



ORIGINAL

MEMORANDUM

TO: Docket Control

FROM: Steven M. Olea
Director
Utilities Division

EA for SMO

DATE: September 6, 2011

RE: STAFF REPORT FOR LIVCO WATER COMPANY, INC.'S APPLICATIONS FOR A PERMANENT RATE INCREASE AND A FINANCING APPROVAL. (DOCKET NOS. W-02121A-11-0213 AND W-02121A-11-0257)

Attached is the Staff Report for Livco Water Company, Inc.'s applications for a permanent rate increase and financing approval. Staff recommends approval of a rate increase in accordance with Staff's recommendations. Staff also recommends approval of the requested financing.

Any party who wishes may file comments to the Staff Report with the Commission's Docket Control by 4:00 p.m. on or before September 16, 2011.

SMO:GWB:kdh

Originator: Gerald Becker

Arizona Corporation Commission

DOCKETED

SEP 6 2011

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Service List for: Livco Water Company, Inc.
Docket Nos. W-02121A-11-0213 and W-02121A-11-0257

Ms. Jenni Wicks
Livco Water Company
Post Office Box 659
Concho, Arizona 85924

**STAFF REPORT
UTILITIES DIVISION
ARIZONA CORPORATION COMMISSION**

LIVCO WATER COMPANY, INC.

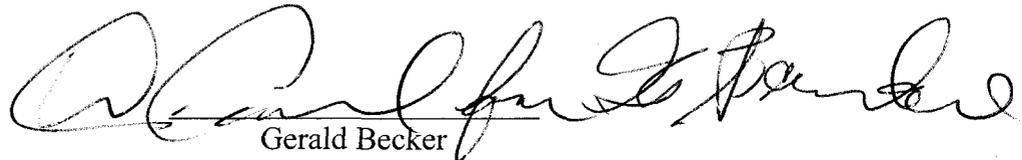
**DOCKET NOS.
W-02121A-11-0213 AND W-02121A-11-0257**

**APPLICATIONS
FOR A
PERMANENT RATE INCREASE
AND
FINANCING APPROVAL**

SEPTEMBER 6, 2011

STAFF ACKNOWLEDGMENT

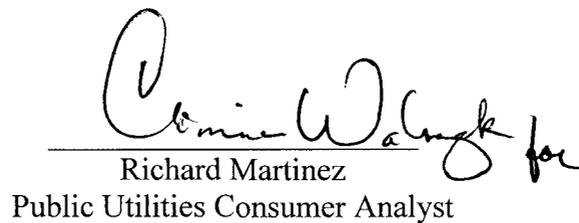
The Staff Report for Livco Water Company, Inc., Docket Nos. W-02121A-11-0213 and W-02121A-11-0257, was the responsibility of the Staff members listed below. Gerald Becker was responsible for the financial review and analysis of the Company's applications. Marlin Scott, Jr. was responsible for the engineering and technical analysis. Richard Martinez was responsible for reviewing the Commission's records on customer complaints filed with the Commission.



Gerald Becker
Public Utilities Analyst V



Marlin Scott, Jr.
Utilities Engineer



Richard Martinez
Public Utilities Consumer Analyst

**EXECUTIVE SUMMARY
LIVCO WATER COMPANY, INC.
DOCKET NOS. W-02121A-11-0213 AND W-02121A-11-0257**

Livco Water Company, Inc. ("Livco" or "Company") is a for profit Arizona Class "D" public service corporation located in Apache County approximately 18 miles southwest of St. Johns, Arizona. The Company provides water service to approximately 379 customers. The Company is not located in an Active Management Area.

On May 23, 2011, the Company filed an application for approval of a permanent rate increase with the Arizona Corporation Commission ("Commission"). On June 23, 2011, Livco filed certain amendments clarifying its rate application. On June 28, 2011, Livco filed an application for approval of a Water Infrastructure Finance Authority of Arizona ("WIFA") loan for \$30,000 for a tank renovation. A Procedural Order, dated August 16, 2011, granted Staff's request to consolidate the permanent rate increase and financing applications.

In its application for approval of a permanent rate increase, Livco proposed total operating revenue of \$194,636, an increase of \$49,910 or 34.49 percent over the Company's adjusted test year revenue of \$144,726, as shown on Schedules GWB-1.1 and GWB-1.2. The Company's proposed rates would increase the typical 5/8 x 3/4-inch meter residential bill, with an average usage of 6,211 gallons, from \$25.67 to \$35.08, an increase of \$9.41, or 36.6 percent, as shown on Schedule GWB-5.

Staff recommends total revenue of \$193,576, as shown on Schedule GWB-1.1 and GWB-1.2 to provide an operating income of \$21,267 for a 10.0 percent rate of return on a Staff-adjusted rate base of \$212,631. In recent rate cases, the Commission has generally authorized rates of return for water companies in the range of eight to ten percent. Staff concludes that a ten per cent rate of return is justified given the size of Staff's recommended revenue increase. Staff's recommended revenues provide the Company with adequate cash flow to support all operations including the debt service on both an existing and the proposed loan to result in a Debt Service Coverage ("DSC") of 4.87, which is significantly more than the DSC of 1.20 as required by WIFA.

Staff's recommended revenues of \$193,576 represent a \$48,850 or 33.75 percent increase over the Company's adjusted test year revenue of \$144,726, as shown on Schedules GWB-1.1 and GWB-1.2. Staff's recommended rates would increase the typical 5/8 x 3/4-inch meter residential bill, with an average usage of 6,211 gallons, from \$25.67 to \$31.64, an increase of \$5.97, or 23.24 percent, as shown on Schedule GWB-5.

STAFF'S RECOMMENDATIONS

Staff recommends:

1. Approval of the Staff recommended rates and charges as shown on Schedule GWB-4.

2. That the Commission authorize Livco to obtain an 18- to 20-year amortizing loan for an amount not to exceed \$30,000 at a rate not to exceed 5.00 percent to finance the Staff-recommended capital improvements.
3. That approval of the loan be rescinded if the Company has not drawn funds from the loan within two years of the date of the Decision resulting from this proceeding.
4. That the Company file with Docket Control, as a compliance item in this Docket, a schedule of its approved rates and charges within 30 days after the Decision in this matter is issued.
5. That the Company continue to monitor its water system for another full year and report the water loss monitoring results to Docket Control. This monitoring report shall be docketed as a compliance item within one year from the effective date of an order issued in this proceeding.
6. Approval of the Company's five Best Management Practice ("BMP") Tariffs, BMPs 1.1, 3.6, 4.1, 4.2 and 5.2, that are attached to the Engineering Report as Exhibit – BMPs.
7. That the Company continue to use Staff's typical and customary depreciation rates as delineated in Table H-1 of the attached Engineering Report.
8. Approval of Staff's recommended Service Line and Meter Installation Charges as delineated in Table I-2 of the attached Engineering Report.

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SCHEDULES

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Rate Base	Schedule GWB-2
Statement of Operating Income	Schedule GWB-3
Rate Design.....	Schedule GWB-4
Typical Bill Analysis	Schedule GWB-5

ATTACHMENTS

Engineering Report for Rate Case	A
Engineering Report for Financing	B

FACT SHEET

Type of Ownership: Arizona “C” Corporation

Location: In Apache County approximately 18 miles southwest of St. Johns, Arizona.

Filing Dates for Rate and Financing Applications: Permanent rate increase application filed May 23, 2011. Financing application filed on June 23, 2011. Amendment clarifying the rate application filed on June 23, 2011. Procedural Order on August 16, 2011, consolidated the rate and financing applications.

Current Rates: Decision No. 70308, dated April 24, 2008.

Prior test year ended: December 31, 2006.

Metered Rates:

	Company Current <u>Rates</u>	Company Proposed <u>Rates</u>	Staff Recommended <u>Rates</u>
Based on 5/8 x 3/4-inch meter			
Monthly Minimum Charge	\$15.50	\$20.62	\$18.50
Gallons in minimum	0	0	0
Commodity Charge (per 1,000 gallons)			
0 to 3,000 gallons	\$1.25	\$1.78	\$1.50
3,001 to 10,000 gallons	\$2.00	\$2.84	\$2.69
Over 10,000 gallons	\$2.40	\$3.41	\$4.25
Typical residential bill			
(based on average usage of 6,211 gallons)	\$25.67	\$35.08	\$31.64

Customers: The Company served an average of 378 metered customers¹ during the test year, broken-out by meter size as follows:

Residential 5/8 x 3/4 – inch meter	322
Residential 3/4 – inch meter	12
Residential 1 – inch meter	18
Commercial 5/8 x 3/4 – inch meter	16

¹ Per the bill count data provided by the Company.

Commercial 3/4 – inch meter	2
Commercial 1 – inch meter	2
Commercial 1 ½ – inch meter	2
Commercial 2 – inch meter	3
Commercial Old Concho 2 – inch meter	<u>1</u>
Total	379

Complaints:

There were no complaints filed from January 1, 2008, through August 31, 2011.

Notifications:

On June 10, 2011, a notarized affidavit of mailing “Customer Notification” was filed for the rate application. On July 14, 2011, a notarized affidavit of mailing “Customer Notification” was filed for the financing application.

SUMMARY OF FILING

In its application for approval of a permanent rate increase, Livco Water Company, Inc. ("Livco" or "Company") proposed total operating revenue of \$194,636, an increase of \$49,910 or 34.49 percent over the Company's adjusted test year revenue of \$144,726 as shown on Schedules GWB-1.1 and GWB-1.2. The Company's proposed rates would increase the typical 5/8 x 3/4-inch meter residential bill, with an average usage of 6,211 gallons, from \$25.67 to \$35.08, an increase of \$9.41, or 36.6 percent, as shown on Schedule GWB-5.

Staff recommends total revenue of \$193,576, as shown on Schedule GWB-1.1 and GWB-1.2 to provide an operating income of \$21,267 for a 10.0 percent rate of return on a Staff-adjusted rate base of \$212,631. In recent rate cases, the Commission has authorized rates of return for water companies in the range of eight to ten percent. Staff concludes that a ten percent rate of return is justified given the size of Staff's recommended revenue increase. Staff's recommended revenues provide the Company with adequate cash flow to support all operations including the debt service on both an existing and the proposed loan to result in a Debt Service Coverage ("DSC") of 4.87, which is significantly more than the DSC of 1.20 as required by the Water Infrastructure Financing Authority of Arizona ("WIFA").

