

<b>ORIGINAL</b>	
N.H.P.U.C. Case No.	DW 12-306
Exhibit No.	#3
Witness	Panel 1
DO NOT REMOVE FROM FILE	

**STATE OF NEW HAMPSHIRE**

**Before the**

**PUBLIC UTILITIES COMMISSION**

Request for Permanent Rate Increase

Rosebrook Water Company, Inc.

Docket No. DW 12-306

**STIPULATION AGREEMENT**

**I. PARTIES AND SCOPE OF STIPULATION**

A. This stipulation agreement relating to Rosebrook Water Company, Inc.'s (Rosebrook) permanent rate filing is entered into this 17th day of September, 2013, by and among Staff of the New Hampshire Public Utilities Commission and Rosebrook (jointly, Settling Parties) representing all of the full participants in this docket.

B. This stipulation constitutes the Settling Parties' recommendation to the Commission with respect to this docket.

C. The Settling Parties agree that the terms of the stipulation are intended to resolve the issues specified herein only. The stipulation shall not be deemed an admission by the Settling Parties that any allegation or contention in this proceeding, other than those specifically agreed to herein, is true and valid. This stipulation shall not be deemed to foreclose the Staff from taking any position in any future proceeding as to these issues or from pursuing penalties pursuant to RSA 365:41 and RSA 365:42 for non-compliance with the terms of this stipulation agreement or Commission order regarding these issues.

D. The Settling Parties agree and recommend that the stipulation and attachments be admitted as full exhibits and given whatever weight the Commission deems appropriate.

## **II. STIPULATION TERMS**

### **A. Rate Case**

#### **1. Revenue Requirement; Rate Base; Rate of Return**

The Settling Parties agree and recommend the Commission approve an increase in Rosebrook's revenue requirement of \$47,386, or 23.00%, to an annual revenue requirement of \$253,441. This revenue requirement is based on a total test year rate base of \$385,642, total operating expenses of \$366,289, and an overall rate of return of 9.24% yielding an operating income requirement of \$35,618. The overall rate of return is a weighted average cost of capital based on a cost of equity of 9.60% and a cost of long-term debt of 4.05%. See Attachment A, Schedules 1 through 7. The Settling Parties also agree and recommend the Commission approve a step increase, to be added to the revenue requirement proposed in this paragraph, as detailed in paragraph A.3. below.

#### **2. Effective Date of New Rates**

The Settling Parties agree and recommend that the new permanent rates under this agreement be effective for water service for the third quarter of 2013, i.e. on and after July 1, 2013. Rosebrook did not seek temporary rates in this proceeding. The Settling Parties acknowledge that Rosebrook normally begins issuing bills for third quarter service in early October, and may delay that billing for a limited period of time in anticipation of a Commission order on the new permanent rates contemplated herein. In the event Rosebrook determines to proceed with its third quarter billing under its currently effective tariff rates, the Settling Parties agree and recommend that the Commission provide its approval for the recovery of the difference between its current tariff rates and the new permanent rates under this agreement, in

amounts and in a manner to be approved by the Commission upon recommendation by the Settling Parties.

### **3. Step Increase**

The Settling Parties agree and recommend the Commission authorize Rosebrook one step increase for recovery of plant additions placed in service during 2012, net of assets retired and contributions in aid of construction (CIAC). Including return on these net additions to rate base, and associated depreciation expense and property tax, the Settling Parties estimate that these costs, as more fully described in Attachment B to this stipulation, would increase the revenue requirement of Rosebrook by \$17,324 or an additional 8.41%. The Settling Parties recommend the Commission authorize this step increase to be effective for service on and after July 1, 2013. The Settling Parties agree and recommend that the revenues arising from this step increase be combined with the permanent revenues as described above in paragraph A.1., resulting in a total new revenue requirement of \$270,765 as shown on Attachment B, Schedule 4.

The plant additions included in this proposed step increase will be subject to audit by the NHPUC Audit Staff. If changes to the calculation of the step increase result from that audit review, the Settling Parties will advise the Commission accordingly and seek further approvals.

### **4. Customer Rate Impact/Rate Design**

The Settling Parties agree that Rosebrook's current rate design is in need of revision, and recommend that the Commission approve changes to Rosebrook's rate design, as illustrated on Attachment B, Schedule 4. As a basis for establishing new rates, the Settling Parties agree that the fixed charges and the consumption charge should recover the same proportion of revenue as occurred in the 2011 test year. Fixed charges recovered approximately 28% of the company's

test year revenue, and the consumption charge recovered the remaining 72%, as illustrated on Attachment A. Schedule 6. The recommended annual fixed charges for each meter class are established in accordance with standards in the American Water Works Manual M6. See Attachment A. Schedule 7 for the flow rates used to derive the multipliers. Since the fixed charges for each metered class must be calculated to recover \$76,868 in revenues per Attachment B. Schedule 4, the Settling Parties propose that the fixed annual charge for a 5/8 inch meter, currently \$140.00, be set at \$118.88. With the 5/8 inch meter charge set at \$118.88, the fixed charge for 1 inch meters, currently at \$154.00, should be set at 3.3 times the 5/8 inch charge or \$392.30; for 2 inch meters, currently at \$406.00, the charge should be 10.7 times the 5/8 inch charge or \$1,272.02; for 3 inch meters, currently at \$406.00, the charge should be 23.3 times the 5/8 inch charge or \$2,769.90; and for 6 inch meters, currently at \$406.00, the fixed charge should be 93.3 times the 5/8 inch charge, or \$11,091.50<sup>1</sup>. Based on the current number of meters in service, these fixed charges will recover approximately \$76,868 or 28% of Rosebrook's new revenue requirement, the same proportion as in its 2011 test year. Applying the test year metered water consumption of 36,357,000 gallons<sup>2</sup> to the balance of the revenue requirement to be recovered yields a consumption rate of \$5.33 per 1,000 gallons. Attachment C is a Report of Proposed Rate Changes, which provides detail on the effect of the proposed increase in revenue requirement as well as the proposed rate design changes on each metered class.

