

STATE OF NEW HAMPSHIRE

Inter-Department Communication

DATE: August 26, 2019
AT (OFFICE): NHPUC

FROM: F. Anne Ross *FAR*

SUBJECT: IR 19-005
Generic Return on Equity (ROE) for Small Water Companies
Proposed Rule Changes

TO: Commissioners
Service List

SUMMARY OF STAFF RECOMMENDATION

The Commission, pursuant to RSA 541-A, should initiate a formal rulemaking for N.H. Code Admin. Rules Part Puc 600 to revise the definition of a small water utility, to change the methodology for determining a generic Return on Equity (ROE), and to eliminate rules for an expedited rate proceeding for small water utilities as an alternative to a full rate proceeding. The generic ROE calculation provides for a baseline ROE based on nationwide authorized water and gas utility ROEs and expected yields on utility preferred stock. Fifty basis points will be added to the baseline ROE for rate case expense savings. The baseline ROE may also be adjusted as follows: up to 25 basis points added for a balanced capital structure, up to 50 basis points added for exemplary performance, and up to a 50 basis point deducted for being out of compliance with regulatory requirements.

BACKGROUND

On February 27, 2018, three water companies filed a joint Petition for Declaratory Ruling or Rulemaking regarding the ROE for small water companies. The three filing companies were: (1) Hampstead Area Water Company (HAWC), (2) Abenaki Water Company (Abenaki) and (3) Lakes Region Water Company (Lakes Region) (collectively the Companies). HAWC and Abenaki had pending rate cases at the time of the filing, DW 17-118 and DW 17-165 respectively.

After discussing their respective gross receipts, expenses and prior approved ROE's, the Companies described the struggles of providing needed infrastructure upgrades for their multiple small water systems and the burdens placed on the Companies by Safe Drinking Water standards. The Companies claimed that those increasing demands create financial and operational risks and therefore justify a higher ROE than for larger more stable utilities. The Companies attached the expert testimony of Pauline M. Ahern, an ROE

expert, who suggested that for small water companies, substantial adders should be applied to standard ROE's produced by a discounted cash flow analysis (DCF).

On June 20, 2018, the Companies signed a stipulation with Commission Staff withdrawing their joint petition and requesting that the Commission investigate whether changes are needed to the Commission's small water company rules. The Commission closed the docket by secretarial letter on July 6, 2018. HAWC and Abenaki submitted Ms. Ahern's testimony in their respective pending rate cases and ultimately HAWC and Abenaki settled ROE issues with Staff and the Office of Consumer Advocate (OCA) in those two rate cases. The Commission approved the ROEs provided by the settlements.

On January 9, 2019, the Commission opened an investigation into establishing a straightforward and economic methodology for setting small water utility ROEs, to avoid extensive litigation, and to produce just and reasonable rates (Docket IR 09-005). The order of notice set a public stakeholder technical session for February 26, 2019 and ordered Staff to investigate the issues and report its findings, conclusions and recommendations to the Commission.

On February 26, 2019, at the technical session attended by representatives of the Companies and OCA, Staff outlined its proposal for setting a generic ROE. Staff's proposal was to use the approach approved by the Commission in the Abenaki (DW 17-165) and Hampstead (DW 17-118) rate cases. The Companies agreed to provide their proposal for setting an ROE within a few weeks.

On June 6, 2019, not having received the Companies proposal, Staff notified the Companies and OCA of its intent to move forward with the Staff proposal unless it received the Companies' proposal in writing before June 30, 2019. Both the Companies and the OCA provided written proposals regarding a methodology for setting a generic ROE for small water companies.

PROPOSALS FOR SETTING ROE FOR SMALL WATER COMPANIES

Staff – Initial Proposal

Staff's initial approach to establishing a generic ROE for small water companies is based upon the methodology used in the two ROE settlements in the HAWC and Abenaki rate cases (DW 17-118 and DW 17-165). The methodology was first presented by Staff's expert witness, J. Randall Woolridge, and is similar, but not identical, to the methodology used by the Connecticut Department of Energy and Environmental Protection Public Utilities Regulatory Authority for determining ROEs for small water utilities in Connecticut (Connecticut). Connecticut uses the average of the recent ROE's for the two largest water utilities in Connecticut (Aquarion Water and Connecticut Water) as its baseline ROE for small water utilities. Connecticut then applies a fixed adder of 50 basis points and a variable performance adder of up to 50 basis points to the baseline ROE, allowing up to a total of 1% to be added.

Staff's initial proposal set a baseline ROE for small water companies based on the average of the authorized ROEs for water utilities in the US during the most recent six months; and the median of the authorized ROE's for gas utilities in the US during the most recent six months. This ROE data is based on published Regulatory Research Associates (RRA) data available through a Commission subscription to SNL. Staff then averaged those two amounts to derive a baseline ROE percentage. Staff added 50 basis points to the baseline ROE to account for the costs avoided by settling rather than litigating the ROE. A Company that demonstrated good utility performance, one measure of good performance being a balanced capital structure, could be granted up to an additional 50 basis points. As an example, below is the calculation of the stipulated ROE percentage in DW 17-118 and DW 17-165, modified to include Staff's proposed adder of 50 basis points for good performance:

Average (mean) Authorized ROE – Water Utilities: 1 st half 2018	9.41%
Median Authorized ROE – Gas Utilities: 1 st half 2018	<u>9.50%</u>
Average (rounded down)	9.45%
Add: ROE Litigation Replacement Premium	<u>0.50%</u>
Stipulated ROE	9.95%
Good Performance (proposed adder)	<u>0.50%</u>
Generic ROE	10.45%

Companies Proposal

The Companies proposed to define a small water utility as selling “Less than 500,000,000 gallons of water per year.”

The Companies adopted Staff's proposal to use RRA data to determine a baseline ROE plus a 50 basis point litigation replacement premium. The Companies then added 100 basis points for a “Small Size Adjustment” and another 50 basis points for a “Risk Adjustment.” As an example, below is the calculation of the stipulated ROE percentage in DW 17-118 and DW 17-165, modified to include the Companies' adders of 100 basis points for a small size adjustment and 50 basis points for a risk adjustment.

Average (mean) Authorized ROE – Water Utilities: 1 st half 2018	9.41%
Median Authorized ROE – Gas Utilities: 1 st half 2018	<u>9.50%</u>
Average (rounded down)	9.45%
Add: ROE Litigation Replacement Premium	<u>0.50%</u>
Stipulated ROE	9.95%
Small Size Adjustment (proposed adder)	1.00%
Risk Adjustment (proposed adder)	<u>0.50%</u>
Generic ROE	11.45%

According to the Companies, the small size adjustment is necessary because smaller companies are less capable than larger companies of coping with factors that affect sales,

revenues and earnings such as: (1) business cycles and economic conditions, (2) loss of revenue from large customers, and (3) extreme weather conditions

According to the Companies, the risk adjustment is necessary because smaller companies do not have access to public equity and bond markets and tend to be riskier, causing investors to expect a greater return to compensate for the risk.

OCA Proposal

OCA proposes to define a small water utility to be “Less than 300,000,000 gallons of water sold per year.”

The OCA proposal would calculate the base generic ROE using the average of an RRA Estimate proposed by Staff, plus 50 basis points, and the Value Line Estimate of the yield on “Utility A” preferred stock plus, plus 375 basis points. The Value Line Estimate is forward-looking and the OCA believes any generic ROE should have a forward-looking component.

The OCA proposes that when a small water company files a rate case, 25 basis points be added to base generic ROE if its actual capital structure is at least 50% debt and the Commission has not found the company to have been out of compliance with any regulatory requirements in the preceding two years. If the company has been out of compliance, 25 basis points are to be deducted from the baseline ROE.

According to the OCA, symmetry is important if the generic ROE methodology is going to produce just and reasonable rates. Therefore, a methodology that includes an ROE adder for having a suitable capital structure and being compliant with regulations should also include a corresponding ROE deduction for non-compliance with regulations.

The OCA does not agree that small water utilities are inherently more risky from an investor perspective and deserve an ROE bonus, but does not consider adding 50 basis points as compensation for avoiding a litigated rate case to be unreasonable.

STAFF CONCLUSIONS AND RECOMMENDATIONS

Having considered the Companies and OCA proposals, Staff recommends the following:

Rules Process

The Commission, pursuant to RSA 541-A, should initiate a formal rulemaking for N.H. Code Admin. Rules Part Puc 610 to revise the definition of a small water utility, to change the methodology for determining a generic ROE, and to eliminate rules for an expedited rate proceeding for small water utilities as an alternative to a full rate proceeding. The proposed rule changes are described below and attached as (Exhibit 1). Before issuing a notice of proposed rulemaking as required by RSA 541-A:6 (Notice),

Staff recommends that the Commission circulate the draft initial proposal to the Companies and the OCA for any additional comments process. *Proposed rule changes attached as Exhibit 1.*

Below are examples of the maximum and minimum generic ROEs possible under the proposed rule changes:

Baseline ROE

Average (mean) Authorized ROE – Water Utilities (last calendar year)	9.41%
Median Authorized ROE – Gas Utilities (2 nd half last calendar year)	<u>9.50%</u>
Average (rounded down)	9.45%
Value Line Utility Preferred Stock plus 350 Basis Points	<u>9.49%</u>
Baseline ROE	<u>9.47%</u>

Maximum Generic ROE

Baseline ROE	9.47%
Add: Rate Case Expense Savings	0.50%
Add: Capital Structure (equity 45% to 55%)	0.25%
Add: Exemplary Performance (discretionary)	0.50%
Maximum Generic ROE	<u>10.72%</u>

Minimum Generic ROE

Baseline ROE	9.47%
Add: Rate Case Expense Savings	0.50%
Deduct: Non-compliance with Regulatory Requirements (discretionary)	<u>-0.50%</u>
Minimum Generic ROE	<u>9.47%</u>

Small Water System Definition

The definition of a small water utility should be “Less than 400,000,000 gallons of water sold per year.” Four hundred million gallons of annual sales is significantly below what New Hampshire’s two largest water utilities sell and is significantly more than what HAWC sells, the largest of the other New Hampshire water utilities.¹ The proposed delineation between a small and large water system at four hundred million gallons of

¹ Millions of gallons sold in 2018: Pennichuck Water Works 3,921; Aquarion Water Company 601; HAWC 183; Lakes 54; Abenaki 45.

annual sales should not serve as a disincentive for small water utilities to grow, and establishes a reasonable threshold at which a company specific review should be undertaken in determining an appropriate ROE. Above the four hundred million gallon annual sales threshold, the additional rate case expense of litigating ROE should have a minor impact on customer bills as that cost would be recovered from a large customer base.

Baseline ROE

The baseline ROE is to be calculated using a three-step process:

- 1) Calculate the average of the average authorized ROE for water utilities for 12 months ending June 30 of the last calendar year and median of authorized ROE for gas utilities for the last six months of the last calendar year. Or, if the average authorized ROE for water utilities is based on seven or fewer ROE decisions, use the median of authorized ROE for gas utilities for the last full calendar year;
- 2) Add 350 basis points to the Value Line Estimated Yield on "Utility A" preferred stocks as most recently reported by Value Line "Selection and Opinion";
- 3) Calculate the average of Step 2 and Step 3.

The source document for the average water and median gas ROEs will be the Regulatory Research Associates (RRA) published reports on rate major rate decisions, available through a Commission subscription to S&P Global Market Intelligence.² Staff believes that using current national authorized ROE's for water and gas utilities, combined with the adjusted estimated yield on "Utility A" preferred stocks,³ gives a good approximation of what a DCF analysis would yield if it were performed for the small water companies. Recent regulatory decisions on authorized ROE are likely to reflect current market conditions and to some extent both historical and forward looking returns. Use of the estimated yield on "Utility A" preferred stocks ensures a significant portion of the baseline ROE is based on forward looking returns, an important consideration for investors, therefore, the three-step process provides a reasonable basis for setting a baseline ROE for small water companies.

