REPORT ON CONSULTING SERVICES FOR
THE TOWN OF HINGHAM

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Submitted on: December 14, 2018
TABLE OF CONTENTS

TRANSMITTAL LETTER

APPENDICES
A. Our Report
B. Our Qualifications
December 14, 2018

Mr. Tom Mayo, Town Administrator  
Town of Hingham  
210 Central St.  
Hingham, MA 02043

Dear Tom:

We have prepared a report relative to our consulting engagement to validate certain assumptions for the Town of Hingham’s (the Town) Town Ownership Cost-Comparison Model (Model) to acquire the Town of Hingham’s water delivery system owned by Aquarion. This report presents our comments and recommendations based on the results of our procedures as presented in Appendix A. We have also provided information on BerryDunn and our consulting team in Appendix B.

**Nature of the Information**

The information presented in this report is based on discussions with, and information provided by, the Town, as well as information obtained in public documents. Our procedures do not constitute an audit, review, or compilation of the information provided.

**Procedures Performed**

Our procedures were focused on certain assumptions in the Model that you identified as being of concern to you. In performing our services, we performed inquiries and analyses based on public information available to us. We performed procedures on the Model’s following assumptions:

1. The starting Service Area A Operating Revenue amount per the DPU 17-90 Order
2. A three-year frequency for Aquarion rate increases
3. A 10% rate increase of triennial Aquarion rate increases
4. The Mains Replacement Adjustment Mechanism (MRAM) annual surcharge calculation in the DPU 17-90 Order
5. The MRAM capital increment factoring into the next rate case

Our procedures were limited to those which you determined best met your information needs and cannot be relied upon to disclose all significant matters about the Model or to disclose errors that may exist. Had we performed additional procedures, other matters might have come to our attention that would have been reported to you. The procedures performed and our comments and recommendations are noted in Appendix A.
Use of the Report

Due to its special nature, our report may not be suitable for any purpose other than to assist in the evaluation of the above referenced assumptions in the Town’s Model as labeled 121018_Acquisition-Maintenance_Full Function-Compliance Filing Update.xlsx. Our report is intended solely for use of the information contained within as it relates to the procedures we performed on this version of the Model.

Sincerely,

BERRY DUNN McNEIL & PARKER, LLC

By: ________________________
   Julie A. Keim, CPA
   Principal
Appendix A

OUR REPORT
Procedures Performed, and Comments and Recommendations

BerryDunn performed procedures on the following assumptions:

1. **The starting Service Area A Operating Revenues for Aquarion Water Company of Massachusetts, Inc. (Aquarion) of $13,047,168 agrees to the Revised Supporting Schedules, Exhibit 4, Schedule 3 issued November 29, 2018 and filed in compliance with the decision of Massachusetts Department of Public Utilities (DPU) Order 17-90.**

   The amount of $13,047,168 used in the Town’s Model is the appropriate starting point for the base revenue requirement used in determining a cost comparison between the Town and Aquarion.

2. **The Town’s Model assumes that Aquarion will file for a rate increase every three years.**

   The assumption of three years agrees to testimony made by Aquarion during proceedings in **DPU Docket 11-43**, which stated that, as a matter of policy, new rates would be filed every three years. Aquarion-Connecticut (CT) has filed three successive rate cases at three-year intervals.

   In contrast, in the DPU Order 17-90, Aquarion-Massachusetts (MA) was granted recovery of the current rate case costs over a five-year period, which may be presumed as when Aquarion will file its next rate case.

   Although in the DPU Order 17-90 it may be presumed that Aquarion may not file the next rate case for five years, the frequency of a rate filing every three years as assumed by the Town is a reasonable assumption. However, if Aquarion did not file a rate case for five years, the rate increase would likely approximate 16.67% (based on a 3.3% average increase per year between rate cases, as noted below), as compared to the Town’s assumption of 10% every three years.

3. **The Town’s Model assumes Aquarion will file for a 10% increase in rates for each triennial rate case.**

   The Town’s Model assumption of a 10% rate increase every three years has been criticized by Aquarion as over-simplified.