Because Rosebrook serves primarily seasonal and part-time residents, annual water consumption by customers with 5/8 inch meters averages 17,612 gallons annually, or 48 gallons

---

<sup>1</sup> The multipliers for each metered class are derived by dividing the flow rate of that meter by the flow rate of the 5/8 inch meters (15 gallons per minute). For example, for the three inch meter, the flow rate of 350 gallons per minute divided by 15 equals the multiplier of 23.3.

<sup>2</sup> This total of water sales excludes non-tariffed and unauthorized water sales which are to be discontinued pursuant to paragraph B.2. of this Stipulation Agreement.

per day. As a result of the recommended new revenue requirement and the recommended new rate design, this average customer will see a increase in annual water cost from \$209.94 to \$212.75 annually.

## **5. Rate Case Expenses**

The Settling Parties agree that Rosebrook will file within fifteen days from the date of a final order in this docket documentation of its rate case expenses, as well as a proposed surcharge to recover those expenses. The Settling Parties further agree that any costs incurred relative to the following matters are not eligible for recovery through a rate case expense surcharge: costs relative to the Audit Staff's audit; costs relative to the establishment of CPR's; costs relative to any and all financial or operational compliance matters raised in this docket or prior dockets; and costs relative to eliminating unauthorized and non-tariffed water sales as discussed in paragraph B.2. below. The Settling Parties agree that, following Staff review of Rosebrook's rate case expense documentation, the Settling Parties will seek to provide a joint recommendation to the Commission, but may each file a recommendation if unable to reach an agreement.

## **B. Compliance Issues**

### **1. Continuing Property Records**

The Settling Parties acknowledge that Rosebrook has not maintained Continuing Property Records (CPR's) as required by Puc Rule 607.08. Rosebrook has engaged the services of a consultant to assist with the construction of CPR's, and the Settling Parties acknowledge that Rosebrook provided an update to Staff on August 15, 2013 regarding that progress. Rosebrook agrees to submit a report and its final proposed CPR's for Staff review no later than September

30, 2013. The Settling Parties intend to discuss, in person or by conference call, the report and proposed CPR's by mid-October. It is the intention of the Settling Parties that Rosebrook finalize its CPR's no later than October 31, 2013. The Settling Parties agree to provide notice to the Commission in the event the CPR's are not finalized by this date.

## **2. Meter By-Pass and Unmetered Sales**

The Settling Parties acknowledge that Rosebrook has in the past failed to eliminate unauthorized and non-tariffed sale of water from its system, and the Settling Parties acknowledge that Rosebrook has agreed in prior dockets<sup>3</sup> to eliminate these practices.

In order to eliminate unauthorized and non-tariffed use of water from the Rosebrook system, the Settling Parties agree that Rosebrook will coordinate with the Mount Washington Hotel to remove the following system by-passes: (a) 2" by-pass at the ski area base lodge; (b) by-pass in the "pit" at the ski area maintenance facility; (c) hose spigot at the ski area first aid building; (d) 4" by-pass at the hotel carpenter shop; (e) two by-passes at the Spa and Conference Center boiler room; and (f) three by-passes at the Cabana. Rosebrook will coordinate with the Mount Washington Hotel to complete this work no later than November 30, 2013. Rosebrook will provide to Staff a compliance report immediately upon completion of this work. The report will include before and after photographs of each of the above-identified by-passes, and a certification from the Rosebrook compliance officer that the by-pass removals were completed properly.

---

<sup>3</sup> See, Docket No. DW 06-149 and Docket No. DW 11-117.

In the event that Rosebrook seeks to serve any new customer at a rate not currently provided for in its tariff, the company agrees that it shall request appropriate authorization for such new rate with the Commission.

**3. Other Compliance Issues from Audit Report**

The Settling Parties acknowledge and agree that Rosebrook has undertaken numerous changes in its accounting, bookkeeping, financial reporting, and operational procedures in order to address Audit Issues identified in the Commission Audit Staff's May 14, 2013 Final Audit Report.

**4. Tariff Language on Cross Connections**

The Settling Parties agree and recommend that the Commission provide its approval of the amended tariff language, shown on Attachment D to this agreement, regarding cross connections. The Settling Parties agree that this amended language is as a result of a recommendation by the New Hampshire Department of Environmental Services that such language be included in Rosebrook's tariff.

**III. MISCELLANEOUS**

A. The Settling Parties agree that this stipulation may be executed in multiple counterparts, which together shall constitute one stipulation.

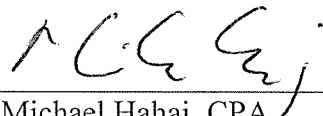
B. The Settling Parties agree that the Commission's acceptance of the stipulation does not constitute continuing approval for, or precedent for, any particular issue in this proceeding other than those specified herein.

Rosebrook Water Company, Inc.  
Stipulation Agreement on Permanent Rates  
Docket No. DW 12-306

**IN WITNESS WHEREFORE**, the signatories below have executed this stipulation,  
each being fully authorized to do so, as of the day indicated below.

ROSEBROOK WATER COMPANY, INC.

Date: September 17, 2013

By:   
Michael Hahaj, CPA  
Director

STAFF OF THE NEW HAMPSHIRE  
PUBLIC UTILITIES COMMISSION  
By its Attorney,

Date: September 12, 2013

By:   
Marcia A. Brown, Esq.



DW 12-306  
ROSEBROOK RATE CASE  
REVENUE REQUIREMENT

Pro-forma Rate Base (Schedule 2)	\$ 385,642
Rate of Return (Schedule 3)	<u>9.24%</u>
Operating Income Requirement	35,618
Pro-forma Operating Income (Schedule 4)	<u>53,761</u>
Revenue Deficiency / (Surplus) Before Taxes	(18,143)
Divided by Tax Factor	<u>77.78%</u>
Revenue Deficiency / (Surplus)	(23,328)
Pro-forma Annual Revenue *	<u>279,482</u>
Revenue Requirement Based on Test Year	\$ 256,154
Less: Test Year Unmetered Water Sales	<u>\$ (2,713)</u>
Adjusted Revenue Requirement	<b>\$ 253,441</b>
Less: Test Year Annual Metered Water Revenue	<u>\$ (206,055)</u>
Proposed Increase in Annual Water Revenue	<u><u>\$ 47,386</u></u>
<b>Percentage Increase/(Decrease) in Annual Water Revenue</b>	<b><u>23.00%</u></b>

\* Includes reimbursement for services provided to affiliates.

