

STATE OF NEW HAMPSHIRE
BEFORE THE
NEW HAMPSHIRE PUBLIC UTILITIES COMMISSION

CITY OF NASHUA'S PETITION FOR VALUATION PURSUANT TO RSA 38:9

Docket No. DW04-048

**DIRECT TESTIMONY OF STEPHEN R. GATES, P.E.,
PAUL DORAN, P.E., AND JACK HENDERSON, P.E.**

- Q. Please state your name and professional employment.
- A. My name is Stephen R. Gates, P.E., DEE and I am a Senior Vice President and Client Services Director for the firm R.W. Beck, Inc. (R.W. Beck), at its office located at 550 Chochituate Road, P.O. Box 9344 in Framingham, Massachusetts.
- A. My name is Paul Doran, P.E. and I am a Senior Water Consultant for the firm R.W. Beck at its office located at 550 Chochituate Road, P.O. Box 9344 in Framingham, Massachusetts.
- A. My name is Jack M. Henderson, P.E. I am a Senior Project Manager for the firm Tetra Tech, Inc. (Tetra Tech), at its office located at 1 Grant Street in Framingham, Massachusetts.
- Q. What is purpose of your testimony?
- A. To explain our role as oversight contractors for the City of Nashua's water system. R.W. Beck will serve as the primary contractor for the City of Nashua overseeing on a full time basis the operation of its water system by Veolia Water North America – Northeast LLC (VWNA). R.W. Beck will support the City of Nashua by providing professional contract oversight services, independent engineering (as opposed to consultant engineering services), capital improvement plan management, rate studies and financial analysis, and other services to ensure the successful operation and management of Nashua's water system under its contract with VWNA.

As needed, R.W. Beck will also draw upon the experience and services of qualified professionals from other firms such as Jack Henderson from Tetra Tech in specialized areas such as security planning and vulnerability analysis, water system analysis and planning, watershed and water resource management and protection and other areas.

- Q. What are your professional qualifications and experience related to this proceeding?
- A. [Stephen R. Gates, P.E., DEE]. I have over 29 years in environmental engineering, program management and management consulting. I have planned, designed and managed construction of environmental facilities valued well over two billion dollars. I also have considerable expertise in alternative project delivery methods including design-build contracting and program management. In my professional career, I have managed major programs for the Massachusetts Water Resources Authority, the New York City Department of Environmental Protection, the Hartford Metropolitan District Commission, the Providence Water Supply Board, and for many other communities including Trenton and Newark, New Jersey, Cambridge, Massachusetts and Ottawa, Ontario. Additional qualifications and experience are set forth in my resume, included in Exhibit A to our testimony.
- A. [Paul B. Doran, P.E.]. I have over 30 years of consulting experience in sanitary, environmental and general civil engineering. I have managed numerous major projects involving the oversight of construction, operation and maintenance for municipal water supply treatment, storage and distribution systems as well as wastewater collection, treatment and discharge systems. Additional qualifications and experience are set forth in my resume, included in Exhibit A to our testimony.
- A. [Jack M. Henderson, P.E.]. I have over 20 years experience in water system engineering, planning, modeling and design experience. I am a founding member and current Vice Chairman of the New England Water Works Association (NEWWA) Filtration Committee, past Chairman of the Boston Society of Civil Engineers Engineering Management Committee and a member of the NEWWA's Ad Hoc Committee on Stage 2 Disinfection By-Products/Long Term 2 Enhanced Surface Water Treatment Rule. I have considerable experience and expertise in a wide range of issues related to water treatment and water systems, including hydraulics of water systems and water treatment plant process design for which I received two American Consulting Engineers Council awards. Additional qualifications and experience are set forth in my resume, included in Exhibit A to our testimony.
- Q. What professional qualifications, experience and resources will RW Beck and Tetra Tech bring to the oversight of Nashua's water system?
- A. Since 1942, R. W. Beck has specialized in engineering-based management consulting services associated with municipal utility creation and operations. Contract development, negotiations and oversight of water utility operations are our signature strengths. We are broadly recognized in the water industry for our expertise advising owners of water systems on procurement, contract development, negotiations and contractor oversight, and for a wide variety of services related to operations, maintenance and management.

R. W. Beck is renowned as an Independent Engineering advocate for municipalities and recognized nationwide for saving utilities money through innovative funding, contracting, operating, and business process strategies. By company mission, we are committed to providing objective, independent engineering reviews and we do not regularly perform contract operations or complete design/build projects for clients. This standing is unique, and others cannot make such definitive 'no conflicts' declarations.

