

**STATE OF NEW HAMPSHIRE  
PUBLIC UTILITIES COMMISSION**

**DW 12-085**

**AQUARION WATER COMPANY OF NEW HAMPSHIRE, INC.**

**Notice of Intent to File Rate Schedules**

**Order Approving Permanent Rates**

**ORDER NO. 25,539**

**June 28, 2013**

**APPEARANCES:** McLane, Graf, Raulerson & Middleton, P.A., by Patrick H. Taylor, Esq., and Steven V. Camerino, Esq. for Aquarion Water Company of New Hampshire; Town of Hampton by Mark S. Gearreald, Esq.; Donahue, Tucker and Ciandella, P.A., by John J. Ratigan, Esq. for Town of North Hampton; Office of the Consumer Advocate by Rorie E.P. Hollenberg, Esq. on behalf of residential ratepayers; and Staff of the Public Utilities Commission by Marcia A. Brown, Esq.

**I. PROCEDURAL HISTORY**

Aquarion Water Company of New Hampshire, Inc. (Aquarion or Company) provides water service to approximately 9,100 customers in the towns of Hampton, North Hampton, and Rye. On April 4, 2012, Aquarion filed a notice of intent to increase its rates and file rate schedules. On May 14, 2012, Aquarion filed its schedules, testimony, and supporting materials to permanently increase its revenue requirement by \$1,113,931. Aquarion also filed a petition for temporary rates to increase its revenue requirement by \$732,078 pending the review of its proposed permanent rates.

Aquarion requested that the proposed temporary rates be made effective for service rendered on or after July 1, 2012. In support of its temporary rate request, Aquarion stated that its overall rate of return for the test year ending December 31, 2011, had declined to 5.23%, and was 249 basis points lower than its last authorized overall return of 7.72%. Aquarion attributed

the deterioration in its overall rate of return to increases in its operation and maintenance expenses, increases in property and similar taxes, and reductions in sales revenues.

On May 24, 2012, the Office of the Consumer Advocate (OCA) filed a letter of participation in this docket on behalf of residential ratepayers pursuant to RSA 363:28. The Town of Hampton (Hampton) petitioned to intervene on July 5, 2012. On June 12, 2012, the Commission issued Order No. 25,373 suspending the proposed tariffs and scheduling a prehearing conference for July 11, 2012, to be followed by a technical session. The Commission granted Hampton's intervention request at the prehearing conference and noted the Office of Consumer Advocate's intention to participate pursuant to RSA 363:28.

On June 14, 2012, Aquarion filed a motion to waive Puc 1203.02(d) requiring that notice be distributed to Aquarion customers no later than 30 calendar days from the date of filing. Aquarion stated that it was working with Staff regarding approval and method of delivery of the proposed statement to its customers, and requested an extension until July 1, 2012 to finalize the notice. The Commission granted Aquarion's request for an extension by Secretarial Letter dated July 3, 2012.

On July 12, 2012, Staff filed a proposed procedural schedule that included an August 30, 2012 hearing on temporary rates, which the Commission approved on July 16, 2012. The hearing on temporary rates was subsequently rescheduled to August 28, 2012. On August 20, 2012, Aquarion filed a settlement agreement reached with the Staff regarding temporary rates and at hearing, Staff and the parties presented testimony and exhibits in support of the settlement agreement.

On August 31, 2012, the Town of North Hampton (North Hampton) filed a Partially-Assented to Motion to Intervene. North Hampton stated that because Aquarion provides water

service in the Town of North Hampton, the proceeding will affect the rights, duties, privileges, immunities, and substantial interests of its citizenry. Aquarion assented to the motion and the Commission did not receive any objections to the request.

On September 18, 2012, the Commission approved through Order No. 25,412, North Hampton's intervention as well as an 8.8% temporary rate increase for Aquarion, effective for service rendered on or after July 1, 2012.

The Commission held a public hearing in Hampton on November 28, 2012 and received comments from the public.

The parties conducted discovery pursuant to the approved procedural schedule and on January 11, 2013, Hampton filed the testimony of David C. Parcell, Frederick W. Welch, and Philip W. Bean. OCA filed the testimony of Scott J. Rubin. Staff filed the testimony of Mark A. Naylor and Jayson P. Laflamme. On January 14, 2013, OCA filed the testimony of Donna L. McFarland. OCA filed corrected testimony of Ms. McFarland on February 7, 2013 and Hampton filed corrected testimony of Mr. Parcell and Mr. Welch on February 22, 2013. North Hampton did not file testimony but supported the testimony of Mr. Parcell.

On March 6, 2013, Aquarion filed rebuttal testimony of Aquarion employees Troy Dixon and Carl McMorran as well as testimony of Pauline Ahern, a principal of AUS Consultants, on the issue of cost of capital. On March 7, 2013, Aquarion filed testimony of John Walsh to adopt the pre-filed testimony of Harry C. Hibbard. On April 8, 2013, Hampton filed the surrebuttal testimony of David C. Parcell. Subsequent to the testimony, Staff and the parties amended the procedural schedule to accommodate further settlement discussions and ultimately, the Commission held a duly-noticed hearing on May 23 and 24, 2013.

On May 13, 2013, Aquarion filed a motion for protective order concerning confidential responses to discovery requests. The Commission granted the motion at hearing. On May 22, 2013, Aquarion filed a partial settlement agreement among Aquarion, the OCA and Staff addressing all issues except the appropriate return on equity. On May 23, 2013, North Hampton filed the testimony of Robert Landman and explained that it had distributed the testimony to Staff and the parties in accordance with the procedural schedule, however, it had failed to file it with the Commission. Staff and the parties did not object to the testimony.

On May 31, 2013, Aquarion filed revised testimony of Ms. Ahern to reflect corrections that were made at hearing. Aquarion also filed responses to record requests: Exhibits 20 and 24. On May 31, 2013, Staff filed its response to a record request for which Exhibit 33 had been reserved.

On June 6, 2013, North Hampton filed its closing statement. On June 7, 2013, Staff, the OCA, Hampton, and Aquarion filed closing statements.