DW 12-306  
ROSEBROOK RATE CASE  
RATE BASE

	Actual 12/31/2011	5 Quarter Average	Company Proforma Adjustments	Pro-forma Test Year 12/31/2011	Staff Proforma Adjustments	Adj #	Staff Proposed Test Year 12/31/11
Plant in Service	\$ 1,134,254	\$ 1,121,666	\$ 12,588	\$ 1,134,254	\$ (12,693)	1-2	\$ 1,121,561
Less: Accum Deprec	(528,912)	(510,398)	(19,076)	(529,474)	19,905	3-6	(509,569)
Total Net Plant	605,342	611,268	(6,488)	604,780	7,212		611,992
Plant Acquisition Adjustment	(347,259)	(347,259)	-	(347,259)	-		(347,259)
Accumulated Amortization	312,002	309,496	-	309,496	-		309,496
Cash Working Capital	27,302	27,302	36,746	64,048	(28,579)	7	35,469
Material & Supplies	853	1,251	-	1,251	-		1,251
Prepayments	5,586	5,678	-	5,678	(433)	8-9	5,245
CIAC	(247,914)	(153,914)	14,624	(139,290)	(88,461)	10-12	(227,751)
Accum Amort of CIAC	67,570	64,178	3,791	67,969	14,121	13-15	82,090
Accum Deferred Income Taxes	(86,860)	(84,891)	-	(84,891)			(84,891)
Total Rate Base	\$ 336,622	\$ 433,109	\$ 48,673	\$ 481,782	\$ (96,140)		\$ 385,642

DW 12-306  
ROSEBROOK RATE CASE  
STAFF PRO-FORMA ADJUSTMENTS TO RATE BASE

Adj #**Plant in Service**

1	To reverse Proforma Adjustment #1 which adjusted the 5 quarter average to year end	\$ (12,588)
2	To adjust tank roof project for MWH Construction overhead incorrectly charged to the project (\$1,054 x 10% = \$105). See Audit Issue #13 and 6/21 email	\$ (105)
<b>Total Plant in Service Adjustments</b>		<b>\$ (12,693)</b>

**Accumulated Depreciation**

3	To reverse Proforma Adjustment #2 which adjusted the 5 quarter average to year end	\$ 18,514
4	To adjust a portion of Proforma Adjustment #3 which adjusted year end depreciation on 2011 additions (\$562/2 = \$281)	\$ 281
5	To correct retirement of generator. See Audit Issue #9	\$ 575
6	To correct Telemetry System depreciation. See Audit Issue #14, Puc Chart of Accounts Standard Lives, St Cyr Memo dated 7/2/13. Calc: \$21,376 / 10yrs = \$2,137 (per yr) / 2 = \$1,069 (first yr) - 534 (booked) =	\$ 535
<b>Total Accumulated Depreciation Adjustments</b>		<b>\$ 19,905</b>

**Working Capital**

7	To adjust Working Capital. See Schedule 2B	\$ (28,579)
---	--	-------------

**Prepayments**

8	To adjust Prepaid Property Taxes per Audit Issue #32 Calc: \$4,771 + 1,610 = \$6,381 / 12 = 532 * 3 = \$1,596 -1,519 (booked)	\$ 77
9	To adjust Prepaid FIT & SBT, Account 161d per Audit Issue #35	\$ (510)
<b>Total Prepayments</b>		<b>\$ (433)</b>

**Contributions In Aid of Construction**

10	To reverse Proforma Adjustment #4 which adjusted the 5 quarter average to year end	\$ 94,000
11	To reverse Proforma Adjustment #5 which adjusted CIAC associated with CWIP	\$ (54,312)
12	To reconcile the filing to revised 5 quarter average using CIAC Schedules provided by Company on 6/26/13	\$ (128,149)
<b>Total Contributions In Aid of Construction</b>		<b>\$ (88,461)</b>

**Accumulated Amortization of CIAC**

13	To reverse Proforma Adjustment #6 which adjusted the 5 quarter average to year end	\$ (3,392)
14	To reverse Proforma Adjustment # 7 which adjusted half year amortization for 2011 additions to CIAC	\$ (399)
15	To reconcile the filing to revised 5 quarter average using CIAC Schedules provided by Company on 6/26/13	\$ 17,912
<b>Total Accumulated Amortization Adjustments</b>		<b>\$ 14,121</b>

DW 12-306  
ROSEBROOK RATE CASE  
CASH WORKING CAPITAL

	Actual 12/31/2010	Actual 12/31/2011	Company Proforma 12/31/2011	Staff Proforma 12/31/2011
Operating Expenses (O&M)	\$ 162,782	\$ 132,957	\$ 311,669	\$ 317,025
Deduct Payroll & Benefits Reimbursed				<u>\$ (144,428)</u>
Adjusted Operating (O&M) Expenses				\$ 172,597
Cashing Working Capital Percentage	20.55%	20.55%	20.55%	20.55%
Cash Working Capital	\$ 33,452	\$ 27,323	\$ 64,048	\$ 35,469
Staff Proforma Adjustment				\$ (28,579)

DW 12-306  
ROSEBROOK RATE CASE  
CAPITAL STRUCTURE AND RATE OF RETURN INFORMATION

OVERALL RATE OF RETURN

Item	Component Ratio	Staff Proforma Component Cost Rate	Weighted Average Cost Rate
Equity Capital	93.44	9.60%	8.97%
Long Term Debt	6.56	4.05%	0.27%
Total	100.00		9.24%