Adjustments to Baseline ROE

Staff proposes adding 50 basis points to the baseline ROE for rate case expense savings because litigation time and expense are significant for presenting and rebutting expert testimony on ROE. Thus, developing an easy approach to calculating ROEs will create savings to water customers and streamline and simplify the rate case process for small water companies. The 50 basis points is an approximation of these savings. It is worth noting that the Connecticut Authority estimated cost savings of \$55,000-\$65,000 per rate case by avoiding litigation on the ROE. *See* Public Utilities Regulatory Authority, Docket No. 13-10-29, *Investigation into Streamlining the Ratemaking Process for Small Water*

² The RRA publishes the median gas utility ROE quarterly and average water utility ROE annually.

³ Value Line publishes its estimated yield on "Utility A" preferred stocks weekly.

Companies, (October 23, 2013) at 4-5. (CT ROE Decision). *CT ROE Decision attached as Exhibit 2.*

Staff proposes adding 10 basis points to the baseline ROE for a small water utility that has a capital structure with equity of 40% to 44% and a 15 basis point adder (total of 25 basis points) for equity of 45% to 55%. This capital structure balances risk against expense in ways that benefit water customers in the long run. As the Connecticut Authority observed:

“The Small Water Companies plan to manage their capital structure by periodically alternating between long term debt and common equity issues. The Small Water Companies believe that they should be able to complete the task of managing their respective common equity ratios between 40% and 60%, on average, as each construction cycle dictates. This is important since the water utility industry is capital intensive and therefore requires constant and significant proportions of capital. This capital comes from periodic long-term sources coupled with short-term bank credit lines used in the interim between major financings. Long-term capital such as debt and equity must be acquired in the financial markets and therefore maintenance of an appropriate capital structure is paramount. Management by the Small Water Companies of their capital ratios will consist of a monitored balancing between internal cash flows of earnings and depreciation and draw downs on bank lines of credit. The start and end of each construction cycle controls the timing between short and long-term debt and common equity issuances as the means to manage their common equity ratio between 40% and 60% on average, as each construction cycle dictates.” CT ROE Decision at 6.

“The Authority recognizes that depending on the timing of rate filings of one of the Small Water Companies and the concurrent equity ratios that a 60% equity ratio would generate higher required revenues all other things being equal. However, there may be offsetting savings in debt costs which could offset an increase in revenue requirements. For example, if one of the Small Water Companies has just completed a debt financing at costs and terms more favorable than normal and because the additional debt has the effect of bringing the company closer to the lower limit of 40% equity, that small water company may determine to increase its common equity ratio to balance the capital structure at 60% or 50% equity. This balancing of the capital structure may produce a higher incremental cost of the equity component. However, there may be an even greater savings in the debt cost component of capital.” *Id.*

Staff proposes a variable adder of up to 50 basis points for exemplary performance based upon a demonstration by the small water company that it has implemented management efficiency measures, and/or improved customer service, and/or implemented cost containment initiatives.

Staff also recommends that up to 50 basis points be deducted from the baseline ROE if the company has not been in compliance with regulatory requirements over the most recent two years, unless non-compliance is the result of a recent acquisition and the

utility has an approved plan to achieve compliance. Staff, or any party to the proceeding, could identify non-compliance and propose a deduction of up to 50 basis points.

Other Changes to the Existing PUC 610 Rules

Staff proposes to eliminate the sections of this rule that provide for a different rate case filing format than required under the Puc 600 rules generally. Historically the small water companies have not used these sections and instead have requested waivers as needed to the standard Puc 600 rules filing requirements. That waiver process has worked well for the small water companies. Thus Staff finds that the current rule creating a different filing regime serves no practical purpose.

The new approach to developing a generic ROE is easier to administer than the process in the current Part Puc 610. Furthermore, Staff no longer has access to information required to calculate the annual generic ROE under the current rules.

Readopt with amendments Puc 600, effective 9-10-13 (Document #10407), cited and to read as follows:

CHAPTER Puc 600 RULES FOR WATER SERVICE

REVISION NOTE:

Document #6475, effective 3-25-97, made extensive changes to the wording and numbering of rules in Chapter Puc 600. Document #6475 supersedes all prior filings for the sections in this chapter. The prior filings for former Chapter Puc 600 include the following documents:

#2011, eff 5-4-82
#2059, eff 6-22-82
#2549, eff 12-26-83
#2601, eff 1-24-84
#2784, eff 7-27-84, EMERGENCY
#2912, eff 11-26-84
#4341, eff 11-24-87
#4782, eff 3-5-90
#5002, eff 11-26-90
#5616, eff 4-20-93
#5818, eff 4-27-94
#5866, eff 7-6-94
#6245, eff 5-14-96
#6365, INTERIM, eff 11-18-96, EXPIRED: 3-18-97

Puc 601.01 Application of Rules. Puc 600 shall apply to any utility as defined in Puc 602.16.

PART Puc 602 DEFINITIONS

Puc 602.01 "Class A utility" means a utility having annual water operating revenues of \$750,000 or more.

Puc 602.02 "Class B utility" means a utility having annual water operating revenues of \$150,000 or more, but less than \$750,000.

Puc 602.03 "Class C utility" means a utility having annual water operating revenues of less than \$150,000.

Puc 602.04 "Commission" means the New Hampshire public utilities commission.

Puc 602.05 "Customer" means any person, firm, corporation, cooperative marketing association, utility or governmental unit or subdivision of a municipality or of the state or nation supplied with water service by a utility.

Puc 602.06 "Customer service pipe" means that section of service pipe from the customer's property line or the curbstop to the customer's place of consumption.

Puc 602.07 ~~"Discounted cash flow methodology" or "DCF" means a method of computing the cost of equity capital via the estimation of the expected flow of dividends in relation to the current market price of the stock computed by dividing the expected annual dividend by the current market price of a share of common stock and adding the expected rate of growth in dividends, as represented in the equation below, where:~~

— (a) "k" means the cost of equity capital:

~~—— (b) "Div_t" means the annual dividend expected in year 1 which is calculated by multiplying the dividends paid over the current year just ended by the product of 1 plus the expected rate of growth in dividends, as shown in the following formula:~~

$$\text{Div}_t = \text{Div}_0(1 + g)$$

~~—— (c) "Div₀" means the dividends paid over the current year just ended;~~

~~—— (d) "P₀" means the current market price of a share of common stock;~~

~~—— (e) "g" means the expected rate of growth in dividends, which is assumed to be constant; and~~

~~—— (f) "k" is derived by dividing "Div_t" by "P₀" and adding "g" to the product; as shown in the following formula:~~

$$k = (\text{Div}_t / P_0) + g$$

~~—— Puc 602.08 — "Franchise" means the right to conduct business as a utility pursuant to RSA 374:22 and RSA 374:26.~~

Puc 602.089 "Meter" means a device installed by a utility for the measurement of water quantities to be used as a basis for determining charges for water service.

Puc 602.109 "Normal operating pressure" means pressure occurring between that when system storage is at the:

- (a) Lowest point of its normal operating range during maximum day demand; and
- (b) Highest point of its normal operating range during minimum day demand.

Puc 602.104 "Order nisi" means an order that will ripen or take effect at some set date in the future unless the order is rescinded by the commission before that date.

Puc 602.112 "Service connection" means the point of connection between the customer's service pipe and the utility's service line.

Puc 602.123 "Service entrance" means the point at which the customer service pipe enters the customer's building.

Puc 602.134 "Service pipe" means the connection between the utility's main and the customer's place of consumption and includes all of the pipe, fittings and valves necessary to make the connection.

Puc 602.145 "Small water system" means any water distribution system that sells fewer than 400,000,000 gallons of water annually serving fewer than 600 customers:

- (a) Which has received a franchise and established an initial revenue requirement pursuant to Puc 1600;
- (b) Which is not interconnected with any other water distribution system owned, operated by or affiliated with the same individual or entity; and
- (c) Whose revenue requirement is established based on the value of the assets used to serve only those customers served by that water distribution system.

Puc 602.156 "Utility" means any "public utility" as defined in RSA 362:2 and RSA 362:4 owning, operating or managing any plant or equipment or any part of the same for supplying of water to the public, or engaged in the transmission or sale of water ultimately sold to the public within New Hampshire except:

- (a) Municipal corporations operating within their corporate limits;
- (b) Municipal corporations which are exempt pursuant to RSA 362:4, to the extent of any such exemption;
- (c) Any landlord supplying water to tenants which service is included in a rental fee; or
- (d) Any association of residents supplying water to themselves.

Puc 602.167 "Utility service pipe" means that portion of the service pipe not characterized as customer service line or pipe.

Puc 602.178 "Water service" means the furnishing of water to a customer in this state by a utility.

PART Puc 603 SERVICE PROVISIONS

Puc 603.01 Filing of Tariffs. No utility shall render service until a complete tariff, containing rate schedules, shall have been filed with the commission and published in accordance with Puc 1600.

Puc 603.02 Information to Customers.

- (a) Each utility shall, upon request, provide a customer with a copy of the most recent chemical analysis of the water supplied.
- (b) Not more than one chemical analysis per customer per year shall be required pursuant to (a) above.

Puc 603.03 Measurement of Service.

- (a) All water sold by a utility shall be billed on the basis of metered volume sales unless a waiver is granted by the commission pursuant to Puc 201.05 for unmetered service.
- (b) Temporary service may be provided on a flat rate basis when the use of water can be readily estimated.
- (c) Service of a character for which there is no rate of general application may be rendered under a special contract between the utility and the applicant to become effective only after order of the commission pursuant to RSA 378:18.

Puc 603.04 Meter Reading and Bill Forms.

- (a) All meters used for metered sales shall have registration devices indicating the volume of water in either cubic feet or United States gallons. Where a constant or multiplier is necessary to convert the meter reading to cubic feet or gallons, the constant shall be plainly marked on the face of the meter.
- (b) In instances where the utility installs a remote meter read device, the meter having actual contact with water shall serve as the primary registrant and shall be the determinant for all billing and billing adjustments.
- (c) A utility shall, except as a result of weather-related emergencies or other extenuating circumstances, read the meter or remote read device of its metered customers every billing period. In no case shall it do so less than every third billing period, except as provided in (d) below.
- (d) If the billing period is 6 months or longer, the utility shall, except as a result of weather-related emergencies or other extenuating circumstances, obtain a reading of the meter or remote read device of its metered customers each billing period. In no case shall it do so less than annually.

(e) When a remote meter read device is a pulse or other non-encoder type, the utility shall obtain a reading from the water meter itself at least every 2 years.

Puc 603.05 Customer Relations. Each utility shall comply with the additional rules governing provision of service to customers contained in Puc 1200, uniform administration of utility customer relations.

PART Puc 604 QUALITY OF WATER SERVICE

Puc 604.01 Quality of Water.

(a) Each utility shall conform to all requirements of the New Hampshire department of environmental services for construction and operation of its water systems regarding sanitation and potability of the water.

(b) When a utility is notified that its water quality is being investigated by the department of environmental services, the utility under investigation shall notify the commission in writing within 10 business days.

(c) The utility referred to in (b) above shall submit to the commission a final report on any such investigation or review within 10 days after final disposition of the matter.

Puc 604.02 Cross-Connections. Each utility shall conform to all requirements of the department of environmental services relative to cross-connections.

Puc 604.03 Pressure.

(a) Each utility shall maintain normal operating pressures of not less than 20 pounds per square inch (psi) nor more than 125 psi at the service connection, subject to (b) below.

(b) For new services connected after the effective date of these rules, each utility shall maintain normal operating pressures of not less than 30 psi nor more than 100 psi at the service entrance to each building, measured with no water flow inside the building, unless the requirements of Puc 604.04 (d) and (f), or (g) are met.

(c) Utilities shall make every reasonable effort to deliver normal system operating pressures within the 30 to 100 psi range to customer service locations connected prior to the effective date of these rules.

Puc 604.04 Pressure Variation.

(a) Variations in pressure under normal operating conditions shall not exceed by one-third, either above or below, the average operating pressure, but in no case shall exceed 20 psi above or below the average operating pressure, unless the utility obtains a waiver pursuant to Puc 201.05.