## **II. POSITIONS OF THE PARTIES AND STAFF**

### **A. Aquarion**

Aquarion agreed to the proposed revenue requirement in the partial settlement agreement, however, it did not reach agreement with Staff and the other parties on the issue of the cost of equity which is a critical component of the revenue requirement. Aquarion, through the testimony of Troy Dixon, proposed a 10.25% return on equity. Mr. Dixon stated that this rate was approved by the Massachusetts Department of Public Utilities (MDPU) in Aquarion's recent rate case. Mr. Dixon did not perform a Discounted Cash Flow (DCF), Capital Asset Pricing Model (CAPM), or comparable earnings analysis to determine the proposed return on equity.

Through the rebuttal testimony of Ms. Ahern, Aquarion argued that the return on equity calculated by Mr. Parcell was in error. Aquarion argued that Mr. Parcell used a natural gas distribution proxy group and that such a proxy group was inappropriate in that it did not reflect the greater business risk associated with water utilities. She stated, for instance, that water utility assets have longer capital recovery periods and, therefore, lower depreciation rates. Water utilities have fewer pass-through rate adjustments than gas and electric utilities. Ms. Ahern stated that the DCF model cannot be used as an estimate of the cost of equity for a utility when the market price of the utility stocks exceeds the book value. She criticized the DCF model as understating the true cost of equity. With Ms. Ahern's corrections to Mr. Parcell's DCF model, Aquarion stated the DCF produces a cost of equity range of 9.32% to 9.54%, with 9.43% as the midpoint. With respect to Mr. Parcell's use of the CAPM model, Ms. Ahern criticized Mr. Parcell's reliance on U.S. Treasury Bonds and stated that 20-year U.S. Treasury Bonds cannot recognize the risk of a particular company or industry because it reflects the risk of the U.S. Government. Ms. Ahern testified that Mr. Parcell's CAPM analysis was flawed in three respects: 1) he incorrectly relied on a historical risk-free rate despite the fact that both ratemaking and cost of capital are prospective; 2) he incorrectly calculated his market equity risk premium by relying upon the wrong indicators; and 3) he did not employ a prospective, or forward-looking equity risk premium. Ms. Ahern also stated that Mr. Parcell did not use an empirical CAPM analysis despite the fact that empirical evidence indicates that the low-beta securities earn returns higher than what the CAPM predicts and high-beta securities earn less. Ms. Ahern was also critical of Mr. Parcell's comparable earnings analysis. In conclusion, Ms. Ahern testified that, after her corrections, Mr. Parcell's CAPM should have produced a cost of equity rate of 10.37%. She then added to the DCF and CAPM rates a financial risk adjustment

of 0.86% due to the Company's debt to equity ratio of approximately 60/40 and business risk adjustment of 0.40% due to the Company's small size, relative to larger water utilities in the proxy sample, producing the following: DCF of 10.58% to 10.80% and a CAPM of 11.63%. Among the proposed changes to its tariff, Aquarion included, under Miscellaneous Charges, a Missed Appointment fee of \$44 for customers who are not present at the time of a scheduled appointment and a Collect-at-the-Door fee of \$44 for customers who make payment to a Company representative at their premises to avoid termination of service.

**B. Town of Hampton**

Hampton opposed the rate increase and revenue requirement being sought by Aquarion in this case on the grounds of three issues.

First, Hampton argued that the increased rates that Aquarion is now seeking are excessive and the frequency of Aquarion's rate cases is too great for Hampton ratepayers; many of whom are on fixed or depressed incomes due to the current economic climate. Hampton contends that prior to 2006, the intervals between rate cases were 8 and 6 years; however, it now intends to file for rate increases every three years. In addition, the rate increases either granted or proposed by Aquarion in its last three rate cases (including the instant case) constituted double-digit percentage increases: 18.64% in 2006, 17.44% in 2009 and 17.71% currently. In addition, Hampton further emphasized that Aquarion's current rate request comes after three Water Infrastructure and Conservation Adjustments (WICA) approved by the Commission. Hampton stated that one of the original goals of the WICA program was to extend the amount of time between full rate cases. Hampton requested that if the Commission does approve a rate increase for Aquarion in this case, that it limit the resulting percentage increase to fewer than double digits.

At hearing, Hampton's witness, Frederick Welch, recommended the WICA projects be paid through bonds so that at the end of the bond period, assuming they were short-term bonds, the bond and the expenses would disappear. This would help reduce rate increases to customers. Hearing Transcript of May 23, 2013 at 138.

Second, Hampton asserted that Aquarion should not be allowed to continue to collect increased revenues that result from a decline in water consumption due to water conservation efforts undertaken by its customers. Hampton stated that \$214,000, or 19.3%, of Aquarion's total proposed revenue increase is the result of this decline in revenues related to customer conservation efforts. Hampton further argued that the Commission itself voiced concern over this issue early on in the proceeding and charged Aquarion to address it on the record. Hampton contends that though Aquarion could have addressed the issue by proposing a more equitable rate design, it failed to do so and thus has not been responsive to the Commission's charge. Therefore, it is Hampton's position that Aquarion should not be rewarded with an increased revenue requirement which fully reimburses Aquarion for its lost revenues due to consumer conservation efforts.

Third, Hampton argued that the return on equity in this case should be 9.3% and not 10.25% as proposed by Aquarion. Hampton contends that Aquarion has not satisfied its burden of proof enunciated in RSA 378:8, in order to justify its proposed return on equity of 10.25% because it did not retain a cost of equity expert. Conversely, Hampton did engage a cost of equity expert who, in testimony, derived a recommended return on equity of 8.3% based upon an average of three methodologies: DCF, CAPM, and Comparable Earnings. Hampton acknowledged that the Commission traditionally utilizes DCF in determining return on equity and that other methodologies are used to test the reasonableness of the results. The DCF

methodology employed by Hampton's cost of equity expert yielded a range of 9.0% to 9.6% with a mid-point of 9.3%. Hampton further contends that the cost of equity expert engaged by Aquarion later in the proceeding ultimately derived a DCF within this same range, between 9.32% and 9.54% with a mid-point of 9.43%. In response to Aquarion's cost of equity expert's contention that the DCF should be adjusted upward in order to account for greater risk due to the Company's smaller size, Hampton contends that Aquarion is, in fact, part of a greater conglomerate of companies and that its capital structure is intertwined with and dependent on its parent(s). Hampton requests that the Commission reject Aquarion's proposed 10.25% return on equity and, instead, approve an return on equity no greater than 9.3% if not the 8.3% return on equity originally recommended by Hampton's cost of equity expert.