Staff's recommended revenues of \$193,576 represent a \$48,850 or 33.75 percent increase over the Company's adjusted test year revenue of \$144,726, as shown on Schedule GWB-1.1 and GWB-1.2. Staff's recommended rates would increase the typical 5/8 x 3/4-inch meter residential bill, with an average usage of 6,211 gallons, from \$25.67 to \$31.64, an increase of \$5.97, or 23.24 percent, as shown on Schedule GWB-5.

The Company utilized a test year ending December 31, 2010.

BACKGROUND

Livco is a for-profit Arizona Class "D" public service corporation located in Apache County approximately 18 miles southwest of St. Johns, Arizona. The Company provides water service to approximately 379 customers. The Company is not located in an Active Management Area.

On May 23, 2011, Livco filed an application for approval of a permanent rate increase with the Arizona Corporation Commission ("Commission"). On June 23, 2011, Livco filed certain amendments clarifying its rate application. On June 28, 2011, Livco filed an application for approval of a WIFA loan for \$30,000 for a tank renovation. A Procedural Order, dated August 16, 2011, granted Staff's request to consolidate the permanent rate increase and financing applications.

CONSUMER SERVICES

For the period of January 1, 2008, through August 31, 2011, Consumer Services records reflect that no Complaints were filed against the Company. No Opinions have been filed to date either for or against the proposed rate increase or for the authority to incur long term debt.

COMPLIANCE

The Utilities Division Compliance Section shows no outstanding compliance issues.

Livco is current on its property and sales tax payments.

Livco is in good standing with the Corporations Division of the Commission.

ENGINEERING ANALYSIS

A complete discussion of Staff's technical findings and recommendations, along with a complete description of the Company's water system is provided in the attached Engineering Report.

RATE BASE

The Company did not propose a fair value rate base that differs from its original cost rate base ("OCRB"). Staff's adjustments increased the Company's proposed rate base by \$11,102, from \$201,529 to \$212,631, as shown on Schedule GWB-2, page 1. Details of Staff's adjustments are discussed below.

Contributions in Aid of Construction ("CIAC")

Adjustment A increases CIAC by \$4,400, from \$143,253 to \$147,653 for the value of land contributed to the Company by an affiliate, Country Club Properties. The Company had increased account 303, Land and Land Rights, for the assessed value of the parcel but did not pay any money for the parcel.

Staff's adjustment is shown on Schedule GWB-2, page 1.

Working Capital

Except for \$684 of prepayments, Livco did not claim any cash working capital allowance. Staff's adjustments B and C resulted in a net increase to working capital of \$15,502, from \$684 to \$16,186, as shown on Schedule GWB-2, page 1.

Cash working capital was calculated by using the formula method which equals one-eighth of the operating expenses less depreciation, taxes, purchased power and purchased water expenses plus one twenty-fourth of purchased power and purchased water expenses.

Plant-in-Service

Adjustment A as shown on Schedule GWB-2, page 2, reclassifies \$65,020 from a capstone account 330, Distribution Reservoirs and Standpipes to the appropriate sub-account 330.1, Storage Tanks. This adjustment has no net effect on rate base.

OPERATING REVENUES

The Company's test year operating revenues were \$144,726. Staff concurs with the Company's revenue and used the same billing determinants for Staff's revenue determination and rate design process.

OPERATING EXPENSES

Staff's adjustments to operating expenses resulted in an increase of \$3,536, from \$163,547 to \$167,083, as shown on Schedule GWB-3, page 1. The adjustments are explained below.

Purchased Power – Adjustment A decreases this account by \$304, from \$15,571 to \$15,267, as shown on Schedule GWB-3, pages 1 and 2. Staff's adjustment reduces power expense associated with the negative revenue annualization proposed by the Company and accepted by Staff. In its application, the Company proposes a revenue reduction of \$1,367, but does not propose any reduction for associated power expense.

Water Testing – Adjustment B increases water testing expense by \$810 from \$1,725 to \$2,535, as shown on Schedule GWB-3, pages 1 and 2. Staff's adjustment reflects Staff Engineer's recommendation.

Rate Case Expense – Adjustment C decreases rate case expense by \$2,000, from \$3,333 to \$1,333, to reflect Staff's normalization of rate case expense based upon an analysis of rate case expense for Class D water companies as shown on Schedule GWB-3, pages 1 and 2.

Staff has reviewed the Commission-approved annual rate case expense for 21 Class D water companies in which the Staff Reports were filed in the years 2009 and 2010. Staff found that 42 percent of the 21 companies (or 9 of 21) received no rate case expense. Seventy-one percent (or 15 of 21) had annual rate case expense of \$1,000 or less. Because the consultant who did the instant case also did the Company's last rate case, the Company has only been out for three years, and there are few, if any, contested issues, Staff recommends rate case expense of \$4,000, normalized over three years.

Income Taxes – Adjustment D increases income taxes by \$5,030, from negative \$4,980 to \$50, as shown on Schedule GWB-3, pages 1 and 2. Staff's calculation of income tax expense reflects the \$50 minimum state income tax expense for companies with zero or negative taxable income.

REVENUE REQUIREMENT

Staff recommends total operating revenue of \$193,576 a \$48,850 or 33.75 percent increase over the Staff adjusted test year operating revenue of \$144,726. Staff's recommended revenue provides an operating income of \$21,267 and a 10.00 percent rate of return on an OCRB of \$212,631, as shown on Schedules GWB-1.1 and GWB-1.2.

Schedules GWB-1.1 and GWB-1.2 are identical except for the DSC and Times Interest Earned Ratio ("TIER"). On Schedule GWB-1.1, Staff calculates DSC and TIER amounts based on the Company's existing debt. On Schedule GWB-1.2, Staff calculates DSC and TIER amounts based on the Company's existing and proposed debt.

As shown on Schedule GWB-1.1, Staff's recommended revenue produces a pro forma 6.36 DSC on the current outstanding loan of \$78,932², and it would provide sufficient cash flow for all obligations.

As shown on Schedule GWB-1.2, Staff's recommended revenue produces a pro forma 4.87 DSC on the current outstanding loan of \$78,932³ and a new \$30,000 20-year amortizing loan at 4.50 percent,⁴ and it would provide sufficient cash flow for all obligations.

Staff's total revenue requirement of \$193,576 provides the Company with sufficient cash flow to pay operating expenses, contingencies, principal and interest on the existing and proposed loan, and to meet the minimum 1.20 DSC required by WIFA on the loan.

RATE DESIGN

Schedule GWB-4 presents a complete list of the Company's present, proposed, and Staff's recommended rates and charges.

The Company's proposed rates would increase the typical 5/8 x 3/4-inch meter residential bill, with an average usage of 6,211, from \$25.67 to \$35.08, an increase of \$9.41, or 36.6 percent as shown on Schedule GWB-5.

Staff's recommended rates would increase the typical 5/8 x 3/4-inch meter residential bill with an average usage of 6,211 gallons from \$25.67 to \$31.64, for an increase of \$5.97, or 23.24 percent, as shown on Schedule GWB-5.

² Balance as of December 31, 2010, the end of the test year.

³ Balance as of December 31, 2010, the end of the test year.

⁴ The \$30,000 loan is discussed below.

MISCELLANEOUS SERVICE CHARGES

Establishment (After Hours), Re-establishment (After Hours), and After Hours Service Charges – The Company has proposed to continue its current Establishment (After Hours) and Re-establishment (After Hours) along with implementing an After Hours Service Charge of \$50, as shown on Schedule GWB-4. Staff agrees that an additional fee for service provided outside of normal business hours is appropriate when such service is at the customer's request or for the customer's convenience. Such a tariff compensates the utility for additional expenses incurred from providing after-hours service.

Moreover, Staff concludes that it is appropriate to apply an after-hours service charge in addition to the charge for any utility service provided outside of regular business hours at the customer's request or for the customer's convenience. Therefore, Staff recommends elimination of the Company's current Establishment (After Hours) and Re-establishment (After Hours) charges. Instead of these charges, Staff recommends a separate \$30 after-hours service charge. For example, under Staff's proposal, a customer would be subject to a \$25 Establishment fee if it is done during normal business hours, but would pay an additional \$30 after-hours fee if the customer requested that the establishment be done after normal business hours. Staff's recommended \$30 after-hours service charge compares with the Company's proposed after-hours service charge of \$50.

FINANCING

Introduction

On June 28, 2011, Livco filed a financing application with the Commission requesting authorization to obtain a WIFA long-term loan for tank renovation.

Public Notice

On July 14, 2011, the Company filed the Affidavit of Notice.

Purpose and Terms of the Proposed Financing

The Company's cost estimate for the proposed capital improvements is \$30,000. Staff finds the proposed capital improvements appropriate and estimated cost to be reasonable. Staff's recommended revenue requirement is sufficient to provide debt service on a \$30,000 20-year amortizing loan at 4.50 percent per annum.

Engineering Analysis

Staff finds the additional capital improvements and estimated costs to be reasonable and appropriate. The Engineering Memorandum (Attachment B) provides details for the project.

Staff makes no "used and useful" determination of the proposed plant and no particular future treatment should be inferred for rate-making or rate base purposes.

Financial Analysis

Staff's analysis is based on Staff's adjusted test year operating results and Staff's recommended revenue requirement. The financial analysis shown in Schedule GWB-1.2 presents selected financial information from the test year operating results and the pro forma effect of additional debt of \$30,000, 20-year amortizing loan at 4.50 percent per annum combined with Staff's recommended revenues and expenses from the rate case.

Interest and Debt Service Coverage

Staff also examined the effects of the proposed financing on the Company's TIER and DSC.

DSC represents the number of times internally generated cash (i.e., earnings before interest, income tax, depreciation and amortization expenses) covers required principle and interest payments on debt. A DSC greater than 1.0 means operating cash flow is sufficient to cover debt obligations.

TIER represents the number of times earnings before income tax expense covers interest expense on short-term and long-term debt. A TIER greater than 1.0 means that operating income is greater than interest expense. A TIER less than 1.0 is not sustainable in the long term but does not necessarily mean that debt obligations cannot be met in the short term.

Schedule GWB-1.2 shows that for the year ending December 31, 2010, Livco had a TIER and a DSC that are not meaningful. The pro forma analysis shows that Staff's recommended revenue with a fully drawn \$30,000 20-year, 4.50 percent amortizing loan results in a pro forma 6.64 TIER and 4.87 DSC. The pro forma TIER and DSC show that Livco would have adequate cash flow to meet all obligations, including the proposed debt.