(b) The average operating pressure shall be determined by computing the arithmetical average of at least 24 consecutive hourly pressure readings.

(c) Pressure variations outside the limits specified shall not be considered a violation of this rule when they:

- (1) Arise from unusual or extraordinary conditions;
- (2) Are infrequent fluctuations not exceeding 5 minutes duration; or
- (3) Arise from the operation of the customer's equipment.

(d) In systems of widely varying elevations a utility may undertake to furnish a new service which does not comply with the specifications contained in either (a) and (c) above or the minimum or maximum pressure requirements of Puc 604.03(b), if:

- (1) The customer is fully advised of the conditions under which average service may be expected; and
- (2) The customer's agreement is secured in writing.

(e) The utility may require in the agreement referred to in (d) (2) above that its terms shall be binding on future customers served at the same location under similar circumstances.

(f) The utility shall record the agreement referred to in (d)(2) above at the appropriate registry of deeds.

(g) Except as provided in (d) above, where a utility is providing new water service where pressures or pressure variations fail to meet the above limits, the utility shall require installation of booster pumps, if permitted by the department of environmental services, on a case by case basis, or pressure reducing devices, by and at the expense of the customer.

(h) The utility shall provide the appropriate remediation device as described in (g) above at its own expense for the following:

- (1) A service connected on or after the effective date of these rules which:
 - a. Fails to meet:
 1. The minimum and maximum pressure requirements of 30 psi and 100 psi established by Puc 604.03 (b); or
 2. The pressure variation criteria of this section; and
 - b. Is a location where the utility has failed to apply the requirements of paragraph (d) or (g) above; or
- (2) A service connected between May 4, 1982 and the 2013 effective date of these rules which:
 - a. Fails to meet either:
 1. The older 20 psi minimum or the 125 psi maximum pressure criteria of Puc 604.03 (a); or
 2. The pressure variation criteria of this section.

(i) Services connected as provided in (h)(2) above shall be exempt from the remediation device requirement to the extent that the pressure or pressure variation requirements of (h)(2)a were waived by an agreement recorded pursuant to paragraph (f) above or if the service was previously remediated by the customer.

Puc 604.05 Pressure Surveys and Records.

(a) Each utility serving 300 or more customers shall provide itself with one or more recording pressure gauges for the purpose of making pressure surveys as required by these rules.

(b) These gauges shall be suitable to record the pressure experienced on the utility's system and shall be able to record a continuous 24-hour test.

(c) One of these recording pressure gauges shall be maintained in continuous service at some representative point on the utility's mains in each individual service area containing 200 or more customers.

(d) At regular intervals, but not less than once in every 5 years, and when substantial changes either in demand or distribution system occur, each utility shall make a survey of pressures in its distribution system sufficient to determine the pressures maintained at representative points on its system and to indicate compliance with the pressure requirements herein.

(e) Such surveys shall be made at or near the period of maximum usage.

(f) Utilities serving less than 300 customers may make such tests with an indicating pressure gauge, provided however, that when no recording gauge is maintained on the system such tests shall be made annually.

(g) Each utility shall retain for at least 2 years and shall make available for inspection by the commission or its representative all pressure records obtained under this section.

(h) Reports of pressure complaints shall be made to the commission on Form E-14, which is described at Puc 609.07, once a month, if any occur.

Puc 604.06 Interruptions of Service.

(a) Each utility shall use all reasonable means to avoid interruptions to service, but should interruption occur service shall be re-established within the shortest time practicable, consistent with safety.

(b) When an emergency interruption of service affects any portion of the fire protection system, the utility shall promptly notify the fire chief or other public official responsible for fire protection of such interruption and of subsequent restoration to normal service.

(c) Each utility shall keep a record of all interruptions to service of over 30 minutes duration affecting any portion of the distribution system.

(d) A utility shall include in the record of service interruptions required by (c) above the following:

- (1) Date and time of interruption;
- (2) Approximate number of customers affected;
- (3) The date and time of service restoration;
- (4) The cause of such interruption when known; and
- (5) Steps taken to prevent its recurrence.

(e) When service is interrupted to perform scheduled work on mains or equipment, such work shall be done at a time causing minimum inconvenience to customers, consistent with the circumstances.

(f) Customers affected by such interruption shall be notified in advance, if practicable.

(g) Where any main supplying public fire protection service is interrupted, the utility shall promptly notify the fire chief or other official responsible for fire protection, stating the approximate time and anticipated duration.

(h) The fire chief or other official responsible for fire protection shall be notified promptly upon restoration of service.

(i) Reports of service interruptions shall be made to the commission on Form E-18, which is described in Puc 609.11, once a month, if any occur.

Puc 604.07 Shortage of Supply.

(a) The utility shall furnish a continuous and adequate supply of water to its customers and to avoid any shortage or interruption of delivery thereof except when prevented from doing so by emergencies the effect of which prudent planning would not have avoided.

(b) If a utility finds that it is necessary to restrict the use of water it shall give the commission and its customers written notice, except in emergency conditions, no less than 24 hours in advance, before such restriction becomes effective.

(c) Such notifications shall specify:

- (1) The reason for the restriction;
- (2) The nature and extent of the restriction, such as restrictions on outdoor use of water or use by certain classes of customers;
- (3) The date such restriction is to go into effect; and
- (4) The probable date of termination of such restriction.

(d) During times of threatened or actual water shortage each utility shall equitably apportion its available water supply among its customers with due regard to public health and safety.

Puc 604.08 Conservation. Each utility shall comply with water conservation rules promulgated by the department of environmental services pursuant to RSA 485:61.

PART Puc 605 METER ACCURACY AND TESTING

Puc 605.01 Inspection of Meters.

(a) All new meters shall be inspected for correctness of register size and multiplier before being installed on a customer's premises.

(b) All meters removed from service which are to be reinstalled shall be inspected for correctness of register size and multiplier.

Puc 605.02 Meter Installations.

(a) All meters shall be in good mechanical condition and of adequate size and design for the type of service which they measure. All meters shall be checked to insure correctness of operation when installed.

(b) Each utility shall adopt a standard method of meter installation which includes:

- (1) Providing a written description and/or drawings to the extent necessary to provide a clear understanding of the requirements; and
- (2) Making available copies of these methods of installation to prospective customers and contractors or others engaged in the business of placing pipe for water utilization.

(c) The customer shall provide an accessible area protected from temperature variation and weather in which to set the meter which shall be located as nearly as practical to where the service pipe enters the building.

(d) If an adequate space is not provided in which to install a meter, the utility may:

- (1) Refuse service; or
- (2) At the option of the customer, install an outside meter pit at the expense of the customer.

Puc 605.03 Test and Calibration of Meters.

(a) All meters shall be tested and calibrated in accordance with the requirements set forth in this section.

(b) No meter shall be placed in service or permitted to remain in service if the error of registration exceeds specifications in (d) below.

(c) A utility shall test all meters as specified by size in the left column, at the 3 rates of flow specified in Table 6.5.1 below:

Table 6.5.1 Test Flows Required by Size of Meter

Meter Size - Inches	Test Flow - Gallons per Minute		
	Minimum	Medium	Maximum
5/8	1/4	2	15
5/8 x 3/4	1/4	2	15
3/4	1/2	3	25
1	3/4	4	40
1 1/2	1 1/2	8	50
2	2	15	100
3	4	20	150
4	7	40	200
6	12	60	500

(d) A meter shall be determined inaccurate and shall not be placed or returned to service if:

- (1) The percent error of registration exceeds 103% or is less than 97%; or
- (2) The registration at the minimum flow exceeds 103% or is less than 90%.

(e) The percent error of registration shall be taken as the algebraic sum of the errors at the intermediate and maximum rates of test flow, as set forth in the table above, divided by 2.

(f) Upon completion of and adjustment of any meter under the provisions of these rules, the utility shall affix thereto a suitable seal in such a manner that the adjustment of registration of the meter cannot be tampered with without breaking the seal.

(g) At the option of the utility, the larger size meters may be tested in place after installation.

Puc 605.04 Test Schedules for Meters.

(a) All new meters shall be tested and calibrated before being put into service.

(b) A utility shall not be required to report to the commission new meter tests referred to in (a) above nor shall these tests be considered as periodic tests of meters in service.

(c) A utility shall conduct tests on meters in service, according to the size of the meter in inches, in accordance with the schedule established by Table 6.5.2 below:

Table 6.5.2 Testing Interval Required By Size of Meter

Size of Meter - Inches	Maximum Interval Between Tests
5/8	10 years
3/4	10 years
1	4 years
1 1/2	4 years
2	4 years
3	2 years
4	1 year
6	1 year

(d) All meters removed from service and not due for periodic test shall be tested before being put back into service.

(e) Source meters shall be calibrated at least every 10 years.

(f) When a customer requests that the customer's meter be tested, a utility:

- (1) Shall test the accuracy of the customer's meter within 15 days from the time the request is made;
- (2) May require a deposit and charge for meter testing in an amount in accordance with tariff provisions;
- (3) Shall promptly refund the deposit and charge if on testing the meter is found to be over-registering by more than 3% or under-registering as described in Puc 605.03(d);
- (4) May retain the deposit amount if the meter is found to meet the accuracy requirements of Puc 605.03(d);
- (5) Shall permit a customer to be represented in person or by his agent when the utility conducts the test of the meter; and
- (6) Shall provide to the customer within 15 days after completion of the test a report giving:
 - a. The name of the customer requesting the test;
 - b. The date of the request;
 - c. The location, type, make, size and serial number of the meter;
 - d. The date tested; and
 - e. The result of the test.

(g) When a customer makes written application to the commission for testing of a meter, sometimes called referee testing, the commission staff shall arrange to have the meter tested in staff's presence as soon as is practicable.

(h) When notified of an application submitted to the commission by a customer for a referee test as provided in (g) above, the utility shall not remove, interfere with, or adjust the meter to be tested without the written consent of the customer, and approval by the commission pursuant to Puc 201.05.

(i) A complete record of all tests and adjustments and data sufficient to allow checking of test calculations shall be recorded by the meter tester.

(j) The test record referred to in (i) above shall include:

- (1) The identifying number of the meter;
- (2) The type of the meter;
- (3) The date and kind of tests made;
- (4) The reading of that meter before making any test;
- (5) The error as found at each test; and
- (6) If repaired the accuracy of the meter after the final test.

(k) The complete record of tests of each meter shall be continuous for at least 2 periodic tests, and in no case for less than 2 years.

(l) Each utility shall report to the commission periodic tests of meters on Form E-15, which is described in Puc 609.08, once a year.

(m) Each utility shall report request or referee tests, referred to in (f) and (g) above, to the commission on Form E-16, which is described in Puc 609.09, once a month, if any occur.

Puc 605.05 Customer's Bill Adjustments.

(a) In meter tests made by the utility or monitored by the commission as provided by Puc 605.04, the correctness of registration of the meter and its performance in service shall be judged by its average error, determined in accordance with Puc 605.03.

(b) Any adjustment of charges which is made in accordance with this section shall be based on the average error thus derived.

(c) Whenever a meter is found to register in excess of 103% of the correct amount, the utility shall refund to the customer an amount equal to the charge for the excess billed for the shorter of the following:

- (1) The previous 12 months;
- (2) A period equal to 1/2 of the time elapsed since the last test; or
- (3) The period of occupancy by the customer.

(d) If the time when the error, referred to in (c) above, first developed or occurred can be definitely fixed, the amount to be refunded shall be based thereon.

(e) Whenever a meter is found to under-register as outlined in Puc 605.03(d), the utility may make a charge to the customer for the unbilled amount supplied for the shorter of:

- (1) The previous 12 months;
- (2) A period equal to 1/2 of the time elapsed since the last test; or
- (3) The period of occupancy by the customer.

(f) If a meter or remote register is found which does not register properly, the bill for the period of improper registration shall be based upon information recorded by a meter or remote register, during a period during which the device is determined to accurately record use, prior or subsequent to the period of improper registration, and any other pertinent information supplied by the customer or known to the utility.

(g) The period for recovery of the difference between previously billed amounts and estimated actual consumption under (f) above shall not exceed 12 months.