### **C. Town of North Hampton**

North Hampton agreed with Hampton's recommendation on a return on equity of 9.3% for the reasons stated by Mr. Parcell. With respect to the rate design relative to public fire protection, North Hampton requested the Commission not change the rate design approved in Aquarion's last rate case, Docket No. DW 08-098. In that 2008 docket, the Commission approved two deviations from the 2005 cost of service study. One deviation was to allocate to the fire protection class, revenues resulting from an increase in fees for establishing and restoring service. The second deviation was to reduce the allocation of the full cost of public fire protection from 75% to 70%. With respect to the WICA program, North Hampton supports the continuation of the WICA program although it expressed concern that the cap on expenditures needs more evaluation to ensure it is not thwarting the goals of the WICA program.



**D. Office of the Consumer Advocate**

The OCA's position in pre-filed testimony differed somewhat from its final position at hearing and thus, the OCA requests the following relief from the Commission:

1. Partial Settlement Terms Approve and incorporate into the final order the terms of the partial settlement. The OCA stated that the partial settlement secures value for customers in the form of requiring Aquarion to file a cost of service study in its next base rate case. This cost of service study will provide an informed basis for cost-based rates going forward. The partial settlement improves the WICA pilot by responding to the OCA's concerns that the WICA only be used for planned, incremental capital expenditures for safety and reliability purposes. The partial settlement includes improvements to annual WICA reporting requirements and this will better inform the Commission's WICA decisions as well as improve transparency of the WICA pilot program and cost recovery.

2. Return on Equity The OCA requests the Commission approve a return on equity of 9.365%, which represents the unadjusted mid-point of the Mr. Parcell and Ms. Ahern's DCF mid-points and, when used in conjunction with the terms of the partial settlement, results in a just and reasonable revenue requirement. The OCA stated that one of the cost of equity experts is aligned with the interests of Aquarion's shareholders and the other expert is aligned with the interests of customers, thus, a mid-point would be appropriate. The ranges from each expert were close numerically: Mr. Parcell's DCF range was 9.0% to 9.6% (9.3% mid-point); and Ms. Ahern's corrected DCF range was 9.32% to 9.54% (9.43% mid-point). The OCA argued that the Commission should reject Aquarion's request to adjust the DCF for one or more risk factors. According to Mr. Parcell, the proposed financial and business risk adjustments are not appropriately applied in the Company's circumstances. Second, the capital structure of the

Company is complex due to parent/affiliate interrelations that are not transparent or capable of evaluation. Third, the Company is in control of its financial and corporate structures (and the information it shares about these structures) and it has not shown that just and reasonable rates require risk adjustments to its DCF return on equity on account of its strategic business choices about these structures. For these reasons, the OCA recommended the Commission reject Aquarion's proposed adjustments to the DCF model.

3. Public Fire Protection Cost Allocation The OCA recommended the Commission deny North Hampton's request to reduce the public fire protection class's allocation of the revenue requirement increase and instead allocate the rate increase equally across all the customer classes. The OCA asserted that North Hampton did not provide cost support for its position.

The OCA stated that the equal allocation of the Company's revenue requirement increase is not precluded by the language in the Commission's order approving the settlement of the Company's last rate case. The OCA argued that North Hampton has not quantified what metered rates would be if its proposal is adopted and what they would be if its proposal is not adopted. Further, North Hampton has not quantified how much money would be shifted from its public fire allocation to the allocation to other customers if its proposal is approved. North Hampton has not shown that the Company's proposed public fire rates exceed the cost of service for fire protection or that its fire flow requirements are such that it is paying for more fire protection than it should. Lastly, North Hampton has not considered alternatives for recovering the costs of public fire protection, such as assessing only those taxpayers who are customers of the Company.

**E. Staff**

Staff filed the testimony of Mark A. Naylor, Director of the Commission's Gas & Water Division, and Jayson P. Laflamme, Utility Analyst in the Gas & Water Division. Mr. Naylor provided testimony on the issue of the continuation of Aquarion's WICA program as a permanent tariff provision; issues related to cost of capital including the impact on the equity return with a WICA provision, and inclusion of \$1 million that Aquarion excluded from its capital structure; the use of a step adjustment to "zero out" Aquarion's current WICA surcharge; issues related to the impact of declines in water sales; and issues relative to fire protection rates. Mr. Laflamme provided testimony on new permanent rates for Aquarion, as well as on a proposed step adjustment for recovery of current WICA revenues in permanent rates.

Mr. Naylor summarized the WICA program that has been in place as a pilot program since 2009, and stated that Staff believes there has not been adequate time for a full evaluation of the program. While Staff believes that one objective of the program has been met, that of accelerating the replacement of aging infrastructure, and one objective has not been met, that of extending time between full rate cases, other WICA objectives cannot yet be evaluated. These include whether a WICA program reduces rate shock to customers, and the reduction of water loss and greater reliability of the distribution system. Staff recommends a continuation of the WICA as a pilot program through the next rate case cycle so that a more extensive evaluation of the WICA pilot program can be made. Mr. Naylor also suggested that, with a WICA in place, a utility's risk is reduced through enhanced cash flow, and thus its equity return should be lower to reflect this. With regard to the use of a step adjustment to permanent rates to bring the WICA surcharge back to zero, Staff believes this is consistent with the Company's tariff, but suggests

the updated cost of capital found in this proceeding should be used in calculating the step adjustment revenues.