STAFF'S RECOMMENDATIONS

Staff recommends:

1. Approval of the Staff recommended rates and charges as shown on Schedule GWB-4.
2. That the Commission authorize Livco to obtain an 18- to 20-year amortizing loan for an amount not to exceed \$30,000 at a rate not to exceed 5.00 percent to finance the Staff-recommended capital improvements.
3. That approval of the loan be rescinded if the Company has not drawn funds from the loan within two years of the date of the Decision resulting from this proceeding.

4. That the Company file with Docket Control, as a compliance item in this Docket, a schedule of its approved rates and charges within 30 days after the Decision in this matter is issued.
5. That the Company continue to monitor its water system for another full year and report the water loss monitoring results. This monitoring report shall be docketed as a compliance item within one year from the effective date of an order issued in this proceeding.
6. Approval of the Company's five Best Management Practice ("BMP") Tariffs, BMPs 1.1, 3.6, 4.1, 4.2 and 5.2, that are attached to the Engineering Report as Exhibit – BMPs.
7. That the Company continue to use Staff's typical and customary depreciation rates as delineated in Table H-1 of the attached Engineering Report.
8. Approval of Staff's recommended Service Line and Meter Installation Charges as delineated in Table I-2 of the attached Engineering Report.

Livco Water Company

Docket No. W-02121A-11-0213 & W-02121A-11-0257

Test Year Ended December 31, 2010

Schedule GWB-1.1

SUMMARY OF FILING

WITHOUT NEW WIFA LOAN

	-- Present Rates --		-- Proposed Rates --	
	Company as Filed	Staff as Adjusted	Company as Filed	Staff as Adjusted
Revenues:				
Metered Water Revenue	\$142,037	\$142,037	\$191,947	\$190,887
Surcharge WIFA loan	0	0		0
Other Water Revenues	2,689	2,689	2,689	2,689
Total Operating Revenue	\$144,726	\$144,726	\$194,636	\$193,576
Operating Expenses:				
Operation and Maintenance	\$135,690	\$134,196	\$136,237	\$134,196
Depreciation	21,447	21,447	21,447	21,447
Property & Other Taxes	11,390	11,390	11,390	11,390
Income Tax	(4,980)	50	5,349	5,275
Total Operating Expense	\$163,547	\$167,083	\$174,423	\$172,309
Operating Income/(Loss)	(\$18,821)	(\$22,357)	\$20,213	\$21,267
Rate Base O.C.L.D.	\$201,529	\$212,631	\$201,529	\$212,631
Rate of Return - O.C.L.D.	-9.34%	-10.51%	10.03%	10.00%
Times Interest Earned Ratio (Pre-Tax)	N/M	N/M	9.80	9.96
Debt Service Coverage Ratio (Pre-Tax)	N/M	N/M	6.30	6.36
Operating Margin	-13.00%	-15.45%	10.39%	10.99%

NOTES: 1. The times interest earned ratio (TIER) represents the ability of the Company to pay interest expenses before taxes.

2. The Debt Service Coverage Ratio (DSC) represent the Company's ability to pay principal and interest before taxes and depreciation

3. Operating Margin represents the proportion of funds available to pay interest and other below the line or non-ratemaking expenses.

N/M Not Meaningful

SUMMARY OF FILING

WITH NEW WIFA LOAN

	-- Present Rates --		-- Proposed Rates --	
	Company as Filed	Staff as Adjusted	Company as Filed	Staff as Adjusted
Revenues:				
Metered Water Revenue	\$142,037	\$142,037	\$191,947	\$190,887
Surcharge WIFA loan	0	0	0	0
Other Water Revenues	2,689	2,689	2,689	2,689
Total Operating Revenue	\$144,726	\$144,726	\$194,636	\$193,576
Operating Expenses:				
Operation and Maintenance	\$135,690	\$134,196	\$136,237	\$134,196
Depreciation	21,447	21,447	21,447	21,447
Property & Other Taxes	11,390	11,390	11,390	11,390
Income Tax	(4,980)	50	5,349	5,275
Total Operating Expense	\$163,547	\$167,083	\$174,423	\$172,309
Operating Income/(Loss)	(\$18,821)	(\$22,357)	\$20,213	\$21,267
Rate Base O.C.L.D.	\$201,529	\$212,631	\$201,529	\$212,631
Rate of Return - O.C.L.D.	-9.34%	-10.51%	10.03%	10.00%
Times Interest Earned Ratio (Pre-Tax)	N/M	N/M	6.54	6.64
Debt Service Coverage Ratio (Pre-Tax)	N/M	N/M	4.82	4.87
Operating Margin	-13.00%	-15.45%	10.39%	10.99%

NOTES: 1. The times interest earned ratio (TIER) represents the ability of the Company to pay interest expenses before taxes.

2. The Debt Service Coverage Ratio (DSC) represent the Company's ability to pay principal and interest before taxes and depreciation

3. Operating Margin represents the proportion of funds available to pay interest and other below the line or non-ratemaking expenses.

N/M Not Meaningful

Livco Water Company

Docket No. W-02121A-11-0213 & W-02121A-11-0257

Test Year Ended December 31, 2010

Schedule GWB-2

Page 1 of 2

RATE BASE

	----- Original Cost -----			Staff
	Company	Adjustment		
Plant in Service	\$588,900	\$0		\$588,900
Less:				
Accum. Depreciation	343,239	0		343,239
Net Plant	\$245,661	\$0		\$245,661
Less:				
Plant Advances	\$24,857	\$0		\$24,857
Customer Deposits	8,349	0		8,349
Total Advances	\$33,206	\$0		\$33,206
Contributions Gross	\$143,253	\$4,400	A	\$147,653
Less:				
Accumulated Amortization of CIAC	131,643	\$0		131,643
Net CIAC	\$11,610	\$4,400		\$16,010
Total Deductions	\$44,816	\$4,400		\$49,216
Plus:				
1/24 Power	\$0	\$636	B	\$636
1/8 Operation & Maint.	\$0	14,866	C	14,866
Inventory	0	0		0
Prepayments	684	0		684
Total Additions	\$684	\$15,502		\$16,186
Rate Base	\$201,529	\$11,102		\$212,631

Explanation of Adjustment:

A To increase CIAC for the value of land contributed by an affiliated party.

B To record adjustment for cash working capital.

C To record adjustment for cash working capital.

PLANT ADJUSTMENT

	Company Exhibit	Adjustment	Staff Adjusted
301 Organization	\$1,882	\$0	\$1,882
302 Franchises	0	0	\$0
303 Land & Land Rights	5,460	0	\$5,460
304 Structures & Improvements	15,988	0	\$15,988
307 Wells & Springs	51,956	0	\$51,956
311 Pumping Equipment	74,869	0	\$74,869
320 Water Treatment Equipment	0	0	\$0
320.1 Water Treatment Plants	0		\$0
320.2 Solution Chemical Feeders	0		\$0
330 Distribution Reservoirs & Standpipes	65,020	(65,020) A	\$0
330.1 Storage Tanks	0	65,020 A	\$65,020
330.2 Pressure Tanks	0		\$0
331 Transmission & Distribution Mains	236,293	0	\$236,293
333 Services	0	0	\$0
334 Meters & Meter Installations	100,630	0	\$100,630
335 Hydrants	9,101	0	\$9,101
336 Backflow Prevention Devices	0	0	\$0
339 Other Plant and Misc. Equipment	327	0	\$327
340 Office Furniture & Equipment	6,439	0	\$6,439
340.1 Computer & Equipment	2,371	0	\$2,371
343 Tools Shop & Garage Equipment	16,334	0	\$16,334
344 Laboratory Equipment	0	0	\$0
345 Power Operated Equipment	0	0	\$0
346 Communication Equipment	0	0	\$0
347 Miscellaneous Equipment	1,863	0	\$1,863
348 Other Tangible Plant	367	0	\$367
105 C.W.I.P.	0	0	
TOTALS	\$588,900	\$0	\$588,900

Explanation of Adjustment:

A To reclassify Storage Tanks from Distribution Reservoirs & Standpipes

Livco Water Company

Docket No. W-02121A-11-0213 & W-02121A-11-0257
 Test Year Ended December 31, 2010

Schedule GWB-3

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STATEMENT OF OPERATING INCOME

	Company Exhibit	Staff Adjustments	Staff Adjusted
Revenues:			
461 Metered Water Revenue	\$142,037	\$0	\$142,037
460 Unmetered Water Revenue	0	0	0
474 Other Water Revenues	2,689	0	2,689
Total Operating Revenue	\$144,726	\$0	\$144,726
Operating Expenses:			
601 Salaries and Wages	\$67,108	\$0	\$67,108
610 Purchased Water	0	0	0
615 Purchased Power	15,571	(304) A	15,267
618 Chemicals	0	0	0
620 Repairs and Maintenance	4,137	0	4,137
621 Office Supplies & Expense	13,077	0	13,077
630 Outside Services	9,563	0	9,563
635 Water Testing	1,725	810 B	2,535
641 Rents	10,530	0	10,530
650 Transportation Expenses	4,695	0	4,695
657 Insurance - General Liability	4,612	0	4,612
659 Insurance - Health and Life	1,339	0	1,339
666 Regulatory Commission Expense - Rate Case	3,333	(2,000) C	1,333
675 Miscellaneous Expense	0	0	0
403 Depreciation Expense	21,447	0	21,447
408 Taxes Other Than Income	6,498	0	6,498
408.11 Property Taxes	4,892	0	4,892
409 Income Tax	(4,980)	5,030 D	50
Total Operating Expenses	\$163,547	\$3,536	\$167,083
OPERATING INCOME/(LOSS)	(\$18,821)	(\$3,536)	(\$22,357)

STAFF ADJUSTMENTS

A POWER EXPENSES - Per Company 15,571
Per Staff 15,267 (\$304)

To remove power expenses associated with revenue annualization

B WATER TESTING - Per Company \$1,725
Per Staff 2,535 \$810

To reflect normalized annual water testing cost

C REGULATORY COMMISSION EXPENSE - RATE CASE
- Per Company \$3,333
Per Staff 1,333 (\$2,000)

