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Transcript Exhibit(s)

Docket #(s): WS-02987A-08-0180

Exhibit # : R1-R16, R8-R15

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JOHNSON UTILITIES, L.L.C.

DOCKET NO. WS-02987A-08-0180

DIRECT TESTIMONY

OF

RODNEY L. MOORE

ON BEHALF OF

THE

RESIDENTIAL UTILITY CONSUMER OFFICE

FEBRUARY 4, 2009

TABLE OF CONTENTS

INTRODUCTION....2
BACKGROUND....3
SUMMARY OF ADJUSTMENTS....4
REVENUE REQUIREMENTS....6

RATE BASE....8
ADJUSTMENT NO. 1 – WATER ONLY - ACC. DEPRECIATION....9
ADJUSTMENT NO. 1 – WASTEWATER ONLY - POST TY PLANT....9
ADJUSTMENT NO. 2 – REINSTATE ACC. AMORT. ON CIAC....10
ADJUSTMENT NO. 3 – REINSTATE CIAC....11
ADJUSTMENT NO. 4 – WATER ONLY – MATERIALS & SUPPLIES....12

OPERATING INCOME....12
ADJUSTMENT NO. 1 – TEST-YEAR DEPRECIATION EXPENSE....13
ADJUSTMENT NO. 2 – PROPERTY TAX COMPUTATION....13
ADJUSTMENT NO. 3 – WASTEWATER ONLY – ANNUALIZE REV.....14
ADJUSTMENT NO. 4 – RATE CASE EXPENSE....15
ADJUSTMENT NO. 5 – WATER ONLY – CAGRD TAX....16
ADJUSTMENT NO. 6 – UNNECESSARY EXPENSES....17
ADJUSTMENT NO. 7– WATER ONLY - NORMALIZE POWER COSTS.18
ADJUSTMENT NO. 8 – INCOME TAX....18

COST OF CAPITAL....19

RATE DESIGN AND PROOF OF RECOMMENDED REVENUE....20

TYPICAL RESIDENTIAL BILL ANALYSIS....21

INTRODUCTION

Q. Please state your name, position, employer and address.

A. Rodney L. Moore, Public Utilities Analyst V
Residential Utility Consumer Office ("RUCO")
1110 West Washington Street, Suite 220
Phoenix, Arizona 85007.

Q. Please state your educational background and qualifications in the utility regulation field.

A. Appendix 1, which is attached to this testimony, describes my educational background and includes a list of the rate case and regulatory matters in which I have participated.

Q. Please state the purpose of your testimony.

A. The purpose of my testimony is to present RUCO's recommendations regarding Johnson Utilities, LLC ("Johnson Utilities" or "Company") application for an increase in its water and wastewater rates. The test-year utilized by the Company in connection with the preparation of this application is the 12-month period that ended December 31, 2007.

BACKGROUND

Q. Please describe your work effort on this project.

A. I obtained and reviewed data and performed analytical procedures necessary to understand the Company's filing as it relates to the rate base, operating income and revenue requirements. My recommendations are based on these analyses. Procedures performed include the in-house formulation and analysis of two sets of data requests, and the review and analysis of Company responses to Commission Staff data requests and other intervenors.

Q. When were the Company's present rates and charges established?

A. The Company's present rates and charges were established by the Commission in Decision No. 60223, dated May 27, 1997. This Decision approved the Company's CC&N with the present rates and charges for utility services.

Q. What areas will you address in your testimony?

A. I will address issues related to revenue requirement, rate base, operating income and rate design. RUCO's witness William A. Rigsby will provide an analysis of the cost of capital as presented on Schedule RLM-13.

Q. Please identify the exhibits you are sponsoring.

A. I am sponsoring a separate set of Schedules numbered RLM-1 through RLM-15 for the Company's Water and Wastewater Districts.

SUMMARY OF ADJUSTMENTS

Q. Please summarize the adjustments to rate base, operating income and revenue requirement addressed in your testimony.

A. My testimony addresses the following issues:

Rate Base

(Water District Only) Accumulated Depreciation – This adjustment recalculates accumulated depreciation to correct the Company's computation error in determining the accumulated depreciation.

Accumulated Amortization For Contributions In Aid Of Construction ("CIAC") – This adjustment reverses and restates the Company's adjustment that increases the accumulated amortization on CIAC balances associated with hook-up fees.

Contributions In Aid Of Construction ("CIAC") – This adjustment reverses and restates the Company's adjustment that decreases the CIAC balances associated with hook-up fees.

Materials and Supplies - This adjustment restates the allowance for materials and supplies to reflect RUCO's recommended operating and maintenance expenses.

Operating Income

Test-Year Depreciation Expense – This adjustment increases test-year operating expenses to reflect computations based on RUCO's recommended gross plant in service.

Property Tax Expense - This adjustment reflects the property tax expense based on RUCO's calculation of adjusted and proposed operating revenues.

(Wastewater District Only) Revenue Annualization –This is a conforming adjustment to increase the revenue as filed and is based on the Company's response to a Staff data request.

Rate Case Expense – This adjustment is based on RUCO's determination of the fair and reasonable cost to Johnson Utilities ratepayers for this application process.

(Water District Only) Central Arizona Groundwater Replenishment District ("CAGRD") Tax – This adjustment reverses the Company's proposal to collect this expense through a surcharge on the customers' monthly statement.

Unnecessary Operating Expenses – These adjustments remove unnecessary operating expenses not required for the provisioning of water and/or wastewater service.

(Water District Only) Power Expense Normalization –This is a conforming adjustment to increase purchased power expense on a going-forward basis.

The adjustment is based on the Company's response to a Staff data request.

Income Tax Expense - This adjustment excludes income taxes as a normal operating expense because the Company is a limited liability company and thus a pass-through tax entity.

Rate Design and Proof of Recommended Revenue

I am recommending a rate design that is generally consistent with the Company's present rate design, but reflects RUCO's recommended revenue requirement and provides proof the design will produce the appropriate revenue requirement.

REVENUE REQUIREMENTS

Q. Please summarize the results of RUCO's analysis of the Company's filing and state RUCO's recommended revenue requirement.

A. As outlined in Schedule RLM-1, RUCO is recommending that the Company's revenue requirement not exceed the following levels:

COMPANY'S WATER DISTRICT	RUCO	DIFFERENCE
$10,939,419	$11,219,234	$279,815

COMPANY'S WASTEWATER DISTRICT	RUCO	DIFFERENCE
$13,528,467	$11,962,300	($1,566,167)

RUCO's recommended increase in Fair Value Rate Base ("FVRB") is based on the Original Cost Rate Base ("OCRB") and is summarized on Schedule RLM-1:

COMPANY'S WATER DISTRICT	RUCO	DIFFERENCE
$6,607,841	$285,272	($6,322,569)

COMPANY'S WASTEWATER DISTRICT	RUCO	DIFFERENCE
$19,149,173	$19,457,670	$308,497

RUCO's recommended required operating income is shown on Schedule RLM-1 as:

COMPANY'S WATER DISTRICT	RUCO	DIFFERENCE
$689,198	$23,347	($665,851)

COMPANY'S WASTEWATER DISTRICT	RUCO	DIFFERENCE
$1,997,259	$1,592,460	($404,799)

RUCO's recommended revenue requirement percentage increase versus the Company's proposal is as follows:

COMPANY'S WATER DISTRICT	RUCO	DIFFERENCE
-16.96 %	-14.83 %	-2.13 %

COMPANY'S WASTEWATER DISTRICT	RUCO	DIFFERENCE
19.84 %	5.15 %	-14.69 %

Schedule RLM-1 presents the calculation of RUCO's recommended revenue requirement.

RATE BASE

Rate Base Adjustment Summary

Q. Is RUCO recommending any changes to the Company's proposed rate base?

A. Yes. As exhibited on Schedule RLM-3, columns (A) through (G), I analyzed the Company's adjustment to its historical test-year OCRB and made a total of six adjustments to the Water and Wastewater Districts' rate base as filed by the Company. These adjustments comprise two unique adjustments for the Water District, two adjustments common to both Districts and one unique adjustment for the Wastewater District.

Q. Does RUCO accept Johnson Utilities' request to use the Company's OCRB as the FVRB?

A. Yes. RUCO accepts the Company's request that the OCRB be used as the FVRB.

Q. Please describe your rate base adjustments.

A. My review, analysis and adjustments are explained below.

Water District Only - Rate Base Adjustment No. 1 – Accumulated Depreciation

Q. Please explain the basis for your adjustment to the Water District's accumulated depreciation.

A. My plant-in-service analysis for both districts from 1997 to 2007 mirrored the Company's filing except for two entries in the Water District.

As shown on the Water District's Schedule RLM-3, column (B), and with supporting Schedule RLM-4, pages 1 through 11, this adjustment decreases adjusted test-year rate base by:

$4,584.

Wastewater District Only - Rate Base Adjustment No. 1 – Post Test-Year Plant

Q. Please explain the basis for your adjustment to the Wastewater District's post test-year plant.

A. This adjustment conforms to the Company's response to Staff's data request JMM 4-6. The Company provided information as to the used and usefulness of the post test-year plant and the actual costs incurred.

As shown on the Wastewater District's Schedule RLM-3, column (B), this adjustment increases adjusted test-year rate base by:

$689,382.

Rate Base Adjustment No. 2 – Accumulated Amortization of Contributions In aid Of Construction ("CIAC")

Q. Please explain the basis for your adjustment to the accumulated amortization of CIAC.

A. This adjustment is a companion to the following Rate Base Adjustment No. 3 and is common to both districts filed in this case. The Company proposed, in this adjustment, to remove the accumulated amortization associated with unexpended CIAC. The Company also proposes, in the following adjustment, to decrease the CIAC balance because it contends there is no plant-in-service amount in rate base to offset the cash balance on unexpended CIAC.

Q. Is this practice normal?

A. No. Typically, contributions are booked as CIAC when they are received and are treated as a deduction to rate base. Under RUCO's recommendations, the Company is being afforded the same rate base treatment for CIAC that every other utility in Arizona is afforded.

As shown on Schedules RLM-3, column (C), I increased the rate base to reflect the inclusion of accumulated amortization associated with unexpended CIAC for each District:

$558,824 for the Water District, and

$16,505 for the Wastewater District.

Q. Are there any exceptions to the accounting treatment for CIAC that you have described?

A. Only when a utility obtains an accounting order that allows it to delay the recognition of CIAC until plant associated with it goes into service. The Commission approved such an accounting order for Arizona-American Water Company in Decision No. 69914, dated September 27, 2007.

Rate Base Adjustment No. 3 – Unexpended Contributions In aid Of Construction ("CIAC")

Q. Please explain the basis for your adjustment to the CIAC balance.

B. As mentioned, this adjustment is a companion to the above Rate Base Adjustment No. 2 and is common to both districts filed in this case. The Company proposed, in this adjustment, to remove the amount of unexpended CIAC from rate base because it contends there is no plant-in-service amount in rate base to offset the cash balance on unexpended CIAC.

As shown on Schedules RLM-3, column (D), I decreased the rate base to reflect the inclusion of unexpended CIAC for each District:

$6,931,078 for the Water District, and

$397,390 for the Wastewater District.

Water District Only - Rate Base Adjustment No. 4 – Allowance For Materials and Supplies

Q. Please explain the basis for your adjustment to the allowance for working capital.

A. I restated the allowance for materials and supplies to reflect RUCO's adjusted test-year level of operations and maintenance expenditures.

As shown on the Water District's Schedule RLM-3, column (E), with supporting documentation on Schedule RLM-6, this adjustment increases the adjusted test-year rate base by:

$54,269.

OPERATING INCOME

Operating Income Adjustment Summary

Q. Is RUCO recommending any changes to the Company's proposed operating expenses?

A. Yes. As shown on Schedule RLM-8, columns (A) through (I), I analyzed the Company's adjustments to its historical test-year operating income and made eight adjustments to the operating income as filed below.