Staff testified that it believes that \$1 million in debt Aquarion excluded from its capital structure should be included, stating that the Company is obligated to pay the loan and associated interest, and that in its petition for approval of the total of \$5 million, Aquarion cited the lower cost of debt it would produce. With respect to the issue of declining sales and the impact on the Company's revenues, Staff noted that declining sales are a national trend, have many causes, and create upward pressure on customer rates. Staff indicated, however, that it did not recommend that the Commission deviate from using test year sales to set new permanent rates, as consistency is an important component of rate setting. Finally, as a result of comments at the public comment hearing held in this proceeding in the Town of Hampton, Staff testified regarding fire protection costs and hydrant rates. Staff explained that fire rates are calculated differently from metered rates, and are a function of system capacity to provide fire flows. Staff cautioned against comparing fire costs, or hydrant rates, from one water system to another, and stated that many factors can cause such rates to differ widely among systems.

Mr. Laflamme provided Staff's recommendation for a revenue requirement for Aquarion in the amount of \$6,944,483, an increase of 14.09% over its test year. Staff recommended a rate base of \$22,507,605 and an overall rate of return of 7.31%. Mr. Laflamme also recommended that the WICA surcharge be "zeroed out" as called for in the Company's WICA tariff provision, with a step adjustment for the 2012 WICA plant additions to be effective at the date the Commission issues its final order. Staff recommended that the rate of return to be applied to the step adjustment assets be that return established by the Commission in this proceeding. Staff also recommended that accumulated depreciation be applied to the calculation of the step

adjustment revenues, consistent with step adjustments the Commission has approved in other dockets.

At hearing the Staff supported the partial settlement agreement presented by Aquarion, Staff, and the OCA. Because the partial settlement agreement did not provide a settlement on the cost of equity capital, Staff continued to recommend that the Commission take into account that with a continuation of a WICA program it would be appropriate to set a cost of equity rate below that found in Aquarion's previous rate case, to reflect the reduction of risk inherent in the WICA process.

### **III. TERMS OF PARTIAL SETTLEMENT AGREEMENT**

Staff, the OCA, and Aquarion reached agreement on certain issues described below.

#### **Revenue Requirement**

The Company's revenue requirement shall be determined in accordance with the schedules submitted by the Company in response to Data Request Staff 3-11 and included with the prefiled testimony of Staff witness Jayson Laflamme, subject to the adjustments proposed by Mr. Laflamme, except that the return on equity shall be as determined by the Commission in this proceeding, and the revenue requirement shall be subject to the adjustments set forth below:

1. The Company's 2012 year end capital structure of 59.24% debt, 0.01% Preferred Stock, and 40.75% equity should be used for ratemaking purposes in this case. The weighted average cost of debt to be used in determining the Company's overall weighted average cost of capital shall be 6.05%.
2. The Company's pro forma property tax expenses should be reduced by \$14,525 to reflect the actual amount of municipal property taxes assessed to the Company in 2012.
3. The Company withdraws its request for recovery through a deferred asset of the Right of Way tax first assessed by the Town of Hampton in 2011. This results in a reduction of \$24,464 in the revenue requirement during the period that such deferral would have been amortized under the Company's original proposal.
4. \$63,512 of the Company's revenue requirement, which represents the annual amount of the Right of Way tax assessed by Hampton, will be reconciled back to April 1, 2013, rather than to the effective date of temporary rates. However, in the event that the Town of Hampton successfully appeals the recent Superior

Court order finding the 2011 and 2012 ROW tax to be illegal<sup>1</sup>, the Company shall have the right to treat nine months of the 2012 tax as a deferred expense that it may recover in its next base rate case.

5. The OCA withdraws its request that a portion of the Company's employee wage and incentive compensation be excluded from the revenue requirement. Furthermore, the OCA agrees that there is an affiliate agreement between the Company and Aquarion Water Company regarding the provision of certain services by employees of Aquarion Water Company of Massachusetts to Aquarion Water Company of New Hampshire, and as such withdraws its request for exclusion of \$18,000 in affiliate employee wage expense in the Company's revenue requirement.

### WICA

6. Subject to the changes set forth below, the OCA does not object to the deferral of the evaluation and a continuation of the Company's WICA program on a pilot basis until it is evaluated in the Company's next base rate case.

7. The Company's WICA tariff page will be amended to remove customer meters from the list of eligible infrastructure improvements.

8. The Company's WICA tariff page will be amended to include the following language: The first \$50,000 in costs related to the emergency/reactive replacement of services, valves, and hydrants in a given year's WICA filing shall not be eligible for recovery through the WICA surcharge.

9. The Company will provide an updated main replacement prioritization analysis and updated infrastructure inventory in its annual WICA filing.

10. The Commission should approve a step adjustment pursuant to which the current WICA revenue requirement related to 2012 WICA capital projects is included in permanent rates and the WICA surcharge is reset to zero as of the date new permanent rates are implemented. The step adjustment would be calculated using the rate of return approved in DW 12-085 and the amount of the WICA surcharge included in base rates would not be included in the reconciliation of permanent rates with temporary rates. The Company agrees to provide documentation of its calculation of the step adjustment along with its calculation of its new permanent rate at the time it submits its compliance tariff.

11. The "Missed Appointment Fee" proposed in the Company's filing (Testimony of Troy Dixon, page 90 of 171) will be reciprocal such that a customer is compensated in an amount equal to the Missed Appointment fee if the Company fails to appear for a scheduled service call. In addition, the Company shall clearly notify customers of the fee when the service appointment is made.

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<sup>1</sup> At hearing, Hampton testified that the Board of Selectmen voted not to appeal the Superior Court decision. 5/23/13 Tr. at 130 lines 4-12.

12. The “Collect at the Door Fee” proposed in the Company’s filing (Testimony of Troy Dixon, page 90 of 171) will not be imposed the first time in any calendar year that a customer does not pay an outstanding bill until a technician arrives at the customer’s premises to perform a shut-off.

13. The Company will file a cost of service study with its next rate case.

#### **IV. COMMISSION ANALYSIS**

RSA 378:7 authorizes the Commission to fix rates after a hearing upon determining that the rates, fares, and charges are just and reasonable. In determining whether rates are just and reasonable, the Commission must balance the customers’ interest in paying no higher rates than are required with the investors’ interest in obtaining a reasonable return on their investment.

