric service to meter reading" in the 2009 Study?

A. The 2009 average lag for "receipt of electric service to meter reading" is 15.21 days. This lag was obtained by dividing the number of days in the test year (365 days) by 24 to determine the average monthly service period. This result is applicable to both the G1 and Non-G1 customer classes. See Schedule DC-1, page 5 of 23.

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

A. The 2009 average "meter reading to recording of accounts receivable" lag is 1.15 days, which is applicable to both the G1 and the Non-G1 customer classes. This lag determines the time required to process the meter reading data and record accounts receivable. The calculation of this lag component conforms to the settlement. See Schedule DC-1, pages 6 through 10 of 23.

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

A. The 2009 average "billing to collection" lag is 24.11 days for G1 customers and 31.67 days for Non-G1 customers. This component was calculated separately for the G1 and Non-G1 customer groups and is derived by the accounts receivable turnover method. The lag reflects the time delay between the mailing of customer bills and the receipt of the billed revenues from customers. See Schedule DC-1, pages 11 and 12 of 23 for G1 and Non-G1 results, respectively.

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

A. The 2009 average "collection to receipt of available funds" lag is 1.35 days. This represents the average weighted check-float period, or the lag that takes place during the period from when payment is received from customers to the time such funds are available for use by the Company. This result is applicable to both the

G1 and Non-G1 customer classes. See Schedule DC-1, pages 13 through 19 of 23.

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

A. Yes. The total revenue lag of 41.82 days for G1 customers and 49.38 days for Non-G1 customers is computed by adding the number of days associated with each of the four revenue lag components described above. This total number of lag days represents the amount of time between the recorded delivery of service to customers and the receipt of the related revenues from customers. See Schedule DC-1, page 4, line 6.

Q. Please turn to the lead periods in the 2009 Study. In determining the expense lead period, how is the weighted days lead in payment of DS purchased power costs determined?

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

The aggregate lead days are then weighted by the dollar amount of the billings. Weighted days lead are calculated separately for G1 and Non-G1 customers, by

supplier, and are shown in the Confidential Workpapers to the 2009 Study, Schedule DC-2.

As of March 1, 2010, prior period adjustments made in 2010 related to 2009 were included in the calculation. Prior year adjustments made in 2009 that relate to 2008 were not included in the calculation. This methodology is similar to that used in George McCluskey's testimony dated 6-3-09 in Docket DE 09-009 and 010.

Q. In the settlement letter dated July 16, 2009, the Company modified its proposed Power Supply Agreement ("PSA") to reflect an end-of-month payment schedule. What was the outcome of this process?

A. As a result of the settlement, UES modifed the proposed PSA it issues with its DS RFP packages to provide for end-of-month payment terms. In the settlement, UES submitted that it is prudent to retain the flexibility to be able to negotiate a change in the language in any final supplier contract should such a change result in a lower overall cost for customers. During the solicitation process, UES works with suppliers to obtain the most favorable non-price terms each supplier is willing to offer, including payment terms. UES then accepts and evaluates final pricing in order to determine which offer provides the greatest overall value. As part of the evaluation process, UES factors the cost of interest expense associated with different payment terms.

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

A. The weighted days lead in payment for RECs was determined using the same methodology applicable to DS power suppliers described above. In applying this methodology to 2009 RECs, three assumptions were made to reflect actual payment activity towards the Company's 2009 REC commitment. First, the monthly cost of the RECs was assumed to be equivalent to the estimated costs of RECs included in rates in 2009. Second, actual payment activity as of March 1, 2010 towards the Company's 2009 REC commitment was applied in chronological order to the earliest month's estimated cost. Third, a payment date of July 1, 2010 was used for all remaining 2009 REC commitments, which is the last day to obtain 2009 RECs and/or make alternative compliance payments. The July 1, 2010 date conforms to the settlement related to RECs in the letter dated July 16, 2009. See Schedule DC-1, page 21 of 23 for the REC summary related to G1 customers and page 23 of 23 for the REC summary related to Non-G1 customers.