Operating Income Adjustment No. 1 – Test-Year Depreciation Expense

Q. Please explain your adjustment to the test-year depreciation expense.

A. As shown on Schedule RLM-9, this adjustment reflects RUCO's end of test-year gross plant in service and calculates the depreciation expense based on depreciation rates proposed by the Company and accepted by RUCO. I made no adjustment to Water District's depreciation expense. The Wastewater District's adjustment is driven by the inclusion of the post test-year plant adjustment proposed by the Company in its response to Staff data request JMM4-6 and accepted by RUCO.

As shown on Schedule RLM-8, column (B), with supporting documentation on Schedule RLM-9 this adjustment increases the Wastewater District's adjusted test-year operating expenses by:

$13,788.

Operating Income Adjustment No. 2 – Property Tax Computation

RUCO has not made an adjustment to the methodology used by Johnson Utilities in calculating the property tax expenses as filed by the Company in the instant rate application. However, RUCO still advocates that the use of proposed revenues to determine an appropriate level of property tax expense to be recovered through rates distorts the methodology employed by the Arizona Department of Revenue and overstates the expense level.

RUCO is in the process of gathering information to produce a clear and concise report, which will provide the Commission with overwhelming evidence that will make it clear why the current practice of using proposed revenues to determine a utility's level of property tax is inappropriate.

Q. Has RUCO made an adjustment to the Company-proposed level of property tax expense?

A. Yes. RUCO has made adjustments to the property tax expense based on its calculation of adjusted and proposed operating revenues.

As shown on Schedule RLM-8, column (C), with supporting documentation on Schedule RLM-10 this adjustment changes the adjusted test-year operating expenses by:

($67) for the Water District, and

$2,813 for the Wastewater District.

<u>Wastewater District Only - Operating Income Adjustment No. 3 – Revenue Adjustment</u>

Q. Please explain your adjustment to the Wastewater District's test-year revenue.

A. This is a conforming adjustment to reflect the Company's response to Staff data request JMM 10-2.

This adjustment corrects an oversight where the Company had failed to charge for the effluent a golf course was receiving.

As shown on Schedule RLM-8, column (D), this adjustment increases the Wastewater District's adjusted test-year operating revenues by:

$65,351.

Operating Income Adjustment No. 4 – Amortization of Rate Case Expenses

Q. Please explain the adjustment to the rate case expense.

A. RUCO believes the $200,000 ($100,000 for each District) proposed by the Company is a fair and reasonable financial burden to the ratepayers to prepare and process this rate application. However, given the Company's propensity of not filing timely rate applications, RUCO recommends an amortization period of five years.

As shown on Schedule RLM-8, column (E), with supporting documentation on Schedule RLM-11 this adjustment decreases each Districts adjusted test-year expenses by:

($13,333).

Water District Only - Operating Income Adjustment No. 5 – Central Arizona Groundwater Replenishment District ("CAGRD") Tax Expense

Q. Does RUCO agree with the Company's proposal to recover CAGRD fees through a commodity-based surcharge?

A. No. RUCO disagrees with the Company's proposal to recover the CAGRD fees through a commodity-based surcharge.

Q. Why has RUCO taken this position on the CAGRD issue?

A. The Commission has already reviewed and denied a similar request by the Company. In Decision 64598, dated March 4, 2002, the Commission determined that the CAGRD tax cannot be treated as a pass-through tax, because it is not a "privilege, sales or use tax" since the CAGRD taxes are not based on sales revenue.

Q. Has RUCO made an adjustment to reverse the Company's proposal to recover CAGRD fees through a separate surcharge?

A. Yes. As shown on Schedule RLM-8, column (F), this adjustment increases the Water Districts adjusted test-year expenses by: $1,295,895.

RUCO's adjustment has the effect of decreasing the Company-proposed rate cut for water customers. However, it must be pointed out that under the Company's proposal, the CAGRD fees would have been recovered as

a surcharge that would be in addition to Johnson Utilities' regular monthly rates.

Operating Income Adjustment No. 6 – Unnecessary Expenses

Q. Please explain the adjustment to remove unnecessary expense.

A After an analysis of the Company's responses to Staff data requests JMM 1-32, I determined these expenditures are not required for the provisioning of either water or wastewater service.

This adjustment removes test-year expenses related to payments for memberships, food and beverages, gifts and lobbying, which are not necessary in the provisioning of public utility services.

As shown on Schedule RLM-8, column (G), with supporting documentation on Schedule RLM-12 this adjustment decreased each District's test-year expenses by:

$31,112 for the Water District, and

$924 for the Wastewater District.

Water District Only - Operating Income Adjustment No. 7 – Normalization of Purchased Power

Q. Please explain your adjustment to the Water District's test-year purchased power expense.

A. This is a conforming adjustment to reflect the Company's response to Staff data request JMM 8-3. This adjustment reflects a known and measurable contractual agreement between the Company and Pinal County for purchased power on a going-forward basis.

As shown on Schedule RLM-8, column (H), this adjustment increases the Water District's adjusted test-year operating expenses by: $13,251.

RUCO Operating Income Adjustment No. 8 – Income Taxes

Q. What is the purpose of RUCO Adjustment No. 8?

A. The adjustment removes income tax expenses as a qualified test-year operating expense.

Q. Please explain your adjustment that removes income taxes as an operating expense.

A. Johnson Utilities was organized as a Limited Liability Company ("LLC") as opposed to a C-Corporation that pays income taxes prior to the distribution of any profits (i.e. dividends) to its shareholders. Under the existing tax law, an LLC's earnings or losses are assigned to individual

shareholders on a pro rata basis. The shareholders are then required to report these earnings or losses on their individual income tax returns. Consequently, the Company's earnings or losses are then combined with the earnings and losses of each of Johnson Utilities' shareholders. Since Johnson Utilities itself does not pay income taxes, RUCO excluded income taxes as a normal operating expense of the Company.

As shown on Schedule RLM-8, column (I), this adjustment decreases each District's adjusted test-year expenses by:
($1,185,679) for the Water District, and
($330,522) for the Wastewater District.

COST OF CAPITAL

Q. Is RUCO proposing any adjustments to the Company proposed cost of capital?

A. Yes, it is. This adjustment decreases the Company's weighted average cost of capital by 225 basis points from 10.43 to 8.18 percent to reflect current market conditions.

This adjustment is fully explained in the testimony of RUCO witness William A. Rigsby.

RATE DESIGN AND PROOF OF RECOMMENDED REVENUE

Q. Have you prepared a Schedule presenting your recommended rate designs?

A. Yes, as shown on Schedule RLM-14, I am recommending a rate design that is consistent with RUCO's recommended revenue allocations and requirement.

Q. Please describe your recommended rate designs for the Company's water and wastewater operations.

A. The Water District's rate design provides for a 14.83 percent decrease equally across all classes of service, which is an increase of 2.13 percent over the Company's requested 16.96 percent decrease. However, if you impute the Company's proposed CAGRD tax surcharge, the Company's request decrease is reduced to 12.03 percent; which is 2.80 percent higher than RUCO's overall proposal.

The Wastewater District's rate design provides for a 5.15 percent increase equally across all classes of service, which is a decrease of 14.69 percent over the Company's requested 19.84 percent increase.

Q. Have you prepared a Schedule presenting proof of your recommended revenue?

A. Yes, I have. Proof that my recommended rate designs will produce the recommended required revenue as illustrated, is presented also on Schedule RLM-14.

TYPICAL RESIDENTIAL BILL ANALYSIS

A. Has RUCO prepared a Schedule representing the financial impact of RUCO's recommended rate design on the typical residential customer?

A. Yes. A typical bill analysis for residential customers with various levels of usage is presented on Schedule RLM-15.

Q. Does this conclude your direct testimony?

A. Yes, it does.

APPENDIX 1

Qualifications of Rodney Lane Moore

EDUCATION: Athabasca University
Bachelor's Degree in Business Administration - 1993

EXPERIENCE: Public Utilities Analyst V
Residential Utility Consumer Office
Phoenix, Arizona 85007
May 2001 - Present

My duties include review and analysis of financial records and other documents of regulated utilities for accuracy, completeness, and reasonableness. I am also responsible for the preparation of work papers and Schedules resulting in testimony and/or reports regarding utility applications for increase in rates, financings, and other matters. Extensive use of Microsoft Excel and Word, spreadsheet modeling and financial statement analysis.

Auditor
Arizona Corporation Commission
Phoenix, Arizona 85007
October 1999 - May 2001

My duties include review and analysis of financial records and other documents of regulated utilities for accuracy, completeness, and reasonableness. I am also responsible for the preparation of work papers and Schedules resulting in testimony and/or reports regarding utility applications for increase in rates, financings, and other matters. Extensive use of Microsoft Excel and Word, spreadsheet modeling and financial statement analysis.

RESUME OF RATE CASE AND REGULATORY PARTICIPATION

Utility Company	Docket No.
Rio Verde Utilities, Inc	WS-02156A-00-0321
Black Mountain Gas Company	G-03703A-01-0283
Green Valley Water Company	W-02025A-01-0559
New River Utility Company	W-01737A-01-0662

Utility Company	Docket No.
Dragoon Water Company	W-01917A-01-0851
Roosevelt Lake Resort, Inc.	W-01958A-02-0283
Southwest Gas Company	G-01551A-02-0425
Arizona-American Water Company	W-01303A-02-0867 et al.
Rio Rico Utilities, Inc.	WS-02676A-03-0434
Qwest Corporation	T-01051B-03-0454
Chaparral City Water Company	W-02113A-04-0616
Southwest Gas Company	G-01551A-04-0876
Arizona-American Water Company	W-01303A-05-0405
Far West Water and Sewer Company	WS-03478A-05-0801
Gold Canyon Sewer Company	SW-02519A-06-0015
Arizona-American Water Company	WS-01303A-06-0403
UNS Gas, Inc.	G-04204A-06-0463 et al.
UNS Electric, Inc.	E-04204A-06-0783
Tucson Electric Power Company	E-01933A-07-0402
Southwest Gas Company	G-01551A-07-0504
Arizona-American Water Company	W-01303A-08-0227 et al.

Johnson Utilities, LLC
Docket Nos. WS-02987A-08-0180
Test Year Ended December 31, 2007

Water District

TABLE OF CONTENTS TO RLM SCHEDULES

SCH. NO.	PAGE NO.	TITLE
RLM-1	1	REVENUE REQUIREMENT AND GROSS REVENUE CONVERSION FACTOR
RLM-2	1	RATE BASE
RLM-3	1	SUMMARY OF ORIGINAL COST RATE BASE ADJUSTMENTS
RLM-4	1 TO 11	RATE BASE ADJUSTMENT NO. 1 - (WATER ONLY) - ADJUSTMENT TO ACCUMULATED DEPRECIATION
TESTIMONY		RATE BASE ADJUSTMENT NO. 2 - REINSTATE ACC. AMORT. ON CIAC ASSOCIATED WITH HOOK UP FEES
TESTIMONY		RATE BASE ADJUSTMENT NO. 3 - REINSTATE CIAC ASSOCIATED WITH HOOK UP FEES
RLM-5		NOT INCLUDED IN THIS FILING - NO ADJUSTMENT FOR POST TEST-YEAR PLANT
RLM-6	1	RATE BASE ADJUSTMENT NO. 4 - (WATER ONLY) - MATERIALS AND SUPPLIES
RLM-7	1	OPERATING INCOME
RLM-8	1	SUMMARY OF OPERATING INCOME ADJUSTMENTS
RLM-9	1	OPERATING INCOME ADJUSTMENT NO. 1 - TEST YEAR DEPRECIATION EXPENSE
RLM-10	1	OPERATING INCOME ADJUSTMENT NO. 2 - PROPERTY TAX COMPUTATION
		OPERATING INCOME ADJUSTMENT NO. 3 - (WASTEWATER ONLY) - INTENTIONALLY LEFT BLANK
RLM-11	1	OPERATING INCOME ADJUSTMENT NO. 4 RATE CASE EXPENSE
TESTIMONY		OPERATING INCOME ADJUSTMENT NO. 5 - CAGRD TAX EXPENSE
RLM-12	1	OPERATING INCOME ADJUSTMENT NO. 6 - UNNECESSARY EXPENSES
TESTIMONY		OPERATING INCOME ADJUSTMENT NO. 7 - ANNUALIZE POWER EXPENSES
TESTIMONY		OPERATING INCOME ADJUSTMENT NO. 8 - INCOME TAX EXPENSE
RLM-13	1	COST OF CAPITAL
RLM-14	1 TO 3	RATE DESIGN AND PROOF OF RECOMMENDED REVENUE
RLM-15	1	TYPICAL RESIDENTIAL BILL ANALYSIS

