STATE OF NEW HAMPSHIRE
BEFORE THE
PUBLIC UTILITIES COMMISSION

Docket No. DE 16-383

Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Utilities
Distribution Rate Case

DIRECT TESTIMONY

OF

JOSHUA C. NOWAK

April 29, 2016

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I. INTRODUCTION AND QUALIFICATIONS

Q. Please state your name and business address.

A. My name is Joshua C. Nowak. My business address is 1900 West Park Drive, Suite 250, Westborough, Massachusetts 01581.

Q. Please describe your current position.

A. I am a Principal at Sussex Economic Advisors, LLC ("Sussex").

Q. Please briefly describe your experience and qualifications.

A. As a consultant with Sussex, I have extensive experience in providing economic, financial, and strategic advisory services to clients in regulated utility industries. Prior to joining Sussex, I worked as an economist at RTI International and as a consultant in the energy industry at Concentric Energy Advisors. In my role as a consultant in the utility and energy industries, I have worked on engagements related to a number of regulatory issues, including cash working capital ("CWC ") requirements, benchmarking analyses, affiliate-cost studies, and cost of capital analyses. I hold a Bachelor's degree in Economics from Boston College. A summary of my professional and educational background, including a list of my testimony in prior proceedings, is included in Attachment JCN-1.

Q. Was this testimony prepared by you or under your direction?

A. Yes, it was.

Q. What is the purpose of your testimony?

A. I am submitting this testimony before the New Hampshire Public Utilities Commission ("Commission") on behalf of Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Utilities ("Granite State" or the "Company"), sponsoring the lead-lag study, which is used to determine the CWC requirement for the Company. My analyses and conclusions are supported by the data presented in Attachments JCN-2 and JCN-3.

II. PURPOSE AND OVERVIEW OF TESTIMONY

Q. Please define the term "cash working capital" as a rate base component.

A. The term "cash working capital" refers to the net funds required by the Company to pay for goods and services between the time of the cash outlay by the Company for such goods and services and the time revenues are recovered from customers. For the Company, the cost of goods and services includes operations and maintenance ("O&M") expenses, including labor expenses and non-labor expenses, federal taxes, local taxes, and payroll-related taxes.

Q. How did you derive the cash working capital requirement?

A. The CWC requirement was determined using the results of a lead-lag study, which compares the net difference between the revenue lag and the expense lag. The revenue lag represents the number of days between the time customers receive their service and the time customer payments are made available to the Company. The longer the revenue lag, the more cash the Company needs to fund its day-to-day operations. The expense lag represents the number of days between the time the Company receives goods and services

used to provide service, and the time payments are made for those goods and services, *i.e.*, when those funds are no longer available to the Company. The longer the expense lag, the less cash the Company needs to fund its day-to-day operations. Together, the revenue lag and expense lag are used to measure the net lead/lag to determine the CWC requirement, which becomes a component of the Company's rate base.

Q. Are the results of your lead-lag study an accurate calculation of the Company's CWC requirement?

A. Yes. The study provides an accurate assessment of the Company's actual CWC needs during the rate case test year.

III. LEAD-LAG STUDY APPROACH

Q. Please summarize the results and the approach of the lead-lag study you conducted for Granite State.

A. The lead-lag study is summarized in Attachment JCN-2 and shows a net lag of 27.50 days for the rate case test year January 1, 2015 through December 31, 2015. The CWC calculation is based on the result of the lead-lag study, which is then applied to the rate case test year amounts for O&M expenses and taxes. I relied on data supplied by the Company to prepare the lead-lag study, including financial and accounting data to determine revenue lags, a sample of invoices to determine expense lags, and various other supporting documents.

Q. Please describe the data you relied on to conduct your lead-lag study.

A. I relied on data provided by the Company related to customer billing, O&M expenses, and taxes. Specifically, I obtained data related to the timing and amount of payments made by, or to the Company. I reviewed the data and followed up with Company personnel, as needed, to prepare the data for inclusion in my lead-lag study.

Q. How did you develop the net lead/lag days in your study?

A. The revenue lag is measured from the time service is provided to customers until the time payment is received from customers. Expense lags are measured from the time a service is provided to the Company until payment is made by the Company for that service. These lags are measured in days, converted to dollar-days, and summarized for each element in the lead-lag study. The difference between the revenue lag and the expense lag determines if there is a net revenue lag (revenue lag days are greater than the expense lag days for a component) or a net expense lead (revenue lag days are less than the expense lag days for a component).

Q. Please describe the results of your lead-lag study.

A. Attachment JCN-2 provides the calculations and results of the lead-lag study. The Attachment shows the total number of revenue lag days and expense lag days for the Company during the CWC test year. The net difference between the computed revenue lag days and expense lag days was then multiplied by the average daily revenue requirements of the system to produce the net cash working capital required by the Company.

IV. REVENUE LAG

Q. Please describe the components of the revenue lag.

A. Revenue lag consists of three components: (1) the service lag; (2) the billing lag; and (3) the collection lag. The total number of days produced by the three components represents the amount of time between providing utility service to customers and the receipt of the related revenues for such service. Together, these revenue lag components comprise the total revenue lag days.