Puc 605.06 Test Facilities and Equipment.

(a) Each utility furnishing metered water service shall either:

(1) Provide the necessary standard facilities, instruments and other equipment for testing meters in compliance with these rules; or

(2) Enter into satisfactory arrangements for the testing of its meters by another utility or agency equipped to test meters in compliance with these rules, subject to approval by the commission pursuant to Puc 201.05.

(b) Each utility shall maintain or arrange for the use of a meter test shop which, insofar as practicable, shall simulate the actual service conditions.

(c) The meter test shop required by (b) above shall be provided with:

(1) The necessary fittings, including a quick-acting valve for controlling the starting and stopping of the test; and

(2) A device for regulating the flow of water through the meter under test.

(d) The accuracy of the test equipment and test procedures shall be sufficient to enable shop test of displacement meters with an error not to exceed 0.5%.

(e) Each utility shall maintain or arrange for the use of measuring devices for test of meters.

(f) The measuring devices required by (e) above shall consist of calibrated tanks for volumetric measurements, tanks mounted upon scales for weight measurement or standard meters.

(g) In using the measuring devices required by (e) above the utility shall adhere to the following test measurement standards:

(1) When a volumetric tank is used it shall be certified by the New Hampshire or local sealer of weights and measures;

(2) When a weight standard is used the scales shall be tested and certified at least once every year by the New Hampshire or local sealer of weights and measures, and a record maintained of the results of such test;

(3) Basic standards used for meter tests shall be of sufficient capacity to insure accuracy of the test;

(4) Standard meters may be used for the purpose of testing meters in place provided they have been tested and calibrated within the limits of accuracy required by Puc 600, either by the utility with its volumetric or weight standard equipment or by an approved laboratory, within the previous 60 days; and

(5) The utility shall keep a record of tests referred to in (4) above for a period of not less than 5 months.

Puc 605.07 Underground Utility Damage Prevention Program. All utilities shall comply with Puc 800, the underground utility damage prevention program rules.

PART Puc 606 EQUIPMENT AND FACILITIES

Puc 606.01 Standard Practice.

(a) Each utility shall construct, install, operate and maintain its plant, structures, equipment and mains:

(1) In accordance with applicable American Water Works Association Standards copyrighted by the American Water Works Association, pursuant to the applicable standards described in N.H Code Admin. Rule Env-Ws 307.01, Standards of the American Water Works Association; and

(2) In such manner, insofar as practical:

a. To best accommodate the public; and

b. To prevent interference with service furnished by other underground facilities, including gas, electric, telephone, steam, sewer and other underground and above ground facilities.

Puc 606.02 Distribution System and Mains.

(a) Water mains shall be installed below the normal frost line or otherwise protected to prevent freezing. Mains used exclusively to provide temporary or seasonal service shall be excluded from this requirement.

(b) Insofar as practicable, the utility shall design its distribution system so as to avoid dead ends on its mains.

(c) Where dead ends are unavoidable the utility shall provide hydrants or valves for the purpose of flushing the mains.

(d) Where dead ends are unavoidable the utility shall adhere to the following standards:

(1) Mains with dead ends shall be flushed as often as necessary to maintain the proper quality of the water;

(2) Records shall be kept of all flushings of mains, showing the date, place and duration; and

(3) Flushing records shall be used as a guide in determining the necessary frequency of flushing of the same mains thereafter.

(e) Valves shall be provided at intervals in the mains sufficient to allow the utility to facilitate repairs and minimize interruptions of service.

(f) Whenever feasible, the distribution system shall be laid out in a grid segmented so that in case of breaks or repairs the number of customers affected can be minimized.

Puc 606.03 Fire Protection and Hydrants.

(a) A utility and an applicant may negotiate regarding fire hydrants, public and private fire protection facilities and connecting mains, as to the following:

(1) Specifications;

- (2) Location;
- (3) Installation;
- (4) Responsibility for maintenance; and
- (5) Ownership.

(b) Fire hydrants and public and private protection facilities shall be installed in conformity to the requirements of the utility.

(c) Hydrants maintained by the utility shall be inspected and flushed at least once each year, and shall be checked for freezing as often as necessary to insure that they are functioning properly.

(d) A record of each hydrant shall be maintained showing the size, type, location, date of inspection and flushing and the results thereof.

(e) Reports of periodic inspection of flushing of hydrants shall be reported to the commission on Form E-17, described at Puc 609.10 once a year.

Puc 606.04 Valves and Service Connections.

(a) Each utility shall locate, operate and inspect each valve on its distribution system at least once every 5 years.

(b) A utility annually shall locate, operate and inspect valves which are:

- (1) Larger than 12 inches in diameter;
- (2) Located on major transmission lines; or
- (3) Otherwise critical to system operation.

(c) A utility shall keep a record of each valve showing the size, type, location, date of inspection and the results of each inspection.

(d) Each utility shall require that the size, design, material and installation of the service pipe shall conform to such requirements of the utility as may be incorporated in its rules and regulations.

(e) The utility shall require that the minimum size of the service pipe shall not be less than 3/4 inch nominal size except under unusual circumstances, such as might exist in a residence with very low demand located very close to the main.

(f) All service pipes shall be laid at a depth sufficient to prevent freezing, except where services are not intended for use during freezing weather and are actually drained during such periods.

(g) Curb stops shall be placed at the customer's property line except in unusual situations such as service to an apartment or to a condominium.

(h) Each utility shall require that the customer shall not install any tree or branch connection in the service pipe.

(i) A utility may require the customer to leave the trench open and customer service pipe uncovered until it is inspected by the utility and shown to be free from any irregularity or defect.

(j) Each utility shall require the following in relation to individual service connections:

- (1) Each service connection shall be provided with an individual shut-off;
- (2) No tandem services shall be permitted; and
- (3) Where such tandem services exist, the shut-offs necessary to comply with this requirement shall be installed.

Puc 606.05 Disinfection of Facilities. Disinfection of facilities shall be as approved by the New Hampshire department of environmental services.

PART Puc 607 RECORDS, REPORTS AND ACCOUNTING REQUIREMENTS

Puc 607.01 Station Records. Each utility shall keep sufficient records of the operation of its pumping, filtering, chlorinating and other units to show the characteristics and performance of each.

Puc 607.02 Water Supply Measurement.

(a) Each utility shall install a suitable measuring device at each source of supply in order that a record can be maintained of the quantity of water produced at each source.

(b) At least once each month each utility shall determine the quantity produced from each source of supply.

(c) A utility shall record and transmit to the commission in the utility's annual report to the commission its 12 month totals of water supply by sources.

Puc 607.03 System Maps.

(a) Each utility shall have on file at its principal office located within New Hampshire a map, maps or drawings showing the following:

- (1) The size, character and location of all mains including hydrants and valves;
- (2) The size and location of each service connection, where practicable; and
- (3) The layout of all principal pumping stations, filter and chlorinating plants to show size, location and character of all major equipment, pipe lines, connections, valves and other equipment used.

(b) In lieu of showing service locations on maps, referred to in (a)(2) above, a card record or other suitable means may be used.

Puc 607.04 Meter Records.

(a) Each utility shall keep records numerically arranged and classified by meter type presenting, for each meter owned and used by the utility for any purpose, the following:

- (1) Identification number;
- (2) Date of purchase;
- (3) Name of manufacturer;
- (4) Serial number;
- (5) Type;
- (6) Rating; and

(7) Information as to each premises where the meter has been in service, as follows:

- a. The name and address of each customer on whose premises the meter has been in service;
- b. Date of installation; and
- c. Date of removal.

(b) These records shall be maintained in a manner such that the date of the last test is readily ascertainable.

Puc 607.05 Preservation of Records.

(a) All records shall be preserved by the utility for a period of 2 years unless otherwise designated by the commission's rules governing the preservation of records, including Puc 607.07(b).

(b) The utility shall make such records available to the commission or its staff upon request at the utility's office located in the state of New Hampshire.

Puc 607.06 Reports to Commission.

(a) The utility shall furnish the commission with any information concerning the utility's facilities or operations which the commission shall request and need for determining rates or judging the practices of the utility.

(b) Each utility shall file periodic reports with the commission as required by Puc 609 on the forms, as described in Puc 609, which shall be furnished by the commission upon request.

Puc 607.07 Uniform System of Accounts.

(a) Each utility shall maintain its accounts and records in conformity with the "Uniform Classification of Accounts for Water Utilities" established and issued by the commission as a uniform system of accounts pursuant to RSA 374:8.

(b) Each utility shall keep and preserve all accounts and records as provided in the "Regulations to Govern the Preservation of Records of Electric, Gas and Water Utilities Regulation", governing the preservation of records of water utilities, issued by the National Association of Regulatory Utility Commissioners, which is established and designated by the commission as part of its uniform system of accounts pursuant to RSA 374:8.

REVISION NOTE:

Document #6475 removed the former Puc 610 entitled "Uniform System of Accounts for Water Utilities" and amended the former Puc 607.08 governing accounting records, previously adopted under Document #5818, effective 4-27-94.

Pursuant to RSA 374:8, II and RSA 541-A:21, I(q), as amended effective 7-23-94 by 1994, 193:3 and 193:4, the uniform system of accounts (USOA) for regulated utilities as referenced in Puc 607.07 is exempt from the rulemaking requirements of RSA 541-A. The text of the USOA is not included in Puc 607.07 above because the publication requirement for rules in RSA 541-A:15, I does not apply.

By Order No. 21,310 dated August 8, 1994, the New Hampshire Public Utilities Commission (Commission) ordered, because of 1994, 193, that the USOAs, including the USOA for water utilities, "shall remain in effect until such time as the Commission shall prescribe, amend, rescind or otherwise affect the USOAs currently prescribed for regulated utilities".

The Commission must still file in the Office of Legislative Services a copy of all USOA rules adopted, amended or repealed under RSA 374:8. The text of the USOA for water utilities subject to Order No. 21,310 was last filed in Document #6624.

A copy of the USOA as referenced in Puc 607.07 may be obtained at the New Hampshire Public Utilities Commission, 21 South Fruit Street, Suite 10, Concord, New Hampshire 03301.

Puc 607.08 Work Order and Continuing Property Records. Each utility shall maintain a work order system and continuing property records according to the "Uniform Classification of Accounts for Water Utilities" and shall provide the commission access to such records when requested.

PART Puc 608 SAFETY, INSPECTIONS AND SHORT TERM DEBT

Puc 608.01 Safety Instructions. Each utility shall adopt comprehensive instructions for the safety of employees in regard to the operation, construction and maintenance of its plant facilities, and shall require that such employees have been properly informed of safe practices and are cognizant of all hazards involved.

Puc 608.02 Resuscitation.

(a) Each utility shall institute and maintain a program instructing its employees engaged in electrical work or work in hazardous atmospheres, such as in-ground pump stations or meter vaults, in safety procedures for resuscitation emergencies.

(b) Copies of safety procedures shall be furnished to each such employee.

(c) Electrical work as used herein shall be construed to mean work on all live electric conductors and equipment.

Puc 608.03 Accidents.

(a) Each utility shall report to the commission as soon as possible after each accident occurring in connection with the operation of its property, facilities or services, wherein any person shall have been killed or seriously injured or whereby any serious property damage shall have been caused.

(b) The first report of an accident may be preliminary, but if so, shall be followed later by as full a statement as possible of the cause and details of the accident and precautions taken, if any, to prevent recurrence.

(c) Accidents resulting in slight injuries which do not incapacitate the person injured from active work for more than 6 days in the aggregate during the 10 days immediately following injury shall not be required to be reported.

(d) The utility shall report to the commission on form E-5, "NHPUC Accident Form", described in Puc 609.06, any accident related to its utility operations which is not a slight accident as described in (c) above.

Puc 608.04 Commission Inspection. The commission shall, from time to time, inspect the works and system of each utility and the manner in which it has conformed and presently conforms to commission rules.

Puc 608.05 Short Term Debt. No utility shall issue or renew any notes, bonds or other evidence of indebtedness payable less than 12 months after the date thereof if said short term debt exceeds 10% of the utility's net fixed plant without prior commission approval pursuant to Puc 201.05.