Johnson Utilities, LLC
Docket Nos. WS-02987A-08-0180
Test Year Ended December 31, 2007

Water District
Schedule RLM-1

REVENUE REQUIREMENT

LINE NO.	DESCRIPTION	(A) COMPANY OCRB/FVRB COST	(B) RUCO OCRB/FVRB COST
1	Original Cost Rate Base	$ 6,607,841	$ 285,272
2	Adjusted Operating Income (Loss)	$ 2,118,161	$ 1,977,012
3	Current Rate Of Return (L2 / L1)	32.06%	693.03%
4	Required Operating Income (L5 X L1)	$ 689,198	$ 23,347
5	Required Rate Of Return On Fair Value Rate Base	10.43%	8.18%
6	Operating Income Deficiency (L4 - L2)	$ (1,428,963)	$ (1,953,664)
7	Gross Revenue Conversion Factor (RLM-1, Page 2)	1.5630	1.0000
8	Increase In Gross Revenue Requirement (L7 X L6)	$ (2,233,480)	$ (1,953,664)
9	Adjusted Test Year Revenue	$ 13,172,899	$ 13,172,899
10	Proposed Annual Revenue (L8 + L9)	$ 10,939,419	$ 11,219,234
11	Required Percentage Increase In Revenue (L8 / L9)	-16.96%	-14.83%
12	Rate Of Return On Common Equity	10.50%	8.31%

References:

Column (A): Company Schedules A-1 and C-1
Column (B): RUCO Schedule RLM-2, RLM-7, And RLM-13

Johnson Utilities, LLC
Docket Nos. WS-02987A-08-0180
Test Year Ended December 31, 2007

Water District
Schedule RLM-2

RATE BASE - ORIGINAL COST

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED OCRB/FVRB	(B) RUCO OCRB/FVRB ADJUSTMENTS	(C) RUCO ADJ'TED OCRB/FVRB
1	Gross Utility Plant In Service	$ 79,591,151	$ -	$ 79,591,151
2	Accumulated Depreciation	(6,199,124)	(4,584)	(6,203,708)
3	Net Utility Plant In Service (Sum L1 & L2)	$ 73,392,027	$ (4,584)	$ 73,387,443
4	Advances In Aid Of Const.	$ (37,840,520)	$ -	$ (37,840,520)
5	Contribution In Aid Of Const.	$ (23,146,285)	$ (6,931,078)	$ (30,077,363)
6	Accumulated Amortization Of CIAC	-	558,824	558,824
7	NET CIAC (L5 + L6)	$ (23,146,285)	$ (6,372,254)	$ (29,518,539)
8	Customer Meter Deposits	$ (6,779,771)	$ -	$ (6,779,771)
9	Deferred Income Taxes And Credits	$ -	$ -	$ -
10	Investment Tax Credits	$ -	$ -	$ -
11	Shared Gain On Well	$ -	$ -	$ -
12	Prepayments	$ -	$ -	$ -
13	Materials And Supplies	$ 348,852	$ 54,269	$ 403,121
14	Deferred Assets	$ 633,537	$ -	$ 633,537
15	Allowance For Working Capital	$ -	$ -	$ -
16	Rounding	$ 1	$ -	$ 1
17	TOTAL RATE BASE (Sum L's 3, 4, & 7 Thru 16)	$ 6,607,841	$ (6,322,569)	$ 285,272

References:
Column (A): Company Schedule B-1
Column (B): Schedule RLM-3
Column (C): Column (A) + Column (B)

Johnson Utilities, LLC
Docket Nos. WS-02987A-08-0180
Test Year Ended December 31, 2007

SUMMARY OF ORIGINAL COST RATE BASE ADJUSTMENTS

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED OCRB/FVRB	(B) ADJMT NO. 1 ACCUMULT'D DEPRECT'N	(C) ADJMT NO. 2 ACC AMORT ON (HUF) CIAC	(D) ADJMT NO. 3 REINSTATE (HUF) CIAC	(E) ADJMT NO. 4 MATERIALS & SUPPLIES	(F) ADJMT NO. 5 LEFT BLANK	(G) ADJMT NO. 6 LEFT BLANK	(H) RUCO ADJ'TED OCRB/FVRB
1	Gross Utility Plant In Service	$ 79,591,151	$ -	$ -	$ -	$ -	$ -	$ -	$ 79,591,151
2	Accumulated Depreciation	(6,199,124)	(4,584)	-	-	-	-	-	(6,203,708)
3	Net Utility Plant In Service (Sum L1 & L3)	$ 73,392,027	$ (4,584)	$ -	$ -	$ -	$ -	$ -	$ 73,387,443
4	Advances In Aid Of Const.	$ (37,840,520)	$ -	$ -	$ -	$ -	$ -	$ -	$ (37,840,520)
5	Contribution In Aid Of Const.	$ (25,004,821)	$ -	$ -	$ (6,931,078)	$ -	$ -	$ -	$ (31,935,899)
6	Accumulated Amortization Of CIAC	1,858,537	-	558,824	-	-	-	-	2,417,361
7	NET CIAC (L5 + L6)	$ (23,146,284)	$ -	$ 558,824	$ (6,931,078)	$ -	$ -	$ -	$ (29,518,538)
8	Customer Meter Deposits	$ (6,779,771)	$ -	$ -	$ -	$ -	$ -	$ -	$ (6,779,771)
9	Deferred Income Taxes And Credits	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
10	Investment Tax Credits	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
11	Shared Gain On Well	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
12	Prepayments	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
13	Materials And Supplies	$ 348,852	$ -	$ -	$ -	$ 54,269	$ -	$ -	$ 403,121
14	Deferred Assets	$ 633,537	$ -	$ -	$ -	$ -	$ -	$ -	$ 633,537
15	Allowance For Working Capital	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
16	Rounding	$ -							$ -
17	TOTAL RATE BASE (Sum L's 3, 4, & 7 Thru 16)	$ 6,607,841	$ (4,584)	$ 558,824	$ (6,931,078)	$ 54,269	$ -	$ -	$ 285,272

References:

Column (A): Company Schedule B-2
Column (B): Adjustment No. 1 - Adjust Test-Year Accumulated Depreciation (See RLM-4, Pages 1 Thru 11, And Testimony, RLM)
Column (C): Adjustment No. 2 - Reverse Company's Adjustment To Remove The CIAC's Accumulated Amortization Associated With Unexpended Hook-Up Fees (See Testimony, RLM)
Column (D): Adjustment No. 3 - Reverse Company's Adjustment To Remove The CIAC Associated With Unexpended Hook-Up Fees (See Testimony, RLM)
Column (E): Adjustment No. 4 - Adjust Material And Supplies (See RLM-6 And Testimony, RLM)
Column (F): Adjustment No. 5 - Intentionally Left Blank
Column (G): Adjustment No. 6 - Intentionally Left Blank
Column (H): Sum Of Columns (A), (B), (C), (D), (E), (F) & (G)

TEST YEAR PLANT SCHEDULES
PRIOR TEST YEAR ENDED DECEMBER 31, 1997

LINE NO.	ACCT NO.	DESCRIPTION	(A) DEPRECIATION RATES	(B) PLANT ADDITIONS	(C) PLANT ADJUSTMENTS	(D) PLANT RETIRMENTS	(E) TOTAL PLANT VALUE	(F) ACCUMULATED DEPRECIATION
1	301	Organization Costs	0.0000%	$ -	$ -	$ -	$ -	$ -
2	302	Franchises	0.0000%	-	-	-	-	-
3	303	Land and Land Rights	0.0000%	-	-	-	-	-
4	304	Structures And Improvements	2.5000%	-	-	-	-	-
5	305	Collecting And Impounding Reservoirs	2.5000%	-	-	-	-	-
6	306	Lake, River And Other Intakes	2.5000%	-	-	-	-	-
7	307	Wells And Springs	2.5000%	-	-	-	-	-
8	308	Infiltration Gallaries And Tunnels	2.5000%	-	-	-	-	-
9	309	Supply Mains	2.5000%	-	-	-	-	-
10	310	Power Generation Equipment	2.5000%	-	-	-	-	-
11	311	Electric Pumping Equipment	2.5000%	-	-	-	-	-
12	320	Water Treatment Plant	2.5000%	-	-	-	-	-
13	330	Distribution Reservoirs And Standpipes	2.5000%	-	-	-	-	-
14	331	Transmission And Distribution Lines	2.5000%	-	-	-	-	-
15	333	Services	2.5000%	-	-	-	-	-
16	334	Meters And Meter Installations	2.5000%	-	-	-	-	-
17	335	Hydrants	2.5000%	-	-	-	-	-
18	336	Backflow Prevention Devices	2.5000%	-	-	-	-	-
19	339	Other Plant And Miscellaneous Equipment	2.5000%	-	-	-	-	-
20	340	Office Furniture And Equipment	2.5000%	-	-	-	-	-
21	341	Transportation Equipment	2.5000%	-	-	-	-	-
22	342	Stores Equipment	2.5000%	-	-	-	-	-
23	343	Tools And Equipment	2.5000%	-	-	-	-	-
24	344	Laboratory Equipment	2.5000%	-	-	-	-	-
25	345	Power Operated Equipment	2.5000%	-	-	-	-	-
26	346	Communication Equipment	2.5000%	-	-	-	-	-
27	347	Miscellaneous Equipment	2.5000%	-	-	-	-	-
28	348	Other Tangible Plant	2.5000%	-	-	-	-	-
29		**TOTAL WATER PLANT**		$ -	$ -	$ -	$ -	$ -
30		Company As Filed		-	-	-	-	-
31		Difference		$ -	$ -	$ -	$ -	$ -

References:

Column (A): Approved Depreciation Rate From Original CC&N In Decision No. 60223 Dated May 27, 1997

Columns (B) (C) (D) (E) & (F): Approved Plant Value In Prior Decision No. 60223

TEST YEAR PLANT SCHEDULES - CONT'D
YEAR ENDED DECEMBER 31, 1998

LINE NO.	ACCT NO.	ACCOUNT NAME	(A) PLANT ADDITIONS	(B) PLANT ADJUSTMENTS	(C) NET PLANT ADDITIONS	(D) PLANT RETIRMENTS	(E) TOTAL PLANT VALUE	(F) DEPRECIATION EXPENSE	(G) ACCUMULATED DEPRECIATION	(H) NET PLANT VALUE
1	301	Organization Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
2	302	Franchises	-	-	-	-	-	-	-	-
3	303	Land and Land Rights	-	-	-	-	-	-	-	-
4	304	Structures And Improvements	-	-	-	-	-	-	-	-
5	305	Collecting And Impounding Reservoirs	-	-	-	-	-	-	-	-
6	306	Lake, River And Other Intakes	-	-	-	-	-	-	-	-
7	307	Wells And Springs	115,000	-	115,000	-	115,000	(1,438)	(1,438)	113,563
8	308	Infiltration Gallaries And Tunnels	-	-	-	-	-	-	-	-
9	309	Supply Mains	-	-	-	-	-	-	-	-
10	310	Power Generation Equipment	-	-	-	-	-	-	-	-
11	311	Electric Pumping Equipment	43,750	-	43,750	-	43,750	(547)	(547)	43,203
12	320	Water Treatment Plant	-	-	-	-	-	-	-	-
13	330	Distribution Reservoirs And Standpipes	-	-	-	-	-	-	-	-
14	331	Transmission And Distribution Lines	282,692	-	282,692	-	282,692	(3,534)	(3,534)	279,158
15	333	Services	-	-	-	-	-	-	-	-
16	334	Meters And Meter Installations	-	-	-	-	-	-	-	-
17	335	Hydrants	-	-	-	-	-	-	-	-
18	336	Backflow Prevention Devices	-	-	-	-	-	-	-	-
19	339	Other Plant And Miscellaneous Equipment	-	-	-	-	-	-	-	-
20	340	Office Furniture And Equipment	-	-	-	-	-	-	-	-
21	341	Transportation Equipment	-	-	-	-	-	-	-	-
22	342	Stores Equipment	-	-	-	-	-	-	-	-
23	343	Tools And Equipment	-	-	-	-	-	-	-	-
24	344	Laboratory Equipment	-	-	-	-	-	-	-	-
25	345	Power Operated Equipment	-	-	-	-	-	-	-	-
26	346	Communication Equipment	-	-	-	-	-	-	-	-
27	347	Miscellaneous Equipment	-	-	-	-	-	-	-	-
28	348	Other Tangible Plant	-	-	-	-	-	-	-	-
29		TOTAL WATER PLANT	$ 441,442	$ -	$ 441,442	$ -	$ 441,442	$ (5,518)	$ (5,518)	$ 435,924
30		Company As Filed	441,442	-	441,442	-	441,442	(5,518)	(5,518)	435,924
31		Difference	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -

References:

Columns (A) (B) (C) (D): Company Schedules B-2
Column (E): Schedule RLM-4, Page 1, Column (C) + Column (C) + Column (D)
Column (F): [(Col. (C) + Col. (D)) X RLM-4, Page 1, Col. (A) X 1/2 yr. conv.] + [RLM-4, Page 1, Col. (E) + Col. (D)) X RLM-4, Page 1, Col. (A)]
Column (G): Schedule RLM-4, Page 1, Column (F) + Column (D) + Column (F)
Column (H): Column (E) + Column (G)

TEST YEAR PLANT SCHEDULES - CONT'D
YEAR ENDED DECEMBER 31, 1999

LINE NO.	ACCT NO.	ACCOUNT NAME	(A) PLANT ADDITIONS	(B) PLANT ADJUSTMENTS	(C) NET PLANT ADDITIONS	(D) PLANT RETIRMENTS	(E) TOTAL PLANT VALUE	(F) DEPRECIATION EXPENSE	(G) ACCUMULATED DEPRECIATION	(H) NET PLANT VALUE
1	301	Organization Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
2	302	Franchises	-	-	-	-	-	-	-	-
3	303	Land and Land Rights	244,400	-	244,400	-	244,400	-	-	244,400
4	304	Structures And Improvements	102,374	-	102,374	-	102,374	(1,280)	(1,280)	101,094
5	305	Collecting And Impounding Reservoirs	-	-	-	-	-	-	-	-
6	306	Lake, River And Other Intakes	-	-	-	-	-	-	-	-
7	307	Wells And Springs	209,355	-	209,355	-	324,355	(5,492)	(6,929)	317,426
8	308	Infiltration Gallaries And Tunnels	-	-	-	-	-	-	-	-
9	309	Supply Mains	-	-	-	-	-	-	-	-
10	310	Power Generation Equipment	-	-	-	-	-	-	-	-
11	311	Electric Pumping Equipment	331,299	-	331,299	-	375,049	(5,235)	(5,782)	369,267
12	320	Water Treatment Plant	-	-	-	-	-	-	-	-
13	330	Distribution Reservoirs And Standpipes	-	-	-	-	-	-	-	-
14	331	Transmission And Distribution Lines	2,537,047	-	2,537,047	-	2,819,739	(38,780)	(42,314)	2,777,425
15	333	Services	155,100	-	155,100	-	155,100	(1,939)	(1,939)	153,161
16	334	Meters And Meter Installations	32,941	-	32,941	-	32,941	(412)	(412)	32,529
17	335	Hydrants	60,225	-	60,225	-	60,225	(753)	(753)	59,472
18	336	Backflow Prevention Devices	-	-	-	-	-	-	-	-
19	339	Other Plant And Miscellaneous Equipment	-	-	-	-	-	-	-	-
20	340	Office Furniture And Equipment	-	-	-	-	-	-	-	-
21	341	Transportation Equipment	-	-	-	-	-	-	-	-
22	342	Stores Equipment	-	-	-	-	-	-	-	-
23	343	Tools And Equipment	16,230	-	16,230	-	16,230	(203)	(203)	16,027
24	344	Laboratory Equipment	-	-	-	-	-	-	-	-
25	345	Power Operated Equipment	-	-	-	-	-	-	-	-
26	346	Communication Equipment	-	-	-	-	-	-	-	-
27	347	Miscellaneous Equipment	-	-	-	-	-	-	-	-
28	348	Other Tangible Plant	-	-	-	-	-	-	-	-
29		TOTAL WATER PLANT	$ 3,688,971	$ -	$ 3,688,971	$ -	$ 4,130,413	$ (54,093)	$ (59,611)	$ 4,070,802
30		Company As Filed	3,688,971	-	3,688,971	-	4,130,413	(54,093)	(59,611)	4,070,802
31		Difference	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -

References:

Columns (A) (B) (C) (D): Company Schedules B-2
Column (E): Schedule RLM-4, Page 2, Column (C) + Column (C) + Column (D)
Column (F): [(Col. (C) + Col. (D)) X RLM-4, Page 1, Col. (A) X 1/2 yr. conv.] + [RLM-4, Page 2, Col. (E) + Col. (D)) X RLM-4, Page 1, Col. (A)]
Column (G): Schedule RLM-4, Page 2, Column (G) + Column (D) + Column (F)
Column (H): Column (E) + Column (G)

TEST YEAR PLANT SCHEDULES - CONT'D
YEAR ENDED DECEMBER 31, 2000

LINE NO.	ACCT NO.	ACCOUNT NAME	(A) PLANT ADDITIONS	(B) PLANT ADJUSTMENTS	(C) NET PLANT ADDITIONS	(D) PLANT RETIRMENTS	(E) TOTAL PLANT VALUE	(F) DEPRECIATION EXPENSE	(G) ACCUMULATED DEPRECIATION	(H) NET PLANT VALUE
1	301	Organization Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
2	302	Franchises	-	-	-	-	-	-	-	-
3	303	Land and Land Rights	27,137	-	27,137	-	271,537	-	-	271,537
4	304	Structures And Improvements	53,356	-	53,356	-	155,730	(3,226)	(4,506)	151,224
5	305	Collecting And Impounding Reservoirs	-	-	-	-	-	-	-	-
6	306	Lake, River And Other Intakes	-	-	-	-	-	-	-	-
7	307	Wells And Springs	32,979	-	32,979	-	357,334	(8,521)	(15,451)	341,883
8	308	Infiltration Gallaries And Tunnels	-	-	-	-	-	-	-	-
9	309	Supply Mains	-	-	-	-	-	-	-	-
10	310	Power Generation Equipment	-	-	-	-	-	-	-	-
11	311	Electric Pumping Equipment	-	(74,250)	(74,250)	-	300,799	(8,448)	(14,230)	286,569
12	320	Water Treatment Plant	-	-	-	-	-	-	-	-
13	330	Distribution Reservoirs And Standpipes	-	-	-	-	-	-	-	-
14	331	Transmission And Distribution Lines	1,396,832	-	1,396,832	-	4,216,571	(87,954)	(130,268)	4,086,303
15	333	Services	317,900	-	317,900	-	473,000	(7,851)	(9,790)	463,210
16	334	Meters And Meter Installations	16,046	-	16,046	-	48,987	(1,024)	(1,436)	47,551
17	335	Hydrants	221,462	-	221,462	-	281,687	(4,274)	(5,027)	276,660
18	336	Backflow Prevention Devices	-	-	-	-	-	-	-	-
19	339	Other Plant And Miscellaneous Equipment	-	-	-	-	-	-	-	-
20	340	Office Furniture And Equipment	1,355	-	1,355	-	1,355	(17)	(17)	1,338
21	341	Transportation Equipment	36,142	-	36,142	-	36,142	(452)	(452)	35,690
22	342	Stores Equipment	-	-	-	-	-	-	-	-
23	343	Tools And Equipment	-	-	-	-	16,230	(406)	(609)	15,621
24	344	Laboratory Equipment	-	-	-	-	-	-	-	-
25	345	Power Operated Equipment	-	-	-	-	-	-	-	-
26	346	Communication Equipment	-	-	-	-	-	-	-	-
27	347	Miscellaneous Equipment	-	-	-	-	-	-	-	-
28	348	Other Tangible Plant	-	-	-	-	-	-	-	-
29		**TOTAL WATER PLANT**	$ 2,103,209	$ (74,250)	$ 2,028,959	$ -	$ 6,159,372	$ (122,173)	$ (181,784)	$ 5,977,588
30		Company As Filed	2,103,209	(74,250)	2,028,959	-	6,159,372	(122,173)	(181,784)	5,977,588
31		Difference	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -

References:

Columns (A) (B) (C) (D): Company Schedules B-2
Column (E): Schedule RLM-4, Page 3, Column (C) + Column (C) + Column (D)
Column (F): [(Col. (C) + Col. (D)) X RLM-4, Page 1, Col. (A) X 1/2 yr. conv.] + [RLM-4, Page 3, Col. (E) + Col. (D)) X RLM-4, Page 1, Col. (A)]
Column (G): Schedule RLM-4, Page 3, Column (G) + Column (D) + Column (F)
Column (H): Column (E) + Column (G)

TEST YEAR PLANT SCHEDULES - CONT'D
YEAR ENDED DECEMBER 31, 2001

LINE NO.	ACCT NO.	ACCOUNT NAME	(A) PLANT ADDITIONS	(B) PLANT ADJUSTMENTS	(C) NET PLANT ADDITIONS	(D) PLANT RETIRMENTS	(E) TOTAL PLANT VALUE	(F) DEPRECIATION EXPENSE	(G) ACCUMULATED DEPRECIATION	(H) NET PLANT VALUE
1	301	Organization Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
2	302	Franchises	-	-	-	-	-	-	-	-
3	303	Land and Land Rights	-	-	-	-	271,537	-	-	271,537
4	304	Structures And Improvements	15,461	-	15,461	-	171,191	(4,087)	(8,592)	162,599
5	305	Collecting And Impounding Reservoirs	-	-	-	-	-	-	-	-
6	306	Lake, River And Other Intakes	-	-	-	-	-	-	-	-
7	307	Wells And Springs	273,474	(157,300)	116,174	-	473,508	(10,386)	(25,836)	447,672
8	308	Infiltration Gallaries And Tunnels	-	-	-	-	-	-	-	-
9	309	Supply Mains	-	-	-	-	-	-	-	-
10	310	Power Generation Equipment	-	-	-	-	-	-	-	-
11	311	Electric Pumping Equipment	102,124	-	102,124	-	402,923	(8,797)	(23,026)	379,897
12	320	Water Treatment Plant	-	-	-	-	-	-	-	-
13	330	Distribution Reservoirs And Standpipes	90,972	157,300	248,272	-	248,272	(3,103)	(3,103)	245,169
14	331	Transmission And Distribution Lines	240,418	-	240,418	-	4,456,989	(108,420)	(238,687)	4,218,302
15	333	Services	-	-	-	-	473,000	(11,825)	(21,615)	451,385
16	334	Meters And Meter Installations	21,024	-	21,024	-	70,011	(1,487)	(2,923)	67,088
17	335	Hydrants	-	-	-	-	281,687	(7,042)	(12,069)	269,618
18	336	Backflow Prevention Devices	-	-	-	-	-	-	-	-
19	339	Other Plant And Miscellaneous Equipment	-	-	-	-	-	-	-	-
20	340	Office Furniture And Equipment	-	(1,355)	(1,355)	-	-	(17)	(34)	(34)
21	341	Transportation Equipment	-	(36,142)	(36,142)	-	-	(452)	(904)	(904)
22	342	Stores Equipment	-	-	-	-	-	-	-	-
23	343	Tools And Equipment	-	(16,230)	(16,230)	-	-	(203)	(812)	(812)
24	344	Laboratory Equipment	-	-	-	-	-	-	-	-
25	345	Power Operated Equipment	-	-	-	-	-	-	-	-
26	346	Communication Equipment	-	-	-	-	-	-	-	-
27	347	Miscellaneous Equipment	-	-	-	-	-	-	-	-
28	348	Other Tangible Plant	-	-	-	-	-	-	-	-
29		**TOTAL WATER PLANT**	$ 743,473	$ (53,727)	$ 689,746	$ -	$ 6,849,118	$ (155,818)	$ (337,602)	$ 6,511,516
30		Company As Filed	743,473	(53,727)	689,746	-	6,849,118	(154,069)	(335,853)	6,513,265
31		Difference	$ -	$ -	$ -	$ -	$ -	$ (1,749)	$ (1,749)	$ (1,749)

