

GENERAL RATE FILING

DIRECT TESTIMONY

OF Stanley J. Knox

June 2011

**Submitted to:
State of Rhode Island and Providence
Plantations Public Utilities Commission**

RIPUC Docket No.

Submitted by:

United Water Rhode Island Inc.

UNITED WATER RHODE ISLAND
STANLEY KNOX

1 **Q. Please state your name and business address.**

2 A. My name is Stanley J. Knox and my business address is P.O. Box 429, 17
3 Arnold St. Wakefield, RI.

4

5 **Q. By whom are you employed and in what capacity?**

6 A. I am employed by United Water Rhode Island (UWRI or the "Company") as its
7 General Manager.

8

9 **Q. Please describe your duties as General Manager.**

10 A. My overall responsibility is to oversee the day-to-day operations of our water
11 system. This includes supervising the daily operations and maintenance of the
12 system, and planning for future improvements and additions to the system that
13 are necessary to provide adequate and reliable value for money service to our
14 customers. UWRI has a small locally based staff, I am supported managerially
15 and technically by Divisional staff and Management and Services staff.
16 Specifically, I work with the financial and engineering staff of United Water
17 Management and Services Company in the planning of capital improvements. It's
18 also my responsibility to keep the expenditures for such projects within budget
19 and monitor expenses to remain within the annual operating budget that I
20 prepare. As part of this responsibility, I control the Company's purchases,
21 inventory and accounts receivable and payable. My duties include
22 communicating with customers and assisting them with their overall water service
23 needs. Also, as a General Manager I am involved in coordinating with the
24 regulatory agencies that oversee water company operations and the

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1 responsibility for the filings made with those agencies. These agencies include
2 the Rhode Island Department of Health (RIDOH), Department of Environmental
3 Management (DEM), Rhode Island Water Resources, Federal Environmental
4 Protection agency (EPA), Occupational Safety and Health Administration (OSHA)
5 and Rhode Island Public Utilities Commission.

6

7 **Q. Briefly describe your business experience with the Company.**

8 A. I have held my current position since August 1979. Before transferring to
9 Wakefield, I held the position of District Accountant of the Maine District for the
10 former General Waterworks Corporation. The Maine District included nineteen
11 (19) small to mid-size companies scattered throughout the State. It was my duty
12 to coordinate and oversee all of the financial functions for those nineteen
13 properties. I acted as coordinator of the operating and capital planning activities,
14 employee training in financial and reporting matters, all accounting reconciliations
15 and audit requirements.

16

17 **Q. What is the purpose of your direct testimony?**

18 A. I will address the need and drivers for this rate proceeding, provide a history and
19 description of the Company, discuss cost control measures, current Company
20 initiatives/infrastructure improvements, and affiliated relationships.

21

22 **Q. Please briefly describe the history of UWRI.**

23 A. UWRI, formerly The Wakefield Water Company, was incorporated in 1887 by
24 four local investors. The original purpose of the utility was to furnish a supply of

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1 high quality water to the Town of South Kingstown and “vicinity”. The “vicinity”
2 became the Town of Narragansett in the year 1901. In 1956, General
3 Waterworks purchased The Wakefield Water Company and steadily improved
4 the system to accommodate growth and regulatory requirements. In April 1994,
5 United Water Resources Inc. merged with GWC Corporation, the parent of
6 General Waterworks. In March, 1995 the Wakefield Water Company was
7 renamed United Water Rhode Island (UWRI). UWRI employs ten (10) full time
8 employees who serve our ‘customers’ needs.

9
10 **Q. Briefly describe the Company’s service area and facilities.**

11 **A.** As of December 31, 2010, the end of the test year established in this proceeding,
12 the Company was serving 7,338 metered residential customers, 715 commercial
13 customers, 10 industrial customers, 97 municipal customers, three wholesale
14 and 183 private fire customers, all in the towns of South Kingstown and
15 Narragansett. The Company also provides public and private fire protection in
16 both of these communities. Water service to these customers is provided by
17 seven (7) wells located in two (2) well fields. The Tuckertown Well Field has four
18 (4) gravel packed wells. These wells are located in gravel and coarse sand, inter-
19 bedded with less permeable, finer grained outwash. These wells range from 48-
20 70 feet in depth, and are located in the Mink Brook Aquifer. The Howland Well
21 Field contains the remaining three (3) wells. These wells are also located in the
22 Mink Brook Aquifer, but are set primarily in fine sand, with small amounts of
23 coarse sand and gravel, and are in a depth range of 85’ and 100’. Currently

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1 production capacity of both well fields yields approximately 7.3 million gallons per
2 day to the system.