PART Puc 609 FORMS TO BE FILED BY ALL UTILITIES

Puc 609.01 F-1C Quarterly Statement of Operations.

(a) Any utility which does not file a statement of operations with the commission on a monthly basis shall file form F-1C on a quarterly basis.

(b) Utilities shall include in form F-1C:

- (1) A caption indicating the title of the form as "Form F-1C" along with the name of the utility filing the report;
- (2) A statement of operation taking operating revenues, subtracting all expenses, leaving the net income;
- (3) A reconciliation of retained earnings composed of balance at the beginning of the period and balance at end of the period;
- (4) A balance sheet listing the assets and liabilities with a final result of total capital and liabilities; and
- (5) The signature, full name and title of the utility employee who supervised the preparation of the report.

Puc 609.02 F-3 Pro Forma Income Statement at Present and Proposed Rates for Year Ended.

(a) Each utility which requests a rate increase shall file form F-3 with the commission.

(b) Form F-3 shall include:

- (1) A caption identifying the report as "F-3 Pro Forma Income Statement" along with the name of the utility filing the report;
- (2) A breakdown of operating revenues and expenses for:
 - a. Actual year ended;
 - b. Adjustments and pro forma at present rates;
 - c. At proposed rates with additional requirements; and
 - d. Total requirements;
- (2) A calculation of rate base and a calculation of rate of return; and
- (3) The signature, full name and title of the utility employee who supervised the preparation of the report.

Puc 609.03 F-4 Petition For Authority To Issue Securities.

(a) Each utility shall file form F-4 with the commission when it seeks authority to issue securities.

(b) Form F-4 shall include the following:

- (1) A petition which shall include:

- a. A caption which shall identify the report as "F-4 Petition for Authority to Issue Securities" along with the name of the utility filing the report;
- b. Description of authorized and outstanding long term debt and capital stock;
- c. Amount of short term notes outstanding;
- d. Description of new securities;
- e. Description of what proceeds will be used for;
- f. List of exhibits attached;
- g. Certification statement as contained in Puc 609.04 (d);
- h. Petitioner's prayer asking for the relief requested; and
- i. The signature, full name and title of the utility employee who supervised the preparation of the form;

(2) Application for leave to issue securities pursuant to RSA 369:3 including a statement in reasonable detail of any proposed additions, construction or working capital requirements together with any proposed construction budget;

(3) Exhibit 2, showing the estimated cost of financing including, for example, legal costs, printing, documentary tax, trustee services, financial services;

(4) Exhibit 3, current balance sheet adjusted for financing with journal entries and explanations for actual, adjustments and as adjusted;

(5) Exhibit 4, current income statement adjusted for financing including new interest, depreciation and taxes with entries for actual, adjustments and as adjusted;

(6) Exhibit 5, statement of capitalization ratios after giving effect to the proposed financing; and

(7) Exhibit 6, weighted average cost of debt.

(c) The utility shall also provide the following:

(1) A copy of the purchase and sale agreement for long term financing including any letter of commitment from a lender stating the details of financing;

(2) A copy of the mortgage indenture;

(3) A copy of terms of new common or preferred stock;

(4) A resolution of petitioner's stockholders, board of directors or other governing body of petitioner, as appropriate, authorizing the proposed financing; and

(5) An original and 6 copies of the petition and exhibits.

(d) By submitting or signing a Form F-4 petition, the persons submitting the form agree to comply with the certification requirement as set forth in Puc 609.04 (d).

Puc 609.04 F-16-Water Annual Report.

(a) Each utility which maintains its books on a calendar year basis shall complete the "Annual Report for Water Utilities," dated July 2013, form available on the commission website at www.puc.nh.gov/forms, and file one signed original and one electronic copy with the commission annually on or before March 31st.

(b) Each utility which maintains its books on a fiscal year which does not coincide with a calendar year shall complete the commission's Form F-16 "Annual Report for Water Utilities," dated July 2013, available on the commission website at www.puc.nh.gov/forms, and file with the commission one signed original and one electronic copy by email or through the commission's electronic records filing system no later than 90 days following the close of each fiscal year.

Puc 609.05 F-22 - Information Sheet.

(a) Each utility shall file Form F-22:

- (1) Annually; and
- (2) Whenever any changes occur to the information included in the Form F-22 filing.

(b) Each utility shall include the following on form F-22:

- (1) A caption identifying the form as "Form F-22" along with the name of utility;
- (2) Person's name and address to receive annual report form;
- (3) Person's name and address to receive the utility assessment tax;
- (4) The names and titles of the principal officers of the company; and
- (5) The signature, full name and title of the utility employee who supervised the preparation of the form.

Puc 609.06 E-5 - Utility Accident Report.

(a) Each utility shall file a completed "NHPUC Accident Form" within 10 working days of when a utility accident, as described in Puc 608.03(a) and (c), occurs.

(b) The "NHPUC Accident Form" shall include a caption identifying it as the "NHPUC Accident Form" and the following:

- (1) Report number, date and name and address of utility;
- (2) Date and location of accident;
- (3) Description of person injured including:
 - a. Name;
 - b. Age;
 - c. Residence;
 - d. Employer; and
 - e. Status of injured person, whether employee, person under contract, invitee, licensee, trespasser or other;

- (4) Description of injury, current condition, duration of disability and, if applicable, anticipated return to work date;
- (5) Description of cause and manner of accident;
- (6) If applicable, cause of death, previous accident report number of the report filed prior to the death;
- (7) Designation of federal or state statute violated, if known;
- (8) Recommendation for guarding against repetition of accident; and
- (9) Signature and title of signatory.

Puc 609.07 E-14 - Report of Pressure Complaints.

(a) Each utility shall report pressure complaints to the commission on form E-14 on a monthly basis if they occur.

(b) A utility shall include on form E-14 the following:

- (1) A caption identifying the report as "E-14 Report of Pressure Complaints" along with the name of the utility filing the report;
- (2) Name of complainant and location;
- (3) Date of test and average pressure;
- (4) Pressure recorded including the minimum, time of day, maximum, time of day;
- (5) Total minutes below allowable minimum and above allowable maximum; and
- (6) The signature, full name and title of the utility employee responsible for supervising the preparation of the report.

Puc 609.08 E-15 Annual Report of Water Meter Tests.

(a) Each utility shall file with the commission a report of water meter tests on form E-15 on an annual basis.

(b) A utility shall include on form E-15 a caption identifying it as "E-15 Annual Report of Water Meter Tests" and the following:

- (1) The utility name and year reported;
- (2) The total meters installed at end of year by size;
- (3) The number of 5/8 through 2-inch meters tested with a breakdown of the number meeting the standards specified in Puc 605.03(b), the number with no registration and the number failing the standards of Puc 605.03(b);
- (4) Individual test results for larger meters; and
- (5) The signature, full name and title of the utility employee who supervised the preparation of the report.

Puc 609.09 E-16 Report of Water Meter Complaint Tests.

(a) Each utility shall file form E-16 summarizing water meter complaint tests on a monthly basis if complaints occur.

(b) A utility shall include on form E-16 a caption identifying the report as “E-16 Report of Water Meter Complaint Tests” and the following:

- (1) The name of the company and the month reported;
- (2) The customer's name and address;
- (3) The meter manufacturer, manufacturer's number, company number, type, size;
- (4) The percent of registration that are fast and percent of registration that are slow;
- (5) If a bill adjustment occurs, the amount refunded or collected and the period covered by the bill adjustment; and
- (6) The signature, full name and title of the utility employee who supervised the preparation of the report.

Puc 609.10 E-17 Annual Report of Hydrant Inspection.

(a) Each utility shall file form E-17 describing its inspections of hydrants on an annual basis.

(b) A utility shall include on form E-17 a caption identifying the report as “E-17 Annual Report of Hydrant Inspection” and the following:

- (1) The name of the company and the year of the report;
- (2) The number of hydrants maintained, number of hydrants inspected and flushed, and number of hydrants found defective;
- (3) A breakdown of defective hydrants as follows:
 - a. The date, location, date of last inspection;
 - b. The nature of the defect, the cause of the defect; and
 - c. The corrective steps taken; and
- (4) The signature, full name and title of the utility employee who supervised the preparation of the report.

Puc 609.11 E-18 Report of Interruptions of Service Over 30 Minutes Duration.

(a) Each utility shall file Form E-18 on a monthly basis summarizing interruptions to service of over 30 minutes duration, if any occur.

(b) A utility shall include on form E-18 a caption identifying the report as “E-18 Report of Interruptions of Service Over 30 Minutes Duration” and the following:

- (1) The name of the company and the month reported;
- (2) The date, time and duration of interruption;

- (3) The location and number of customers affected;
- (4) The cause of the interruption; and
- (5) The signature, full name and title of the utility employee who supervised the preparation of the report.

Puc 609.12 E-22 - Report of Proposed Expenditures for Additions, Extensions and Capital Improvements to Fixed Capital.

(a) Except as provided in (i) below, each utility shall file an annual report of proposed expenditures for addition, extensions and capital improvements to fixed capital on or before May 15 of each year.

(b) The report shall include a caption identifying the report as "E-22 Report of Proposed Expenditures for Additions, Extensions and Capital Improvements to Fixed Capital" along with the name of the utility filing the report.

(c) The utility shall report the following on Form E-22 with respect to any proposed expenditures for additions, extensions and capital improvements which meet the conditions of (d) below:

- (1) A description of the addition, extension or capital improvement;
- (2) The location of the proposed addition, extension or capital improvement;
- (3) The total estimated cost of the proposed addition, extension or improvement by work category; and
- (4) The signature, full name and title of the utility employee who supervised the preparation of the report.

(d) Each utility shall report to the commission when the probable cost of any addition, extension or capital improvement to its utility plant will exceed the reportable amounts shown in Table 6.9.1 below:

Table 6.9.1 Reportable Amounts by Utility Plant Range

UTILITY PLANT RANGE	REPORTABLE AMOUNT
\$ 400,000 and under	\$5,000
400,001 to \$ 1,000,000	10,000
1,000,001 to 2,000,000	15,000
2,000,001 to 3,000,000	22,500
3,000,001 to 50,000,000	30,000
50,000,001 to 100,000,000	50,000
100,000,001 and over	100,000

(e) The reportable amount shall be based on the gross fixed capital, as of December 31st of the calendar year immediately preceding, of each core stand-alone or satellite system with an independent source of supply.

(f) Companies with more than \$10,000,000 in fixed capital may use the next higher reporting limit for their satellite systems.

(g) The reporting limits shall apply to total project cost including contributions in aid of construction.

(h) For purposes of (d) above, reporting to the commission shall consist of:

- (1) A completed E-22 form; or

(2) With written approval of the commission, a construction budget.

(i) The commission shall accept a construction budget in place of individual E-22 forms if the proposed budget:

- (1) Highlights all projects above the utility's reporting limit;
- (2) Contains a level of detail appropriate to the expenditures anticipated and to identification of potential project-specific issues; and
- (3) Covers a period of no longer than one year.

(j) A utility shall file an original and duplicate copy with the commission engineering department as follows:

- (1) An individual E-22 form no fewer than 30 days before starting actual construction or expenditure of funds; or
- (2) A construction budget no fewer than 60 days before starting actual construction or expenditure of funds.

(k) A utility may provide an additional copy of its filing and request that it be date-stamped and returned by the commission to confirm filing.

(l) If the cost of a project is anticipated to fall below the applicable reporting limit but later exceeds it, the utility shall immediately file an E-22 form at whatever time or phase of the project it becomes apparent the limit will be exceeded. This requirement shall include projects listed in a construction budget but not highlighted in accordance with (i)(1) above.

(m) Investigation of or comment on a construction budget or E-22 by the commission or failure of the staff to identify prudence review issues shall not constitute a final prudence review and the commission shall not be precluded from analyzing the merit of any expenditure in a future rate case.

(n) If a project not included in an approved construction budget arises which will exceed a utility's reporting limit, the utility shall file an E-22 form.