*Eastman Sewer Company, Inc.*, 138 N.H. 221, 225 (1994). Additionally, in circumstances where a utility seeks to increase rates, the utility bears the burden of proving the necessity of the increase pursuant to RSA 378:8. Pursuant to RSA 541-A:31, V(a), informal disposition may be made of any contested case at any time prior to the entry of a final decision or order, by stipulation, agreed settlement, consent order or default. N.H. Code Admin. R. Puc 203.20 (b) requires the Commission to determine, prior to approving disposition of a contested case by settlement, that the settlement results are just and reasonable and serve the public interest.

We apply these standards in connection with our review of the partial settlement agreement, keeping in mind that not all issues in this proceeding were settled. The issue of cost of equity remains contested. The partial settlement agreement and return on equity are inter-related and we must ultimately find that Aquarion’s resulting rates are just and reasonable under RSA 378:7 and RSA 378:28.

### A. Cost of Equity

The Commission's method of determining a utility's cost of equity, or return on equity, is well described in *Appeal of Conservation Law Foundation*, 127 N.H. 606, 635 (1986). The Commission is "bound to set a rate of return that falls within a zone of reasonableness, neither so low as to result in a confiscation of company property, nor so high as to result in extortionate charges to customers." *Id.* "A rate falling within that zone should, at a minimum, be sufficient to yield the cost of debt and equity capital necessary to provide the assets required for the discharge of the company's responsibility." *Id.*, citing *New Eng. Tel. & Tel. Co. v. State*, 104 N.H. 229, 232 (1962). An appropriate return on equity is one that will attract capital from the investment community generally, and is not one based on what will motivate a holding company to invest its discretionary capital in a utility subsidiary. *EnergyNorth Natural Gas, Inc. d/b/a National Grid NH*, Order No. 24,972, 94 NH PUC 256, 285 (2009).

We understand that Aquarion is obliged to invest large sums of money toward infrastructure improvements. Aquarion is no different from many other utilities in this regard. Aquarion does, however, have an annual rate increase mechanism allowing for recovery of certain of its infrastructure improvements through the WICA program that is not available to all utilities.

As to the methods of determining the return on equity, the Commission has long favored the use of the DCF method in determining return on equity. The Staff and parties acknowledged this in their closing statements. In *EnergyNorth Natural Gas, Inc. d/b/a National Grid NH*, the Commission reaffirmed that the "DCF is the most reliable and consistent method in terms of its application and results." *EnergyNorth*, 94 NH PUC at 286. The "DCF remains a widely accepted approach used by regulators here and elsewhere to determine [return on equity]." *Id.* at



286. The Commission follows the traditional approach of relying primarily on the DCF model and using other valid methods as a check on the reasonableness of the DCF result. *Id.* at 287.

We apply these principles to this proceeding.

At hearing, Hampton's expert, David Parcell calculated a cost of equity of 9.0% to 9.6% using the DCF method. His CAPM cost rate was 6.1% and Mr. Parcell testified that he would not recommend this cost figure as it was quite low. Hearing Transcript of May 24, 2013, afternoon, (5/24/13 Tr. PM) at 17, line 16. His comparable earnings model produced a cost range of 9% to 10%. Aquarion's expert, Pauline Ahern, filed testimony correcting perceived errors in Mr. Parcell's testimony and arrived at a cost range of 9.59% to 9.78% using the DCF method. After realizing she had made a mathematical error, however, Ms. Ahern presented at hearing a corrected range of 9.32% to 9.54%, similar to Mr. Parcell's range. Ms. Ahern's CAPM rate was 10.37%.

Ms. Ahern then proposed adding two adjustments to the cost of equity results to account for risk. Aquarion requested neither of these adjustments in its initial filing. To the DCF and CAPM costs of equity, Ms. Ahern added a 0.86% adjustment for financial risk and a 0.40% adjustment for business risk. We discuss these adjustments in greater detail below. Inclusion of the adjustments increased Ms. Ahern's DCF range to 10.58% to 10.80% which is higher than the 10.25% cost of equity proposed in Mr. Dixon's pre-filed testimony. The adjustments increased Ms. Ahern's CAPM cost rate to 11.63%.

We note that Aquarion did not file initial expert testimony on cost of equity. Mr. Dixon proposed 10.25%, not because of any analysis he conducted, but because that was the cost of equity determined in a recent rate case involving Aquarion's Massachusetts affiliate.<sup>2</sup> Although

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<sup>2</sup> "The Company's proposed return on equity of 10.25%, was based on the authorized return determined in its recently concluded rate case before the Massachusetts Department of Public Utilities (Massachusetts DPU) in

decisions from other regulatory bodies on utility issues and concepts can be instructive, we have ample analytical evidence in the record and thus do not need to rely on the findings of the Massachusetts DPU. Aquarion filed the testimony of Ms. Ahern to rebut the testimony of Mr. Parcell. Hampton filed surrebuttal testimony of Mr. Parcell taking issue with Ms. Ahern's criticisms. The testimony of both witnesses was admitted into evidence at hearing and both were extensively cross-examined.

In reviewing the DCF ranges of both Mr. Parcell and Ms. Ahern, it is remarkable that they are so similar. Although Ms. Ahern and Mr. Parcell held differing opinions on whether one component of growth included in the DCF should be comprised exclusively of analysts' forecasts of earnings per share, as noted by Mr. Parcell, this methodological difference is of no consequence in that the DCF results are essentially the same. 5/24/13 Tr. AM at 102, lines 8-20. Ms. Ahern recommended exclusive reliance of forecasted earnings per share, while Mr. Parcell used a mix of measurements, including analysts' forecasts of earnings per share. We agree that this methodological disagreement is of little significance, given the similarity of the two experts' DCF cost ranges, though we note that over the years the Commission has not relied exclusively on analysts' forecasted earnings per share but instead has considered those forecasts among a mix of measures of growth.