DW 12-306  
ROSEBROOK RATE CASE  
INCOME STATEMENT

	12 Months Ending 12/31/11	Company Pro-forma Adjustments	Test Year As Pro-formed	Staff Pro-forma Adjustments	Adj #	Staff Test Year Pro-formed	Revenue Deficiency (Surplus)	Revenue Requirement
Water Revenues	\$ 208,768	\$ 70,714	\$ 279,482	\$ -		\$ 279,482	(23,328)	\$ 256,154
Management Fees	-	136,977	136,977	7,451	16	144,428		144,428
Other Income	750	-	750	575	17	1,325		1,325
Total Operating Revenues	\$ 209,518	\$ 207,691	\$ 417,209	\$ 8,026		\$ 425,235	(23,328)	\$ 401,907
Operating Expenses								
Operating & Maintenance Expense	132,857	178,812	311,669	5,356	18-27	317,025		317,025
Depreciation Expense	36,482	562	37,044	1,603	28	38,647		38,647
Amortization of CIAC	(6,709)	(399)	(7,108)	(8,207)	29	(15,315)		(15,315)
Amort of Plant Acquisition Adj	(5,010)	-	(5,010)	-		(5,010)		(5,010)
Taxes Other Than Income	8,920	5,515	14,435	6,180	30-31	20,615		20,615
Income Taxes	2,403	11,853	14,256	1,256		15,512	(5,185)	10,327
Total Operating Expenses	168,943	196,343	365,286	6,188		371,474	(5,185)	366,289
Net Operating Income (Loss)	40,575	11,348	51,923	1,838		53,761	(18,143)	<u>35,618</u>

DW 12-306  
ROSEBROOK RATE CASE  
STAFF PRO-FORMA ADJUSTMENTS TO INCOME STATEMENT

**Adj #**

**Operating Revenue**

- |    |   |          |
|----|---|----------|
| 16 | To adjust Proforma A1 which increased test year revenues for anticipated revenues from Resort Waste & BW Resort. Staff DR1-15 prompted the discovery of additional revenue: \$144,428-136,977=\$7,451 | \$ 7,451 |
|----|---|----------|

**Other Income**

- |    |  |        |
|----|--|--------|
| 17 | To correct retirement of generator. Other Income, Account #610.04b understated. See Audit Issue #9 | \$ 575 |
|----|--|--------|

**Total Income**

**\$ 8,026**

**Outside Services - Regulatory**

- |    |  |        |
|----|--|--------|
| 18 | To adjust Proforma #18 which was meant to add test year regulatory expenses for the recovery of compliance/ CIAC/tariff costs over 5yrs (\$4,659/5). This Proforma was accidentally omitted from the filing. | \$ 931 |
|----|--|--------|

**Outside Services - Legal**

- |    |  |          |
|----|--|----------|
| 19 | To adjust Proforma #15 which adjusted test year legal expenses for the recovery of compliance/CIAC/tariff costs over 5 yrs. Two invoices were not recoverable. (\$451.50+193.50 = \$645/5) | \$ (129) |
|----|--|----------|

**Outside Services - Legal**

- |    |  |            |
|----|--|------------|
| 20 | To adjust Proforma #16 which adjusted test year legal expenses for normal and recurring legal expenses based on Staff DR 1-8 and 1-9: 2009 exp was \$1,711, 2010 exp was \$444. 2011 adj exp was \$645 | \$ (1,000) |
|----|--|------------|

**Outside Service - PUC Audit**

- |    |  |          |
|----|--|----------|
| 21 | To adjust Proforma #19 which added test year accounting expenses for the anticipated costs associated with 2012 PUC audit. Remove \$1,300 as it relates to compliance (\$1300/3 = \$433) | \$ (433) |
|----|--|----------|

**Miscellaneous Expense**

- |    |  |          |
|----|--|----------|
| 22 | To adjust Miscellaneous Expenses, Account #665 per Audit Issue #27 | \$ (765) |
|----|--|----------|

**Outside Services - Operations**

- |    |  |          |
|----|--|----------|
| 23 | To adjust Proforma A3 which eliminated affiliate agreement costs. See St Cyr email dated 7/3/13. | \$ (201) |
|----|--|----------|

**Attachment A**  
**Schedule 4A, page 2**

**Employee Pension and Benefits**

24	To adjust Employee Pension and Benefit Expenses, Account #926 per Audit Issue #27	\$ (100)
----	---	----------

**Regulatory Commission Expense**

25	To adjust Regulatory Commission Expense, Account #928 per Audit Issue #27 <b>(Not needed: see email 6/21/13)</b>	\$ -
----	--	------

**Insurance Expense**

26	To adjust Insurance Expense, Account 924 per Audit Issue #30 (\$5,256 - 4,509 = \$747)	\$ (747)
----	--	----------

**Rent Expense**

27	To adjust for 12 months Rent Expense, Account #93, at \$650/mo per 8/15/11 agreement with 9 Remic Lane, LLC	\$ 7,800
----	---	----------

**Total Operating Maintenance Expenses**

	\$ 5,356
--	----------

**Depreciation Expense**

28	To correct Telemetry System depreciation. See Audit Issue #14, Puc Chart of Accounts Standard Lives, St Cyr Memo dated 7/2/13. Calc: \$21,376 / 10yrs = \$2,137 (per yr) - 534 (booked) =	\$ 1,603
----	---	----------

**Amortization Expense**

29	To record additional amortization expense due to Rate Case related CIAC adjustments. Calc: (\$14,916 - 6,709)	\$ (8,207)
----	---	------------

**Property Tax Expense**

30	To adjust Property Tax Expense, Account #408.11 per Actual Property Tax billings (\$4,771 + \$1,610)	\$ 6,381
----	--	----------

31	To adjust State Property Tax Expense, Account #408.12 per Audit Issue #33	\$ (201)
----	---	----------

**Total Property Taxes**

	\$ 6,180
--	----------



DW 12-306  
ROSEBROOK RATE CASE  
INCOME TAX PROVISION

Operating Revenues	\$	8,026
Operating Expenses		
Net Proforma to Operating & Maintenance Expense	\$	(5,356)
Net Proforma to Depreciation Expense		(1,603)
Net Proforma to Amortization of CIAC		8,207
Net Proforma to Amort of Plant Acquisition Adj		-
Net Proforma to Taxes Other Than Income		(6,180)
Net Operating Income before NHBPT	\$	3,094
Less: NHBPT @ 8.5%		(263)
Net Operating Income before FIT	\$	2,831
FIT @ 15%		(425)
Net Operating Income after FIT	\$	2,406
Less Adjustments per Audit Report:		
To adjust FIT Expense per Audit Issue #34		(58)
To adjust NHBPT Expense per Audit Issue #35		(510)
Net Proforma Adjustments to Operating Income	\$	1,838