References:

Columns (A) (B) (C) (D): Company Schedules B-2
Column (E): Schedule RLM-4, Page 4, Column (C) + Column (C) + Column (D)
Column (F): [(Col. (C) + Col. (D)) X RLM-4, Page 1, Col. (A) X 1/2 yr. conv.] + [RLM-4, Page 4, Col. (E) + Col. (D)) X RLM-4, Page 1, Col. (A)]
Column (G): Schedule RLM-4, Page 4, Column (G) + Column (D) + Column (F)
Column (H): Column (E) + Column (G)

TEST YEAR PLANT SCHEDULES - CONT'D
YEAR ENDED DECEMBER 31, 2002

LINE NO.	ACCT NO.	ACCOUNT NAME	(A) PLANT ADDITIONS	(B) PLANT ADJUSTMENTS	(C) NET PLANT ADDITIONS	(D) PLANT RETIRMENTS	(E) TOTAL PLANT VALUE	(F) DEPRECIATION EXPENSE	(G) ACCUMULATED DEPRECIATION	(H) NET PLANT VALUE
1	301	Organization Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
2	302	Franchises	-	-	-	-	-	-	-	-
3	303	Land and Land Rights	-	-	-	-	271,537	-	-	271,537
4	304	Structures And Improvements	-	-	-	-	171,191	(4,280)	(12,872)	158,319
5	305	Collecting And Impounding Reservoirs	-	-	-	-	-	-	-	-
6	306	Lake, River And Other Intakes	-	-	-	-	-	-	-	-
7	307	Wells And Springs	-	-	-	-	473,508	(11,838)	(37,674)	435,834
8	308	Infiltration Gallaries And Tunnels	-	-	-	-	-	-	-	-
9	309	Supply Mains	-	-	-	-	-	-	-	-
10	310	Power Generation Equipment	-	-	-	-	-	-	-	-
11	311	Electric Pumping Equipment	22,050	-	22,050	-	424,973	(10,349)	(33,375)	391,598
12	320	Water Treatment Plant	-	-	-	-	-	-	-	-
13	330	Distribution Reservoirs And Standpipes	-	-	-	-	248,272	(6,207)	(9,310)	238,962
14	331	Transmission And Distribution Lines	5,764,948	457,745	6,222,693	-	10,679,682	(189,208)	(427,896)	10,251,786
15	333	Services	-	-	-	-	473,000	(11,825)	(33,440)	439,560
16	334	Meters And Meter Installations	178,075	-	178,075	-	248,086	(3,976)	(6,900)	241,186
17	335	Hydrants	157,282	-	157,282	-	438,969	(9,008)	(21,077)	417,892
18	336	Backflow Prevention Devices	-	-	-	-	-	-	-	-
19	339	Other Plant And Miscellaneous Equipment	-	-	-	-	-	-	-	-
20	340	Office Furniture And Equipment	-	-	-	-	-	-	(34)	(34)
21	341	Transportation Equipment	-	-	-	-	-	-	(904)	(904)
22	342	Stores Equipment	-	-	-	-	-	-	-	-
23	343	Tools And Equipment	-	-	-	-	-	-	(812)	(812)
24	344	Laboratory Equipment	-	-	-	-	-	-	-	-
25	345	Power Operated Equipment	-	-	-	-	-	-	-	-
26	346	Communication Equipment	-	-	-	-	-	-	-	-
27	347	Miscellaneous Equipment	-	-	-	-	-	-	-	-
28	348	Other Tangible Plant	-	-	-	-	-	-	-	-
29		TOTAL WATER PLANT	$ 6,122,355	$ 457,745	$ 6,580,100	$ -	$ 13,429,218	$ (246,691)	$ (584,293)	$ 12,844,925
30		Company As Filed	6,122,355	457,745	6,580,100	-	13,429,218	(246,691)	(582,544)	12,846,674
31		Difference	$ -	$ -	$ -	$ -	$ -	$ -	$ (1,749)	$ (1,749)

References:

Columns (A) (B) (C) (D): Company Schedules B-2
Column (E): Schedule RLM-4, Page 5, Column (C) + Column (C) + Column (D)
Column (F): [(Col. (C) + Col. (D)) X RLM-4, Page 1, Col. (A) X 1/2 yr. conv.] + [RLM-4, Page 5, Col. (E) + Col. (D)) X RLM-4, Page 1, Col. (A)]
Column (G): Schedule RLM-4, Page 5, Column (G) + Column (D) + Column (F)
Column (H): Column (E) + Column (G)

TEST YEAR PLANT SCHEDULES - CONT'D
YEAR ENDED DECEMBER 31, 2003

LINE NO.	ACCT NO.	ACCOUNT NAME	(A) PLANT ADDITIONS	(B) PLANT ADJUSTMENTS	(C) NET PLANT ADDITIONS	(D) PLANT RETIRMENTS	(E) TOTAL PLANT VALUE	(F) DEPRECIATION EXPENSE	(G) ACCUMULATED DEPRECIATION	(H) NET PLANT VALUE
1	301	Organization Costs	$ -	$ -	$ -	$ -	-	-	-	$ -
2	302	Franchises	-	-	-	-	-	-	-	-
3	303	Land and Land Rights	-	-	-	-	271,537	-	-	271,537
4	304	Structures And Improvements	-	-	-	-	171,191	(4,280)	(17,152)	154,039
5	305	Collecting And Impounding Reservoirs	-	-	-	-	-	-	-	-
6	306	Lake, River And Other Intakes	-	-	-	-	-	-	-	-
7	307	Wells And Springs	319,090	-	319,090	-	792,598	(15,826)	(53,500)	739,098
8	308	Infiltration Gallaries And Tunnels	-	-	-	-	-	-	-	-
9	309	Supply Mains	-	-	-	-	-	-	-	-
10	310	Power Generation Equipment	-	-	-	-	-	-	-	-
11	311	Electric Pumping Equipment	-	-	-	-	424,973	(10,624)	(44,000)	380,973
12	320	Water Treatment Plant	5,455	-	5,455	-	5,455	(68)	(68)	5,387
13	330	Distribution Reservoirs And Standpipes	-	-	-	-	248,272	(6,207)	(15,517)	232,755
14	331	Transmission And Distribution Lines	6,623,922	1,498,885	8,122,807	-	18,802,489	(368,527)	(796,423)	18,006,066
15	333	Services	-	-	-	-	473,000	(11,825)	(45,265)	427,735
16	334	Meters And Meter Installations	1,173,247	-	1,173,247	-	1,421,333	(20,868)	(27,767)	1,393,566
17	335	Hydrants	459,546	-	459,546	-	898,515	(16,719)	(37,796)	860,719
18	336	Backflow Prevention Devices	-	-	-	-	-	-	-	-
19	339	Other Plant And Miscellaneous Equipment	-	-	-	-	-	-	-	-
20	340	Office Furniture And Equipment	-	-	-	-	-	-	(34)	(34)
21	341	Transportation Equipment	34,226	-	34,226	-	34,226	(428)	(1,331)	32,895
22	342	Stores Equipment	-	-	-	-	-	-	-	-
23	343	Tools And Equipment	-	-	-	-	-	-	(812)	(812)
24	344	Laboratory Equipment	-	-	-	-	-	-	-	-
25	345	Power Operated Equipment	-	-	-	-	-	-	-	-
26	346	Communication Equipment	-	-	-	-	-	-	-	-
27	347	Miscellaneous Equipment	-	-	-	-	-	-	-	-
28	348	Other Tangible Plant	-	-	-	-	-	-	-	-
29		TOTAL WATER PLANT	$ 8,615,486	$ 1,498,885	$ 10,114,371	$ -	$ 23,543,589	$ (455,372)	$ (1,039,664)	$ 22,503,925
30		Company As Filed	8,615,486	1,498,885	10,114,371	-	23,543,589	(455,372)	(1,037,916)	22,505,673
31		Difference	$ -	$ -	$ -	$ -	$ -	$ -	$ (1,748)	$ (1,748)

References:

Columns (A) (B) (C) (D): Company Schedules B-2
Column (E): Schedule RLM-4, Page 6, Column (C) + Column (C) + Column (D)
Column (F): [(Col. (C) + Col. (D)) X RLM-4, Page 1, Col. (A) X 1/2 yr. conv.] + [RLM-4, Page 6, Col. (E) + Col. (D)) X RLM-4, Page 1, Col. (A)]
Column (G): Schedule RLM-4, Page 6, Column (G) + Column (D) + Column (F)
Column (H): Column (E) + Column (G)

TEST YEAR PLANT SCHEDULES - CONT'D
YEAR ENDED DECEMBER 31, 2004

LINE NO.	ACCT NO.	ACCOUNT NAME	(A) PLANT ADDITIONS	(B) PLANT ADJUSTMENTS	(C) NET PLANT ADDITIONS	(D) PLANT RETIRMENTS	(E) TOTAL PLANT VALUE	(F) DEPRECIATION EXPENSE	(G) ACCUMULATED DEPRECIATION	(H) NET PLANT VALUE
1	301	Organization Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
2	302	Franchises	-	-	-	-	-	-	-	-
3	303	Land and Land Rights	901	-	901	-	272,438	-	-	272,438
4	304	Structures And Improvements	458,157	-	458,157	-	629,348	(10,007)	(27,159)	602,189
5	305	Collecting And Impounding Reservoirs	-	-	-	-	-	-	-	-
6	306	Lake, River And Other Intakes	-	-	-	-	-	-	-	-
7	307	Wells And Springs	80,000	-	80,000	-	872,598	(20,815)	(74,315)	798,283
8	308	Infiltration Gallaries And Tunnels	-	-	-	-	-	-	-	-
9	309	Supply Mains	-	-	-	-	-	-	-	-
10	310	Power Generation Equipment	-	-	-	-	-	-	-	-
11	311	Electric Pumping Equipment	-	-	-	-	424,973	(10,624)	(54,624)	370,349
12	320	Water Treatment Plant	16,401	-	16,401	-	21,856	(341)	(410)	21,446
13	330	Distribution Reservoirs And Standpipes	-	-	-	-	248,272	(6,207)	(21,724)	226,548
14	331	Transmission And Distribution Lines	136,085	8,764,671	8,900,756	-	27,703,245	(581,322)	(1,377,745)	26,325,500
15	333	Services	-	-	-	-	473,000	(11,825)	(57,090)	415,910
16	334	Meters And Meter Installations	1,108,316	-	1,108,316	-	2,529,649	(49,387)	(77,155)	2,452,494
17	335	Hydrants	-	-	-	-	898,515	(22,463)	(60,259)	838,256
18	336	Backflow Prevention Devices	-	-	-	-	-	-	-	-
19	339	Other Plant And Miscellaneous Equipment	-	-	-	-	-	-	-	-
20	340	Office Furniture And Equipment	-	-	-	-	-	-	(34)	(34)
21	341	Transportation Equipment	44,945	-	44,945	-	79,171	(1,417)	(2,749)	76,422
22	342	Stores Equipment	-	-	-	-	-	-	-	-
23	343	Tools And Equipment	-	-	-	-	-	-	(812)	(812)
24	344	Laboratory Equipment	-	-	-	-	-	-	-	-
25	345	Power Operated Equipment	-	-	-	-	-	-	-	-
26	346	Communication Equipment	-	-	-	-	-	-	-	-
27	347	Miscellaneous Equipment	-	-	-	-	-	-	-	-
28	348	Other Tangible Plant	-	-	-	-	-	-	-	-
29		**TOTAL WATER PLANT**	$ 1,844,805	$ 8,764,671	$ 10,609,476	$ -	$ 34,153,065	$ (714,408)	$ (1,754,073)	$ 32,398,992
30		Company As Filed	1,844,805	8,764,671	10,609,476	-	34,153,065	(714,408)	(1,752,324)	32,400,741
31		Difference	$ -	$ -	$ -	$ -	$ -	$ -	$ (1,749)	$ (1,749)