Our approach provides the highest value because we expertly leverage the power of the free market to find the best, most valuable ideas and services for our clients through effective procurement, contracting and oversight.

For purposes of this project, R. W. Beck has associated with Tetra Tech, one of the largest engineering companies in the United States to gain its considerable water systems engineering, watershed management and utility planning experience. Together, R.W. Beck and Tetra Tech will ensure that the operation of Nashua's water system meets the highest industry standards and provide Nashua with access to state-of-the-art technical and managerial expertise. By making these resources available to Nashua as needed, it is anticipated that Nashua will avoid fixed costs associated with developing those resources in its own water utility or relying on an investor-owned utility.

Appendix B to our testimony sets forth R.W. Beck's and Tetra Tech's experience successfully managing a number of projects in the water and wastewater industries. These projects illustrate both the depth of experience and benefits that R.W. Beck and Tetra Tech will bring to the oversight of Nashua water system.

Q. What role will each of you perform in the oversight of Nashua's water system?

A. [Stephen R. Gates, P.E., DEE]. I will be the Principal-in-Charge for R.W. Beck. As the Principal-in-Charge, my responsibilities will include ensuring that appropriate resources needed for oversight of Nashua's water system are made available in a timely fashion. I will also be responsible for assuring that a high level of quality on all work products provided to Nashua and its customers.

A. [Paul B. Doran, P.E.]. I will be the full-time Project Manager for R. W. Beck and will serve as Nashua's designated representative providing the day-to-day contact with VWNA on behalf of the City. As the Project Manager, I will be primarily responsible for performance of the work associated the oversight of Nashua's water system as set forth in the Professional Services Agreement and to ensure that VWNA operates Nashua's water system in compliance with the OM&M Agreement, applicable laws and regulations, prudent industry practice, any condition imposed on Nashua's acquisition by the Commission, and other requirements.

My responsibilities will include the review of operational and other reports prepared by the OM&M contractor and reporting to the Mayor and Board of Aldermen with timely information related to Nashua's water system. I will be responsible for the performance of a number of oversight tasks set forth in the Scope of Services to the Professional Services Agreement, including reviewing water quality, watershed management, hydrant testing and flushing, valve testing, backflow testing, meter testing and leak detection. I will review the maintenance and capital improvement plans for the water system and make sure they are properly implemented.

My priorities will include rate management, customer service, restoration of the utility assets, timely completion of capital projects to upgrade the performance and reliability of Nashua's water system, protection of the source water and watersheds of the region, and compliance with New Hampshire Department of Environmental Services and the United States Environmental Protection Agency regulations.

[Jack M. Henderson, P.E.]. I will support the Project Manager in performance of planning and engineering functions including facilities condition assessment, hydraulic modeling, security planning, plant performance, construction coordination and capital improvement plan review.

Q. How will R.W. Beck and Tetra Tech oversee the operation of Nashua's water system?

A. The details concerning R.W. Beck the oversight services to be provided by R.W. Beck in cooperation with Tetra Tech are set forth in the Professional Services Agreement dated October 12, 2005 which is attached to our testimony as Exhibit B. The Professional Services Agreement includes a Scope of Services that describes in detail the oversight services to be provided to ensure the successful operation of Nashua's water system. These oversight services are broken down into the following areas:

- Public Utility Commission Proceedings Support;
- Bonding Requirements Support;
- Water Ordinance Oversight;
- Regulatory Compliance Oversight;
- General Oversight of the O&M Contractor Service Agreement;
- Initial and Recurring O&M Contractor Oversight; and
- Supplemental Services.

Q. What services are included in Public Utility Commission Proceedings Support?

A. Public Utility Commission Proceedings Support includes supporting Nashua during its contract negotiations with VVNA. R.W. Beck provided extensive technical advice and assistance to the City of Nashua in negotiating the Operation,

Maintenance and Management Agreement (OM&M Agreement) between Nashua and VWNA. As a result of these negotiations, the OM&M Agreement will provide Nashua with state of the art operation, maintenance and management of its water system from one of the world leaders in the industry.

PUC Proceedings Support also includes our role as witnesses during the regulatory review process in these proceedings (PUC Task 2).