Puc 609.13 E-25 Water - Report of Proposed Changes in Depreciation Rates.

(a) Each utility shall file Form E-25 Water when it proposes any change in depreciation rates.

(b) A utility shall include on form E-25 Water:

- (1) A caption identifying the report as "E-25 Water Report of Proposed Changes in Depreciation Rates" along with the name of the company;
- (2) The date;
- (3) The account number and title;
- (4) The estimated life, both present and proposed, in years;
- (5) The net salvage, both present and proposed, by percentage;
- (6) The depreciation rate, both present and proposed, by percentage;
- (7) The net annual change in dollars;

(8) The reasons for the proposed changes; and

(9) The signature, full name and title of the utility employee who supervised the preparation of the report.

(c) A utility shall not implement any change in depreciation rates until the proposed change has been approved by the commission.

Puc 609.14 Electronic Filing Requirements, Annual Report.

(a) "Electronic filing" means the filing with the commission of an electronic version of a document or form.

(b) Each utility shall, in addition to filing a completed and executed "Annual Report" in paper as required by Puc 609.04, electronically file with the commission, to the extent practicable, in an electronic file format compatible with the computer system of the commission, a completed "Annual Report" form.

(c) The commission shall maintain a list on its web site of the types of electronic file formats compatible with its computer system.

~~(d) Any small water system as defined in Puc 602.15 shall be exempt from the requirements of this section.~~

(ed) Any utility may petition for a one year waiver from the electronic filing requirement pursuant to the waiver provisions of Puc 201.05.

(fe) In its application for a waiver under (e) above, a utility shall describe and provide evidence to demonstrate that:

(1) It does not have the computer capability to generate electronic reports or filings due to the small size of its overall operations or its lack of computer equipment and/or expertise;

(2) Its existing available computer systems are not compatible with the computer systems of the commission and because of this incompatibility it would be prohibitively expensive or cumbersome to file electronically; or

(3) Other circumstances would make electronic filing prohibitively expensive or cumbersome.

(ef) The commission shall issue a waiver under (e) and (f) above if it determines that the burden on the utility of electronic filing outweighs the benefit to the administrative process.

(hg) The commission shall make available to each utility upon request an electronic version of the "Annual Report" form when the commission has prepared and has available an electronic version.

PART Puc 610 RETURN ON EQUITY FOR SMALL WATER UTILITIES

Puc 610.01 Purpose. The purpose of Puc 610 is to provide a generic return on equity ~~an expedited rate making mechanism for that a small water distribution systems may elect to use in a rate filing to:~~

(a) ~~Ensure safe and adequate service to customers that might be threatened from time to time by severe revenue erosion caused by unexpected capital additions and state and federally mandated programs that increase operating expenses~~ Provide an economical and straightforward methodology for setting a return on equity for small water distribution systems; and

(b) Reduce rate case expenses. Avoiding the use of outside consultants as expert witnesses on return on equity in a rate filing will lower rate case expenses that are currently paid for in their entirety by customers and have at times far exceeded the requested rate relief.

(c) Reduce customer bill impact. Rate case expenses are recovered through a surcharge on customer bills. The surcharge is determined by dividing rate case expense by either the number of customers or the gallons sold by the water distribution system, therefore, a small customer base requires a higher surcharge and has a greater customer bill impact. Customers of a small water distribution system see a greater reduction in bill impact from avoided rate case expenses than customers of larger water distribution systems.

Puc 610.02 Expedited Proceeding.

~~(a) In the alternative to a full rate proceeding filed pursuant to Puc 1600, a small water system may request an increase in revenues to recover the cost of any capital additions, or any operating costs that are the result of any state or federal mandate, that result in annual earnings, based on the small water system's fiscal year, below a generic return on equity set pursuant to Puc 610.03, subject to the following conditions:~~

~~(1) The small water system shall file a petition with the commission containing the following:~~

- ~~a. The small water system's last established rate base and rate of return, with a citation to the docket establishing said rate base and rate of return;~~
- ~~b. The small water system's and the utility's realized rate of return established from its last filed annual report in combination with any increased or decreased costs and capital additions that were not included in that annual report;~~
- ~~c. The small water system's proposed cost of capital utilizing the generic return on equity contained in Puc 610.03 and its most recent cost of debt;~~
- ~~d. Copies of all invoices substantiating the capital additions requested to be added to rate base;~~
- ~~e. An explanation signed under oath and notarized of each capital addition's usefulness, necessity and purpose;~~
- ~~f. An explanation signed and sworn to under oath and notarized of all increased operating costs incurred as a result of a federal or state mandate including a specific citation to the federal or state mandate that required the increase in costs;~~
- ~~g. The requested increase in revenues, and its effect upon the average customer's annual bill; and~~
- ~~h. An amended tariff page reflecting the proposed increase;~~

~~(2) The small water system shall make itself available for an audit at the location where its books and records are kept;~~

~~(3) The small water system shall maintain its books and records pursuant to the uniform system of accounts which is described at Puc 607.07;~~

~~(4) Subsequent to the filing, the small water system shall provide notice to all of its customers, all municipalities in which those customers are served and the office of the consumer advocate by first class mail of:~~

- ~~a. The requested rate increase;~~

- ~~b. The rate impact on the average customer's annual bill;~~
- ~~e. The capital additions and the federal or state mandates that necessitated the need for rate relief; and~~
- ~~d. The customers' right to participate in the review of the requested rate increase;~~

~~(5) A copy of the notice required in (4), along with an affidavit of mailing, shall be filed with the commission within 15 days of the acceptance of the petition as referred to in (b) below.~~

~~(b) Failure to comply with any of the provisions and requirements set forth in (a) shall result in the immediate rejection of the petition if the utility has failed to respond to any notice issued by the commission required by RSA 541-A:29.I.~~

~~Puc 610.03 Generic Return on Equity.~~

~~(a) At least once during any 12 month period following the adoption of these rules the commission shall establish a generic return to be applied to the equity invested in the a small water distribution system using the discounted cash flow methodology.~~

~~(b) For the purposes of this section, the commission shall assume that the return on equity for regulated gas and water utilities as published by the Regulatory Research Associates for the most recent calendar year DCF model is based on the concept that are representative of what value stockholders currently value place on a share of stock for water distribution systems at the present value of the expected cash flow from that share of stock, and that cash flow will grow at the same rate from the present to perpetuity.~~

~~(c) For purposes of this section, the commission shall assume that the value placed on utility preferred stock plus 350 basis points as published by Value Line is representative of what value stockholders place on a share of stock for water distribution systems.~~

~~(de) For the purposes of this section, the generic return on equity, rounded down to 2 decimal places, shall be derived as follows: sample of companies used in computing k shall consist of non-California water utilities listed in the most current issue of Value Line Investment Survey or other recognized financial source that have consistent data for at least a 10-year period of time.~~

~~(1) If the number of cases that make up the average authorized return of water utility rate cases during the most recent calendar year is equal to or greater than 8, then the baseline return on equity will be calculated using the average of the average authorized return on equity for water utilities for the most recent calendar year and the median authorized return on equity for gas utilities for the last 6 months of the most recent calendar year. Following that calculation, the resulting return will be averaged with an amount resulting from adding 350 basis points to the value of the preferred utility stock as most recently reported by Value Line. The result of the 2 calculations shall yield the baseline return on equity for this section.~~

~~(2) If the number of cases that make up the average authorized return of water utility rate cases for the most recent calendar year is equal to or less than 7, then the baseline return on equity will be calculated using the median authorized return on equity for gas utilities for the most recent calendar year. Following that calculation, the resulting return will be averaged with an amount resulting from adding 350 basis points to the value of the preferred utility stock as most recently reported by Value Line. The result of the 2 calculations shall yield the baseline return on equity for this section.~~

~~(3) For purposes of this section, the authorized average return of equity for water utilities and the number of cases will be as reported by the Regulatory Research Associates, 'RRA Water Advisory:~~

Major Rate Case Decisions. The median of authorized return on equity for gas utilities will be as reported by the Regulatory Research Associates, 'RRA Regulatory Focus: Major Rate Case Decisions.' Utility preferred stock values will be the Value Line estimated yield on "Utility A" preferred stocks published weekly.

(4) Rate Case Expense Savings Adder: 50 basis points will be added to the baseline return on equity;

(5) Capital Structure Adder will be added to the baseline return on equity for a balanced capital structure: 10 basis points for a capital structure with equity of 40 to 44 percent; or 25 basis points for a capital structure with equity of 45 to 55 percent.

(6) An Exemplary Performance Adder of up to 50 basis points may be added to the baseline return on equity if a small water utility demonstrates exemplary utility performance in a rate filing and if approved by the commission, basis points would be earned for:

- a. Development of an Asset Management Program for achieving and maintaining the desired level of service at the lowest appropriate cost to customers;
- b. Reduction in system leaks and unaccounted for water;
- c. Cost containment initiatives;
- d. Above average or improved water quality;
- e. Above average or improved customer service.

(7) A Non-compliance Deduction: up to 50 basis points may be deducted from the baseline return on equity when a small water utility files for a rate increase if the utility has not complied with regulatory requirements within the past 2 years.

- a. Staff or any party to the rate proceeding may request a deduction for non-compliance and requires commission approval;
- b. There will be no deduction for non-compliance of an acquired utility if the acquired utility was out of compliance when acquired and the acquiring utility has implemented an approved plan to achieve compliance. Compliance plans must be approved by the by the regulatory authority with jurisdiction.

~~—— (d) For the purposes of this section cash flow shall be measured using both dividends and earnings, with a 3:1 weighting of dividends to earnings, reflecting the view that investors discount that which they receive, but are also concerned with the source of the cash flow.~~

~~Puc 610.034 Eligibility Right to Challenge Use of the Generic Return on Equity. The commission staff, the office of consumer advocate, a customer or other interested party may challenge the generic return on equity used by a small water distribution system in a rate filing with the commission. A small water system shall not be eligible for rate relief pursuant to this section within 2 years after the issuance of a final order under Puc 610 or Puc 1600.~~

~~—— Puc 610.05 Rate Design.~~

~~—— (a) There shall be no change to a small water system's allocation of revenue responsibility between classes of customers as part of a proceeding brought before the commission pursuant to this section.~~

~~—— (b) Changes to revenue allocations shall include:~~

- ~~(1) Changes between or among residential, commercial, wholesale or industrial customers;~~
- ~~(2) Fixed charges for service regardless of the amount of water consumed unless the system bills on an unmetered basis;~~
- ~~(3) Availability charges; or~~
- ~~(4) Any other charge that is not based on the amount of water consumed for metered rates as a result of a rate request pursuant to this section.~~

~~— (c) Such changes shall be allowed, however, where a small water system has installed meters since its last revenue requirement was set by the commission at which time a volumetric charge shall be established along with a fixed charge.~~

~~— Puc 610.06 Staff Review and Recommendation.~~

~~— (a) Upon the filing of a request for rate relief pursuant to this section the commission staff shall:~~

- ~~(1) Verify that the small water utility has complied with the requirements set forth in Puc 610.02 and Puc 610.03;~~
- ~~(2) Review all information acquired pursuant to the requirements of Puc 610.02; and~~
- ~~(3) Make a recommendation to the commissioners that the requested increase, or some modification thereof, be approved or denied based on the criteria set forth by these rules, RSA 378 and the opinions of the New Hampshire supreme court.~~

~~— (b) The staff shall serve a copy of the staff recommendation on the petitioning small water utility and the office of the consumer advocate.~~

~~— (c) The petitioning small water utility shall serve a copy of the staff recommendation upon the customers of the small water utility and the municipalities in which those customers reside at the time the petition is filed with the commission.~~

~~— Puc 610.07 Right to Challenge Recommendation.~~

~~— (a) The small water system, the office of the consumer advocate, a customer or other interested party may challenge the staff recommendation to approve, modify or deny the requested rate increase by filing with the commission's executive director, within 15 days of mailing of the staff recommendation, a request to hold a conference with the relevant staff members to discuss the recommendation.~~