To recognize a normalized level of the estimated rate case expense

	Total Rate Case Expense	No. of Years Amortized	Annual Rate Case Expense	Company Name	Docket No.
1	\$0	0	\$0	Appaloosa Water	W-03443A-08-0313
2	\$0	0	\$0	Fisher's Landing	WS-04047A-07-0708
3	\$0	0	\$0	Groom Creek Water	W-01865A-07-0385 & 07-0384
4	\$13,500	4	\$3,375	Orange Grove Water	W-02237A-08-0455
5	\$0	0	\$0	Walnut Creek Water	W-02466A-08-0486
6	\$0	0	\$0	Northern Scottsdale	W-03270A-08-0225
7	\$0	0	\$0	D.S. Water	W-04049A-08-0339
8	\$0	0	\$0	Lagoon Estates	W-01825A-09-0345
9	\$0	0	\$0	Q Mtn Mobile Home	W-02518A-10-0227
10	Not specified	Not specified	\$54	Bellemont Water	W-02526A-09-0421
11	Not specified	Not specified	\$288	Granite Mountain	W-02467A-09-0333
12	Not specified	Not specified	\$500	Christopher Creek	W-20459A-08-0168
13	Not specified	Not specified	\$500	Ehrenberg Improvmnt	W-02273A-08-0251
14	\$3,000	5	\$600	Sonoita Valley Wtr	W-20435A-09-0296 & 09-0298
15	Not specified	Not specified	\$1,000	Baca Float Water	WS-01678A-09-0376
16	Not specified	Not specified	\$1,545	Montezuma Rimrck	W-04254A-08-0361
17	\$7,500	4	\$1,875	Virgin Mountain	W-03551 A-09-0205
18	\$6,000	3	2,000	Mountain Glenn	W-03875A-08-0421
19	\$7,500	3	2,500	Little Park Water	W-02192-09-0531
20	\$10,000	3	3,333	Whitehorse Ranch	W-0416A-09-0471
21	Not specified	Not specified	\$5,000	Beaver Dam Water	W-03067A-08-0266
Arithmetic Average (Mean)			\$1,075		
Median			\$500		
Mode			\$0		

D INCOME TAX - Per Company (\$4,980)
Per Staff 50 \$5,030

To adjust income tax to reflect state minimum income tax expense

Livco Water Company

Docket No. W-02121A-11-0213 & W-02121A-11-0257

Test Year Ended December 31, 2010

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Page 3 of 3

STAFF ADJUSTMENTS (Cont.)

For informational purposes only.

Pro Forma Annual Depreciation Expense:

Plant in Service	\$588,900
Less: Non Depreciable Plant	7,342
Fully Depreciated Plant	0
Depreciable Plant	<u>\$581,558</u>
Times: Staff Proposed Average Depreciation Rate	4.94%
Credit to Accumulated Depreciation	<u>\$28,746 *</u>
Less: Amort. of CIAC* @ 4.94%	<u>7,298</u>
Pro Forma Annual Depreciation Expense	<u><u>\$21,447</u></u>

*** Amortization of CIAC:**

Contribution(s) in Aid of Construction (Gross)	\$147,653
Less: Non Amortizable Contribution(s)	4,400
Fully Amortized Contribution(s)	0
Amortizable Contribution(s)	<u>\$143,253</u>
Times: Staff Proposed Amortization Rate	4.94%
Amortization of CIAC	<u><u>\$7,298</u></u>

RATE DESIGN

	Present	Company	Staff
	Rates	Proposed	Recommended
Monthly Customer Charge:			
5/8" x 3/4" Meter	\$15.50	\$20.62	\$18.50
3/4" Meter	17.75	23.61	23.84
1" Meter	27.00	35.91	36.26
1½" Meter	50.00	66.50	67.15
2" Meter	68.00	117.04	118.18
3" Meter	248.00	329.84	332.12
4" Meter	387.75	515.71	520.84
6" Meter	775.00	1,030.75	1,041.00
Gallons Included in Monthly Customer Charge:	0	0	0
Residential 5/8" by 3/4" customers:			
Per 1,000 Gallons for 0 to 3,000 Gallons	\$1.25	\$1.78	\$1.50
Per 1,000 Gallons for 3,001 to 10,000 Gallons	\$2.00	\$2.84	\$2.69
Per 1,000 Gallons for Gallons in Excess of 10,000	\$2.40	\$3.41	\$4.25
Commercial 5/8" by 3/4" customers:			
Per 1,000 Gallons for 0 to 10,000 Gallons	\$2.00	\$2.84	\$2.69
Per 1,000 Gallons for Gallons in Excess of 10,000	\$2.40	\$3.41	\$4.25
Commercial & Residential 1" customers:			
Per 1,000 Gallons for 0 to 24,000 Gallons	\$2.00	\$2.84	\$2.69
Per 1,000 Gallons for Gallons in Excess of 24,000	\$2.40	\$3.41	\$4.25
Commercial & Residential 1 1/2" customers:			
Per 1,000 Gallons for 0 to 60,000 Gallons	\$2.00	\$2.84	\$2.69
Per 1,000 Gallons for Gallons in Excess of 60,000	\$2.40	\$3.41	\$4.25
Commercial & Residential 2" customers:			
Per 1,000 Gallons for 0 to 150,000 Gallons	\$2.00	\$2.84	\$2.69
Per 1,000 Gallons for Gallons in Excess of 150,000	\$2.40	\$3.41	\$4.25
Commercial & Residential 3" customers:			
Per 1,000 Gallons for 0 to 500,000 Gallons	\$2.00	\$2.84	\$2.69
Per 1,000 Gallons for Gallons in Excess of 500,000	\$2.40	\$3.41	\$4.25
Commercial & Residential 4" customers:			
Per 1,000 Gallons for 0 to 830,000 Gallons	\$2.00	\$2.84	\$2.69
Per 1,000 Gallons for Gallons in Excess of 830,000	\$2.40	\$3.41	\$4.25
Commercial & Residential 6" customers:			
Per 1,000 Gallons for 0 to 1,750,000 Gallons	\$2.00	\$2.84	\$2.69
Per 1,000 Gallons for Gallons in Excess of 1,750,000	\$2.40	\$3.41	\$4.25

Service Line and Meter Installation Charges

	Present Rates			Company Proposed			Staff Recommended		
	Services	Meters	Total	Services	Meters	Total	Services	Meters	Total
5/8" x 3/4" Meter	\$370	\$130	\$500	\$445	\$155	\$600	\$445	\$155	\$600
3/4" Meter	\$370	\$205	\$575	\$445	\$255	\$700	\$445	\$255	\$700
1" Meter	\$420	\$240	\$660	\$495	\$315	\$810	\$495	\$315	\$810
1 1/2" Meter	\$450	\$450	\$900	\$550	\$525	\$1,075	\$550	\$525	\$1,075
2" Turbine Meter	\$580	\$945	\$1,525	\$830	\$1,045	\$1,875	\$830	\$1,045	\$1,875
2" Compound Meter	\$580	\$1,640	\$2,220	\$830	\$1,890	\$2,720	\$830	\$1,890	\$2,720
3" Turbine Meter	\$745	\$1,420	\$2,165	\$1,045	\$1,670	\$2,715	\$1,045	\$1,670	\$2,715
3" Compound Meter	\$765	\$2,195	\$2,960	\$1,165	\$2,545	\$3,710	\$1,165	\$2,545	\$3,710
4" Turbine Meter	\$1,090	\$2,270	\$3,360	\$1,490	\$2,670	\$4,160	\$1,490	\$2,670	\$4,160
4" Compound Meter	\$1,120	\$3,145	\$4,265	\$1,670	\$3,645	\$5,315	\$1,670	\$3,645	\$5,315
6" Turbine Meter	\$1,610	\$4,425	\$6,035	\$2,210	\$5,025	\$7,235	\$2,210	\$5,025	\$7,235
6" Compound Meter	\$1,630	\$6,120	\$7,750	\$2,330	\$6,920	\$9,250	\$2,330	\$6,920	\$9,250

Service Charges

	Present Rates	Company Proposed	Staff Recommended
Establishment	\$25.00	\$25.00	\$25.00
Establishment (After Hours)	40.00	40.00	N/A
Reconnection (Delinquent)	40.00	40.00	40.00
After Hours Service Charge (Rule R14-2-403.D)	Cost	50.00	30.00
Meter Test	25.00	25.00	25.00
Deposit	*	*	*
Deposit Interest	*	*	*
Re-establishment (Within 12 Months)	**	**	**
Re-establishment (Within 12 Months After Hrs)	**	**	N/A
NSF Check	25.00	25.00	25.00
Deferred Payment - per month	1.50%	1.50%	1.50%
Meter Re-read	20.00	20.00	20.00
Late Payment Penalty - per month	1.50%	1.50%	1.50%
Moving Customer Meter (Customer Request)	***	***	***

Monthly Service Charge for Fire Sprinkler

4" or Smaller	N/A	N/A	****
6"	N/A	N/A	****
8"	N/A	N/A	****
10"	N/A	N/A	****
Larger than 10"	N/A	N/A	****

* Per Commission rule AAC R14-2-403.B

** Number of months off system times the monthly minimum per Commission rule AAC R14-2-403(D).

*** Per Commission rule R14-2-405

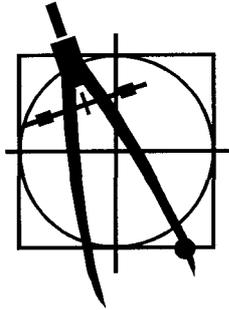
**** 2.00% of Monthly Minimum for a Comparable Sized Meter Connection, but no less than \$10.00 per month. The Service Charge for Fire Sprinklers is only applicable for service lines separate and distinct from the primary

Typical Bill Analysis
Residential 5/8 X 3/4-Inch Meters

Company Proposed	Gallons	Present Rates	Proposed Rates	Dollar Increase	Percent Increase
Average Usage	6,211	\$ 25.67	\$ 35.08	\$ 9.41	36.64%
Median Usage	3,475	20.20	27.31	\$ 7.11	35.19%
Staff Recommended					
Average Usage	6,211	\$ 25.67	\$ 31.64	\$ 5.97	23.24%
Median Usage	3,475	20.20	24.28	\$ 4.08	20.19%