References:

Columns (A) (B) (C) (D): Company Schedules B-2
Column (E): Schedule RLM-4, Page 7, Column (C) + Column (C) + Column (D)
Column (F): [(Col. (C) + Col. (D)) X RLM-4, Page 1, Col. (A) X 1/2 yr. conv.] + [RLM-4, Page 7, Col. (E) + Col. (D)) X RLM-4, Page 1, Col. (A)]
Column (G): Schedule RLM-4, Page 7, Column (G) + Column (D) + Column (F)
Column (H): Column (E) + Column (G)

TEST YEAR PLANT SCHEDULES - CONT'D
YEAR ENDED DECEMBER 31, 2005

LINE NO.	ACCT NO.	ACCOUNT NAME	(A) PLANT ADDITIONS	(B) PLANT ADJUSTMENTS	(C) NET PLANT ADDITIONS	(D) PLANT RETIRMENTS	(E) TOTAL PLANT VALUE	(F) DEPRECIATION EXPENSE	(G) ACCUMULATED DEPRECIATION	(H) NET PLANT VALUE
1	301	Organization Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
2	302	Franchises	-	-	-	-	-	-	-	-
3	303	Land and Land Rights	-	-	-	-	272,438	-	-	272,438
4	304	Structures And Improvements	-	-	-	-	629,348	(15,734)	(42,892)	586,456
5	305	Collecting And Impounding Reservoirs	-	-	-	-	-	-	-	-
6	306	Lake, River And Other Intakes	-	-	-	-	-	-	-	-
7	307	Wells And Springs	452,618	454,498	907,116	-	1,779,714	(33,154)	(107,469)	1,672,245
8	308	Inflitration Gallaries And Tunnels	-	-	-	-	-	-	-	-
9	309	Supply Mains	-	-	-	-	-	-	-	-
10	310	Power Generation Equipment	-	-	-	-	-	-	-	-
11	311	Electric Pumping Equipment	-	-	-	-	424,973	(10,624)	(65,248)	359,725
12	320	Water Treatment Plant	-	-	-	-	21,856	(546)	(956)	20,900
13	330	Distribution Reservoirs And Standpipes	-	-	-	-	248,272	(6,207)	(27,931)	220,341
14	331	Transmission And Distribution Lines	8,337,862	2,023,385	10,361,247	-	38,064,492	(822,097)	(2,199,841)	35,864,651
15	333	Services	-	-	-	-	473,000	(11,825)	(68,915)	404,085
16	334	Meters And Meter Installations	1,602,159	-	1,602,159	-	4,131,808	(83,268)	(160,423)	3,971,385
17	335	Hydrants	969,120	-	969,120	-	1,867,635	(34,577)	(94,835)	1,772,800
18	336	Backflow Prevention Devices	-	-	-	-	-	-	-	-
19	339	Other Plant And Miscellaneous Equipment	-	-	-	-	-	-	-	-
20	340	Office Furniture And Equipment	-	-	-	-	-	-	(34)	(34)
21	341	Transportation Equipment	-	(79,171)	(79,171)	-	-	(990)	(3,738)	(3,738)
22	342	Stores Equipment	-	-	-	-	-	-	-	-
23	343	Tools And Equipment	-	-	-	-	-	-	(812)	(812)
24	344	Laboratory Equipment	-	-	-	-	-	-	-	-
25	345	Power Operated Equipment	-	-	-	-	-	-	-	-
26	346	Communication Equipment	-	-	-	-	-	-	-	-
27	347	Miscellaneous Equipment	-	-	-	-	-	-	-	-
28	348	Other Tangible Plant	-	-	-	-	-	-	-	-
29		TOTAL WATER PLANT	$ 11,361,759	$ 2,398,712	$ 13,760,471	$ -	$ 47,913,536	$ (1,019,022)	$ (2,773,095)	$ 45,140,442
30		Company As Filed	11,361,759	2,398,712	13,760,471	-	47,913,536	(1,016,187)	(2,768,511)	45,145,025
31		Difference	$ -	$ -	$ -	$ -	$ -	$ (2,835)	$ (4,584)	$ (4,584)

References:

Columns (A) (B) (C) (D): Company Schedules B-2
Column (E): Schedule RLM-4, Page 8, Column (C) + Column (C) + Column (D)
Column (F): [(Col. (C) + Col. (D)) X RLM-4, Page 1, Col. (A) X 1/2 yr. conv.] + [RLM-4, Page 8, Col. (E) + Col. (D)) X RLM-4, Page 1, Col. (A)]
Column (G): Schedule RLM-4, Page 8, Column (G) + Column (D) + Column (F)
Column (H): Column (E) + Column (G)

TEST YEAR PLANT SCHEDULES - CONT'D
YEAR ENDED DECEMBER 31, 2006

LINE NO.	ACCT NO.	ACCOUNT NAME	(A) PLANT ADDITIONS	(B) PLANT ADJUSTMENTS	(C) NET PLANT ADDITIONS	(D) PLANT RETIRMENTS	(E) TOTAL PLANT VALUE	(F) DEPRECIATION EXPENSE	(G) ACCUMULATED DEPRECIATION	(H) NET PLANT VALUE
1	301	Organization Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
2	302	Franchises	-	-	-	-	-	-	-	-
3	303	Land and Land Rights	-	-	-	-	272,438	-	-	272,438
4	304	Structures And Improvements	4,258,830	2,390,824	6,649,654	-	7,279,002	(98,854)	(141,747)	7,137,255
5	305	Collecting And Impounding Reservoirs	-	-	-	-	-	-	-	-
6	306	Lake, River And Other Intakes	-	-	-	-	-	-	-	-
7	307	Wells And Springs	2,554,632	628,261	3,182,893	-	4,962,607	(84,279)	(191,748)	4,770,859
8	308	Infiltration Gallaries And Tunnels	-	-	-	-	-	-	-	-
9	309	Supply Mains	-	-	-	-	-	-	-	-
10	310	Power Generation Equipment	-	-	-	-	-	-	-	-
11	311	Electric Pumping Equipment	86,801	-	86,801	-	511,774	(11,709)	(76,958)	434,817
12	320	Water Treatment Plant	-	-	-	-	21,856	(546)	(1,502)	20,354
13	330	Distribution Reservoirs And Standpipes	-	-	-	-	248,272	(6,207)	(34,137)	214,135
14	331	Transmission And Distribution Lines	12,220,856	1,341,833	13,562,689	-	51,627,181	(1,121,146)	(3,320,987)	48,306,194
15	333	Services	-	-	-	-	473,000	(11,825)	(80,740)	392,260
16	334	Meters And Meter Installations	1,074,809	-	1,074,809	-	5,206,617	(116,730)	(277,153)	4,929,464
17	335	Hydrants	1,546,683	-	1,546,683	-	3,414,318	(66,024)	(160,860)	3,253,458
18	336	Backflow Prevention Devices	-	-	-	-	-	-	-	-
19	339	Other Plant And Miscellaneous Equipment	-	-	-	-	-	-	-	-
20	340	Office Furniture And Equipment	-	-	-	-	-	-	(34)	(34)
21	341	Transportation Equipment	-	-	-	-	-	-	(3,738)	(3,738)
22	342	Stores Equipment	-	-	-	-	-	-	-	-
23	343	Tools And Equipment	-	-	-	-	-	-	(812)	(812)
24	344	Laboratory Equipment	-	-	-	-	-	-	-	-
25	345	Power Operated Equipment	-	-	-	-	-	-	-	-
26	346	Communication Equipment	-	-	-	-	-	-	-	-
27	347	Miscellaneous Equipment	-	-	-	-	-	-	-	-
28	348	Other Tangible Plant	-	-	-	-	-	-	-	-
29		TOTAL WATER PLANT	$ 21,742,611	$ 4,360,918	$ 26,103,529	$ -	$ 74,017,065	$ (1,517,322)	$ (4,290,416)	$ 69,726,649
30		Company As Filed	21,742,611	4,360,918	26,103,529	-	74,017,065	(1,517,322)	(4,285,832)	69,731,233
31		Difference	$ -	$ -	$ -	$ -	$ -	$ -	$ (4,584)	$ (4,584)

References:

Columns (A) (B) (C) (D): Company Schedules B-2
Column (E): Schedule RLM-4, Page 9, Column (C) + Column (C) + Column (D)
Column (F): [(Col. (C) + Col. (D)) X RLM-4, Page 1, Col. (A) X 1/2 yr. conv.] + [RLM-4, Page 9, Col. (E) + Col. (D)) X RLM-4, Page 1, Col. (A)]
Column (G): Schedule RLM-4, Page 9, Column (G) + Column (D) + Column (F)
Column (H): Column (E) + Column (G)

TEST YEAR PLANT SCHEDULES - CONT'D
TEST-YEAR ENDED DECEMBER 31, 2007

LINE NO.	ACCT NO.	ACCOUNT NAME	(A) PLANT ADDITIONS	(B) PLANT ADJUSTMENTS	(C) NET PLANT ADDITIONS	(D) PLANT RETIRMENTS	(E) TOTAL PLANT VALUE	(F) DEPRECIATION EXPENSE	(G) ACCUMULATED DEPRECIATION	(H) NET PLANT VALUE
1	301	Organization Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
2	302	Franchises	-	-	-	-	-	-	-	-
3	303	Land and Land Rights	-	-	-	-	272,438	-	-	272,438
4	304	Structures And Improvements	2,203,163	-	2,203,163	-	9,482,165	(209,515)	(351,261)	9,130,904
5	305	Collecting And Impounding Reservoirs	-	-	-	-	-	-	-	-
6	306	Lake, River And Other Intakes	-	-	-	-	-	-	-	-
7	307	Wells And Springs	263,423	-	263,423	-	5,226,030	(127,358)	(319,106)	4,906,924
8	308	Infiltration Gallaries And Tunnels	-	-	-	-	-	-	-	-
9	309	Supply Mains	-	-	-	-	-	-	-	-
10	310	Power Generation Equipment	-	-	-	-	-	-	-	-
11	311	Electric Pumping Equipment	268,357	(16,019)	252,338	-	764,112	(15,949)	(92,906)	671,206
12	320	Water Treatment Plant	-	-	-	-	21,856	(546)	(2,049)	19,807
13	330	Distribution Reservoirs And Standpipes	-	-	-	-	248,272	(6,207)	(40,344)	207,928
14	331	Transmission And Distribution Lines	1,805,404	-	1,805,404	-	53,432,585	(1,313,247)	(4,634,234)	48,798,351
15	333	Services	54,473	-	54,473	-	527,473	(12,506)	(93,246)	434,227
16	334	Meters And Meter Installations	861,887	-	861,887	-	6,068,504	(140,939)	(418,092)	5,650,412
17	335	Hydrants	133,400	-	133,400	-	3,547,718	(87,025)	(247,885)	3,299,833
18	336	Backflow Prevention Devices	-	-	-	-	-	-	-	-
19	339	Other Plant And Miscellaneous Equipment	-	-	-	-	-	-	-	-
20	340	Office Furniture And Equipment	-	-	-	-	-	-	(34)	(34)
21	341	Transportation Equipment	-	-	-	-	-	-	(3,738)	(3,738)
22	342	Stores Equipment	-	-	-	-	-	-	-	-
23	343	Tools And Equipment	-	-	-	-	-	-	(812)	(812)
24	344	Laboratory Equipment	-	-	-	-	-	-	-	-
25	345	Power Operated Equipment	-	-	-	-	-	-	-	-
26	346	Communication Equipment	-	-	-	-	-	-	-	-
27	347	Miscellaneous Equipment	-	-	-	-	-	-	-	-
28	348	Other Tangible Plant	-	-	-	-	-	-	-	-
29		**TOTAL WATER PLANT**	$ 5,590,107	$ (16,019)	$ 5,574,088	$ -	$ 79,591,153	$ (1,913,292)	$ (6,203,708)	$ 73,387,445
30		Company As Filed	5,590,107	(16,019)	5,574,088	-	79,591,153	(1,913,292)	(6,199,124)	73,392,029
31		Difference	$ -	$ -	$ -	$ -	$ -	$ -	$ (4,584)	$ (4,584)