Ms. Ahern advocated for the upper range of Mr. Parcell's DCF results which ranged from 8.3% to 9.6%. Mr. Parcell, himself, recommended a DCF for Aquarion that was in the "upper portion of the broad DCF range" which he stated was 9.0% to 9.6%. Exh. 13 at 19. The OCA suggested adopting the "mid-point of the mid-points" of each of the experts, which would be a

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D.P.U. 11-43, which was a fully litigated case. That decision was issued just over one month ago. Given the extremely recent nature of that result, the relatively small size of the Company and the fact that it is smaller than its Massachusetts affiliate, it is reasonable that a return on equity slightly above the average of the Company's surveyed should be authorized." Exh. 5, Testimony of Troy Dixon, page 22.

DCF of 9.365%. In light of the testimony and schedules presented at hearing, as well as our standard approach to DCF analysis, we find the weight of the evidence supports adoption of Mr. Parcell's DCF high-point, for a 9.6% cost of equity for Aquarion.

We note that the DCF cost of equity ranges provided by Mr. Parcell and Ms. Ahern are very similar, before adjustments by Ms. Ahern. The same is not true of the CAPM results, as both experts reached widely divergent results. While we have consistently used the CAPM and other risk premium methods as a check on the DCF results, we find that the DCF results are well supported and documented in this proceeding and that the CAPM results provide little additional value.

We next turn to the issue of risk adjustments. Ms. Ahern proposed a 0.86% increase to the DCF and CAPM cost rates to account for financial risk. She stated that financial risk is due to the introduction of senior capital, such as debt and preferred stock, into Aquarion's capital structure. She reasoned that the higher the proportion of senior capital in the capital structure, the higher the financial risk to common equity. Ms. Ahern determined this financial risk using the Hamada equation which calculates the relative equity ratios of water companies in terms of a measurable beta, or basis point.

Aquarion's debt to equity ratio is approximately 60/40. Ms. Ahern argues that this introduces a significant business risk to the Company. We do not agree. Many of the utilities we regulate have not dissimilar debt to equity ratios.<sup>3</sup> The Commission has historically not adjusted DCF results on the basis of a utility's capital structure. In *Pennichuck Water Works*, we held that a company cannot create a risk via its capital structure and then demand that the Commission

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<sup>3</sup> See, e.g. *Northern Utilities, Inc.*, Order No. 25,352 (April 24, 2012) in Docket No. DG 11-069, reporting a debt to equity ratio of 59.75% to 40.25% and *Pennichuck East Utilities, Inc.*, Order No. 25,051 (December 11, 2009), Docket No. DW 09-051, reporting a debt to equity ratio of 55.18% to 44.82%.

protect it from that risk. *Pennichuck*, Order No. 17,911, 70 NH PUC 850, 863 (1985). In *EnergyNorth*, the Commission rejected a risk adjustment to account for the introduction of debt into the capital structure. *EnergyNorth* at 291. The Commission deems the risk associated with senior capital in a utility's capital structure to be accounted for already by investors in the market price they are willing to pay for common stock. *Pennichuck* at 863. As stated by Mr. Parcell, Ms. Ahern's reasoning assumes Aquarion is financed independently and not as part of a financial network. Exh. 14 at 22. He noted that, as Mr. Dixon testified, Aquarion is too small to seek debt on its own and that it relies on its parent. 5/23/13 Tr. at 173 lines 22-24. Mr. Parcell also noted that such an adjustment for leverage in a capital structure is inappropriate when the capital structure is complex due to parent/affiliate interrelations and is not transparent or capable of evaluation. Exh. 14 at 22. Mr. Parcell also criticized Ms. Ahern for not reviewing any capital structure data other than that provided in Aquarion's Annual Report filed with the Commission. *Id.* Additionally, she did not review trends in Aquarion's capital structure ratios. *Id.* We find these criticisms to be credible and, given the Commission's view over the years that adjustors for this type of business risk are not appropriate, we decline to adopt Ms. Ahern's financial risk adjustment.

Ms. Ahern also added a 0.40% increase to the DCF and CAPM cost rates to account for business risk. Commencing on page 44 of her testimony, she defined business risk as the risk a small company faces compared to the risk of a larger company. See, Exh. 8. She states, for example, that a smaller company faces more risk exposure to business cycles and economic conditions and that smaller companies have a less diverse customer base, less diverse operations, and less financial flexibility. Additionally, extreme weather conditions such as droughts will have a greater impact upon a small operating water utility than upon a larger, more

geographically diverse holding company. Ms. Ahern cited as an example of how size can affect business risk, Hampton's assessment of a right-of-way tax. The tax represented 28% of Aquarion's test year net income and had the Company been larger, the tax would not have had such a negative impact on Aquarion's income. Mr. Parcell rebutted these assertions by arguing that Aquarion does not have access to equity markets on its own; rather, Aquarion's equity is provided by its parent. Mr. Parcell stated that in his own analysis, the proxy of water utilities contained many utilities with multiple subsidiaries operating in different jurisdictions. Exh. 14 at 21. Ms. Ahern acknowledged in response to Hampton's discovery request 4-20 that Mr. Parcell's proxy group contained mostly utilities with subsidiaries. Mr. Parcell argued that to allow an adjustment for size could encourage utilities to split up their operations in order to form small entities in an effort to be awarded higher rates of return, which would harm customers by creating artificially higher rates. *Id.* We agree with Mr. Parcell's reasoning and thus deny Ms. Ahern's recommendation to adjust the cost of equity for business risk.

Staff's witness Mr. Naylor recommended that the cost of equity be reduced to reflect the ways in which the WICA reduces risk to the Company, though he did not quantify the level of reduction that would be appropriate. We have not required such a reduction for utilities with similar infrastructure mechanisms and do not find a basis in the record to do so in this case. As we will not increase the cost of equity to reflect the Company's assertion of greater risk, neither will we reduce the cost of equity to reflect the Staff's assertion of lesser risk. Accordingly, we find that a cost of equity of 9.6% is appropriate for Aquarion. We will incorporate this cost of equity figure into the revenue requirement calculations.