DW 12-306  
ROSEBROOK RATE CASE  
EFFECTIVE TAX FACTOR

Taxable Income	100.00%
Less: NH Business Profits Tax	<u>8.50%</u>
Federal Taxable Income	91.50%
Federal Income Tax Rate	<u>15.00%</u>
Effective Federal Income Tax Rate	13.73%
Add: NH Business Profits Tax	<u>8.50%</u>
Effective Tax Rate	<u><u>22.23%</u></u>
Percent of Income Available if No Tax	100.00%
Effective Tax Rate	<u>22.23%</u>
Percent Used as a Divisor in Determining the Revenue Requirement	<u><u>77.78%</u></u>
Tax Multiplier	<u><u>0.28576</u></u>

DW 12-306  
ROSEBROOK RATE CASE  
CALCULATION OF CONSUMPTION RATE AND  
FIXED RATES USING EQUIVALENT METER COST RATIOS  
BASED ON TEST YEAR ONLY

**CALCULATION OF REVENUE RATIO, Fixed and Consumption:**

Total TEST YEAR Metered Revenue	\$ 206,055	
Less: FIXED REVENUE	— \$ 58,492	28.39%
CONSUMPTION REVENUE: Total Test Year Metered Revenue less Fixed Revenue	\$ 147,563	71.61%
		100.00%

**CALCULATION OF FIXED CHARGES:**

Meter Size (inches)	# of Meters at Year End 2011	Maximum Flow, gpm **	Equivalents Relative to 5/8" Meter Using Maximum Flow	Proposed Ratio Rates	Ratio Proposed Revenue
5/8"	356	15	1.0	\$ 111.28	\$ 39,615.68
1" Turbine	43	50	3.3	367.22	15,790.46
2" Turbine	3	160	10.7	1,190.70	3,572.10
3" Turbine	1	350	23.3	2,592.82	2,592.82
6" Turbine	1	1400	93.3	10,382.42	10,382.42
	404				\$ 71,953.48

\*\* Source: AWWA Manual M6 : Water Meters-Selection, Installation, Testing, and Maintenance, Table 5-3 (Attachment A, Schedule 7)

**CALCULATION OF CONSUMPTION RATE:**

Proposed Revenue Requirement	\$ 253,441
Proposed Revenue Requirement for Fixed Revenue (28.39%)	— \$ 71,952
Proposed Revenue Requirement for Consumption (71.61%)	\$ 181,489
TEST YEAR 2011 Consumption per 1000 gallons	36,357 *
Proposed Consumption Rate per 1000 gallons used	\$ 4.99

\* Eliminates unauthorized and non-tariffed sales.

## TESTING OF METERS—TEST PROCEDURES AND EQUIPMENT 6.

Table 5-3 Test requirements for new, rebuilt, and repaired cold-water meters\*

Displacement Meters (AWWA C700 and C710)												
Size	Maximum Rate (All Meters)				Intermediate Rate (All Meters)				Minimum Rate (New and Rebuilt)			
	Flow Rate <sup>1</sup>	Test Quantity <sup>2,3</sup>	Accuracy Limits	Flow Rate <sup>1</sup>	Test Quantity <sup>2,3</sup>	Accuracy Limits	Flow Rate <sup>1</sup>	Test Quantity <sup>2,3</sup>	Accuracy Limits	Flow Rate <sup>1</sup>	Test Quantity <sup>2,3</sup>	Accuracy Limits
<i>in.</i>	<i>gpm</i>	<i>gal</i>	<i>ft<sup>3</sup></i>	<i>percent</i>	<i>gpm</i>	<i>gal</i>	<i>ft<sup>3</sup></i>	<i>percent</i>	<i>gpm</i>	<i>gal</i>	<i>ft<sup>3</sup></i>	<i>percent</i>
<i>(min)</i>												
1/2	8	100	10	98.5–101.5	2	10	1	98.5–101.5	1/4	10	1	95–101
1/2 x 3/4	8	100	10	98.5–101.5	2	10	1	98.5–101.5	1/4	10	1	95–101
3/4	15	100	10	98.5–101.5	2	10	1	98.5–101.5	1/4	10	1	95–101
3/4 x 1	15	100	10	98.5–101.5	2	10	1	98.5–101.5	1/4	10	1	95–101
1	25	100	10	98.5–101.5	3	10	1	98.5–101.5	1/2	10	1	95–101
1 1/2	40	100	10	98.5–101.5	4	10	1	98.5–101.5	3/4	10	1	95–101
2	50	100	10	98.5–101.5	8	100	10	98.5–101.5	1 1/2	100	10	95–101
2	100	100	10	98.5–101.5	15	100	10	98.5–101.5	2	100	10	95–101