Q. What is the service lag?

A. The service lag represents the midpoint of the service period, *i.e.*, the time between the start of the billing month and the end of the billing month. My consistent approach is to rely on the midpoint of the service period, which assumes that service will be provided evenly over the service period. As such, I used the midpoint of the service period (*i.e.*, one-half of one month) in my analysis.

Q. What is the billing lag?

A. The billing lag is the time between the meter reading date and the date bills are sent to customers. The billing lag begins the day the meter reading process begins, and ends with the recording and mailing of the customer bill. This lag includes the process for review and validation of usage and billing.

Q. Have you measured the billing lag for Granite State for the CWC test year?

A. Yes, I measured the billing lag based on the meter reading and billing schedule provided by the Company. The Company has twenty meter reading cycles per month, and allows the meter-reading team three days to complete a route. While 90 percent of all meters are read on the first day of a meter-reading route, I used a conservative assumption of the mid-point of the three-day meter reading schedule to calculate the billing lag.

Q. What is the collection lag?

A. Collection lag reflects the time between recording and bill mailing for the services rendered and the receipt of payment from customers for the revenues billed. The collection lag was determined by the accounts receivable turnover ratio method. This is calculated by taking the average accounts receivable balance divided by the average daily revenues for the test year.

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

A. Each of these revenue lag components was totaled to arrive at the total revenue lag. These calculations are shown on Attachment JCN-3.

V. EXPENSE LAG

A. Operation and Maintenance Expenses

Q. How did you determine the expense lag days for O&M expenses?

A. I separated total system expenses into three groups: (1) regular payroll costs; (2) annual performance bonus payroll costs; and (3) third-party O&M expenses. I measured the expense lag days for each of these groups independently.

Q. How were the lag days for the payroll expenses determined?

A. I based the expense lag days for payroll on the Company's wage payment process, which pays employees on a bi-weekly basis or weekly basis. I calculated the expense lag days for payroll costs by determining the average days of service being paid and adding the midpoint of the service period to the number of days between the end of each service period and the date of payment to employees. This calculation produces the number of total days between the middle of the period for which employees' wages are recorded and the date on which payments are disbursed. These calculations were based on actual historical Company data for the CWC test year. Holidays are also based on actual historical data for the CWC test year.

Q. Did you make any adjustment to the payroll lag days in your lead-lag study?

A. Yes. I made an adjustment for vacation pay, which recognizes that vacation pay is earned before it is actually taken. The vacation pay adjustment is calculated based on the average payroll lag days and the midpoint of the days in the year.

Q. How were the lag days for the annual performance bonus determined?

A. The Company's annual performance bonus is paid annually in May for the preceding calendar year. The lag days were determined based on the midpoint of the performance period and the date bonuses were paid.

Q. How were the lag days determined for third-party O&M expenses?

A. I based the measure of expense lag days for the expenses in this group on a sampling of these expenses for the test year. The study estimates the midpoint of the service period independently for each invoice in the sample. I then identified the service period and the payment date for each of the sample items used to calculate the expense lag for third-party O&M expenses.

B. Current Federal Income Tax Expense

Q. What are the lag days determined for federal income taxes?

A. The lag days for federal income taxes were calculated using the calendar year as the service period because the income taxes would be earned throughout the year. The midpoint of the service period would be July 2. Payment of estimated tax for the year is made quarterly on April 15, June 15, September 15, and December 15. If the scheduled payment date falls on a Saturday, Sunday, or legal holiday, the payment is due on the next regular business day.

C. Taxes Other than Income Taxes

Q. What taxes are included in the taxes other than income taxes?

A. This group of taxes consists of (1) payroll-related taxes (FICA, federal unemployment, and state unemployment), and (2) ad valorem taxes.

Q. How were the lag days calculated for each of those taxes?

A. The payment lags for FICA taxes were calculated from the midpoints of the applicable work periods to the respective payment dates of the taxes. Federal unemployment taxes are paid after the end of each quarter based on that quarter's wages up to the annual limit. State unemployment taxes were calculated from the midpoints of the applicable work periods to the respective payment dates of the taxes. The payment lag for ad valorem taxes was calculated from the midpoint of the period for which the tax was assessed to the payment date.

D. Non-Cash Items

Q. Please explain why you excluded non-cash items from your lead-lag study.

A. This study uses the cash method and therefore excludes non-cash items. As such, non-cash items, including depreciation, amortization, deferred income taxes, and return (including return on equity, and interest on long-term debt), have not been included in my lead-lag study.

VI. CONCLUSION

Q. What were the results of the lead-lag study?

A. As shown in Attachment JCN-2, the CWC requirement for Granite State is based on a net lag of 27.50 days for the rate case test year January 1, 2015 through December 31, 2015.

Q. Are the results of this lead-lag study reasonable?

A. Yes, the results of the lead-lag study reflect the Company's practices, and are fair and reasonable. In addition, the methods used in the study are consistent with studies performed in other jurisdictions. The resulting CWC requirement should properly be included in the Company's rate base.

Q. Does this conclude your testimony?

A. Yes, it does.