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

A. The weighted days lead for G1 customers is 35.35 days, as shown on Schedule DC-1, page 20 of 23. The weighted days lead for Non-G1 customers is 39.98 days, as shown on Schedule DC-1, page 22 of 23.

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

A. For G1 customers, the DS and REC expense lead of 35.35 days is subtracted from the lag in receipt of revenue of 41.82 days to produce the total DS and REC lag of 6.47 days. For Non-G1 customers, the DS and REC expense lead of 39.98 days is subtracted from the lag in receipt of revenue of 49.38 days to produce the total DS and REC lag of 9.40 days. See Schedule DC-1, page 4 of 23.

Q. How do the results of the 2009 Study compare to the 2008 Study for G1 customers?

A. For G1 customers, the net lag in the 2009 Study of 6.47 days is 2.18 days higher than the net lag in the 2008 Study of 4.29 days. The increase in net lag was driven by a decrease in DS and REC expense lead of 3.71 days and offset by an overall revenue lag decrease of 1.53 days.

The revenue lag component, "meter reading to recording of accounts receivable" in the 2009 Study is 1.15 days compared to 3.16 days in the 2008 Study, a decrease of 2.01 days. As indicated earlier in my testimony, the Company adopted the methodology specified in the settlement to calculate "meter reading to recording of accounts receivable" versus the previous methodology used in the 2008 Study which calculated "meter reading to billing". All of the other components in revenue lag increased a total of 0.48 days in the 2009 Study

compared to the 2008 Study. The combined change in all of the revenue lag components resulted in an overall revenue lag decrease of 1.53 days.

The DS and REC expense lead is 35.35 days in the 2009 Study compared to 39.06 days in the 2008 Study, a decrease of 3.71 days. The results of the 2009 Study and 2008 Study are not directly comparable because of variances in methodology. As mentioned above, the Company incorporated the settlement in its calculation of DS and REC expense leads by utilizing the due date of the payment and also by incorporating the alternative compliance payment date of July 1, 2010 for any RECs not yet acquired. This approach would have increased the DS and REC expense lead, so the overall net decrease in the expense lead is attributable to variances in actual payment history in the 2009 Study compared to the 2008 Study. For example, the DS average days lead in the 2009 Study is 28.10 days compared to 36.29 days in the 2008 Study. This decrease was not attributable to changes in payment terms, but rather largely due to prior period adjustments related to 2009 from a couple of the Company's suppliers.

Q. How do the results of the 2009 Study compare to the 2008 Study for Non-G1 customers?

A. For Non-G1 customers, the net lag in the 2009 Study of 9.40 days is 3.46 days lower than the net lag in the 2008 Study of 12.86 days. The decrease in net lag is

attributable to a 0.96 day decrease in revenue lag and a 2.50 day increase in the DS and REC expense lead.

For the reasons given in the prior Q&A, the "meter reading to recording of accounts receivable" was 1.15 days in the 2009 Study, which is 2.01 days less than the "meter reading to billing" in the 2008 Study. "Billing to collection" was approximately 0.87 days higher and all other revenue lag components were approximately 0.18 days higher in the 2009 Study compared to the 2008 Study. The net effect of all of the changes in the revenue lag components resulted in a 0.96 decrease in the 2009 revenue lag compared to 2008.

The DS and REC expense lead is 2.50 days higher in 2009 compared to 2008. Part of this increase is attributable to the inclusion of the due date in the DS and REC payments as discussed in the prior Q&A. The remainder of the increase is largely attributable to the overall increase in the REC commitment from 2008 to 2009. In 2008, RECs represented 1.20% of total DS and REC expenses compared to 2.05% in 2009. The increased weighting of RECs coupled with the higher REC lead days contributes to the overall higher expense lead days in 2009 compared to 2008.

VI. CONCLUSION

Q. Does this conclude your testimony?

A. Yes, it does.