3

4 **Q. Does the Company have additional property or the ability to develop**
5 **additional supply if needed?**

6 A. Yes, in the early 1970's the Company performed a survey to see if there was any
7 area or location within the existing system, or nearby, that could provide the
8 quality and quantity of water that was needed for the future. The study found two
9 such areas. One was a site off Tuckertown Road, which the Company purchased
10 and developed with three wells currently called the Howland Well Field. The
11 other location was on Plains Road in Kingston, along the Chipuxet River, about
12 four miles north of the existing well fields. After performing the usual testing at
13 this location, the Company determined that this property could provide the
14 additional high quality supply needed for the future. This property, the May Farm
15 Property, is located adjacent to the University of Rhode Island well supply.

16

17 **Q. Does the Company treat the water, and if so, what type of treatment?**

18 A. Yes, the Company treats its water. Sodium hypochlorite (chlorine) is used for
19 disinfection, aeration is used for releasing much of the carbon dioxide from the
20 water, hydrated lime is used for ph adjustment and zinc orthophosphate is used
21 as a corrosion inhibitor.

22

23 **Q. Were any of the treatment techniques modified since the last rate case?**

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1 A. Yes. Sodium hypochlorite replaced chlorine gas as the disinfectant. This change
2 resulted in a safer work environment for company employees as well as our
3 customers.

4
5 **Q. Are you currently in compliance with the state and federal water quality
6 regulations?**

7 A. Yes. There are no violation issues with State or Federal water quality regulations.

8

9 **Q. Are there any other State or Federal regulations other than water quality
10 that have been mandated since the last rate case?**

11 A. Yes, there have been. Some of these regulations have placed substantial
12 demands on Company resources. In 2004, the Federal Homeland Security Act
13 was enacted resulting in the Company's developing an Emergency Response
14 Plan along with a Vulnerability Assessment Plan. The Emergency Response
15 Plan deals with Company action, should any type of an emergency take place.
16 The Company trains in this plan on a regular basis and is part of the monthly
17 safety training. At least two tabletop exercises are held each year. These
18 exercises deal with issues such as Company action should a major hurricane hit
19 our service area resulting in loss of power, certain roads being rendered
20 impassable, etc., and how the Company will still maintain quality, dependable
21 water to its customers. The Vulnerability Assessment plan was created after a
22 thorough review of all Company facilities and operations with the concern being
23 on Company security. As a result of this assessment, several changes took

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1 place. The Company has a contract with the security company, ADT, to provide
2 back up if needed. All Company facilities have entry alarms on doors and
3 windows. The Company installed a keyless system on all facility doors. Tank
4 hatches on all of the storage tanks were changed to more secure units. New
5 emergency lighting was installed in certain critical areas such as around the
6 storage tanks and around well field buildings.

7
8 **Q. Were there any other regulations mandated?**

9 **A. Yes. In 2010, the RIDOH enacted new Cross Connection and Backflow**
10 **requirements for all regulated water utilities. The Company already had a**
11 **program, but it did not totally meet the RIDOH guidelines in the area of retrofits.**
12 **The Company had been requiring devices on new units, however, the new**
13 **RIDOH guidelines requires they be installed on all non-residential dwellings.**
14 **Also, the testing of these units must be completed on an annual basis at the**
15 **customer's expense. Even though the cost burden for the units and testing is on**
16 **the customer, the Company must maintain files on all units that show when they**
17 **were installed and when tested last and provide any type follow up when needed.**
18 **Another requirement, resulting from the Federal EPA's Groundwater Rule,**
19 **impacted the Company in 2010. The requirements are that anytime a**
20 **groundwater system gets a positive coliform sample, all wells which were in**
21 **operation at the time of the positive sample must be tested for coliform within 24**
22 **hours. The requirement also extends to wholesale customers. If a wholesale**
23 **customer gets a positive sample, they must notify the company as soon as they**

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1 can after receiving the result, and the Company again, has 24 hours from that
2 point to sample all wells that were then running. This requirement results in
3 additional lab fee expenses as well as placing an added burden on personnel.
4

5 **Q. What are the major drivers for this rate increase?**

6 A. There are two main drivers of this proposed rate increase. The first is the
7 increase in the Company's investment in Plant In-Service as noted in the
8 testimony of Mr. Michaelson. This increase was necessary for the Company to
9 continue to be in compliance with water quality requirements, provide quality
10 service to customers and improve reliability of service by replacing aging
11 infrastructure. The second main driver for the proposed increase is the added
12 costs of operation and maintenance expenses. UWRI has experienced significant
13 cost increases to its large expense categories of, labor, power and chemicals,
14 taxes and depreciation, despite the fact that UWRI has performed excellently to
15 manage these costs in a changing regulatory environment. Mr. Lippai provides
16 greater detail about this in his testimony.
17

18 **Q. What steps has the Company taken to ensure the cost effectiveness of its
19 operations?**

20 A. United Water Rhode Island, as part of a larger national company, has been able
21 to leverage its company size and volumes to negotiate better unit prices for
22 chemicals, energy, paving, contractors' charges and transportation costs.
23 Although prices have risen significantly, these increases would have been
24 greater if not for our ability to leverage our purchasing power. The resulting

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1 savings in both operating expenses and capital are passed on to our customers
2 through lower expense needs.