Present & Proposed Rates (Without Taxes)
Residential 5/8 X 3/4-Inch Meters

Consumption	Rates	Rates	Increase	Rates	Increase
-	\$ 15.50	\$ 20.62	33.03%	\$ 18.50	19.35%
1,000	\$ 16.75	\$ 22.40	33.73%	\$ 20.00	19.40%
2,000	\$ 18.00	\$ 24.18	34.33%	\$ 21.50	19.44%
3,000	\$ 19.25	\$ 25.96	34.86%	\$ 23.00	19.48%
4,000	\$ 21.25	\$ 28.80	35.53%	\$ 25.69	20.89%
5,000	\$ 23.25	\$ 31.64	36.09%	\$ 28.38	22.06%
6,000	\$ 25.25	\$ 34.48	36.55%	\$ 31.07	23.05%
7,000	\$ 27.25	\$ 37.32	36.95%	\$ 33.76	23.89%
8,000	\$ 29.25	\$ 40.16	37.30%	\$ 36.45	24.62%
9,000	\$ 31.25	\$ 43.00	37.60%	\$ 39.14	25.25%
10,000	\$ 33.25	\$ 45.84	37.86%	\$ 41.83	25.80%
11,000	\$ 35.65	\$ 49.25	38.15%	\$ 46.08	29.26%
12,000	\$ 38.05	\$ 52.66	38.40%	\$ 50.33	32.27%
13,000	\$ 40.45	\$ 56.07	38.62%	\$ 54.58	34.93%
14,000	\$ 42.85	\$ 59.48	38.81%	\$ 58.83	37.29%
15,000	\$ 45.25	\$ 62.89	38.98%	\$ 63.08	39.40%
16,000	\$ 47.65	\$ 66.30	39.14%	\$ 67.33	41.30%
17,000	\$ 50.05	\$ 69.71	39.28%	\$ 71.58	43.02%
18,000	\$ 52.45	\$ 73.12	39.41%	\$ 75.83	44.58%
19,000	\$ 54.85	\$ 76.53	39.53%	\$ 80.08	46.00%
20,000	\$ 57.25	\$ 79.94	39.63%	\$ 84.33	47.30%
25,000	\$ 69.25	\$ 96.99	40.06%	\$ 105.58	52.46%
30,000	\$ 81.25	\$ 114.04	40.36%	\$ 126.83	56.10%
35,000	\$ 93.25	\$ 131.09	40.58%	\$ 148.08	58.80%
40,000	\$ 105.25	\$ 148.14	40.75%	\$ 169.33	60.88%
45,000	\$ 117.25	\$ 165.19	40.89%	\$ 190.58	62.54%
50,000	\$ 129.25	\$ 182.24	41.00%	\$ 211.83	63.89%
75,000	\$ 189.25	\$ 267.49	41.34%	\$ 318.08	68.07%
100,000	\$ 249.25	\$ 352.74	41.52%	\$ 424.33	70.24%



**Engineering Report for Livco Water
Company**

Docket No. W-02121A-11-0213 (Rates)

August 25, 2011

**By: Marlin Scott, Jr.
Utilities Engineer**

CONCLUSIONS

- A. Livco Water Company (“Company”) has adequate well and storage capacity to serve its present customer base and reasonable growth.
- B. The Arizona Department of Environmental Quality has reported no deficiencies and has determined that the Company’s system, PWS No. 01-018, is currently delivering water that meets the water quality standards required by Arizona Administrative Code, Title 18, Chapter 4.
- C. The Company is not within an Arizona Department of Water Resources’ (“ADWR”) Active Management Area and is in compliance with ADWR requirements governing water providers and/or community water systems.
- D. According to the Utilities Division compliance database, the Company has no delinquent Commission compliance issues.
- E. The Company has an approved curtailment tariff that became effective on May 11, 2005.
- F. The Company has an approved backflow prevention tariff that became effective on May 11, 2005.

RECOMMENDATIONS

- 1. Staff recommends that the Company continue to monitor its water system for another full year and report the water loss monitoring results to Docket Control. This monitoring report shall be docketed as a compliance item within one year from the effective date of an order issued in this proceeding.
- 2. Staff recommends its annual water testing expense of \$2,535 be used for purpose of this application.

3. Staff recommends approval of the Company's five Best Management Practice ("BMP") Tariffs, BMPs 1.1, 3.6, 4.1, 4.2 and 5.2, that are attached to this Engineering Report as Exhibit – BMPs.
4. The Company has adopted Staff's typical and customary depreciation rates and Staff recommends that the Company continue to use the depreciation rates delineated in Table H-1.
5. Staff recommends its Service Line and Meter Installation Charges as delineated in Table I-2.

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EXHIBIT – BMPs

BMP TARIFF 1.1	17
BMP TARIFF 3.6	18
BMP TARIFF 4.1	19
BMP TARIFF 4.2	21
BMP TARIFF 5.2	23

A. INTRODUCTION

Livco Water Company (“Company”) filed a rate application on May 23, 2011. This Engineering Report constitutes Staff’s engineering evaluation relative to the filing of this rate application.

Location of Company

The Company serves the community of Concho Valley, which is located approximately 18 miles southwest of St. Johns along State Highway 61. Figure 1 shows the location of the Company within Apache County and Figure 2 shows the Certificate of Convenience and Necessity covering approximately five square-miles.

B. DESCRIPTION OF THE WATER SYSTEM

The water system was field inspected on June 30, 2011, by Marlin Scott, Jr., Staff Utilities Engineer, in the accompaniment of Matt Davis representing the Company. The Company operates a water system serving the Concho Valley Subdivisions and the surrounding area. The water system consists of two wells, two storage tanks, three booster systems and a distribution system serving 373 customers as of December 2010. The system also has an emergency inter-tie with the Town of St. Johns and could purchase water at 325 GPM.

The Company also provides water service to the Old Concho Townsite with a 2-inch master-meter that serves 30 to 35 customers. Old Concho is approximately one mile north of the Concho Valley Subdivisions.

A system schematic is shown as Figure 3 and a detailed plant facility listing is as follows:

Table 1. Well Data

Well Information	Well No. 1	Well No. 2
ADWR Well No.	55-600014	55-508133
Casing Size	10-inch	6-inch
Casing Depth	833 ft.	74 feet
Pump Size	60-Hp	5-Hp
Pump Type	Submersible	Submersible
Pump Yield	225 GPM	60 GPM
Wellhead meter	3-inch	2-inch
Year Drilled	1970	1984
Treatment	None	None

Table 2. Storage Tanks

Storage Capacity	Location
250,000 gallons	Near Well No. 1
24,000 gallons	Near Well No. 2

Table 3. Booster Stations

Booster Station ("B.S.")	Booster Pump	Pressure Tank	Serving # of Connections
Commercial B.S.	15-Hp & 5-Hp	4 each, 80 gallon bladder tanks	13
Zuni B.S.	1-Hp	60 gallon bladder tank	5
Jones B.S.	5-Hp	3,000 gallon tank	5

Table 4. Water Mains

Diameter	Material	Length
2-inch	PVC	5,237 ft.
3-inch	PVC	2,060 ft.
4-inch	PVC	85,749 ft.
6-inch	PVC	77,939 ft.
8-inch	PVC	1,184 ft.
8-inch	AC	2,910 ft.
	Total:	175,079 ft. or 33.2 miles

Table 5. Customer Meters

Size	Quantity
5/8 x 3/4-inch	405
3/4-inch	18
1-inch	25
1-1/2-inch	2
2-inch	4
Total:	454

Table 6. Structures

Structures	Quantity
Well No. 1 – well fencing	8 ft. x 15 ft.
– control panel fencing	12 ft. x 12 ft.
– pressure switch operation	
250,000 gallon tank site fencing	80 ft. x 80 ft.(new)
Commercial B.S. building	10 ft. x 18 ft.
Zuni B.S. building	7 ft. x 9 ft.
Jones B.S. building	15 ft. x 40 ft.
Well No. 2 – building	8 ft. x 8 ft.
– radio telemetry operation	
24,000 gallon tank site fencing	30 ft. x 30 ft. (new)