Multijet Meters (AWWA C708)												
Size	Maximum Rate (All Meters)				Intermediate Rate (All Meters)				Minimum Rate (New and Rebuilt)			
	Flow Rate <sup>1</sup>	Test Quantity <sup>2,3</sup>	Accuracy Limits	Flow Rate <sup>1</sup>	Test Quantity <sup>2,3</sup>	Accuracy Limits	Flow Rate <sup>1</sup>	Test Quantity <sup>2,3</sup>	Accuracy Limits	Flow Rate <sup>1</sup>	Test Quantity <sup>2,3</sup>	Accuracy Limits
<i>in.</i>	<i>gpm</i>	<i>gal</i>	<i>ft<sup>3</sup></i>	<i>percent</i>	<i>gpm</i>	<i>gal</i>	<i>ft<sup>3</sup></i>	<i>percent</i>	<i>gpm</i>	<i>gal</i>	<i>ft<sup>3</sup></i>	<i>percent</i>
<i>(min)</i>												
3/4	15	100	10	98.5–101.5	1	10	1	98.5–101.5	1/4	10	1	97–103
3/4 x 1	15	100	10	98.5–101.5	1	10	1	98.5–101.5	1/4	10	1	97–103
1	25	100	10	98.5–101.5	2	10	1	98.5–101.5	1/2	10	1	97–103
1 1/2	35	100	10	98.5–101.5	3	10	1	98.5–101.5	3/4	10	1	97–103
2	70	100	10	98.5–101.5	5	100	10	98.5–101.5	1 1/2	100	10	97–103
2	100	100	10	98.5–101.5	8	100	10	98.5–101.5	2	100	10	97–103
Singlejet Meters (AWWA C712)												
Size	Maximum Rate (All Meters)				Intermediate Rate (All Meters)				Minimum Rate (New and Rebuilt)			
	Flow Rate <sup>1</sup>	Test Quantity <sup>2,3</sup>	Accuracy Limits	Flow Rate <sup>1</sup>	Test Quantity <sup>2,3</sup>	Accuracy Limits	Flow Rate <sup>1</sup>	Test Quantity <sup>2,3</sup>	Accuracy Limits	Flow Rate <sup>1</sup>	Test Quantity <sup>2,3</sup>	Accuracy Limits
<i>in.</i>	<i>gpm</i>	<i>gal</i>	<i>ft<sup>3</sup></i>	<i>percent</i>	<i>gpm</i>	<i>gal</i>	<i>ft<sup>3</sup></i>	<i>percent</i>	<i>gpm</i>	<i>gal</i>	<i>ft<sup>3</sup></i>	<i>percent</i>
<i>(min)</i>												
3/4	15	100	10	98.5–101.5	2	10	1	98.5–101.5	1/4	10	1	95–101.5
3/4 x 1	15	100	10	98.5–101.5	2	10	1	98.5–101.5	1/4	10	1	95–101.5
1	25	100	10	98.5–101.5	3	10	1	98.5–101.5	1/2	10	1	95–101.5
1 1/2	40	100	10	98.5–101.5	4	10	1	98.5–101.5	3/4	10	1	95–101.5
2	50	100	10	98.5–101.5	8	100	10	98.5–101.5	1 1/2	100	10	95–101.5
2	100	100	10	98.5–101.5	15	100	10	98.5–101.5	2	100	10	95–101.5
3	160	500	50	98.5–101.5	20	100	10	98.5–101.5	2	100	10	95–101.5
4	250	500	50	98.5–101.5	40	100	10	98.5–101.5	3/4	100	10	95–101.5
6	500	1,000	100	98.5–101.5	60	100	10	98.5–101.5	1 1/2	100	10	95–101.5
Fluidic-Oscillator Meters (AWWA C713)												
Size	Maximum Rate (All Meters)				Intermediate Rate (All Meters)				Minimum Rate (New and Rebuilt)			
	Flow Rate <sup>1</sup>	Test Quantity <sup>2,3</sup>	Accuracy Limits	Flow Rate <sup>1</sup>	Test Quantity <sup>2,3</sup>	Accuracy Limits	Flow Rate <sup>1</sup>	Test Quantity <sup>2,3</sup>	Accuracy Limits	Flow Rate <sup>1</sup>	Test Quantity <sup>2,3</sup>	Accuracy Limits
<i>in.</i>	<i>gpm</i>	<i>gal</i>	<i>ft<sup>3</sup></i>	<i>percent</i>	<i>gpm</i>	<i>gal</i>	<i>ft<sup>3</sup></i>	<i>percent</i>	<i>gpm</i>	<i>gal</i>	<i>ft<sup>3</sup></i>	<i>percent</i>
<i>(min)</i>												
1/2	8	100	10	98.5–101.5	2	10	1	98.5–101.5	1/4	10	1	95–101
1/2 x 3/4	8	100	10	98.5–101.5	2	10	1	98.5–101.5	1/4	10	1	95–101
3/4	15	100	10	98.5–101.5	2	10	1	98.5–101.5	1/4	10	1	95–101
3/4 x 1	15	100	10	98.5–101.5	2	10	1	98.5–101.5	1/4	10	1	95–101