~~— (b) Any such request shall set forth the basis of the objection to the recommendation of the commission staff and the issues discussed at any such meeting shall be limited to those issues raised in the request.~~

~~— (c) The conference referred to in (a) above shall:~~

- ~~(1) Occur within 25 days of the mailing of the staff recommendation; and~~
- ~~(2) If agreed to by the challenging party and the commission staff, be conducted by telephone conference.~~

~~— (d) If staff, the small water system, the office of the consumer advocate, or any other interested party resolve any disagreement regarding staff's original recommendation they shall so notify the commission in writing.~~

~~—— (e) If staff, the small water utility, the office of the consumer advocate, or any other interested party are unable to resolve their differences and they wish to express their position to the commission, they shall present their positions to the commission by filing a written statement with the executive director within 15 days of the conference with staff.~~

~~—— (f) If staff or any party wishes to respond to the statements filed pursuant to section (e), they shall do so by filing a written response with the executive director within 25 days of the conference referred to in (e) above.~~

~~—— (g) Copies of all documents filed with the commission pursuant to this section shall be served upon all of the small water system customers, the office of the consumer advocate, the small water system or any other party that has participated in the proceeding.~~

~~—— Puc 610.08 Commission Decision.~~

~~—— (a) After review and consideration of the staff recommendation and any position statements and responses thereto filed by the parties or the staff, the commission shall:~~

~~(1) Issue an order nisi approving a rate increase, if the commission finds the rate increase just and reasonable pursuant to the standards set forth in RSA 378 and by the New Hampshire supreme court, and the request is related to a matter under the commission's jurisdiction as set forth in this chapter;~~

~~(2) Issue an order denying the rate increase, if the commission finds the requested rate increase to be unjust and unreasonable pursuant to the standards set forth in RSA 378 and by the New Hampshire supreme court, or the request is outside the ambit of these rules; or~~

~~(3) Issue an order initiating a full rate proceeding pursuant to RSA 378:7 and Puc 1600 should the commission believe the utility is over-earning, or under-earning to a degree that threatens safe and adequate service to customers.~~

~~—— Puc 610.09 Service and Publication of Order.~~

~~—— (a) A copy of the order nisi granting the small water utility any increase in revenues shall be served by the utility upon each of the utility's customers via first class mail and the municipalities in which the rate increase shall take effect.~~

~~—— (b) The small water utility shall also publish an attested copy of the order nisi in a newspaper having general circulation distributed in that part of the state in which the rate increase shall take effect.~~

~~—— Puc 610.10 Procedural Expenses.~~

~~—— (a) A small water utility seeking rate relief pursuant to this section may recover the following expenses:~~

~~(1) All administrative costs, including, but not limited to:~~

~~a. Postage costs;~~

~~b. Publication costs;~~

~~c. Photocopying expenses; and~~

~~d. Transcription costs; and~~

~~(2) One of the following 2 expense categories:~~

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- a. ~~The fees of one professional, such as, an accountant, economist, engineer or attorney provided they are prudently incurred and just and reasonable; or~~
- b. ~~All mileage and hourly fees of utility employees used to prosecute a rate proceeding pursuant to this section.~~

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Appendix

Rule	Specific State Statute the Rule Implements
Puc 601.01 - 602.178	RSA 365:8, XH(1)
Puc 603.01	RSA 365:8, XH(1) ; 378:3
Puc 603.02 - 603.05	RSA 365:8, XH(1) ; 370:1-3; 374:3
Puc 604.01 - 604.08	RSA 365:8, XH(1) ; 374:3
Puc 605.01 - 605.06	RSA 365:8, XH(1) ; 370:1-8
Puc 605.07	RSA 365:8, XH(1) ; 374:48-56
Puc 606.01 - 606.05	RSA 365:8, XH(1) ; 374:3, 15
Puc 607.01 - 607.08	RSA 365:8, XH(1) ; 374:3, 5 and 15
Puc 608.01 - 608.05	RSA 365:8, XH(1) ; 374:3, 4 and 37-39
Puc 609.01 - 609.02	RSA 365:8, XH(1) ; 374:15
Puc 609.03	RSA 365:8, XH(1) ; 369:1, 3
Puc 609.04 - 609.05	RSA 365:8, XH(1) ; 374:15
Puc 609.06	RSA 365:8, XH(1) ; 374:37-39
Puc 609.07 - 609.09	RSA 365:8, XH(1) ; 370:2-5
Puc 609.10 - 609.15	RSA 365:8, XH(1) ; 374:3, 15
Puc 610.01 - 610.10	RSA 365:8, XH(1) ; 374:3, 15; 378:3



STATE OF CONNECTICUT

DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION
PUBLIC UTILITIES REGULATORY AUTHORITY
TEN FRANKLIN SQUARE
NEW BRITAIN, CT 06051

DOCKET NO. 13-01-29 INVESTIGATION FOR STREAMLINING THE
RATEMAKING PROCESS FOR SMALL WATER
COMPANIES

October 23, 2013

By the following Commissioners:

John W. Betkoski, III
Arthur H. House
Michael A. Caron

Lead Staff: James K. Sutphin
Legal Advisor: Robert Luysterborghs

DECISION

DECISION

I. INTRODUCTION

A. SUMMARY

In this Decision, the Public Utilities Regulatory Authority approves the Settlement Agreement as submitted on June 20, 2013 by the Parties to this Docket. The Settlement Agreement provides for an allowed return on equity calculated as the current allowed return on equity average of Aquarion Water Company and The Connecticut Water Company plus a 50 basis point fixed adder. The provisions of the Settlement Agreement also include a 50 basis point variable adder for exemplary performance in such areas as management efficiency, customer service, and cost containment initiatives. In addition, the Settlement Agreement includes a provision for the small water companies to manage their capital structures so that the common equity portion is in a range of 40% to 60% of their total capital structure.

B. BACKGROUND

On its own motion, the Public Utilities Regulatory Authority (PURA or Authority) established this docket, pursuant to §§16-19 and 16-19e of the General Statutes of Connecticut (Conn. Gen. Stat.). On March 21, 2013, the PURA held a noticed technical meeting to discuss methods to streamline the rate case process for the small water companies. Issues discussed included:

1. Assigning the PURA's Prosecutorial Staff to assist small water companies in the preparation of rate cases.
2. Benchmarking the allowed return on equity (ROE) for small water companies with allowed ROEs of larger water companies.
3. Developing an ROE using standard ratemaking methodology that will be applied to all small water companies.
4. Developing similar accounting treatment of expense and rate base items for all small water companies.
5. Any other issues relevant to the topic of streamlining small water company rate cases.

The Authority requested that admitted parties submit written comments and preferably a settlement agreement on or before April 26, 2013, addressing the following formula for setting an allowed ROE for small water companies:

Aquarion Water Company (Aquarion Water)	Using the allowed ROE from last rate case, 9.95%, as an example.
The Connecticut Water Company (Connecticut Water)	Using the allowed ROE from last rate case, 9.75%, as an example.
Average	Example the allowed ROE average of Aquarion Water Company and Connecticut Water of 9.85% [(9.95%+9.75%)/2].
Formula adder	Reasonable % adder to be determined by the Settling Parties.
Total ROE	Final result allowed ROE of ???%. Example of (9.85%+adder %).

C. CONDUCT OF THE PROCEEDING

By Notice of Technical Meeting issued on March 5, 2013, the Authority conducted a Technical Meeting on March 21, 2013 at its offices at Ten Franklin Square, New Britain, Connecticut. On April 4, 2013, the Authority issued a Notice of Request for Written Comments and Settlement Agreement (Notice of Settlement Agreement). On April 23, 2013, the Office of Consumer Counsel (OCC) requested an extension to file written comments or a settlement agreement in the subject matter. On April 24, 2013, the small water companies filed a letter of non-opposition to the OCC's request provided that the extension was granted to all parties. On April 25, 2013, the Authority granted the request for extension until May 20, 2013. On May 17, 2013, the OCC requested, and the small water companies did not oppose, a further extension until June 20, 2013 to file a settlement agreement or written comments. The Authority approved that request. The Parties submitted a settlement (Settlement Agreement) on June 20, 2013. A copy of that agreement is attached hereto as Attachment A. By Notice of Hearing dated August 19, 2013, pursuant to Conn. Gen. Stat. §§16-11, 16-19 and 16-19e, the Authority held a public hearing on this matter on August 30, 2013 at its offices.

D. PARTIES TO THE PROCEEDING

The Authority designated the Hazardville Water Company, 281 Hazard Avenue, Enfield, CT 06082; Torrington Water Company, P.O. Box 867, Torrington, CT 06790; Avon Water Company, 14 West Main Street, Avon, CT 06001; Valley Water Systems, Inc. 37 Northwest Drive, Plainville, CT 06062; and the Heritage Village Water Company P.O. Box 873, Southbury, CT 06488; (collectively, Small Water Companies) and the Office of Consumer Counsel, Ten Franklin Square, New Britain, Connecticut 06051, as Parties to this proceeding.

II. AUTHORITY ANALYSIS

A. INTRODUCTION

The Authority received the Settlement Agreement on June 20, 2013, and reviewed its contents. The following is the Authority's analysis of the proposed Settlement Agreement.

B. SETTLEMENT AGREEMENT

The main points of the Settlement Agreement are as follows:

Aquarion Water	Base Allowed ROE from the most recent rate case (i.e., currently 9.95% ¹).
Connecticut Water	Base Allowed ROE from most recent rate case. (i.e., currently 9.75%).
Average	Allowed ROE average of Aquarion Water and Connecticut Water, currently 9.85% [(9.95%+9.75%)/2].
Fixed Formula Adder	Fixed Adder of 0.50%.
Variable Performance Adder	Up to 0.50% based on exemplary performance in such areas as management efficiency, customer service and cost containment initiatives.
Total ROE	Final result allowed ROE of 10.35% - 10.85%. Example of (9.85% + 0.50% fixed adder + 0.00% to 0.50% Performance Adder).

1. Aquarion Water and Connecticut Water Base Allowed ROE. The Base Allowed ROE Average for Aquarion Water and Connecticut Water excludes any bonus, incentive or penalty adjustments made by the PURA to the allowed ROE for the individual company.
2. Fixed Formula Adder. A 50 basis point formula adder is determined as reasonable by the Settling Parties.
3. Variable Performance Adder. The water company filing the rate application can request up to an additional 50 basis point adder based on exemplary performance in such areas as: management efficiency, customer service and cost containment initiatives. Applicant will be responsible for demonstrating these qualitative measures justifying the additional adder.

¹ At the time the Settlement Agreement was signed, the current allowed ROE for Aquarion Water was 9.95%. Recently, this was changed by the Decision dated September 24, 2013 in Docket No. 13-02-20, Application of Aquarion Water Company of Connecticut to Amend Its Rates, to an allowed ROE of 9.63% (9.13% Base ROE plus 0.50% bonus)

Other provisions of the Settlement Agreement are as follows:

1. Capital Structure. Companies will attempt to manage capital structure so that common equity represents 40% – 60% of capital structure. Settlement does not preclude capital structure adjustments if equity weight is outside 40-60% of capital structure or to balance capitalization with rate base.
2. Regulatory Compliance, Management Prudence and Service Quality. The ROE Formula assumes compliance with PURA and the Department of Public Health (DPH) orders, prudent management and satisfactory service quality. The Settlement Agreement does not preclude ROE penalties for inferior customer service, management performance, or imprudence.

Settlement Agreement, pp. 3 and 4.

C. RETURN ON EQUITY

Effective upon the Authority's approval of this Settlement Agreement for rate cases filed through December 31, 2023, the signatories to this agreement will have their allowed return on equity level set based on the above formula. The Settlement Agreement provides for a ROE determined by an average of the large water companies in the state (Aquarion Water and Connecticut Water) which is identical to the formula provided in the Notice of Settlement Agreement together with a 50 basis point fixed adder. The ROE combined with the fixed adder is the average base ROE separately approved in Aquarion Water's and Connecticut Water's last rate cases. The base allowed ROE average for Aquarion Water and Connecticut Water excludes any bonus, incentive or penalty adjustments made by the Authority to the allowed ROE. This base ROE is before an adder as numerated in Public Act 13-78 An Act Concerning Water Infrastructure and Conservation, Municipal Reporting Requirements and Unpaid Utility Accounts at Multi-Family Dwellings or any other adders and before any adjustments downward based on prudence.