   Since 2008, Aquarion’s MA, CT, and New Hampshire (NH) operations have filed for average annual rate increases of 4.18%, 3.74%, and 5.25%, respectively. If these annual rate increases were used as a basis for a triennial rate increase per the Town’s assumption, this would equate to three-year increases of approximately 13%, 11%, and 16% for MA, CT, and NH, respectively. These historical rate increases are higher than the Town’s assumption of 10% every three years and appear to be conservative.

   The uncertainty of any rate change assumption is an argument whereby a ceiling and floor would need to be determined using multiple models. Based on explanations provided by the Town, the Town has conducted this exercise with various revisions to the assumed rate changes. The evidence from Aquarion’s previously filed rate cases would appear to support a slightly higher increase. Absent any significant changes in costs, the Town’s assumption of a 10% increase per triennial rate case appears conservative and a reasonable assumption.
4. The application of Aquarion’s Mains Replacement Adjustment Mechanism (MRAM) calculation used in the Town’s Model adheres to the structure as outlined in the DPU Order 17-90.

Per the DPU Order 17-90, the MRAM period is set at five years with any over or under recovery to flow into Aquarion's next rate case.

The Town’s Model uses amounts from the MRAM calculation submitted as Exhibit AG-13-14 Attachment A, dated March 18, 2018, which, with the exception of the amortization of excess deferred income tax component, was approved by the DPU Order 17-90 with an effective implementation date of September 1, 2019. The MRAM surcharge has an annual cap of 2% of prior-year base revenues with a total cap of 10% over a five-year period.

The prior-year base revenue of $13,047,168 is derived from Aquarion’s most recent rate case proceeding, less amounts related to miscellaneous charges of $78,456, surcharges related to the Hingham Water Treatment Plant of $4,219,538, and purchased water surcharge revenues of $126,809 from the DPU Order 17-90 Revised Compliance Filing on 11-29-18. This results in a base revenue of $8,622,365 to apply the MRAM cap.

The Town’s Model assumes a recovery of $1,360,431 for an uncapped MRAM surcharge. This amount was derived using the approved incremental revenue requirement related to eligible MRAM additions. As noted above, per the DPU Order 17-90, the MRAM surcharge is capped at 2% per year for a total cap of 10% over 5 years. The Town’s Model estimates a five-year cumulatively capped MRAM surcharge of $867,237 (10% of the base revenue of $8,622,365). This results in an unrecovered MRAM surcharge of $498,194 at the end of Year 5, which the Town’s Model assumes will be recovered through ongoing MRAM surcharges in Years 6 through 8 until the full $1,360,431 is recovered.

The Town’s Model includes the additional rate base from the MRAM-eligible additions at the next rate case.

We have identified the following findings and recommendations with the Town’s Model:

- **Finding**
  
  The Town’s Model includes the correct calculation of the annual MRAM surcharge based on Aquarion’s most recent filings for the five years subsequent to this rate case. However, we note that 2019 assumes a full year of MRAM surcharges even though the MRAM surcharge is not effective until September 1, 2019.

  **Recommendation**
  
  The Town should include four months of MRAM surcharges in 2019, twelve months in years 2020 through 2023, and eight months in 2024.

- **Finding**
  
  The DPU Order 17-90 states the MRAM eligible additions will be transferred to rate base and the MRAM surcharge will reset to zero at the end of five years. Any future MRAM surcharges would be evaluated based on needs demonstrated in the next rate case. The Town’s Model continues to recover the MRAM surcharge using the 2% cap subsequent to the next rate case and includes the additional rate base on MRAM eligible additions in the next rate case revenue requirement. We believe this is not consistent with the DPU Order 17-90 and could cause duplicate recovery.

  **Recommendation**
  
  The Town could remove the MRAM surcharges subsequent to the next rate case to avoid inadvertently calculating duplicate recovery of revenue requirement.
Appendix A

• **Finding**
  The 10% increase in revenue requirement in the next rate case should be based on the approved revenue requirement in the last rate case, and should not include the calculation of the MRAM surcharge in the base revenue.

**Recommendation**
The Town should calculate the next rate case revenue requirement increase of 10% based on the last rate case’s approved revenue requirement of $13,047,168.

• **Finding**
The Town’s Model appropriately includes the additional rate base from the MRAM-eligible assets in the next rate case; however, in the revenue requirement calculated on the MRAM, eligible assets would decrease between rate cases due to accumulated depreciation reducing the rate base on these additions.