3

4 Energy - The Company has made considerable efforts to control energy costs.
5 The Company continues to install high efficiency motors wherever possible. In
6 addition, United Water has a very strong Hedging Management Team that
7 constantly watches the markets for pricing changes. As favorable pricing and
8 conditions arise, the Hedging Team will re-evaluate the Company's energy
9 options to look for pricing reductions. Locking in prices and blending/extending
10 will be used for the benefit of customers. It must be stressed that hedging is not
11 an exact science and can carry some risk if energy prices decline. However,
12 hedging has been used effectively to benefit our customers by managing energy
13 price risk.

14

15 Pension / Post-Retirement Benefits - In recognition of the trying economic times,
16 United has taken the proactive approach to reduce its overall benefits cost. In
17 May of 2009, the Company decided to eliminate its Post-Retirement Health care
18 plan for all new employees. Additionally, in January 2010, Pension eligibility was
19 discontinued for new employees. This will help keep future costs manageable
20 and results in a lower overall increase in the costs associated with employee
21 replacements in the future.

22

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1 Personnel - At the end of 2010, the Rhode Island operation employed 10 people,
2 with 8,346 customers at year end. This equates to a ratio of 832 customers per
3 Employee, and is far more favorable than other utilities its size. There are no
4 current plans for this employee count to change for 2011.

5
6 **Q. Could you please explain a little about the wholesale customers you serve?**

7 **A.** Yes. UWRI has provided water to the Municipality of Narragansett to supply their
8 system in Point Judith located in the most southerly part of town, and also the
9 most northerly section of the town. Both of these sections combined serve
10 approximately 4,100 customers. This customer has been served by UWRI since
11 it was developed in the early 1900's. The other wholesale customer is the Town
12 of South Kingstown, which own and operate the Middlebridge System, developed
13 in the late 1960's which is located along the Narrow River in the center of the
14 UWRI system. UWRI entered into an additional agreement with South Kingstown
15 to supply water to its South Shore System, which is located at the most southerly
16 section of town. This section of South Kingstown has only been supplied by
17 UWRI since 2005. A connection was made with South Kingstown to provide
18 higher quality water as they were suffering from lead and manganese issues.
19 Both of the South Kingstown supplies serve approximately 3,500 customers. As
20 a result of growth in these Towns and entering into additional wholesale
21 agreement, UWRI customers have benefitted from the additional revenue by off-
22 setting cost increases and the need to file for rates at an earlier point in time.

23

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1 **Q. Has the Company made any major additions to Plant In-Service since the**
2 **last case?**

3 **A. Yes, there are a number of examples. In 2004 UWRI undertook a major project**
4 **for the installation of 10,000 feet of 12" DI main from the Company's existing**
5 **system up Route 1 South. This was an emergency connection and as such, was**
6 **eligible for some of the RI Water Resources Emergency Connection Funding.**
7 **The project was completed with an overall cost of \$500,000 with RI Water**
8 **Resources Emergency Connection Funding contributing \$200,000 of that**
9 **amount. This contribution of \$200,000 is one of examples where the UWRI**
10 **management has been pro-active on behalf of our customers in making**
11 **infrastructure improvement while keeping customer rates down. The project was**
12 **placed in service in 2005.**

13
14 **Another major project was the Saugatucket Road Pump Station. This was**
15 **constructed to boost the pressure and increase the hydraulic gradient during**
16 **periods of high flow, the head loss between the Sherman tank on the southerly**
17 **end of the system and the Tower Hill tank on the northerly end of the system was**
18 **significantly greater than the difference in their overflow elevations (about 14').**
19 **This made it impossible to maintain a high water level in the Tower Hill tank,**
20 **even when the Sherman tank was full. This pump station provided an effective**
21 **separation between the two tanks, increased the ability to transmit water to the**
22 **Tower Hill tank, greater storage in the Sherman tank, increase the flow around**
23 **the north end of the distribution system.**

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1 **Q. Has the Company made any other major additions to Plant In-Service?**

2 **A. Yes. The System hydraulic Modeling that was designed and calibrated has been**