Table 7. Fire Hydrants

Size	Quantity
Standard	15

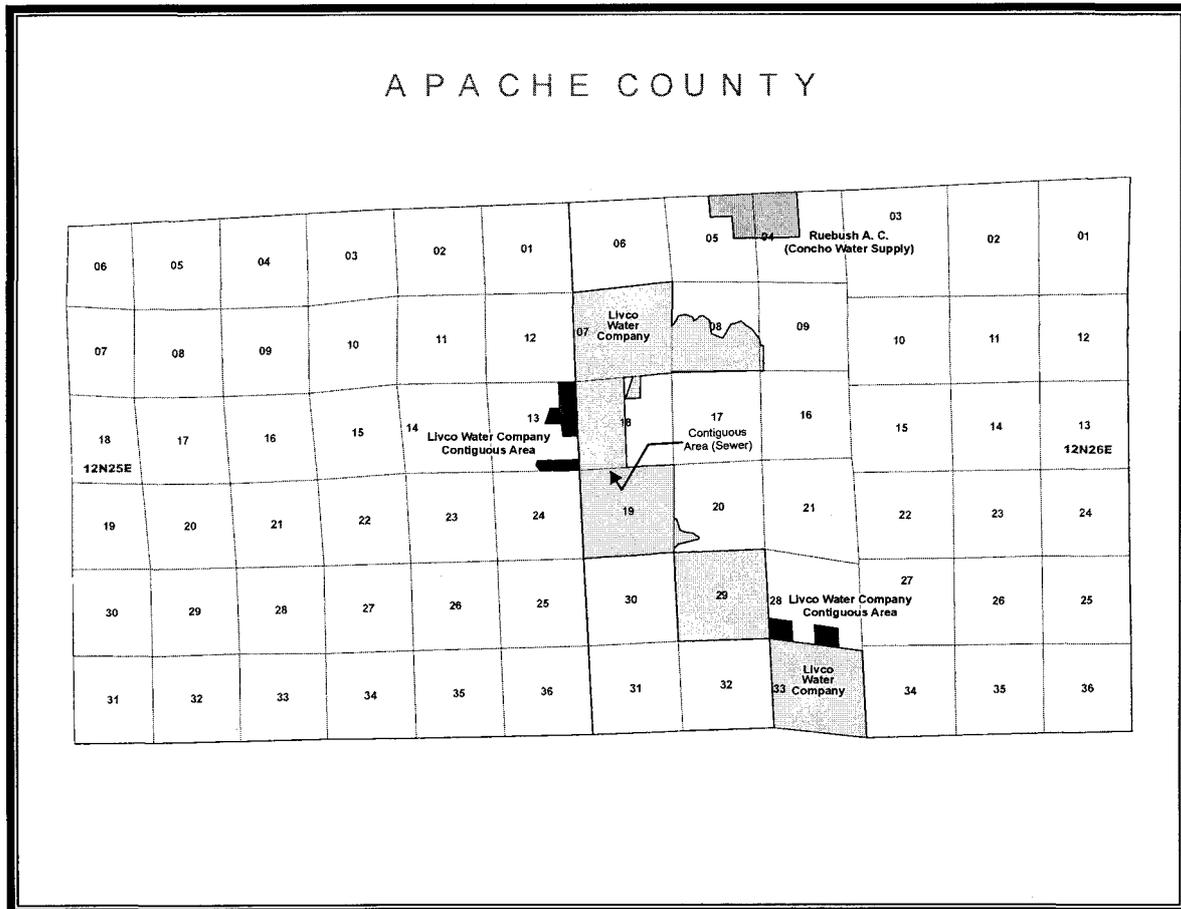


Figure 2. Certificated Areas

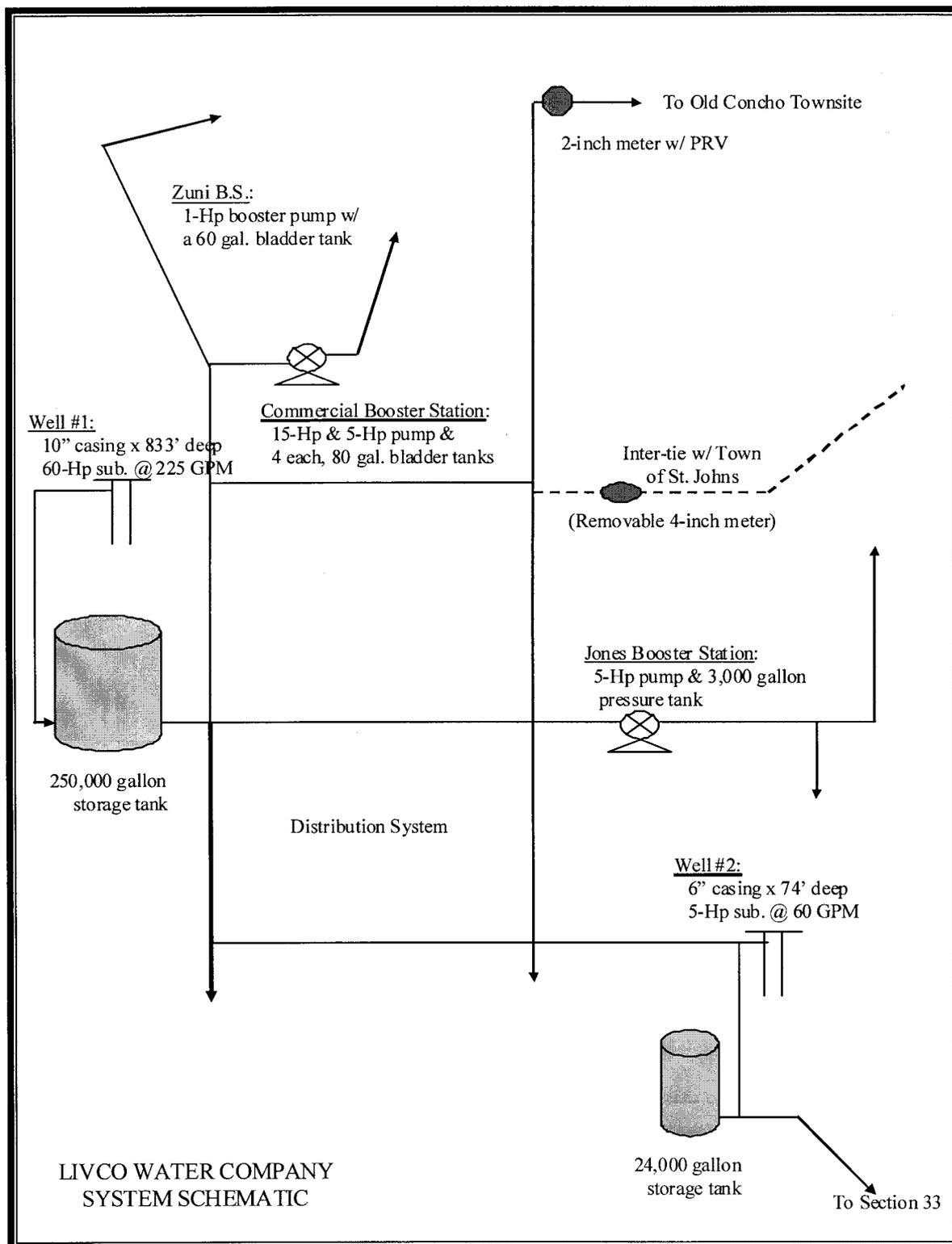


Figure 3. Water System Schematic

C. WATER USE

Water Use

Figure 4 represents the water consumption data provided by the Company for its test year ending December 2010. Customer consumption experienced a high monthly water use of 462 gallons per day (“GPD”) per connection in June and the low monthly water use of 127 GPD per connection in March for an average monthly use of 244 GPD per connection.

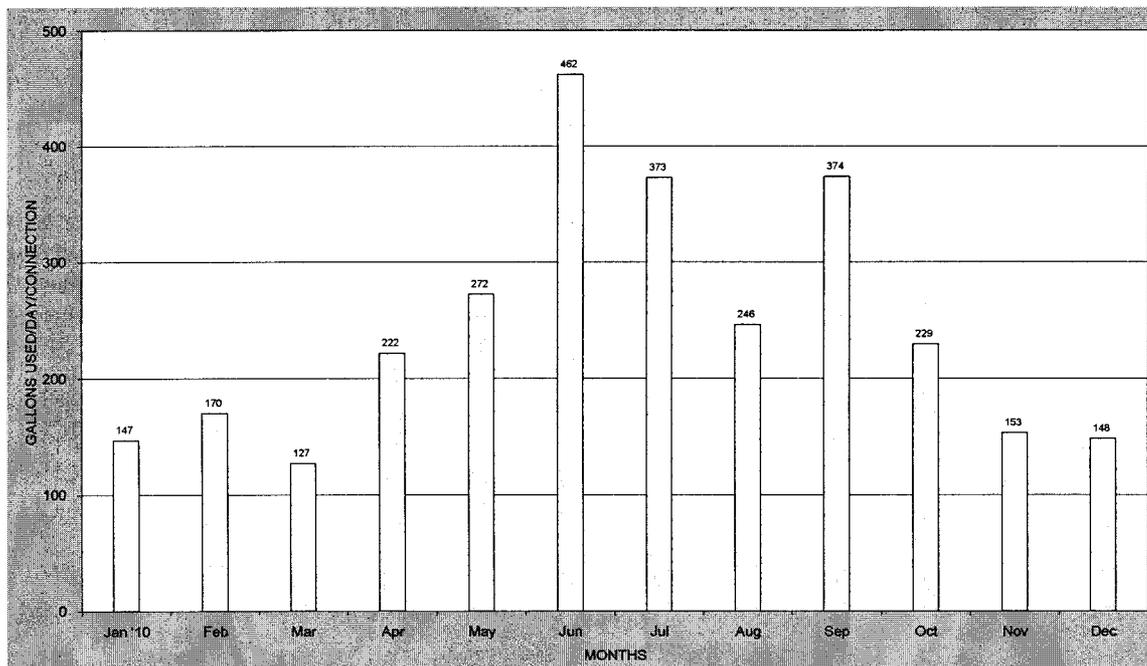


Figure 4. Water Use

Non-Account Water

Decision No. 70308

In the last rate case and its Decision No. 70308, dated April 24, 2008, the Company was ordered to;

- “...monitor its gallons of water pumped and sold each month for one full year after the Water Meter Replacement Program is completed and report the monitoring results to Docket Control.”
- “...if the reported water loss for the one year monitoring period is greater than 10 percent, Livco Water Company shall prepare a report containing a detailed analysis

and plan to reduce water loss to 10 percent or less before filing its next rate increase application.”

On January 27, 2009, the Company filed a document indicating that the Water Meter Replacement Program had been completed, with the last meter being installed on November 21, 2008, and the mandated one year monitoring of water loss would be filed approximately on April 24, 2010.

On November 24, 2009, the Company filed its Water Loss Report. This report showed a 12-month monitoring period from November 2008 to October 2009 with a water loss of 14.6 %. During the monitoring period, the Company provided estimated readings in December due to snow and reported unmetered water usage mainly due to water line flushing and fire department usage. The Company also noted numerous water leaks that were found and repaired. Since the water loss was greater than 10%, the Company also submitted an Analysis and Plan (“A&P”) to further reduce the water loss. This A&P provided; 1) a discussion of how the water meter replacement program reduced the overall water loss by approximately 4%, 2) the implementation of a leak identification program, and 3) if more extreme steps are necessary, the Company will investigate grant funding to create a water system map, a comprehensive master plan of the water system, and purchase underground leak detection equipment.

Since the above November 24, 2009 filing of the Water Loss Report indicated some estimated readings, Staff requested that the Company continue to monitor its water system and submit the results. Therefore, on December 30, 2010, the Company submitted its Water Loss Report with a 12-month monitoring period from November 2009 to October 2010 showing a water loss of 20.2%. During this latest monitoring period, the Company noted three major leaks during the first half of the monitoring period and once these leaks were repaired, the water loss dropped to 9.5% for the remaining second half of the year.

Staff Review

During the test year 2010, the Company reported 42,378,000 gallons of water pumped and 33,876,000 gallons of water sold. This represents a difference of 20.1%. Since the test year data indicates a significant water loss, Staff requested additional data during its field inspection that included; 1) gallons pumped and sold from January 2011 to June 2011, 2) recorded water leaks, and 3) recorded unmetered water, if any.

In its response, the Company submitted data from November 2010 to June 2011 showing a water loss of 8.6%. This 8.6% was determined based on 22,111,900 gallons pumped (minus 540,000 gallons for unmetered flushing and leak estimates) and 19,722,000 gallons sold. In addition, the Company submitted the number of leaks and repairs; five in 2009, three in 2010 and one in 2011. According to the Company, the majority of the leaks were caused by poor pipe installations and poor leak repairs. The Company also provided kilowatt usage reports that showed data and graphs of its pumping sites that monitor/indicate any high pumping occurrence

versus usage. The Company uses the kilowatt report as notification of high water usage and possibly the detection of any water leaks.

Staff Conclusion

Non-account water should be 10% or less. The Company is taking corrective action to address its water loss issue by; 1) completion of the Water Meter Replacement Program, 2) implementation of a leak identification program, 3) monitoring its system, 4) repairing leaks when found, and 5) providing its best estimate for gallons of unmetered water. However, at times, the Company has not provided adjustments for the unmetered water, which results in indications of high water loss.

In addition to the Company's above efforts and correction actions, the Company has agreed to implement two additional Best Management Practice Tariffs (for a total of five) related to the water loss; i.e., BMP 4.1-Leak Detection Program Tariff and BMP 4.2-Meter Repair and/or Replacement Tariff. (See Section F – Arizona Department of Water Resources for further discussion.)

Staff believes it is appropriate for the Company to demonstrate it is properly monitoring, recording and calculating its water loss. Therefore, Staff recommends that the Company continue to monitor its water system for another full year and report the water loss monitoring results to Docket Control. This monitoring report shall be docketed as a compliance item within one year from the effective date of an order issued in this proceeding.