**Recommendation**
The Town should reduce the calculated revenue requirement on the MRAM-eligible assets at each subsequent rate case based on the decrease in rate base on these additions. This could be presented as a reduction of revenue requirement by applying a rate of return to the increase in accumulated depreciation, which decreases rate base by using a depreciation rate of 2.25% (the average life used in the 2021 depreciation calculation in Aquarion’s *Exhibit AG-13-14, Attachment A* filing). The accumulated depreciation would increase approximately $234,000 each year (calculated as $10,392,980 in MRAM-eligible additions x 2.25% depreciation factor) and the revenue requirement would decrease approximately $20,000 per year (calculated as $234,000 x 8.05% rate of return).

5. **How will the MRAM capital increments factor into future rate cases?**

The Town’s Model assumes that the MRAM-eligible additions placed in service since the last rate case will be included in the rate base in the next rate case. The additional net rate base will include the cost of the MRAM-eligible additions, offset by the related accumulated depreciation and deferred income taxes. The MRAM-eligible additions are assumed to be in excess of the routine plant additions Aquarion incurs and, therefore, the Town has separately identified the impact of the MRAM-eligible additions by applying a rate of return factor of 8.05% as stated in the DPU Order 17-90.

We agree with the methodology applied to the additional net rate based on the eligible additions as well as the routine plant additions between rate cases. It appears that any amounts not recovered in the current MRAM surcharge will be included in future rate cases.

Future applicability for the MRAM mechanism per *DPU. Order 17-90, Page 81* states, “The Department will closely evaluate future such studies in determining whether the Company has demonstrated a continuing need for the Mechanism.” Based on this statement, it is left open to Aquarion in the next rate case to demonstrate whether a continued need for the MRAM is necessary.

The future applicability of the MRAM surcharge is somewhat subjective. Based on the statements made by the DPU and Aquarion, it would not be unreasonable to assume an MRAM surcharge will be used in future rate cases for any capital improvements that are above and beyond routine capital expenditures.
Appendix B

OUR QUALIFICATIONS
BERRYDUNN OVERVIEW

Full-Service Assurance, Tax, and Consulting Firm

- Founded in 1974
- John M. Chandler, CPA, Managing Principal & CEO
- 40 Principals
- 375 Employees

THE BERRYDUNN OFFICES
Portland, ME
Bangor, ME
Manchester, NH
Glastonbury, CT
Charleston, WV
Phoenix, AZ

Services Comply with Limitations and Regulations of the AICPA and Public Company Accounting Oversight Board (PCAOB)

TOP 100
“Top 100” ranking from INSIDE Public Accounting and Accounting Today since 2011

TOP 10
Voted one of “Ten Best Accounting Firms for Women” by American Society of Women Accountants and American Woman’s Society of Certified Public Accountants

HLB Independent Member of HLB International
OUR QUALIFICATIONS

BerryDunn is the largest certified public accounting and management consulting firm headquartered in Northern New England. We bring flexibility, expertise, and experience to the traditional technical services expected of a CPA firm—providing the high-quality, proactive, value-added services required to support the complexities of our clients’ financial needs, at fees they can afford.

OUR UTILITY INDUSTRY EXPERTISE

Today’s utilities face a range of challenges that are likely to be both costly and complex, including:

- Rate-setting and rate regulation
- Impacts of assumptions in financial forecasts and projections
- Greater focus on risk management to increase risk transparency with customers/owners
- Heightened consumer price sensitivity
- Addressing union-related concerns, including negotiations and strike costs
- Complex and ever-changing state and federal policies and regulations

The Town of Hingham (the Town) will benefit from the resources of BerryDunn’s dedicated Telecom & Energy Group, which serves water, electric, and nuclear companies, incumbent and competitive local exchange carriers, and other rate-driven entities. Our team brings deep industry expertise to help clients navigate the complex financial and regulatory issues unique to the rate-regulated industry—giving you access to experts in audit, tax, and consulting who specialize in and understand the business challenges facing utilities.