(continued)

## 64 WATER METERS—SELECTION, INSTALLATION, TESTING, AND MAINTENANCE

Table 5-3 Test requirements for new, rebuilt, and repaired cold-water meters\* (continued)

Fluidic-Oscillator Meters (AWWA C713)													
3/4	25	100	10	98.5-101.5	3	10	1	98.5-101.5	1/2	10	1	95-101	90
1	40	100	10	98.5-101.5	4	10	1	98.5-101.5	3/4	10	1	95-101	90
1 1/2	50	100	10	98.5-101.5	8	100	10	98.5-101.5	1 1/2	100	10	95-101	90
2	100	100	10	98.5-101.5	15	100	10	98.5-101.5	2	100	10	95-101	90
Class I Turbine Meters, Vertical-Shaft Type (AWWA C701)													
Size	Maximum Rate (All Meters)				Intermediate Rate (All Meters)				Minimum Rate (New and Rebuilt)				Minimum (Repaired)
	Flow Rate <sup>+</sup>	Test Quantity <sup>++</sup>	Accuracy Limits	Flow Rate <sup>++</sup>	Test Quantity <sup>++</sup>	Accuracy Limits	Flow Rate	Test Quantity <sup>++</sup>	Accuracy Limits	Flow Rate	Test Quantity <sup>++</sup>	Accuracy Limits	Accuracy Limits
in.	gpm	gal	ft <sup>3</sup>	percent	gpm	gal	ft <sup>3</sup>	percent	gpm	gal	ft <sup>3</sup>	percent	percent (min)
3/4	30	100	10	98-102	3	10	1	98-102	1 1/2	10	1	98-102	--
1	50	100	10	98-102	5	10	1	98-102	2	10	1	98-102	--
1 1/2	100	500	50	98-102	10	100	10	98-102	3	100	10	98-102	--
2	160	500	50	98-102	16	100	10	98-102	4	100	10	98-102	--
3	350	1,000	100	98-102	35	100	10	98-102	6	100	10	98-102	--
4	600	1,500	200	98-102	60	100	10	98-102	8	100	10	98-102	--
6	1,250	4,000	500	98-102	125	1,000	100	98-102	15	1,000	100	98-102	--
Class II Turbine Meters, In-Line (High-Velocity) Type (AWWA C701)													
Size	Maximum Rate (All Meters)				Intermediate Rate (All Meters)				Minimum Rate (New and Rebuilt)				Minimum (Repaired)
	Flow Rate <sup>+</sup>	Test Quantity <sup>++</sup>	Accuracy Limits	Flow Rate <sup>++</sup>	Test Quantity <sup>++</sup>	Accuracy Limits	Flow Rate	Test Quantity <sup>++</sup>	Accuracy Limits	Flow Rate	Test Quantity <sup>++</sup>	Accuracy Limits	Accuracy Limits
in.	gpm	gal	ft <sup>3</sup>	percent	gpm	gal	ft <sup>3</sup>	percent	gpm	gal	ft <sup>3</sup>	percent	percent (min)
1 1/2	100	500	50	98.5-101.5					4	100	10	98.5-101.5	--
2	160	500	50	98.5-101.5					4	100	10	98.5-101.5	--
3	350	1,000	100	98.5-101.5					8	100	10	98.5-101.5	--
4	630	1,500	200	98.5-101.5					15	100	10	98.5-101.5	--
6	1,400	4,000	500	98.5-101.5					30	1,000	100	98.5-101.5	--
8	2,400	7,000	900	98.5-101.5					50	1,000	100	98.5-101.5	--
10	3,800	10,000	1,300	98.5-101.5					75	1,000	100	98.5-101.5	--
12	5,000	15,000	2,000	98.5-101.5					120	1,000	100	98.5-101.5	--
16	10,000	30,000	4,000	98.5-101.5					200	1,000	100	98.5-101.5	--
20	15,000	40,000	5,000	98.5-101.5					300	1,000	100	98.5-101.5	--
Propeller Meters (AWWA C704)													
Size	Maximum Rate (All Meters)				Intermediate Rate (All Meters)				Minimum Rate (New and Rebuilt)				Minimum (Repaired)
	Flow Rate <sup>+</sup>	Test Quantity <sup>++</sup>	Accuracy Limits	Flow Rate <sup>++</sup>	Test Quantity <sup>++</sup>	Accuracy Limits	Flow Rate	Test Quantity <sup>++</sup>	Accuracy Limits	Flow Rate	Test Quantity <sup>++</sup>	Accuracy Limits	Accuracy Limits
in.	gpm	gal	ft <sup>3</sup>	percent	gpm	gal	ft <sup>3</sup>	percent	gpm	gal	ft <sup>3</sup>	percent	percent (min)
2	100	300	40	98-102					35	200	25	98-102	90
3	250	800	100	98-102					40	200	25	98-102	90
4	500	1,500	200	98-102					50	250	30	98-102	90
6	1,200	2,500	300	98-102					90	500	60	98-102	90
8	1,500	3,000	400	98-102					100	500	60	98-102	90
10	2,000	4,000	500	98-102					125	500	60	98-102	90
12	2,800	6,000	800	98-102					150	750	100	98-102	90
14	3,750	8,000	1,000	98-102					250	1,000	130	98-102	90
16	4,750	10,000	1,300	98-102					350	1,500	200	98-102	90
18	5,625	12,000	1,600	98-102					450	2,000	250	98-102	90
20	6,875	15,000	2,000	98-102					550	2,500	300	98-102	90
24	10,000	20,000	2,500	98-102					800	4,000	500	98-102	90
30	15,000	30,000	4,000	98-102					1,200	6,000	800	98-102	90
36	20,000	40,000	5,000	98-102					1,500	7,500	1,000	98-102	90

(continued)



DW 12-306  
ROSEBROOK RATE CASE  
STEP ADJUSTMENT - 2012 PLANT ADDITIONS  
REVENUE REQUIREMENT

**Additions to Rate Base:****Plant Additions (Attachment B; Sch 2):**

2012 Plant Additions	\$ 288,915	
Less: Accumulated Depreciation	<u>(7,355)</u>	\$ 281,560

**Additions to CIAC (Attachment B; Sch 2):**

2012 Additions to CIAC	(200,288)	
Less: Accumulated Amortization	<u>3,563</u>	<u>(196,725)</u>

Net Additions to Rate Base		\$ 84,835
----------------------------	--	-----------

Rate of Return (Attachment A; Sch 3)	x	<u>9.24%</u>
--------------------------------------	---	--------------

<b>Operating Income Requirement</b>		<b>\$ 7,835</b>
-------------------------------------	--	-----------------

**Increases in Annual Operating Expenses:****Net Depreciation Expense (Attachment B; Sch 2):**

Annual Depreciation Expense - 2012 Plant Additions	\$ 14,710	
Less: Annual Depreciation Expense - 2012 Retirements	<u>(3,321)</u>	11,389

**Amortization Expense (Attachment B; Sch 2):**

Annual Amortization Expense - 2012		(7,125)
------------------------------------	--	---------

<b>Property Tax Expense (Attachment B; Sch 3):</b>		<u>5,226</u>
--	--	--------------

<b>Total Increase in Revenue Requirement from Step Adjustment</b>		<b>\$ <u>17,324</u></b>
---	--	-------------------------

Pro-forma Test Year Annual Water Revenue (Attachment A; Sch 1)		<u>\$ (206,055)</u>
--	--	---------------------

<b>Percentage Increase in Annual Water Revenues from Step Adjustment</b>		<b><u>8.41%</u></b>
--	--	---------------------

DW 12-306  
ROSEBROOK RATE CASE  
STEP ADJUSTMENT - 2012 PLANT ADDITIONS  
2012 PLANT ADDITIONS / RETIREMENTS / CIAC

**2012 Plant Additions:**

Acct. #	Account	Description	Cost	Depreciation Rate	Annual Depreciation Expense	Accumulated Depreciation
304	Structures	Tank Roof	\$ 183,657	2.50%	\$ 4,591	\$ 2,296
310	Power Generation	Diesel Generator	54,000	10.00%	5,400	2,700
311	Pumping Equipment	Submersible Pump	46,162	10.00%	4,616	2,308
335	Hydrants	Hydrants	5,096	2.00%	102	51
Total Plant Additions			<u>\$ 288,915</u>		<u>\$ 14,710</u>	<u>\$ 7,355</u>

**2012 Plant Retirements:**

Acct. #	Account	Description	Cost	Depreciation Rate	Annual Depreciation Expense	Accumulated Depreciation
304	Structures	Tank Roof	\$ 75,000	2.50%	\$ 1,875	\$ 75,000
310	Power Generation	Diesel Generator	-	10.00%	-	-
311	Pumping Equipment	Submersible Pump	14,366	10.00%	1,437	14,366
335	Hydrants	Hydrants	469	2.00%	9	469
Total Plant Retirements			<u>\$ 89,835</u>		<u>\$ 3,321</u>	<u>\$ 89,835</u>