The fixed adder of 50 basis points was agreed to by the parties to the Settlement Agreement as outlined in the Notice of Settlement Agreement. Those parties added a variable performance adder, to the ROE, of up to 50 basis points based on exemplary performance in such areas as management efficiency, customer service and cost containment initiatives.

The most significant element of the Settlement Agreement is that it creates administrative efficiencies which could lead to significant cost savings in the rate case process. The OCC believes the Settlement Agreement and methodology will save money and time for each of the companies and their ratepayers, their participants, the OCC, and the Authority. Tr. 8/30/13, pp. 96 and 97. It is expected that these cost savings would be passed on to ratepayers. Cost savings include the following:

1. Decrease of \$30,000 to \$40,000 in costs to retain cost of capital witnesses per Small Water Company for each rate case.

2. Decrease of \$25,000 in costs associated with the OCC hiring an expert witness in rebuttal.
3. The preparation and processing of interrogatories, rebuttal and briefing documents on the part of the Small Water Companies.
4. Cost of hearings will be reduced to perhaps one procedural hearing.
5. Savings in rate case legal fees.

Response to Interrogatory FI-1, Tr. 8/30/13, pp. 101-108.

Additionally, the Small Water Companies will benefit from the Settlement Agreement in time and monetary savings for non-recoverable rate case expenses such as the time value of money for up-fronting rate case expenses. Other savings come from not having to subscribe to financial publications to support their positions and to respond to counter testimony. Other savings that are hard to quantify include employee work time that can be deployed to non-rate case activities and therefore, delay or eliminate the need for incremental employees. The agreed upon ROE formula gives the Small Water Companies a more certain pre-determined ROE range when applying to the Authority for rate relief. Response to Interrogatory FI-2, Tr. 8/30/13, pp. 106 and 107.

The Authority establishes the total cost savings per rate case for the Small Water Companies and the OCC at \$80,000 based on cross examination of the parties. This \$80,000 includes savings for cost of capital witnesses, attorney fees, preparation and processing of interrogatories, rebuttal, and briefing documents. The OCC and the Small Water Companies, agreed to an estimate of savings of \$80,000 for each rate case based on the provisions of the Settlement Agreement. Tr. 8/30/13, p. 108.

The fixed formula adder of 50 basis points was developed through negotiation by the OCC and the Small Water Companies. This fixed formula adder is in recognition of the lack of financial flexibility for the Small Water Companies due to their size and as such lack of access to the financial markets. This 50 basis point adder was believed to be reasonable when compared with the various deciles of micro-cap size adjustments recommended by Ibbotson Associates which is a research firm that compiles stock and other financial data. The 9th and 10th decile companies, of which the Small Water Companies are comparable, all rated at least a 2.22% percentage point adder in a range of 2.22%-3.81%. In addition, when the 9th and 10th deciles are further broken down by size, relative to the Small Water Companies, the Ibbotson adders increase even more. Response to Interrogatory FI-10. The Authority finds the Settlement Agreement's fixed formula adder to be reasonable given the data from Ibbotson Associates.

A variable performance adder of 50 basis points was included as a provision to the Settlement Agreement as an incentive for management efficiency, customer service and cost containment initiatives. The variable performance adder of 50 basis points was found reasonable by the Parties, reasoning that a variable performance adder equal to the fixed formula adder would encourage excellence in performance. The Authority notes that the fixed and variable performance adder when combined is still significantly less than the 9th and 10th decile companies in the 2.22%-3.81% range. Response to Interrogatory FI-11. The Small Water Companies believe that data to support the areas of management efficiency, customer service, and cost containment can be easily generated since they track these measurements. Tr. 8/30/13, pp. 112 and 113. The

Authority is of the opinion that this variable performance adder should provide for better service for water customers.

D. CAPITAL STRUCTURE

A provision was included in the Settlement Agreement for the Small Water Companies to manage the common equity in their capital structures to a range of 40% to 60% of their total capital structure. This was included as a provision ". . . since it was viewed as a reasonable capital structure for ratemaking purposes." Tr. 8/30/13, p. 110. This range was determined by water utility industry comparison. From a recent issue of Value Line analysis of the water utility industry, of 7 publicly traded water utilities, the average common equity ratio in 2013 is 52% with a range from 45.5% to 58%. The Small Water Companies report that this ratio has trended slowly upward coincidental with increased environmental risks. Documentation of this slow trend upward is found in Value Line where in 2003, equity ratios averaged 49.1% and have since climbed to a 52.0% average. One of the principle reasons behind this upward movement in the equity ratio is the perception of increased business risk in the water utility industry and the need to mitigate that risk in the capital structure. The lower limit of 40% was determined as the lowest an equity ratio should be in order to maintain adequate financial coverage on the debt as well as meet many bond indenture capital limitations for investment grade securities. The Small Water Companies assert that their smaller size as micro-cap water utilities renders them even more susceptible to business and financial risks than larger water utilities. Response to Interrogatory FI-3.

The Small Water Companies plan to manage their capital structure by periodically alternating between long term debt and common equity issues. The Small Water Companies believe that they should be able to complete the task of managing their respective common equity ratios between 40% and 60%, on average, as each construction cycle dictates. This is important since the water utility industry is capital intensive and therefore requires constant and significant proportions of capital. This capital comes from periodic long-term sources coupled with short-term bank credit lines used in the interim between major financings. Long-term capital such as debt and equity must be acquired in the financial markets and therefore maintenance of an appropriate capital structure is paramount. Management by the Small Water Companies of their capital ratios will consist of a monitored balancing between internal cash flows of earnings and depreciation and draw downs on bank lines of credit. The start and end of each construction cycle controls the timing between short and long-term financing. Periodically, the Small Water Companies will alternate between long-term debt and common equity issuances as the means to manage their common equity ratio between 40% and 60%, on average, as each construction cycle dictates. Response to Interrogatory FI-4.

The Authority has concern over the affect the 60% top of the equity range has on customers' bills since equity customarily has a greater cost than debt. All the Small Water Companies equity ratios are different but in the 40% to 60% range. Over the life of the Settlement Agreement there may be instances when all the five water utilities, for a legitimate business reason, will have less financial risk and increase or maintain their common equity ratio at or near the 60% level. Conversely, there may also be times when the equity ratio of one of more of the five Small Water Companies drops toward the 40%

level. The Settlement Agreement set this range wide enough to be inclusive of multiple risk circumstances in addition to market fluctuations in debt and equity costs. There was no intent in the Settlement Agreement to restrict common equity movement of the Small Water Companies at the same time and as such, they are being treated as individual entities. Response to Interrogatory FI-6.

The Authority recognizes that depending on the timing of rate filings of one of the Small Water Companies and the concurrent equity ratios that a 60% equity ratio, would generate higher required revenues all other things being equal. However, there may be offsetting savings in debt costs which could offset an increase in revenue requirements. For example if one of the Small Water Companies has just completed a debt financing at costs and terms more favorable than normal and because the additional debt has the effect of bringing the company closer to the lower limit of 40% equity that, small water company may determine to increase its common equity ratio to balance the capital structure at 60% or 50% equity. This balancing of the capital structure may produce a higher incremental cost of the equity component. However, there may be an even greater saving in the debt cost component of capital. Response to Interrogatory FI-7. The Authority finds that the range of equity between 40% to 60% of equity in the capital structure is reasonable.

E. REGULATORY COMPLIANCE, MANAGEMENT PRUDENCE AND SERVICE QUALITY

The Settlement Agreement provides that the ROE formula assumes compliance with the PURA and DPH orders, prudent management and satisfactory service quality. Settlement Agreement, Section B4. The Settlement Agreement does not preclude ROE penalties for inferior customer service, management performance or imprudence. The Authority finds this is reasonable and assures ratepayers are fairly treated and that service quality remains at a high level.

F. PUBLIC ACT 13-78

Public Act 13-78 (PA 13-78), An Act Concerning Water Infrastructure and Conservation, Municipal Reporting Requirements and Unpaid Utility Accounts at Multi-Family Dwellings, was signed into law after the Settlement Agreement was filed with the Authority. PA 13-78 requires the Authority to:

. . . authorize rates for each water company, as defined in section 16-1 of the general statutes, which promote comprehensive supply-side and demand-side water conservation. In establishing such rates, the authority shall take into consideration state energy policies, the capital intensive nature of sustaining water systems that minimize water losses and the competition for capital for continued investments in such systems. Such rates shall consider (1) demand projections that recognize the effects of conservation, (2) implementation of metering and measures to provide timely price signals to consumers, (3) multiyear rate plans, (4) measures to reduce system water losses, and (5) alternative rate designs that promote conservation.

Thus, PA 13-78 provides for a revenue adjustment mechanism that reconciles in rates, the difference between actual and allowed revenues, an earnings sharing mechanism, and a premium rate of return to a water company that has acquired non-viable systems.

The OCC asserts that PA 13-78 and the Settlement Agreement do not conflict. The OCC also suggests that the only conflict may be from the premium ROE given to a water company that has acquired non-viable systems. In the opinion, of the OCC, the premium section of PA 13-78 was geared to larger water utilities such that there would be an incentive to take over non-viable systems. Tr. 8/30/13, pp. 115 and 116. The Authority finds no conflict between PA 13-78 and this Settlement Agreement.

III. FINDINGS OF FACT

1. The Authority received the Settlement Agreement on June 20, 2013.
2. The Settlement Agreement is effective through December 31, 2023.
3. The Settlement Agreement provided for calculation of the allowed ROE based on the prescribed formula of the average of the latest base allowed ROE of Connecticut Water and Aquarion Water.
4. The Settlement Agreement provides for a fixed formula adder of 0.50%.
5. The Settlement Agreement provides for a variable performance adder of up to 0.50% based on exemplary performance in such areas as management efficiency, customer service and cost containment initiatives.
6. The Settlement Agreement permits the Small Water Companies to manage the common equity in their capital structures to a range of 40% to 60% of their total capital structure.
7. The ROE formula assumes compliance with the PURA and DPH orders, prudent management and satisfactory service quality.
8. The Settlement Agreement does not preclude ROE penalties for inferior customer service, management performance, or imprudence.

IV. CONCLUSION

The Authority hereby approves the Settlement Agreement submitted in its entirety. The Authority finds the Settlement Agreement will lead to cost savings for every rate case submitted by the Small Water Companies which will benefit its ratepayers, the OCC, other rate case participants, and the PURA. Lastly, the Settlement Agreement is in the public interest.

The Connecticut Department of Energy and Environmental Protection is an Affirmative Action/Equal Opportunity Employer that is committed to requirements of the Americans with Disabilities Act. Any person with a disability who may need

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APPENDIX D
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information in an alternative format may contact the agency's ADA Coordinator at 860-424-3194 or at deep.hrmed@ct.gov. Any person with limited proficiency in English, who may need information in another language, may contact the agency's Title VI Coordinator at 860-424-3035 or at deep.aaoffice@ct.gov. Any person with a hearing impairment may call the State of Connecticut relay number – 711. Discrimination complaints may be filed with DEEP's Title VI Coordinator. Requests for accommodations must be made at least two weeks prior to any agency hearing, program or event.

APPENDIX D

**DOCKET NO. 13-01-29 INVESTIGATION FOR STREAMLINING THE
RATEMAKING PROCESS FOR SMALL WATER
COMPANIES**

This Decision is adopted by the following Directors:

John W. Betkoski, III

Arthur H. House

Michael A. Caron

CERTIFICATE OF SERVICE

The foregoing is a true and correct copy of the Decision issued by the Public Utilities Regulatory Authority, State of Connecticut, and was forwarded by Certified Mail to all parties of record in this proceeding on the date indicated.



Nicholas E. Neeley
Department of Energy and Environmental Protection
Acting Executive Secretary
Public Utilities Regulatory Authority

October 24, 2013

Date

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