## B. Revenue Requirement

The Revenue requirement is determined by multiplying rate base by a rate of return and including a utility's known and measureable expenses as found in a utility's sample test year. The Commission uses a historical test year. Aquarion selected 2011 as its test year. The audited rate base, which is agreed to by Staff, the OCA, and Aquarion, totals \$22,507,606. The Commission received no evidence or argument that this rate base is inaccurate or that the assets are not prudent, used and useful, as required by RSA 378:28. Although the rate of return was not a settled issue among Staff and the parties, for illustration purposes, the settling parties proposed using a 9.75% return on equity, Aquarion's last approved return on equity, to illustrate the impacts on the revenue requirement. Using a cost of equity of 9.75%, Staff and the settling parties calculated Aquarion's rate of return to be 7.55%. Applying this rate of return and using the settling parties' proposed operating income of \$1,699,324 and other adjustments proposed in the partial settlement agreement the revenue requirement is \$7,034,759.

Having determined the cost of equity to be 9.6%, the revenue requirement becomes \$7,012,053, resulting in an overall rate of return of 7.49%. The complete components of the revenue requirement are as follows:

1) Rate Base	\$22,507,606
2) Rate of Return	<u>7.49%</u>
3) Operating Income Requirement (L1 x L2)	\$ 1,685,820
4) Adjusted Net Operating Income at Present Rates	<u>\$ 1,135,450</u>
5) Revenue Deficiency before Tax Effect (L3 – L4)	\$ 550,370
6) Tax Effect	<u>59.475%</u>
7) Revenue Deficiency (Tax Effect) (L5 ÷ L6)	\$ 925,380

8) Revenues at Present Rates	<u>\$ 6,086,673</u>
9) Total Revenue Requirement (L7 + L8)	<u>\$ 7,012,053</u>
Percentage Increase (L7 ÷ L8)	15.20%

We are aware that, pursuant to the partial settlement agreement, Aquarion will submit documentation of its calculation for a step adjustment. The purpose of the step adjustment is to incorporate its recently approved 2012 WICA surcharge adjustment into base rates and reset the WICA surcharge to zero as of the date that the new permanent rates are implemented.

At hearing, Staff and the parties recounted the multiple rounds of discovery, technical sessions, and prefiled direct and responsive testimony. Additional time was granted to allow for exploration of settlement prior to hearing. We conclude that the process leading up to the filing of the partial settlement agreement allowed for the issues to be thoroughly explored in discovery and that negotiations were conducted with parties representing a diversity of interests. Having reviewed the partial settlement and the proposed revenue requirement and its components, as well as the proposed pro-forma adjustments, we find that the revenue requirement presented by Staff, the OCA and Aquarion is just and reasonable and that it will produce just and reasonable rates. Further, we find that the rate base used to calculate the revenue requirement is prudent, used, and useful in accordance with RSA 378:28. We also find the mechanism for transferring the WICA surcharge into base rates to be reasonable and thus approve it.

At the public hearing held on November 28, 2012, customers of Aquarion expressed concern regarding continued significant rate increases. Customers also noted that a portion of Aquarion's initial rate increase request was to account for taxes Hampton assessed on the use of rights of way. Because of the connection between changes in local taxes and rates charged to customers, we encourage Aquarion to maintain an open dialogue with the towns of Hampton,

North Hampton, and Rye on how local tax expenses impact customer rates. Aquarion has met regularly with local officials and it is apparent from the record that those meetings have been fruitful and will continue. In light of the customer comments in this proceeding, we encourage Aquarion to include in those meetings discussion of how local taxes impact customer rates.

### **C. Rates**

The settling parties proposed that permanent rates be applied on an across the board basis, that is, each customer class sees the same percentage increase. 5/24/13 Tr. PM at 149, lines 1-4. Testifying for the settling parties, Staff stated that it believed that an across the board change in rates is consistent with the last approved rate design in that the modifications of the allocation of costs to the public fire class are reflected in the revenues that Aquarion earned in the test year. North Hampton disagreed and instead seeks an allocation of only 70% of the revenues attributable to fire protection, as done in the 2008 settlement. Missing from the record, however, is an identification of the particular revenues that should qualify for the 70% allocation.

Having considered the positions of the settling parties and North Hampton, we will approve implementation of the rate increase on an equal basis to all customer classes. Though we understand North Hampton's arguments, because the record is silent as to those revenues that are attributable to public fire protection, we have no basis to perform the 70% allocation on the revenue increase. Therefore, we will maintain the base public fire protection rates as they emerged from the 2008 settlement and allocate the new revenues on an equal basis across all customer classes. In applying the increase to Aquarion's revenue requirement equally among all customer classes, we are not modifying Order No. 25,019 or the Commission's finding that such an allocation of the prior revenue requirement was just and reasonable.



Aquarion's last cost of service study was conducted in 2005 and bears updating. A provision of the partial settlement agreement in this case appropriately includes a commitment on the part of Aquarion to file a new cost of service study as part of its next rate case. The updated information provided by that study will better inform Staff, the parties, and the Commission on a just and reasonable allocation of the revenue requirement among Aquarion's customer classes. We encourage North Hampton to participate in the review of the new cost of service study when filed.

**D. WICA**

Staff, the OCA, and Aquarion propose in the partial settlement that the Company's WICA pilot program be continued for further evaluation until the next general rate case. North Hampton also supports the continuation of the WICA and recommended that the program not be capped at a level that is too low for the program to achieve some of its stated objectives. For clarity's sake, in Order No. 25,019, the Commission approved caps on the revenue increases Aquarion could seek under the WICA program as follows: Aquarion could request no more than a cumulative 7.5% increase to its revenue requirement between general rate filings and it could not request an increase to its revenues of more than 5% for any twelve-month period, i.e., annually during the pilot. We believe these are the caps to which North Hampton refers.