3 **utilized not only for capital planning, but also for operational simulations. This**

4 **hydraulic model was especially helpful for the future tank designs currently**

5 **planned in (2013 and 2014) and the associated main replacements. The Boston**

6 **Neck Road main replacement, which will be placed in service early 2012, is a**

7 **major project. Currently in the section of the Narragansett Town beaches along**

8 **Boston Neck Road, there are 4" and 8" diameter pipes running parallel to one**

9 **another. The flows in this area are restricted by the size of the pipes, reducing**

10 **the amount of water that can be delivered to the North end of Narragansett.**

11 **These two mains will be replaced with one 12" DI main that will increase flows**

12 **and capacity, and improve transmission not only this area, but the hydraulic**

13 **model also indicates the main replacement is crucial to the Tower Hill tank**

14 **replacement.. The design and bidding is taking place in 2011, with construction in**

15 **early 2012.**

16

17 **Another construction project currently on-going, is the project in Wakefield on**

18 **Northrup Street. This project involves the replacement of a small diameter 4" CI**

19 **main, installed in 1916, with a 6" DI main. A hydrant replacement and 13**

20 **replacement service lines will be part of the project. One of the primary reasons**

21 **for completing this project at this time, is the frequency of main breaks/splits. In**

22 **the past two years there have been three split breaks on this small section of**

23 **main. This caused severe road settlement and road repairs last spring, with**

24 **interruption to service while the repairs were being made. Also, this replacement**

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1 will increase fire flows as well as better quality and service to those customers
2 feed by this particular main.

3

4 **Q. Please describe any corporate initiative relating to information Technology**
5 **(IT) and its benefits to United Water Rhode Island.**

6 A. One off the most exciting is the Business Technology Master Plan (BTMP).

7

8 **Q. Please explain the Business Technology Master Plan (BTMP).**

9 A. The BTMP is essentially a roadmap or strategy undertaken by united Water for
10 the benefit of its subsidiaries, to update and improve its core business systems
11 such as financial accounting, asset management, customer information and
12 billing, human resources, and work management systems. The BTMP sets out
13 the vision for the business systems to support and improve business
14 performance and customer service. As a part of the BTMP, the Company is in
15 the process of implementing a new billing and customer service system
16 described below. This system will be fully operational and in-service in October
17 of this year. The cost changes related to this project are included in the revenue
18 requirement in this case and are included in the testimonies of Mr. Michaelson
19 and Mr. Lippai. For the remaining portions of the BTMP, this testimony is
20 presented to inform the Commission of the Company's plans and goals.

21

22 **Q. Why is it important to have a BTMP?**

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1 A. Technology is constantly changing and technological advancement generally
2 means that better business systems translate into better service provision. As
3 older technology gets phased out, support becomes less readily available. It is
4 important for the Company to keep pace with the technology to ensure continuity
5 of service and when appropriate, either enhance existing services or introduce
6 new services. A PBMP allows the utility to keep pace with technology and reduce
7 risk due to outdated and supported systems.

8

9 **Q. Is the Company planning to implement aspects of its BTMP?**

10 A. Yes. United Water is moving towards the implementation of an Enterprise
11 Resource Planning (ERP) tool. An ERP allows every Business Unit or Company
12 owned by United Water to be on the same business system. The business
13 systems can be linked to transfer data from system to system and provide
14 virtually real time information to field staff and office staff. At this point, United
15 Water plans to replace the Customer Information System (CIS), implement an
16 Enterprise Asset Management (EAM) system, and a geographic information
17 system (GIS), with all systems linked to mobile field staff.

18

19 **Q. When will this start and how long will it take to implement the new
20 systems?**

21 A. The first system to be replaced is the Customer Information System. The process
22 started in October 2009, with the two phase completion occurring in August and
23 October of 2011. The Asset Management System is currently scheduled to be

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1 rolled out at the beginning of 2012 with completion in 18 months, followed by
2 mobile field data collection and transfer, which should take another 18 months.
3 Essentially it is a five year implementation.
4

5 **Q. Can you provide some background information about the current out**
6 **sourced Customer Information System?**

7 A. Yes. The customer service functions provided by United are supported by the
8 WINS II system, which is an outsourced "green screen" system offered by utility
9 Billing Systems (UBS), a subsidiary of Cash Cycle Solutions. It provides the
10 basic customer service functions of customer account management, customer
11 billing, aged receivables management and filed service order creation. WINS II is
12 a proprietary software package that operates on an IBM mainframe at the UBS
13 data center in Union, NJ. UBS staff maintains the system, including client data
14 management and report development. The current version of WINS II, developed
15 in the mid-1990s, is a rewrite of the original COBOL mainframe WINS I system.
16 WINS II is written in the ADABAS/Natural proprietary database/language system.
17 ADABAS is a 2nd generation database that was popular in the mid-1980s. The
18 WINS II mainframe system has been customized to meet the needs of United
19 Water over the years, including a number of customized reports.
20