References:

Columns (A) (B) (C) (D): Company Schedules B-2
Column (E): Schedule RLM-4, Page 10, Column (C) + Column (C) + Column (D)
Column (F): [(Col. (C) + Col. (D)) X RLM-4, Page 1, Col. (A) X 1/2 yr. conv.] + [RLM-4, Page 10, Col. (E) + Col. (D)) X RLM-4, Page 1, Col. (A)]
Column (G): Schedule RLM-4, Page 10, Column (G) + Column (D) + Column (F)
Column (H): Column (E) + Column (G)

EXPLANATION OF RATE BASE ADJUSTMENT NO. 4
MATERIALS AND SUPPLIES

LINE NO.	DESCRIPTION	(A) AMOUNT	(B) REFERENCE
1	Cash Working Capital (1/8 O&M Expenses) As Per Company	$ 794,916	Company Schedule C-1
2	Cash Working Capital (1/8 O&M Expenses) As Per RUCO	794,638	RUCO Schedule RLM-7
3	Adjustment	$ (278)	Line 2 - Line 1
4	Pumping Power (1/24 Of Pumping Power) As Per Company	$ 34,538	Company Schedule C-1
5	Pumping Power (1/24 Of Pumping Power) As Per RUCO	35,090	RUCO Schedule RLM-7
6	Adjustment	$ 552	Line 5 - Line 4
7	Purchased Water (1/24 Of Purchased Water) As Per Company	$ 13,956	Company Schedule C-1
8	Purchased Water (1/24 Of Purchased Water) As Per RUCO	67,951	RUCO Schedule RLM-7
9	Adjustment	$ 53,994	Line 8 - Line 7
10	TOTAL ADJUSTMENT (See RLM-2, Column (G))	$ 54,269	Sum Lines 3, 6 & 9

Johnson Utilities, LLC
Docket Nos. WS-02987A-08-0180
Test Year Ended December 31, 2007

Water District
Schedule RLM-7

OPERATING INCOME

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED	(B) RUCO TEST YEAR ADJM'TS	(C) RUCO TEST YEAR AS ADJ'TED	(D) RUCO PROP'D CHANGES	(E) RUCO AS RECOMM'D
	Revenues:					
1	Metered Water Revenues	$ 12,843,604	$ -	$ 12,843,604	$ (1,953,664)	$ 10,889,940
2	Unmetered Water Revenues	-	-	-	-	-
3	Other Water Revenues	329,295	-	329,295	-	329,295
4	TOTAL OPERATING REVENUE	$ 13,172,899	$ -	$ 13,172,899	$ (1,953,664)	$ 11,219,234
	Operating Expenses:					
5	Salaries And Wages	$ -	$ -	$ -	$ -	$ -
6	Purchased Water	334,948	1,295,865	1,630,813	-	1,630,813
7	Purchased Power	828,900	13,251	842,151	-	842,151
8	Chemicals	16,189	-	16,189	-	16,189
9	Repairs And Maintenance	14,333	-	14,333	-	14,333
10	Office Supplies And Expenses	1,119	-	1,119	-	1,119
11	Outside Services	5,877,591	30,032	5,907,623	-	5,907,623
12	Water Testing	55,007	-	55,007	-	55,007
13	Rents	53,444	-	53,444	-	53,444
14	Transportation Expenses	-	-	-	-	-
15	Insurance - General Liability	21,565	-	21,565	-	21,565
16	Insurance - Health And Life	-	-	-	-	-
17	Regulatory Comm. Exp. - Rate Case	33,333	(13,333)	20,000	-	20,000
18	Miscellaneous Expense	286,747	1,080	287,827	-	287,827
19	Depreciation Expense	1,548,515	-	1,548,515	-	1,548,515
20	Taxes Other Than Income	-	-	-	-	-
21	Property Taxes	797,368	(67)	797,302	-	797,302
22	Income Tax	1,185,679	(1,185,679)	-	-	-
23	Rounding	-				
24	TOTAL OPERATING EXPENSES	$ 11,054,738	$ 141,149	$ 11,195,887	$ -	$ 11,195,887
25	OPERATING INCOME (LOSS)	$ 2,118,161	$ (141,149)	$ 1,977,012	$ (1,953,664)	$ 23,347

References:

Column (A): Company Schedule C-1
Column (B): RLM-8, Columns (B) Thru (I)
Column (C): Column (A) + Column (B)
Column (D): RLM-1
Column (E): Column (C) + Column (D)

Johnson Utilities, LLC
Docket Nos. WS-02987A-08-0180
Test Year Ended December 31, 2007

SUMMARY OF OPERATING INCOME ADJUSTMENTS
TEST YEAR AS FILED AND ADJUSTMENTS

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED	(B) ADJMT NO. 1 DEPRECIAT'N & AMORTIZ'N	(C) ADJMT NO. 2 PROPERTY TAX	(D) ADJMT NO. 3 LEFT BLANK	(E) ADJMT NO. 4 RATE CASE EXPENSE	(F) ADJMT NO. 5 CAGRD TAX EXPENSE	(G) ADJMT NO. 6 UNNECESS'Y EXPENSES	(H) ADJMT NO. 7 ANNUAL'ZD POWER EXP.	(I) ADJMT NO. 8 INCOME TAX	(J) RUCO AS ADJT'D
	Revenues:										
1	Metered Water Revenues	$ 12,843,604	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 12,843,604
2	Unmetered Water Revenues	-	-	-	-	-	-	-	-	-	-
3	Other Water Revenues	329,295	-	-	-	-	-	-	-	-	329,295
4	TOTAL OPERATING REV.	$ 13,172,899	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 13,172,899
	Operating Expenses:										
5	Salaries And Wages	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
6	Purchased Water	334,948	-	-	-	-	1,295,865	-	-	-	1,630,813
7	Purchased Power	828,900	-	-	-	-	-	-	13,251	-	842,151
8	Chemicals	16,189	-	-	-	-	-	-	-	-	16,189
9	Repairs And Maintenance	14,333	-	-	-	-	-	-	-	-	14,333
10	Office Supplies And Expenses	1,119	-	-	-	-	-	-	-	-	1,119
11	Outside Services	5,877,591	-	-	-	-	-	30,032	-	-	5,907,623
12	Water Testing	55,007	-	-	-	-	-	-	-	-	55,007
13	Rents	53,444	-	-	-	-	-	-	-	-	53,444
14	Transportation Expenses	-	-	-	-	-	-	-	-	-	-
15	Insurance - General Liability	21,565	-	-	-	-	-	-	-	-	21,565
16	Insurance - Health And Life	-	-	-	-	-	-	-	-	-	-
17	Regulatory Comm. Exp. - Rate Case	33,333	-	-	-	(13,333)	-	-	-	-	20,000
18	Miscellaneous Expense	286,747	-	-	-	-	-	1,080	-	-	287,827
19	Depreciation Expense	1,548,515	-	-	-	-	-	-	-	-	1,548,515
20	Taxes Other Than Income	-	-	-	-	-	-	-	-	-	-
21	Property Taxes	797,368	-	(67)	-	-	-	-	-	-	797,302
22	Income Tax	1,185,679	-	-	-	-	-	-	-	(1,185,679)	-
23	Rounding	-									
24	TOTAL OPERATING EXP.	$ 11,054,738	$ -	$ (67)	$ -	$ (13,333)	$ 1,295,865	$ 31,112	$ 13,251	$ (1,185,679)	$ 11,195,887
25	OPERATING INC. (LOSS)	$ 2,118,161									$ 1,977,012

ADJUSTMENTS:	REFERENCE:
1 Depreciation And Amortization Expense	Testimony, RLM And Schedule RLM-9
2 Property Tax Computation	Testimony, RLM And Schedule RLM-10
3 Intentionally Left Blank	
4 Rate Case Expense	Testimony, RLM And Schedule RLM-11
5 CAGRD Tax Expense	Testimony, RLM
6 Unnecessary Expenses	Testimony, RLM And Schedule RLM-12
7 Annualize Power Expenses	Testimony, RLM
8 Income Tax	Testimony, RLM

EXPLANATION OF OPERATING INCOME ADJUSTMENT NO. 1
TEST YEAR DEPRECIATION EXPENSE

LINE NO.	ACCOUNT NO.	ACCOUNT NAME	(A) TOTAL PLANT VALUE	(B) COMPANY PROPOSED DEP. RATES	(C) TEST YEAR DEPRECIATION EXPENSE
1	301	Organization Costs	$ -	0.00%	$ -
2	302	Franchises	-	0.00%	-
3	303	Land and Land Rights	272,438	0.00%	-
4	304	Structures And Improvements	9,482,165	3.33%	315,756
5	305	Collecting And Impounding Reservoirs	-	2.50%	-
6	306	Lake, River And Other Intakes	-	2.50%	-
7	307	Wells And Springs	5,226,030	3.33%	174,027
8	308	Infiltration Gallaries And Tunnels	-	6.67%	-
9	309	Supply Mains	-	2.00%	-
10	310	Power Generation Equipment	-	5.00%	-
11	311	Electric Pumping Equipment	764,112	12.50%	95,514
12	320	Water Treatment Plant	21,856	20.00%	4,371
13	330	Distribution Reservoirs And Standpipes	248,272	2.22%	5,512
14	331	Transmission And Distribution Lines	53,432,585	2.00%	1,068,652
15	333	Services	527,473	3.33%	17,565
16	334	Meters And Meter Installations	6,068,504	8.33%	505,506
17	335	Hydrants	3,547,718	2.00%	70,954
18	336	Backflow Prevention Devices	-	6.67%	-
19	339	Other Plant And Miscellaneous Equipment	-	6.67%	-
20	340	Office Furniture And Equipment	-	6.67%	-
21	341	Transportation Equipment	-	20.00%	-
22	342	Stores Equipment	-	4.00%	-
23	343	Tools And Equipment	-	5.00%	-
24	344	Laboratory Equipment	-	10.00%	-
25	345	Power Operated Equipment	-	5.00%	-
26	346	Communication Equipment	-	10.00%	-
27	347	Miscellaneous Equipment	-	10.00%	-
28	348	Other Tangible Plant	-	10.00%	-
29		TEST YEAR GROSS PLANT AND DEPRECIATION EXPENSE	$ 79,591,153		$ 2,257,857
48		AMORTIZATION OF CONTRIBUTIONS	(25,004,821)	2.8368%	(709,341)
50		Rounding			(1)
51	**TOTAL DEPRECIATION EXPENSE**				$ 1,548,515
52	Company As Filed				1,548,515
53	Difference				$ -
54	RUCO Adjustment (See RLM-8, Column (B))				$ -

References:

Column (A): RLM-4, Page 11, Column (E)
Column (B): Company Workpapers
Column (C): Column (A) X Column (B)