Staff, the OCA, and Aquarion's recommendation includes relatively minor changes to the program to which North Hampton did not object. Staff and the settling parties requested the exclusion of customer meters from the list of infrastructure improvements; the exclusion from WICA recovery of the first \$50,000 in annual costs related to the emergency/reactive replacement of services, valves, and hydrants; and Aquarion's agreement to provide an updated main replacement prioritization analysis and updated infrastructure inventory in its next annual

WICA filing. At hearing, Staff stated that three years of data was insufficient to determine whether to convert the WICA pilot to a permanent program or terminate it. While pointing out that some data showed that Aquarion had accelerated its rate of replacement of aging infrastructure, other data was inconclusive on whether WICA investment had contributed to a reduction in water loss, or to a more reliable distribution system. Staff also noted that Aquarion's statement that it was likely to file another rate case in three years meant that the WICA was not meeting the goal of extending time between rate cases. For these reasons, Staff and the settling parties recommend the Commission permit the WICA program to continue, with the recommended modifications, so that additional data can be obtained and reviewed in Aquarion's next rate case.

We accept the recommendation of Staff, the OCA, and Aquarion to continue the WICA program for another rate case cycle. We are encouraged by the indication that the rate of infrastructure replacement has increased, and it can be expected that customers will benefit from this increase through a more reliable water distribution system. While this aspect of the pilot program is encouraging, it appears unlikely that the program will extend the time between rate cases as was originally projected. Aquarion indicates that changes in costs, the trend of declining consumption, and the remainder of its annual capital investments not recovered through WICA make it difficult to extend the time between full rate cases. Nevertheless, we hope that the impact of a WICA program in lessening rate shock, or spreading out the increasing costs of this water utility, will continue to provide benefits to customers.

At hearing, Hampton's witness, Frederick Welch, recommended the WICA projects be paid through bonds so that at the end of the bond period, assuming they were short-term bonds, the bond and the expenses would disappear. We understand that WICA costs cannot be paid

through short-term bonding because utility rates are not, and cannot, be set the way municipal rates are set. Utility assets placed in service are recovered over their expected useful life, on a straight line basis. The underlying principal is that customers pay a return on assets that serve them. If the Commission were to approve a shorter term, or shorter service life of the assets, current customers would pay the entire cost of assets even though those assets would be used by subsequent generations beyond that term. Thus, shortening the asset life to match the bond term would result in a subsidy whereby future customers do not pay for assets that provide them service. Straight line depreciation is an integral, essential component in preventing these types of inter-generational inequities. In addition, the use of bonds would result in higher rates for customers to pay off the assets over a shorter time period. We appreciate Mr. Welch raising this idea; however, for the reasons stated, we decline to adopt the use of bonds for these purposes.

#### **E. Capital Planning**

At hearing, the Commission instructed Aquarion to file a copy of its five-year capital budget. The plan submitted identified major capital spending areas for mains, transmission and distribution, meters, source of supply, and treatment, among other things. While this plan is useful for anticipating capital spending, the Commission is also interested in understanding Aquarion's plan for addressing peak demand. Aquarion testified that its peak demand is at or near 5 million gallons per day, usually during July. 5/23/13 Tr. at 79 and 151. At hearing, Aquarion was not fully able to state that it had a plan to reduce peak demand. The Commission directs Aquarion to file such a plan with its next Annual Report.

#### **F. Recoupment**

We approved temporary rates for Aquarion by Order No. 25,412 (September 18, 2012). Pursuant to RSA 378:29, temporary rates are effective until the final determination of the rate

proceeding. Under the law, if final rates are in excess of temporary rates, the public utility is permitted to recover the sum of the difference. In the event permanent rates are less than temporary rates, the excess is refunded, pursuant to RSA 378:7 to establish just and reasonable rates. With respect to permanent rates in this case, Staff and the settling parties recommend that the rate increase be applied equally to all customer classes. Thus, to fully reconcile the permanent rates with temporary rates, Aquarion shall file a reconciliation report that identifies the funds to be recouped for each customer class and propose a surcharge to recover the funds. We will render a decision on this issue after Aquarion has made its filing and after Staff and the parties have had an opportunity to comment on Aquarion's proposed surcharge and recoupment period.

#### **G. Conclusion**

Having reviewed the record, including the settlement and evidence presented at hearing, we find that the proposed revenue requirement, as modified by our finding on cost of equity, is reasonable and will produce just and reasonable rates. We find that the terms of the partial settlement represent an appropriate balancing of ratepayer interests and the interests of Aquarion's investors under current economic circumstances and are consistent with the public interest. We further find that Aquarion's investments in rate base used to serve its customers are prudent and used and useful, pursuant to RSA 378:28 and that the resulting rates are just and reasonable pursuant to RSA 378:7. We will adopt and approve the terms of the partial settlement agreement.

**Based upon the foregoing, it is hereby**

**ORDERED**, that the terms of the partial settlement agreement presented by Staff and the settling parties are hereby adopted and approved as discussed herein; and it is

**FURTHER ORDERED**, that Aquarion is authorized a permanent revenue requirement of \$7,012,053, which is a 15.20% increase over Aquarion's pro forma test year water revenues; and it is

**FURTHER ORDERED**, that Aquarion is authorized to collect from customers permanent rates, as discussed herein; and it is


**FURTHER ORDERED**, that Aquarion shall file within fourteen days its calculation of the step adjustment of the approved 2012 WICA surcharge; and it is


**FURTHER ORDERED**, that Aquarion shall file within fourteen days its calculation of the temporary rate recoupment from July 1, 2012 to the date of this order, as well as its proposed method of recovering the difference; and it is


**FURTHER ORDERED**, that Aquarion shall file within thirty days a calculation of its rate case expenses and proposed surcharge; and it is

**FURTHER ORDERED**, that Aquarion shall file with the Commission a compliance tariff within fourteen days of the date of this order.


By order of the Public Utilities Commission of New Hampshire this twenty-eighth day of  
June, 2013.

  
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Amy L. Ignatius  
Chairman

  
\_\_\_\_\_  
Michael D. Harrington  
Commissioner

  
\_\_\_\_\_  
Robert R. Scott  
Commissioner

Attested by:

  
\_\_\_\_\_  
Lori A. Davis  
Assistant Secretary