**2012 CIAC:**

Acct. #	Account	Description	Amount	Amortization Rate	Annual Amortization of CIAC	Accumulated Amortization
304	Structures	Tank Roof	\$ 172,046	2.50%	\$ 4,301	\$ 2,151
310	Power Generation	Diesel Generator	28,242	10.00%	2,824	\$ 1,412
Total CIAC			<u>\$ 200,288</u>		<u>\$ 7,125</u>	<u>\$ 3,563</u>

DW 12-306  
ROSEBROOK RATE CASE  
STEP ADJUSTMENT - 2012 PLANT ADDITIONS  
CALCULATION OF PROPERTY TAX EXPENSE

Net 2012 Additions to Plant		\$	288,915	
Valuation Factor for State Tax:				
2012 Assessed Valuation	\$	560,511		
2011 Net Utility Plant	÷	\$	653,108	
Valuation Percentage			x	<u>85.82%</u>
Net 2012 Taxable Plant		\$	247,953	
2012 Total Tax Rate (per \$1,000):				
Add: State Tax Rate			x	<u>\$ 6.60</u>
State Property Tax Expense		\$		1,636



DW 12-306  
ROSEBROOK RATE CASE  
CALCULATION OF CONSUMPTION RATE AND FIXED RATES  
USING EQUIVALENT METER COST RATIOS  
TEST YEAR AND STEP ADJUSTMENT REVENUES

**CALCULATION OF REVENUE RATIO, Fixed and Consumption:**

Total TEST YEAR Metered Revenue	\$	206,055	
Less: TOTAL REVENUE FROM FIXED CHARGES	— \$	58,492	28.39%
TOTAL REVENUE FROM CONSUMPTION CHARGES	\$	147,563	71.61%
			100.00%

**CALCULATION OF FIXED CHARGES:**

Meter Size (inches)	Number of Meters at Year End 2011	Maximum Flow, gpm **	Equivalents Relative to 5/8" Meter Using Maximum Flow	ANNUAL FIXED CHARGE BASED ON TEST YEAR [Att A; Sch 6]	TOTAL REVENUES FROM FIXED CHARGES BASED ON TEST YEAR	Add Effect of STEP ADJUSTMENT ON FIXED CHARGE	ADDITIONAL REVENUE FROM STEP ADJUSTMENT	ANNUAL FIXED CHARGE	TOTAL REVENUES FROM FIXED CHARGES INCLUDING STEP
5/8"	356	15	1.0	\$ 111.28	\$ 39,615.68	\$ 7.60	\$ 2,705.60	\$ 118.88	\$ 42,321.28
1" Turbine	43	50	3.3	367.22	15,790.46	25.08	1,078.44	392.30	16,868.90
2" Turbine	3	160	10.7	1,190.70	3,572.10	81.32	243.96	1,272.02	3,816.06
3" Turbine	1	350	23.3	2,592.82	2,592.82	177.08	177.08	2,769.90	2,769.90
6" Turbine	1	1400	93.3	10,382.42	10,382.42	709.08	709.08	11,091.50	11,091.50
	404				\$ 71,953.48		\$ 4,914.16		\$ 76,867.64

\*\* Source: AWWA Manual M6: Water Meters-Selection, Installation, Testing, and Maintenance, Table 5-3 (Attachment A, Schedule 7)

**CALCULATION OF CONSUMPTION RATE:**

	REVENUE REQUIREMENT BASED ON TEST YEAR [Att A; Sch 1]	REVENUES FROM STEP ADJUSTMENT [Att B; Sch 1]	TOTAL REVENUE REQUIREMENT
Proposed Revenue Requirement - See Attachment A; Schedule 6	\$ 253,441	\$ 17,324	\$ 270,765
Proposed Revenue Requirement for Fixed Revenue (28.39%)	— \$ 71,952	\$ 4,918	— \$ 76,870
Proposed Revenue Requirement for Consumption (71.61%)	\$ 181,489	\$ 12,406	\$ 193,895
TEST YEAR 2011 Consumption per 1000 gallons (less non-tariffed consumption)	36,357	36,357	36,357 *
Proposed Consumption Rate per 1000 gallons used	\$ 4.99		
Proposed Effect of STEP on Consumption Rate per 1000 gallons used		\$ 0.34	
Proposed Combined Consumption Rate per 1000 gallons used			\$ 5.33

\* Eliminates unauthorized and non-tariffed sales.

DW 12-306  
ROSEBROOK RATE CASE  
REPORT OF PROPOSED RATE CHANGES PER SETTLEMENT

<u>Service Class</u>	<u>Number of Customers</u>	<u>Present Revenue Requirement</u>	<u>Proposed Revenue Requirement</u>	<u>Proposed Change in Revenue</u>	<u>Proposed Percentage Change</u>
5/8"	356	\$ 74,846	\$ 75,167	\$ 321	0.43%
1"	43	\$ 12,335	24,437	12,102	98.11%
2"	3	\$ 18,061	25,948	7,887	43.67%
3"	1	\$ 2,550	5,599	3,049	119.57%
6"	1	\$ 98,263	139,614	41,351	42.08%
Total	<u>404</u>	<u>\$ 206,055</u>	<u>\$ 270,765</u>	<u>\$ 64,710</u>	<u>31.40%</u>

7. Cross Connections.

Cross-Connections between water supplies and non-potable sources of contamination are significant threats to health in the water supply industry. The Rosebrook Water cross connection program is designed to maintain the safety and potability of the water in the Rosebrook Water Company, Inc. System by establishing rules and procedures to prevent the contamination of public drinking water by the backflow of water from an unapproved source or other fluids. The purposes of the cross connection requirements are: (a) To protect the public water supply of the Rosebrook Water Company, Inc. System from the possibility of contamination by isolating contaminants which could backflow or back-siphon into the public water system within its customers' internal distribution system(s); (b) to promote the elimination or control of cross-connections, actual or potential, between its customers' internal distribution system and anything that could contaminate or pollute it; and (c) to provide for the continued maintenance of a cross-connection control program to effectively prevent the contamination or pollution of the Rosebrook drinking water system.

All customers shall comply with the requirements of the Rosebrook Water Cross Connection Control Plan approved by DES for on March 28, 2013. A copy of that Plan is available for review at the Rosebrook Water offices during normal; business hours.