System Analysis

The current well capacity of 285 GPM and storage capacity of 274,000 gallons is adequate to serve its present customer base and reasonable growth.

D. GROWTH

Figure 5 details the customer growth using linear regression analysis. The number of service connections was obtained from annual reports submitted to the Commission. During the test year 2010, the Company had 373 customers and it is projected that the Company could have approximately 380 customers by 2015.

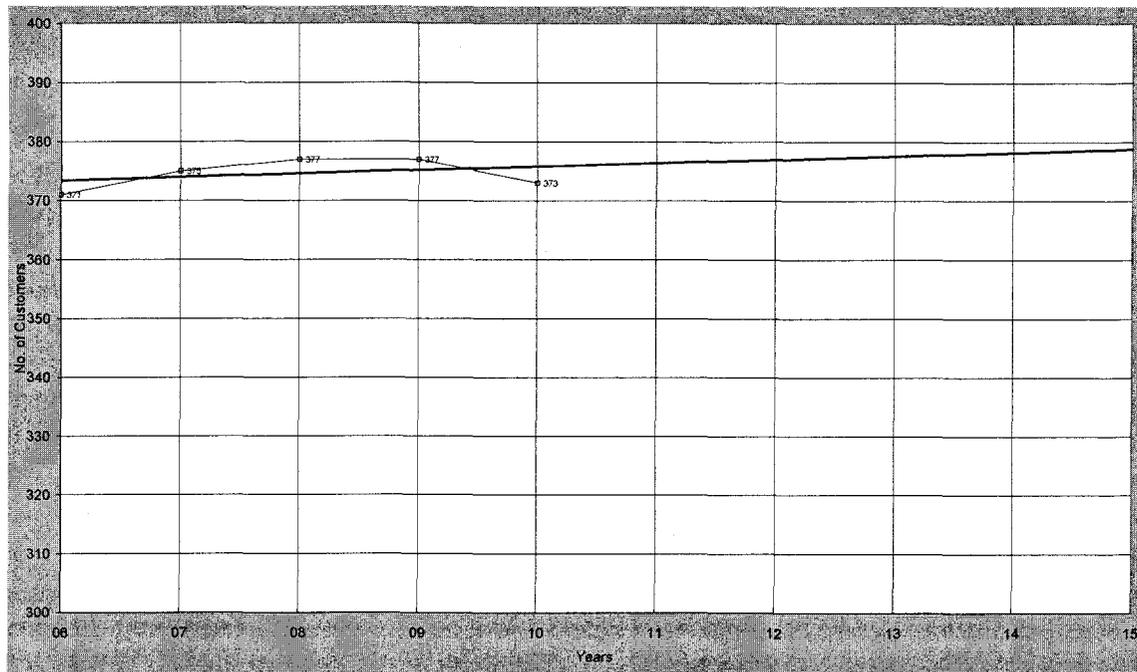


Figure 5. Growth Projection

E. ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY (“ADEQ”)

Compliance

According to an ADEQ Compliance Status Report, dated May 17, 2011, that was submitted with the rate application; ADEQ reported no deficiencies and has determined that the Company’s system, PWS #01-018, is currently delivering water that meets the water quality standards required by 40 CFR 141/Arizona Administrative Code, Title 18, Chapter 4.

Water Testing Expense

The Company is subject to mandatory participation in the Monitoring Assistance Program (“MAP”). The Company reported its water testing cost at \$1,725 during the test year. Staff has reviewed these expenses and has recalculated the annual expense by adding the lead & copper and Disinfection/Disinfection By-Product (“D/DBP”) monitoring requirements. Annual D/DBP monitoring applies to any public water system that adds a halogenated disinfectant during the treatment process. The Company manually chlorinates its sources and therefore, is required to monitor for D/DBP. Table E-1 shows Staff’s adjusted annual monitoring expense estimate of \$2,535 with participation in the MAP.

Table E-1. Water Testing Expense

Monitoring	Cost per test	No. of test	Annual Cost
Total coliform – monthly	\$20	24	\$480
MAP – IOCs, Radiochemical, Nitrate, Nitrite, Asbestos, SOCs, & VOCs	MAP	MAP	\$1,245
Lead & Copper – per 3 years (with metals prep)	\$45 \$15	10 2	\$150 \$10
D/DBP – Trihalomethanes – annually	\$100	2	\$200
– Haloacetic Acids – annually	\$210	2	\$420
– Residual chlorine – annually	\$15	2	\$30
Total			\$2,535

Note: ADEQ's MAP invoice for the 2011 Calendar Year was \$1,244.59.

Staff recommends its annual water testing expense of \$2,535 be used for purpose of this application.

F. ARIZONA DEPARTMENT OF WATER RESOURCES (“ADWR”)

Compliance

The Company is not located in any Active Management Area (“AMA”). According to ADWR's Water Provider Compliance Status Report, dated June 28, 2011, this Company is in compliance with ADWR's requirements governing water providers and/or community water systems.

Best Management Practice Tariffs

In 2008, ADWR added a new regulatory program for the ADWR Third Management Plan for AMAs. The new program, called Modified Non-Per Capita Conservation Program (“Modified NPCCP”), addresses large municipal water providers (cities, towns and private water companies serving more than 250 acre-feet per year) and was developed in conjunction with stakeholders from all AMAs. Participation in the program is required for all large municipal water providers that do not have a Designation of Assured Water Supply and that are not regulated as a large untreated water provider or an institutional provider.

The Modified NPCCP is a performance-based program that requires participating providers to implement water conservation measures that result in water use efficiency in their service areas. A water provider regulated under the program must implement a required Public Education Program and choose one or more additional Best Management Practices (“BMPs”)

based on its size, as defined by its total number of water service connections. The provider must select the additional BMPs from the list included in the Modified NPCCP Program. The BMPs are a mix of technical, policy, and information conservation efforts.

Although the implementation of the Modified NPCCP is required of large municipal water providers within an AMA, the Commission has adopted BMPs for implementation by Commission regulated water companies.

During the field inspection, Staff discussed the BMP Tariffs with the Company and requested the Company select three BMPs, for a water company this size, from the list of Staff templates posted on the Commission's website. On August 10, 2011, Staff received an email indicating that the Company had selected BMPs 1.1, 3.6 and 5.2. In addition, after Company discussions regarding its water loss issue, the Company has agreed to also include BMPs 4.1 and 4.2. In summary, these five selected BMPs are as follows:

1. Local and/or Regional Messaging Program Tariff – BMP 1.1
2. Customer High Water Use Inquiry Resolution Tariff – BMP 3.6
3. Leak Detection Program Tariff – BMP 4.1
4. Meter Repair and/or Replacement Tariff – BMP 4.2
5. Water System Tampering Tariff – BMP 5.2

Staff concludes that the Company's selected BMP Tariffs are relevant to the Company's service area characteristics and conform to the templates developed by Staff. These BMPs should also assist the Company with its water loss issue. Staff recommends approval of the Company's five BMP Tariffs, BMPs 1.1, 3.6, 4.1, 4.2 and 5.2, that are attached to this Engineering Report as Exhibit – BMPs.

G. ARIZONA CORPORATION COMMISSION ("ACC") COMPLIANCE

On June 29, 2011, the Utilities Division Compliance Section reported the Company had no delinquent ACC compliance items.

H. DEPRECIATION RATES

In a prior rate case, the Company adopted Staff's typical and customary depreciation rates. These rates are presented in Table H-1 and it is recommended that the Company continue to use these depreciation rates.

Table H-1. Depreciation Rates

NARUC Acct. No.	Depreciable Plant	Average Service Life (Years)	Annual Accrual Rate (%)
304	Structures & Improvements	30	3.33
305	Collecting & Impounding Reservoirs	40	2.50
306	Lake, River, Canal Intakes	40	2.50
307	Wells & Springs	30	3.33
308	Infiltration Galleries	15	6.67
309	Raw Water Supply Mains	50	2.00
310	Power Generation Equipment	20	5.00
311	Pumping Equipment	8	12.5
320	Water Treatment Equipment		
320.1	Water Treatment Plants	30	3.33
320.2	Solution Chemical Feeders	5	20.0
330	Distribution Reservoirs & Standpipes		
330.1	Storage Tanks	45	2.22
330.2	Pressure Tanks	20	5.00
331	Transmission & Distribution Mains	50	2.00
333	Services	30	3.33
334	Meters	12	8.33
335	Hydrants	50	2.00
336	Backflow Prevention Devices	15	6.67
339	Other Plant & Misc Equipment	15	6.67
340	Office Furniture & Equipment	15	6.67
340.1	Computers & Software	5	20.00
341	Transportation Equipment	5	20.00
342	Stores Equipment	25	4.00
343	Tools, Shop & Garage Equipment	20	5.00
344	Laboratory Equipment	10	10.00
345	Power Operated Equipment	20	5.00
346	Communication Equipment	10	10.00
347	Miscellaneous Equipment	10	10.00
348	Other Tangible Plant	20	5.00

I. OTHER ISSUES

1. Service Line and Meter Installation Charges

The Company has requested changes to its service line and meter installation charges. These proposed charges are shown in Table I-2 below and Staff recommends approval of the charges.

Table I-1. Current Service Line and Meter Installation Charges

Meter Size	Service Line Charges	Meter Installation Charges	Total Charges
5/8 x 3/4-inch	\$370	\$130	\$500
3/4-inch	\$370	\$205	\$575
1-inch	\$420	\$240	\$660
1-1/2-inch	\$450	\$450	\$900
2-inch – Turbine	\$580	\$945	\$1,525
2-inch – Compound	\$580	\$1,640	\$2,220
3-inch – Turbine	\$745	\$1,420	\$2,165
3-inch – Compound	\$765	\$2,195	\$2,960
4-inch – Turbine	\$1,090	\$2,270	\$3,360
4-inch – Compound	\$1,120	\$3,145	\$4,265
6-inch – Turbine	\$1,610	\$4,425	\$6,035
6-inch – Compound	\$1,630	\$6,120	\$7,750

Table I-2. **Proposed** Service Line and Meter Installation Charges

Meter Size	Service Line Charges	Meter Installation Charges	Total Charges
5/8 x 3/4-inch	\$445	\$155	\$600
3/4-inch	\$445	\$255	\$700
1-inch	\$495	\$315	\$810
1-1/2-inch	\$550	\$525	\$1,075
2-inch – Turbine	\$830	\$1,045	\$1,875
2-inch – Compound	\$830	\$1,890	\$2,720
3-inch – Turbine	\$1,045	\$1,670	\$2,715
3-inch – Compound	\$1,165	\$2,545	\$3,720
4-inch – Turbine	\$1,490	\$2,670	\$4,160
4-inch – Compound	\$1,670	\$3,645	\$5,315
6-inch – Turbine	\$2,210	\$5,025	\$7,235
6-inch – Compound	\$2,330	\$6,920	\$9,250

2. Curtailment Plan Tariff

The Company has an approved curtailment tariff that became effective on May 11, 2005.