21 **Q. Why is it important for United Water to implement a new CIS system?**

22 A. There are both business and technical reasons for United Water to move off
23 WINS II.
24

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Customer Facing Business Processes

The WINS II system does not meet current business needs. While it supports the management of basic customer data and billing functions, it does not provide the appropriate level of integration, allowing the customer service personnel to be linked to the activities in the field to better support the needs of the customer. Further, the ability of the Company to effectively utilize and improve the business processes that impact customers directly have been limited by the WINS II system. These limitations have forced the Company to develop numerous manual, paper-based processes around the system to meet the specific needs of its customers. Additionally, management reporting within WINS II is limited, requiring the use of numerous spreadsheets, multiple data transformations, and manual Data Entry.

Technical/Support

The ADABAS technology is beyond the end of its useful technical life and is not readily utilized in the market. It was replaced by 3rd generation relational data base technology beginning in the early 90s. Virtually all modern systems operate on a relational data base platform. Further, there are few IT professionals with ADABAS skills; new programmers are not being taught this technology at the college level.

UBS Business Relationship

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1 There is considerable business risk for United Water in remaining on the
2 WINS II system. Utility Business Systems, the owner and operator of the
3 WINS CIS system, have demonstrated no commitment over the recent
4 years to invest in and develop the system. Any enhancements made to
5 the product have been at the direct request of United Water and these
6 have been driven by specific business needs. This lack of investment in a
7 structured system development path represents significant risk for United
8 Water. Other clients of UBS have already, or have plans to, migrate off the
9 WINS II system e.g. Elizabethtown Water and Middlesex Water,
10 increasing the reliance of UBS on United Water as its core client. This
11 reduction in the client base caused United Water additional concern over
12 the viability of UBS as an ongoing successful business entity. Finally,
13 there is only a small number of staff at UBS who have detailed functional
14 and technical knowledge of the WINS II system. This again poses a
15 significant risk over the availability of ongoing support and development of
16 the product.

17
18 **Q. What are the customer benefits of a new CIS?**

19 **A. The new CIS, based on the Oracle Customer Care & Billing System (CCB)**
20 **provides enhancements in all aspects of Customer Relationship Management**
21 **including billing; account management; revenue management; credit and**
22 **collections; field device management and field service work management. The**
23 **new CIS, as has been previously mentioned, is part of an overall technology**
24 **master plan to update and improve the core business systems of the Company.**

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1 The CIS is a critical building block in the overall ERP effort which aims at
2 providing the most efficient and effective basis for providing outstanding
3 customer service while controlling costs. Through the integration of the CIS with
4 the other business systems, significant customer benefits will be realized. High
5 on this list is the ability of the customer service personnel to be linked with the
6 field activities on a real time basis, allowing for improved communication and
7 coordination of customer-related work. Some examples of specific benefits to the
8 customer are outlined below:

9
10 First Call Resolution

11 The new CIS enhances United's ability to provide the customer with a
12 response to their inquiry during the first contact with the Company,
13 assuming that a field visit is not required. The CIS provides a centralized
14 repository of all relevant information relating to the customer and the
15 premise, including current and historical billing. They also have complete
16 visibility into field work that impacts that customer. Once the ERP is
17 implemented in entirety, this will include visibility of future work, such as
18 periodic replacements. Further, the customer service representative
19 (CSR) can see all contact and work history related to that customer and
20 premise in a single place, thereby reducing the need for call-backs or
21 repeat calls. If a customer has multiple accounts with the Company, these
22 will be linked and the CSR will be able to see and access all from a single
23 location in the system.

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1 Improved Scheduling of Customer Appointments

2 When a field visit is needed that requires the customer to be present, the
3 CIS provides an improved scheduling capability that allows an
4 appointment to be set that meets the customers' needs. CSRs have
5 visibility into available appointment slots that can be matched to the
6 customers' availability, and can easily be changed, if required. It is
7 anticipated that the lead time for appointments will be reduced over time
8 as the field service work force becomes automated. In addition, the CIS
9 maintains workflow, which allows the CSR to see at what stage work is at
10 e.g., if completed in the field, the CSR can then see which work group has
11 been assigned to complete associated system updates. Again, if taking a
12 call from a customer, this visibility of work will allow the CSR to provide a
13 full response at the point of the call.