Our Telecom & Energy specialists have represented several utility clients with expert testimony on revenue requirements in Maine and New Hampshire. We have also consulted with clients on the concerns unique to the rate-regulated industry, including regulated rate filings for financing purposes, rate case filings, and public utility commission inquiries. In addition to our rate-regulated expertise, we have also facilitated acquisitions for clients as well as provided financial forecasting and modeling for these same companies.

From water utilities and treatment facilities to public utilities commissions, we have served numerous water, electric, energy, and telecommunications companies, including, but not limited to:

<table>
<thead>
<tr>
<th>BIDDEFORD AND SACO WATER COMPANY</th>
<th>C. N. BROWN ELECTRICITY</th>
<th>CONNECTICUT ATOMIC POWER COMPANY</th>
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<td>SACRAMENTO MUNICIPAL UTILITY</td>
<td>EASTERN MAINE ELECTRIC COOPERATIVE</td>
<td>PENOBSCOT ENERGY RECOVERY COMPANY</td>
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<td>HOULTON WATER COMPANY</td>
<td>LINCOLNVILLE TELEPHONE COMPANY</td>
<td>MAINE OFFICE OF THE PUBLIC ADVOCATE</td>
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<td>MAINE PUBLIC UTILITIES COMMISSION</td>
<td>MAINE YANKEE ATOMIC POWER COMPANY</td>
<td>OTELCO</td>
</tr>
<tr>
<td>UNITEL INC.</td>
<td>VERMONT TELEPHONE COMPANY</td>
<td>YANKEE ATOMIC ELECTRIC COMPANY</td>
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A Principal who knows the ins and outs of highly regulated environments, Julie has become a preferred choice with BerryDunn’s utilities clients for her expertise in state and federal regulations within the energy and telecommunications industries.

As leader of the firm’s Telecom & Energy Group, Julie provides audit and accounting, consulting, and regulatory services to diverse clients in the utilities industry, as well as other organizations with complex financial issues and regulatory concerns. Her experience includes managing the firm’s telecommunications cost studies and related regulatory services process, including revenue requirement and settlements consulting. Julie joined BerryDunn in 1995.

EXPERIENCE HIGHLIGHTS

Julie helps clients with a variety of issues, including:

- Audit and attest services
- Financial statement preparation and analysis
- Financial forecasts and projections
- Analysis and consulting on FASB ASC 980, Regulated Operations
- Revenue requirement consulting for public utilities
- Revenue recognition, including implementation of FASB ASC 606, Revenue from Contracts with Customers
- Business process improvement and internal control reviews

PUBLICATIONS AND PRESENTATIONS

- Adapting Accounting Practices for Industry Changes, presented to Telephone Association of New England (TANE)
- Edge-Out Business Case, presented to TANE
- Internal and External Fraud Scenarios and How You Can Help, presented to TANE
- Telecom Plant Accounting, presented to TANE
- Hot Topics in the Accounting World, presented to Telergee Alliance
JOHN A. ROBERTSON
Senior Business Consultant

A Senior Auditor in the firm’s Telecom & Energy Group, John brings over 20 years of experience in the regulated utility and telecom industries. He has spent the past 18 years providing audit and consulting services primarily to regulated and non-regulated entities, including electric, telecommunications, and water/treatment utilities. John has performed hundreds of financial statement audits, internal control evaluations, and business risk assessments.

John joined BerryDunn in 2000 after several years at a local telephone company, where he most recently served as the accounting manager. His expertise includes financial statement preparation and analysis, financial forecasts and projections, and internal control analyses.

EXPERIENCE HIGHLIGHTS
John helps clients with a variety of issues, including:

- Internal control assessments
- Audit and attest services
- Financial statement preparation and analysis
- Financial statement audits in accordance with FASB ASC 980, Regulated Operations
- Financial forecasts and projections
- Rate regulation

PUBLICATIONS AND PRESENTATIONS
- Speaker at Northeast Public Power Association
- Speaker at Northeast Association of Cooperative Accountants
- Speaker at Telephone Association of New England

OFFICE LOCATION
• Portland, ME

AREAS OF EXPERTISE
• Audit and Accounting

EDUCATION
• BS, Accounting, University of Maine

MEMBERSHIPS
• American Institute of Certified Public Accountants
• Northeast Public Power Association
• Telephone Association of Maine
• Telephone Association of New England