Q. What services are included in the Basic, Initial and Recurring Oversight of the O&M Contractor Service Agreement?

A. The Basic Oversight Services include the general administrative functions that R.W. Beck will provide to ensure that VWNA operates Nashua's water system in compliance with the OM&M Agreement, applicable laws, regulations and permits, and in accordance with prudent industry practice.

The Initial Oversight Services include a number of initial tasks designed to ensure that Nashua's operation of its water system transitions smoothly upon issuance of a notice to proceed by Nashua. These tasks include: evaluation of the maintenance plan for Nashua's water system (Initial Task 1), its existing inventory (Initial Task 2) and staffing (Initial Task 3) levels, the condition of the assets acquired by Nashua (Initial Task 4), its hydraulic models (Initial Task 5), its long-range capital improvement (Initial Task 6) and security (Initial Task 7) planning.

The Recurring Oversight Services consist of oversight services at different intervals as a result of the need to oversee on-going operations, maintenance or management services provided by the OM&M contractor. As set forth in detail in the Scope of Services, R.W. Beck will:

- Represent and provide technical assistance to Nashua in discussions with the OM&M contractor regarding its services (Recurring Task 1).
- Audit performance of planned maintenance activities by the OM&M contractor (Recurring Task 2) including preventive maintenance, predictive maintenance testing, and corrective maintenance and for appropriateness in preventing, minimizing and delaying asset failures, and shutdowns resulting in unplanned maintenance.
- Review O&M Contractor Unplanned Maintenance Requests (Recurring Task 3) to check that they are reasonable and appropriate.
- Review and Evaluate Operational Data (Recurring Task 4) to assess its completeness and accuracy, and to ensure that the water system meets regulatory requirements, design limits and to make sure that water system is operating as required.

- Review and Evaluate Test Results for External Reports (Recurring Task 5). Review reports prepared for submittal to regulatory agencies, Nashua and the public. Review of the sampling and monitoring programs relative to the treatment facilities and water quality within the distribution system and storage facilities. Monitor the data collection process for compliance with the O&M contract for collecting all of the required data and using the proper sampling and analytical procedures.
- Review and Test Security Plan (Recurring Task 6). Conduct continuing reviews of the Security Plans for the water system. When necessary, recommend modifications to the Security Plan or improvements to the facilities to enhance and strengthen security and to provide appropriate responses to each incident.
- Coordinate Construction (Recurring Task 7). Construction coordination will be provided on an “as-needed” basis, including but not limited to the preparation of a Construction Administration Plan (CAP), monitoring construction work for compliance with contract documents, and other tasks. R.W. Beck will work with the OM&M contractor to coordinate the construction work to minimize interference with the operation of the water system. Construction oversight and coordination tasks will be performed in accordance with industry standards as defined by the National Society of Professional Engineers.
- Long-Range Planning (Recurring Task 8). R.W. Beck will provide ongoing, annual updates to Nashua’s Long-Range Plan for the water system including a highly collaborative process with key stakeholders to assure that the Long-Range Plan remains current with the highest priorities for the water system.
- Review Capital Improvement Plans (Recurring Task 9). R.W. Beck will review the CIP to confirm critical elements such as: affordability, consistency with the selected rate structure, deferred and ongoing asset renewal and replacement, and the future needs of the water system are addressed.

Q. What other oversight services will R.W. Beck and Tetra Tech provide?

A. A complete description of the oversight services provided by R.W. Beck and Tetra Tech is included in the Scope of Services attached to the Professional Services Agreement.

Q. How will consumers benefit from Nashua’s use of a public-private partnership to oversee and operate its water system?

- A. Nashua selection of third-party contractors for oversight and operation of its water system will allow Nashua to utilize competitive forces to obtain the highest quality of service, experience and resources at the best price. R.W. Beck has strong rate design capabilities that will be important to Nashua's ability to operate the system cost effectively and save the city money through innovative funding, contracting and business process strategies. With Tetra Tech, Beck provides the ability to integrate state of the art watershed planning, engineering and security into the operating and management of its water system. Together, R.W. Beck and Tetra Tech will help Nashua to achieve stable rates while maintaining a high level of service and long range planning and coordination to benefit the public interest.

This approach has significant advantages over alternatives such as the creation of its own water department, or the reliance on a third-party investor-owned utility that have incentives to maximize consumption and return on investment instead of providing the highest level of service for the best price. The current investor owned utility (IOU) model is burdened with always trying to balance the tension that exists between supplying water and serving the interests of investors, which at times are in direct conflict.