14
15 Improved Handling of Customer Complaints

16 The CIS has built-in case management functionality. Cases allow for
17 scripting and intuitive workflow for specific areas of complaint and allow for
18 all associated incoming and outgoing communications to be linked within
19 the customers' records. The scripting and workflow guide a CSR through
20 the steps that need to be taken to resolve the complaint in the best way
21 possible, ensuring that all steps are taken in a proactive and consistent
22 manner. This allows the Company to ensure that required actions are

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1 followed up on proactively and that the customer is kept informed of
2 progress and ultimate resolution.

3
4 Pre-emptive Monitoring

5 The CIS has built-in workflow and pre-emptive monitoring capabilities.
6 This functionality will allow work to be assigned to specific work groups
7 and all outstanding work will be fully visible to management. This reduces
8 the reliance on paper and manual work monitoring and ensures that all
9 customers receive timely responses to inquiries and billing updates are
10 processed promptly.

11
12 Improved Customer Communications

13 Each customer will have the option of selecting their preferred channel of
14 communication for updates from the Company. In the event of
15 emergencies, the CIS will automatically send out necessary updates via
16 this selected channel; E.G. phone, email, or text.

17
18 Improved Billing Services

19 Currently, agreed payment plans cannot be represented on the customers'
20 bill. This can lead to confusion and result in customers breaking payment
21 arrangement, resulting in unnecessary collections activity. The new CIS
22 will allow all payment arrangements and also installment deposit plans to
23 be clearly shown on the bill in addition to and separate from current
24 charges.

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Q. Please discuss the Company's capital expenditure program in relation to its value to the customer.

A. The Company's capital expenditure program will address infrastructure improvements and replacements in the areas of mains, service lines, system valves, and hydrants. It will also address compliance with regulations which includes meter replacements and treatment equipment upgrades as well as other equipment needs of the Company. These expenditures will ensure the Company will be able to meet its public commitment to customers to provide high quality water and water service in a cost efficient manner. These capital investments will provide improved flow and pressure, ensure timely and accurate meter readings, and provide redundancy within the distribution system. One area in which we have been aggressively involved in the past few years has been an Asbestos Cement (AC) main replacement program. In the mid-1940s up through the 1970s, AC main was widely used in our system, as it was countrywide. This type of main has some limitation with certain soil types, we've found that in areas where aggressive ground water and aggressive soil is present, the pipe deteriorates from the outside. Over time, it becomes susceptible to failure, if pressure fluctuations take place, trench settlement occurs, or when tapping the main. As a result, we've identified the areas with aggressive soils and incorporated the appropriate pipe materials in our new main replacement program. Our strategy has been to complete at least one project per year, and some years perform more projects. Since our last rate case, we have replaced 4,220 ft. of 8", 3,110 ft. of 6" and 550 ft. of 4" pipe, and we have several hundred

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1 more feet planned for future years. We are also continuing our meter
2 replacement program that has been ongoing since our last case. Approximately
3 80% of our residential meters have been replaced with radio frequency
4 transmitting meters. These new meters enable our reader to take a reading on a
5 scheduled route each morning and then have the ability at the end of the day to
6 download the data from the reading device directly to our billing system, that
7 night the bills are processed and mailed out the next day. This year we will
8 replace approximately 450-500 meters. The more efficient automatic reading
9 devices have produced more accurate reads and provide us with a technology
10 platform that we can develop into a fixed meter network in the future. We will also
11 continue with hydrant and valve replacement as needed. These replacements
12 are scheduled based on serviceability and age.

13
14 **Q. What is the R&I Alliance?**

15 **A.** United Water's parent company, Suez Environnement, offers research grants to
16 its operating companies for a variety of drinking water-related projects. Funding
17 is available each year through several research programs. Research conducted
18 by United Water under the R&I Alliance and other Suez Environnement programs
19 provides added value to the Company in several ways: Research results are
20 applied to specific capital projects to reduce capital expenditures. Research on
21 water treatment processes is used to optimize operations, reduce operating costs
22 and improve water quality. Research on new technologies is used to reduce the
23 testing required by the Company to obtain regulatory approvals to apply these
24 technologies.

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Q. How does the R&I Alliance specifically benefit United Water Rhode Island customers?

A. The R&I Alliance benefits United Water Rhode Island customers in the following ways:

Pipe Asset Management – There are numerous studies by R&I Alliance concerning the practical age of various types of pipes and services. One particular study considered the potential impact that chlorine has on the lifespan of polyethylene pipe, which the Company uses. The results of also provide valuable information in forecasting the renewal of polyethylene pipe. In addition, there have been several studies on the lifespan of asbestos cement and cast iron water mains. This information as well as other industry information will be used in pipeline renewal/replacement programs for UWRI infrastructure.