3. Backflow Prevention Tariff

The Company has an approved backflow prevention tariff that became effective on May 11, 2005.

Exhibit - BMPs

Company: _____

Decision No.: _____

Phone: _____

Effective Date: _____

Local and/or Regional Messaging Program Tariff – BMP 1.1

PURPOSE

A program for the Company to actively participate in a water conservation campaign with local or regional advertizing (Modified Non-Per Capita Conservation Program BMP Category 1: Public Awareness/Public Relations 1.1: Local and/or Regional Messaging Program).

REQUIREMENTS

The requirements of this tariff are governed by Rules of the Arizona Corporation Commission and were adapted from the Arizona Department of Water Resources' Required Public Education Program and Best Management Practices in the Modified Non-Per Capita Conservation Program.

1. The Company or designated representative shall actively participate in water conservation campaign with local and/or regional advertising.
2. The campaign shall promote ways for customers to save water.
3. The Company shall facilitate the campaign through one or more of the following avenues (not an all inclusive list):
 - a. Television commercials
 - b. Radio commercials
 - c. Websites
 - d. Promotional materials
 - e. Vehicle signs
 - f. Bookmarks
 - g. Magnets
4. The Company shall keep a record of the following information and make it available to the Commission upon request.
 - a. A description of the messaging program implemented and program dates.
 - b. The number of customers reached (or an estimate).
 - c. Costs of Program implementation.

Company: _____

Decision No.: _____

Phone: _____

Effective Date: _____

Customer High Water Use Inquiry Resolution Tariff – BMP 3.6

PURPOSE

A program for the Company to assist its customers with their high water-use inquiries and complaints (Modified Non-Per Capita Conservation Program BMP Category 3: Outreach Services 3.6: Customer High Water Use Inquiry Resolution).

REQUIREMENTS

The requirements of this tariff are governed by Rules of the Arizona Corporation Commission and were adapted from the Arizona Department of Water Resources' Required Public Education Program and Best Management Practices in the Modified Non-Per Capita Conservation Program.

1. The Company shall handle high water use inquiries as calls are received.
2. Calls shall be taken by a customer service representative who has been trained on typical causes of high water consumption as well as leak detection procedures that customers can perform themselves.
3. Upon request by the customer or when the Company determines it is warranted, a trained Field Technician shall be sent to the customer's residence to conduct a leak detection inspection and further assist the customer with water conservation measures.
4. The Company shall follow up in some way on every customer inquiry or complaint and keep a record of inquiries and follow-up activities.

Company: _____

Decision No.: _____

Phone: _____

Effective Date: _____

Leak Detection Program Tariff – BMP 4.1

PURPOSE

A program for the Company to systematically evaluate its water distribution system to identify and repair leaks (Modified Non-Per Capita Conservation Program Best Management Practice Category 4: Physical System Evaluation and Improvement 4.1 Leak Detection Program).

REQUIREMENTS

The requirements of this tariff are governed by Rules of the Arizona Corporation Commission and were adapted from the Arizona Department of Water Resources' Required Public Education Program and Best Management Practices in the Modified Non-Per Capita Conservation Program.

1. The Company shall implement a comprehensive leak detection and repair program to attain and maintain a less than 10 percent unaccounted for water loss in its system(s). The program must include auditing procedures, in-field leak detection and repair efforts. The Company shall take whatever steps are necessary to ensure that its water system is operating at optimal efficiency.
2. On a systematic basis, at least every two years (annually for smaller systems), the Company shall inspect its water distribution system (to include hydrants, valves, tanks, pumps, etc. in the distribution system) to identify and repair leaks. Detection shall be followed by repair or in some cases replacement. Repair vs. replacement will depend upon site-specific leakage rates and costs.
3. Leak Detection efforts should focus on the portion of the distribution system with the greatest expected problems, including:
 - a. areas with a history of excessive leak and break rates;
 - b. areas where leaks and breaks can result in the heaviest property damage;
 - c. areas where system pressure is high;
 - d. areas exposed to stray current and traffic vibration;
 - e. areas near stream crossings; and,
 - f. areas where loads on pipe may exceed design loads.
4. The Company shall keep accurate and detailed records concerning its leak detection and repair/rehabilitation program and the associated costs. Records of repairs shall include: possible causes of the leak; estimated amount of water lost; and date of repair. These records shall be made available to the Commission upon request.

5. The Company shall maintain a complete set of updated distribution system maps.
6. The Company shall conduct a water audit annually which includes the following steps to determine how efficient each water system is operating and where the losses might be.
 - a. Use coordinated monthly source and service meter readings to calculate how much water enters and leaves the system during the 12 month review period.
 - b. Track and estimate any unmetered authorized uses.
 - c. Calculate the total amount of leakage using the following formula:

$$\text{Unaccounted for water (\%)} = \frac{[(\text{Production and/or purchased water minus metered use \& estimated authorized un-metered use}) / (\text{Production and/or purchased water})] \times 100}{}$$
 - d. Authorized un-metered uses may include firefighting, main flushing, process water for water treatment plants, etc. Water losses include all water that is not identified as authorized metered water use or authorized un-metered use.
 - e. Determine possible reasons for leakage, including physical leaks and unauthorized uses.
 - f. Analyze results to determine the improvements needed, such as, better accounting practices, leak survey or replacing old distribution pipes.
7. The Company shall keep accurate and detailed records concerning its annual water audit results. These records shall be made available to the Commission upon request.

Company: _____

Decision No.: _____

Phone: _____

Effective Date: _____

Meter Repair and/or Replacement Tariff – BMP 4.2

PURPOSE

A program for the Company to systematically assess all in-service water meters (including Company production meters) in its water service area to identify under-registering meters for repair or replacement (Modified Non-Per Capita Conservation Program Best Management Practice Category 4: Physical System Evaluation and Improvement 4.2 Meter Repair and/or Replacement Program).

REQUIREMENTS

The requirements of this tariff are governed by Rules of the Arizona Corporation Commission and were adapted from the Arizona Department of Water Resources' Required Public Education Program and Best Management Practices in the Modified Non-Per Capita Conservation Program.

1. On a systematic basis, the Company will inspect 100 percent of its 1-inch and smaller in-service water meters at least once every ten years for one of the following reasons (whichever occurs first):
 - a. A meter reading complaint is filed with the Company by a customer or Arizona Corporation Commission Staff,
 - b. A meter has registered 1,000,000 gallons of usage,
 - c. A meter has been in service for ten years.
2. Meters larger than 1-inch shall be inspected for one of the following reasons:
 - a. A meter reading complaint is filed with the Company by a customer or Arizona Corporation Commission Staff,
 - b. A meter has been in service for five years.
3. The inspection will be accomplished by having the meter pulled and having a Company Technician physically inspect each meter and its fittings for leaks, registers which may have become loose or are not properly attached to the meter and could be under-registering or other broken parts which need repair. In addition, meters shall be randomly selected for flow testing to identify potentially under-registering meters.
4. The Company shall also replace or reprogram any water meters that do not register in gallons. Within 5 years of the initial effective date of this tariff, the Company shall install all replacement meters with new:
 - a. 1-inch and smaller meters that register in 1 gallon increments,
 - b. 1-1/2-inch through 4-inch meters that register in 10 gallon increments, and

- c. 6-inch and larger meters that register in 100 gallon increments.
5. The Company shall keep records of all inspected and replacement meters and make this information available to the Commission upon request.

Company: _____

Decision No.: _____

Phone: _____

Effective Date: _____

WATER SYSTEM TAMPERING TARIFF – BMP 5.2

PURPOSE

The purpose of this tariff is to promote the conservation of groundwater by enabling the Company to bring an action for damages or to enjoin any activity against a person who tampers with the water system.

REQUIREMENTS:

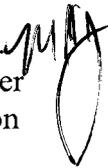
The requirements of this tariff are governed by Rules of the Arizona Corporation Commission, specifically Arizona Administrative Code ("AAC") R14-2-410 and the Arizona Department of Water Resources' Required Public Education Program and Best Management Practices in the Modified Non-Per Capita Conservation Program.

1. In support of the Company's water conservation goals, the Company may bring an action for damages or to enjoin any activity against a person who: (1) makes a connection or reconnection with property owned or used by the Company to provide utility service without the Company's authorization or consent; (2) prevents a Company meter or other device used to determine the charge for utility services from accurately performing its measuring function; (3) tampers with property owned or used by the Company; or (4) uses or receives the Company's services without the authorization or consent of the Company and knows or has reason to know of the unlawful diversion, tampering or connection. If the Company's action is successful, the Company may recover as damages three times the amount of actual damages.
2. Compliance with the provisions of this tariff will be a condition of service.
3. The Company shall provide to all its customers, upon request, a complete copy of this tariff and AAC R14-2-410. The customers shall follow and abide by this tariff.
4. If a customer is connected to the Company water system and the Company discovers that the customer has taken any of the actions listed in No. 1 above, the Company may terminate service per AAC R14-2-410.
5. If a customer believes he/she has been disconnected in error, the customer may contact the Commission's Consumer Services Section at 1-800-222-7000 to initiate an investigation.

MEMORANDUM

DATE: August 25, 2011

TO: Gerald Becker
Public Utilities Analyst V
Utilities Division

FROM: Marlin Scott, Jr. 
Utilities Engineer
Utilities Division

RE: Livco Water Company
Docket No. W-02121A-11-0257 (Financing)

On June 28, 2011, Livco Water Company ("Company") submitted a financing application to assist in funding the exterior painting of a storage tank. The Company is requesting funding approval of \$30,000 through the use of Water Infrastructure Financing Authority ("WIFA") indebtedness.

The existing operating system consists of two wells (totaling to 285 gallons per minute), two storage tanks (250,000 and 24,000 gallons) and a distribution system serving 373 customers.

In its financing application, the Company is proposing to renovate its 250,000 gallon storage tank by repairing and coating the exterior tank at an estimated cost of \$30,000. In its application, the Company provided a proposal and a summary assessment report prepared by Superior tank Solutions.

Staff concludes that the 250,000 gallon storage tank exterior renovation project is appropriate and the cost estimate totaling \$30,000 is reasonable.