Storage Tank Operations – Currently, research is being performed to evaluate the use of mixing technologies to provide more effective operations of finished water storage tanks. The results will demonstrate the use of new technology to improve distribution system water quality through mixing in storage tanks. Well Optimization Current research is being conducted to develop a tool that would optimize the use of wells to reduce operating costs and to better manage aquifer conditions. This tool is being tested at another United Water ground-water system, but potentially can be applied to UWRI.

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Energy Efficiency – In 2006 and 2007, research was performed to consider the level of energy consumption relative to other similar systems in the U.S. and the world. The mathematical model was developed via a collaborative effort with R&I Alliance.

Q. Are there any R&I projects planned for the future where UWRI customers will benefit?

A. Yes. The following R&I projects are planned: United Water was awarded a Suez Environnement research grant to study the use of a special membrane to remove volatile substances from drinking water. This technology may be applicable for some of the UWRI wells to remove carbon dioxide from the water, thereby raising the pH and reducing the need for lime addition. United Water is participating in an R&I project that involves the evaluation of fixed metering networks which provide the customer with real-time information about their water usage and allows the Company to assist the customer in identifying costly leaks. This technology could be applied to UWRI in the future to enhance customer service and reduce non-revenue water. In 2009, United Water has established a research center to further facilitate the conduct of research in the U.S. with direct benefit to operating companies like United Water Rhode Island. This research center, the Water and Environment Research Centers (WERCs) will “tap” the expertise through United Water to participate in research that will further our efforts to continually improve. Finally, United Water strongly believes that the

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1 conduct of appropriate research is central to ensuring that the various operating
2 companies have the best available methods and technologies at their disposal to
3 successfully manage water quality, infrastructure and technology. To this end,
4 support by staff to allow the costs associated with research activities sends the
5 important message that such efforts are valued and should continue.

6
7 **Q. Is the Company continuing it's commitment to conservation and the "wise
8 use of water"?**

9 **A.** Yes. The Company continues the distribution of low flow household water fixtures
10 at the customer's request. In cases where the Company feels a household's
11 water use is higher than normal, it will recommend the use of these fixtures, and
12 offer them free of charge. The Company continues the use of 'Bill stuffers' as a
13 vehicle to distribute seasonal water saving tips. Outdoor use tips are included
14 with Spring and Summer bills and inside use tips are included with the Fall and
15 Winter bills. The Company also has a policy where all leaks, whether on service
16 lines or mains, are responded to immediately. If the leak is located on Company
17 property, repairs will be made within twenty-four hours, keeping the find to fix
18 time as short as possible. If not, notification to the customer is made immediately,
19 if repairs are the responsibility of the customer. UWRI's current Non Revenue
20 water is 10.15%, this very low level of system losses not only provides a water
21 conservation benefit, but also reduces the energy and chemical usage. As a
22 result lower CO₂ emissions are transported to the environment. Additionally, the

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1 current rate structure approved at the last rate filing does work and customers
2 are very aware of the cost per CCF.

3

4 **Q. Is there any indication that the conservation efforts are working?**

5 A. Yes. It's most likely a combination of several factors, with conservation being the
6 leading factor, however, the economy and weather conditions over the past three
7 years are key contributors. In 1998, the test year of our last case, the average
8 residential customer usage was 217 gallons of water per day, and the average
9 usage in 2010 was 157 gallons per day. This is a drop of 60 gallons per customer
10 per day.

11

12 **Q. Are there any regulators seeking added conservation?**

13 A. Yes. Currently, there is a move by the RI Water Resources (RIWR) to get
14 legislation enacted to set a limit on what the residential customer should use
15 every year. The usage number that we keep hearing is 65 gallons per person per
16 day. Considering that currently, the average head count per household is four,
17 therefore, the average consumption per household is 260 gallons per customer
18 per day. The Company would have no problem meeting that requirement,
19 although the number would need to be confirmed based on the 2010 census
20 data. Additionally, there is a water allocation requirement being considered by
21 the RIWR. This requirement would limit withdrawals for ground water systems.
22 The withdrawal limits are still being worked on, but if this allocation requirement
23 is to take place, it could place a tremendous burden on groundwater suppliers
24 throughout the state.

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1 **Q. Does the Company currently have an Outreach and Education Program?**

2 **A. Yes. The Company's goal for our outreach and education program is to keep**
3 **customers and other stakeholders informed about company activities and**
4 **performance including conservation etc. The Company utilizes an array of**
5 **communication channels, including: Annual consumer confidence reports**
6 **(containing water quality results), Company website, Rapid alert (Reverse 911),**
7 **News media, Meetings with local officials and School programs. Through these**
8 **media, we provide our customers with up-to-date information on the value of**
9 **water, water quality, system improvements, conservation tips and products,**
10 **customer rights, customer service matters such as payments, billing, meter**
11 **reading, hardship programs and rate change information. Copies of consumer**
12 **confidence reports are mailed directly to our customers and copies are also**
13 **made available in municipal offices, libraries, schools and at local company**
14 **offices. In case of an emergency, customers are kept informed via banner alerts**
15 **on the company website and/or reverse 911, Rapid Alert System, as well as**
16 **through local media. On a regular basis, I will meet with local officials to discuss**
17 **Company programs as well as solicit areas of concern expressed by their**
18 **constituents. For the past several years, a representative from the Company will**
19 **conduct a water education session, usually with the 5th grade class at each of our**
20 **area elementary schools. In addition, classes have been invited to tour our**
21 **pumping and treatment facilities.**

22

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1 **Q. Has the Company conducted any customer surveys since the last case to**
2 **determine UWRI's customer satisfaction?**

3 A. Yes. Every year for the past few years, United Water's corporate Customer
4 Service group has conducted customer satisfaction surveys for all of its regulated
5 companies. A group of customers are randomly polled to see how they rated the
6 Company on such things as overall satisfaction rating, telephone etiquette,
7 response to service order requests, time delay in getting new service installed,
8 time to get meters tested, water quality and many other items. On virtually every
9 survey, UWRI tends to be the number one company. The Company receives
10 very few complaints, with only four high bill complaints reaching the Division level
11 for resolution last year. The Company takes great pride in this accomplishment
12 and each year strives to not only meet customer satisfaction, but to surpass it.

13

14 **Q. Who will be the witnesses in this filing and what areas will each be**
15 **covering?**

16 A. I will be testifying on overall Company objectives and capital. Mr. Tom Lippai is
17 testifying on operations and maintenance expenses as well as taxes. Mr. Obiama
18 (Obie) Ugboaja is testifying on revenue requirement. Mr. Tim Michaelson is
19 testifying on rate base and is the case manager. Pauline Ahern is testifying on
20 cost of capital and Chris Woodcock is testifying on the cost of service study.
21 Legal counsel for the case is Joseph Keough.

22

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1 **Q Please list the service and functions provided to UWRI by United Water**
2 **Management and Services Company.**

3 A. United Water Management and Services Company (UWM&S) provides UWRI
4 with various services in the following general areas: Technical Operations
5 Support (hydraulic modeling etc), Customer Service, Risk Management,
6 Information Technology, Water Quality, Environmental Compliance, Human
7 Resources and Employee Relations, Accounting, Data Processing, Planning and
8 Treasury, Engineering/Master Planning, Customer Communications,
9 Procurement/Accounts payable.

10

11 **Q. Are these services and functions provided to UWRI required on a regular**
12 **and timely basis?**

13 A. Yes. Without the support, guidance, administration and expertise of UWM&S,
14 UWRI would be unable to effectively continue to meet the more stringent and
15 ever changing state and federal regulations. In addition, if the M&S Company did
16 not perform these necessary functions, additional highly educated and
17 experienced Staff would have to be hired and/or outside firms would have to be
18 engaged.

19

20 **Q. Briefly explain the Sector Agreement between United Water New York and**
21 **UWRI.**

22 A. United Water New York (UWNY) provides operational, engineering and
23 management support on an as needed basis. UWNY maintains an organization

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1 where the senior management employees are familiar with all facets of water
2 utility operations and are qualified to render the services necessary in an
3 economical manner (cost plus payroll overhead rates). The Sector Agreement
4 was signed in 1998, and is intended to supplement the services provided by the
5 management Company, particularly in the area of operations. United Water
6 created six sectors in its national operations. Each sector includes a larger sector
7 utility, such as UWNY, United Water New York (UWNY) and several smaller
8 companies that are assisted in their operations by the larger utility. UWNY's
9 sector includes UWRI and United Water Connecticut (UWCT).

10
11 **Q. Is there any duplication of services provided between United Water
12 Management & Services Company, United Water New York and United
13 Water Rhode Island?**

14 **A. No.**

15
16 **Q. Was the aforementioned Sector Agreement filed with the Rhode Island
17 Public Utilities Commission?**

18 **A. Yes, on January 22, 1998, the agreement was filed with the Secretary, Rhode
19 Island Public Utilities Commission.**

20
21 **Q. Has the company included in this application a copy of its rules and
22 regulations?**

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1 A. Yes, the Company has included a copy of its rules and regulations with
2 highlighted changes.

3

4 Q. Does this conclude your testimony?

5 A. Yes.