EXPLANATION OF OPERATING INCOME ADJUSTMENT NO. 2
PROPERTY TAX COMPUTATION

LINE NO.	DESCRIPTION	REFERENCE	(A)	(B)
	Calculation Of The Company's Full Cash Value:			
	Annual Operating Revenues:			
1	*Adjusted Revenues In Year Ended December 2007*	Sch. RLM-6, Col (C), Ln 4	$ 13,172,899	
2	Adjusted Revenues In Year Ended December 2007	Sch. RLM-6, Col (C), Ln 4	13,172,899	
3	Proposed Revenues	Sch. RLM-6, Col (D), Ln 4	10,940,980	
4	Total Three Year Operating Revenues	Sum Of Lines 1, 2 & 3	$ 37,286,778	
5	Average Annual Operating Revenues	Line 4 / 3	12,428,926	
6	Two Times Three Year Average Operating Revenues	Line 5 X 2		$ 24,857,852
	ADD:			
	10% Of Construction Work In Progress ("CWIP"):			
7	Test Year CWIP	Company Workpapers	$ -	
8	10% Of CWIP	Line 7 X 10%		$ -
	SUBTRACT:			
	Transportation At Book Value:			
9	Original Cost Of Transportation Equipment	Company Workpapers	$ -	
10	Acc. Dep. Of Transportation Equipment	Company Workpapers	-	
11	Book Value Of Transportation Equipment	Line 9 + Line 10		$ -
12	Company's Full Cash Value ("FCV")	Sum Of Lines 6, 8 & 11		$ 24,857,852
	Calculation Of The Company's Tax Liability:			
	MULTIPLY:			
	FCV X Valuation Assessment Ratio X Property Tax Rates:			
13	Assessment Ratio	House Bill 2779	23.0%	
14	Assessed Value	Line 12 X Line 13	$ 5,717,306	
	Property Tax Rates:			
15	Primary Tax Rate	Company Workpapers	13.93%	
16	Secondary Tax Rate	Company Workpapers	0.00%	
17	Estimated Tax Rate Liability	Line 15 + Line 16	13.93%	
	Property Tax			$ 796,215
	Tax On Parcel			1,184
18	Company's Total Tax Liability - Based On Full Cash Value	Line 14 X Line 17		$ 797,399
19	Test Year Adjusted Property Tax Expense As Filed	Co. Sch. C-1		797,466
20	Decrease In Property Tax Expense	Line 18 - Line 19		$ (67)
21	RUCO Adjustment (See RLM-8, Column (C))	Line 20		$ (67)

EXPLANATION OF OPERATING INCOME ADJUSTMENT NO. 4
RATE CASE EXPENSE

LINE NO.	DESCRIPTION	(A) COMPANY ESTIMATE	(B) RUCO ADJUSTMENT	(C) RUCO AS ADJUSTED
1	Rate Case Expense Total	$ 200,000	$ -	$ 200,000
2	Allocation Factor			50.0%
3	Water District (Line 1 X Line 2)			$ 100,000
4	Amortization Period - 5 Years			5
5	RUCO Adjusted Rate Case Expense (Line 3 / 5 Years)			$ 20,000
6	Company Rate Case Expenses As Filed (Company Sch. C-2)			$ 33,333
7	RUCO Pro Forma Rate Case Expense (Lines 5 - 6)			$ (13,333)
8	RUCO Adjustment (Line 7) (See RLM-8, Column (E))			$ (13,333)

EXPLANATION OF OPERATING INCOME ADJUSTMENT NO. 6
UNNECESSARY EXPENSES

LINE NO.	DESCRIPTION	REFERENCE	(A) RUCO AS ADJUSTED
	SPLIT ACCOUNT		
1	*Miscellaneous - Sponsorships*	Co. Response To Staff DR 1-32	$ 1,850
2	Allocation Factor	Co. Workpapers	53.88%
3	Water District - Miscellaneous	Lines 1 X 2	$ 997
	WATER DISTRICT SPECIFIC		
4	Outside Services - Lobbying Expenses	Co. Response To Staff DR 1-32	$ 30,032
5	Miscellaneous - Food & Beverages	Co. Response To Staff DR 1-32	$ 83
6	RUCO Test-Year Disallowance Of Unnecessary Expense	Sum Of Lines 3, 4 & 5	$ 31,112
7	Outside Services Expense	Line 4	$ 30,032
8	Miscellaneous Expense	Sum Of Lines 3 & 5	$ 1,080
9	RUCO Adjustment (See RLM-8, Column (G))	Sum Of Lines 7 & 8	$ 31,112

COST OF CAPITAL

LINE NO.	DESCRIPTION	(A) CAPITAL RATIO	(B) COST	(C) WEIGHTED COST RATE
1	Long-Term Debt	40.00%	8.00%	3.20%
2	Common Equity	60.00%	8.31%	4.98%
3	Total Capitalization	100.00%		
4	WEIGHTED AVERAGE COST OF CAPITAL			8.18%

References:
Columns (A) Thru (C): Testimony, WAR

Johnson Utilities, LLC
Docket Nos. WS-02987A-08-0180
Test Year Ended December 31, 2007

Water District
Schedule RLM-14
Pages 1 thru 3

RATE DESIGN AND PROOF OF RECOMMENDED REVENUE
PROPOSED REVENUE

LINE NO.	DESCRIPTION	(A) TEST YEAR DETERMIN'TS Gallons In Thousands	(B) ANN'ZED ADJUSTM'TS	(C) TEST YEAR ADJUSTED DETERMIN'TS	(D) PRESENT CHARGES & USAGE FEES	(E) TEST YEAR ADJUSTED REVENUES	(F) TOTAL REVENUES
	RESIDENTIAL CUSTOMERS						
1	3/4" Meter	15,212	1,132	16,344	$ 23.06	$ 4,522,796	$ 4,522,796
	Commodity Usage						
2	First Tier - First 4,000 Gals.	157,703	54,312	212,015	$ 1.5240	$ 323,121	
3	Second Tier - Next 6,000 Gals.	575,393	35,724	611,117	$ 1.9859	$ 1,213,605	
4	Third Tier - Over 10,000Gals.	668,195	-	668,195	$ 2.5503	$ 1,704,128	
							$ 3,240,854
5	1" Meter	260	5	265	$ 38.43	$ 122,381	$ 122,381
	Commodity Usage						
6	First Tier - First 25,000 Gals.	20,673	667	21,340	$ 1.9859	$ 42,378	
7	Second Tier - Over 25,000 Gals.	22,591	-	22,591	$ 2.5503	$ 57,615	
							$ 99,993
8	2" Meter	1	(0)	1	$ 122.99	$ 1,024	$ 1,024
	Commodity Usage						
9	First Tier - First 80,000 Gals.	79	-	79	$ 1.9859	$ 157	
10	Second Tier - Over 80,000 Gals.	3,762	(406)	3,356	$ 2.5503	$ 8,559	
							$ 8,716
11	3" Meter	0	(0)	-	$ 245.98	$ -	$ -
	Commodity Usage						
12	First Tier - First 160,000 Gals.	-	-	-	$ 1.9859	$ -	
13	Second Tier - Over 160,000 Gals.	-	-	-	$ 2.5503	$ -	
							$ -
14	Total Residential Customers	15,473	1,137	16,610			
15	Total Residential Usage	1,448,397	90,296	1,538,693			
16	TOTAL RESIDENTIAL CUSTOMERS REVENUE						$ 7,995,764
	COMMERCIAL CUSTOMERS						
17	3/4" Meter	4	0	5	$ 23.06	$ 1,294	$ 1,294
	Commodity Usage						
18	First Tier - First 10,000 Gals.	86	(74)	12	$ 1.9859	$ 24	
19	Second Tier - Over 10,000 Gals.	607	-	607	$ 2.5503	$ 1,548	
							$ 1,572
20	1" Meter	6	1	7	$ 38.43	$ 3,025	$ 3,025
	Commodity Usage						
21	First Tier - First 25,000 Gals.	409	63	472	$ 1.9859	$ 937	
22	Second Tier - Over 25,000 Gals.	2,192	213	2,405	$ 2.5503	$ 6,135	
							$ 7,072
23	1-1/2" Meter	18	(2)	17	$ 76.87	$ 15,259	$ 15,259
	Commodity Usage						
24	First Tier - First 50,000 Gals.	1,605	(63)	1,542	$ 1.9859	$ 3,062	
25	Second Tier - Over 50,000 Gals.	5,515	(429)	5,086	$ 2.5503	$ 12,971	
							$ 16,033
26	2" Meter	26	5	31	$ 122.99	$ 46,133	$ 46,133
	Commodity Usage						
27	First Tier - First 80,000 Gals.	3,499	420	3,919	$ 1.9859	$ 7,783	
28	Second Tier - Over 80,000 Gals.	43,206	6,673	49,879	$ 2.5503	$ 127,208	
							$ 134,991
29	3" Meter	2	-	2	$ 245.98	$ 5,924	$ 5,924
	Commodity Usage						
30	First Tier - First 160,000 Gals.	-	-	-	$ 1.9859	$ -	
31	Second Tier - Over 160,000 Gals.	6,359	-	6,359	$ 2.5503	$ 16,217	
							$ 16,217
32	4" Meter	2	-	2	$ 384.35	$ 8,660	$ 8,660
	Commodity Usage						
33	First Tier - First 250,000 Gals.	360	-	360	$ 1.9859	$ 714	
34	Second Tier - Over 250,000 Gals.	2,649	-	2,649	$ 2.5503	$ 6,755	
							$ 7,470
35	Total Commercial Customers	59	4	63			
36	Total Commercial Usage	66,486	6,804	73,290			
37	TOTAL COMMERCIAL CUSTOMERS REVENUE						$ 263,648

Johnson Utilities, LLC
Docket Nos. WS-02987A-08-0180
Test Year Ended December 31, 2007

Water District
Schedule RLM-14
Pages 1 thru 3

RATE DESIGN AND PROOF OF RECOMMENDED REVENUE
PROPOSED REVENUE

LINE NO.	DESCRIPTION	(A) TEST YEAR DETERMIN'TS Gallons In Thousands	(B) ANN'ZED ADJUSTM'TS	(C) TEST YEAR ADJUSTED DETERMIN'TS	(D) PRESENT CHARGES & USAGE FEES	(E) TEST YEAR ADJUSTED REVENUES	(F) TOTAL REVENUES
	PUBLIC AUTHORITY CUSTOMERS						
38	3/4" Meter	-	-	-	$ 23.06	$ -	$ -
	Commodity Usage						
39	First Tier - First 10,000 Gals.	-	-	-	$ 1.9859	$ -	
40	Second Tier - Over 10,000 Gals.	-	-	-	$ 2.5503	$ -	
							$ -
41	1" Meter	-	-	-	$ 38.43	$ -	$ -
	Commodity Usage						
42	First Tier - First 10,000 Gals.	-	-	-	$ 1.9859	$ -	
43	Second Tier - Over 10,000 Gals.	-	-	-	$ 2.5503	$ -	
							$ -
44	1-1/2" Meter	-	-	-	$ 76.87	$ -	$ -
	Commodity Usage						
45	First Tier - First 50,000 Gals.	-	-	-	$ 1.9859	$ -	
46	Second Tier - Over 50,000 Gals.	-	-	-	$ 2.5503	$ -	
							$ -
47	2" Meter	8	1	9	$ 122.99	$ 12,898	$ 12,898
	Commodity Usage						
48	First Tier - First 80,000 Gals.	1,869	-	1,869	$ 1.9859	$ 3,712	
49	Second Tier - Over 80,000 Gals.	1,636	201	1,837	$ 2.5503	$ 4,684	
							$ 8,396
50	3" Meter	1	-	1	$ 245.98	$ 2,861	$ 2,861
	Commodity Usage						
51	First Tier - First 160,000 Gals.	265	-	265	$ 1.9859	$ 526	
52	Second Tier - Over 160,000 Gals.	922	-	922	$ 2.5503	$ 2,351	
							$ 2,878
53	4" Meter	1	-	1	$ 384.35	$ 4,237	$ 4,237
	Commodity Usage						
54	First Tier - First 250,000 Gals.	1,110	-	1,110	$ 1.9859	$ 2,204	
55	Second Tier - Over 250,000 Gals.	1,420	-	1,420	$ 2.5503	$ 3,621	
							$ 5,826
56	Total Public Authority Customers	10	1	11			
57	Total Public Authority Usage	7,222	201	7,423			
58	TOTAL PUBLIC AUTHORITY CUSTOMERS REVENUE						$ 37,095
	IRRIGATION CUSTOMERS						
59	3/4" Meter	41	1	42	$ 23.06	$ 11,549	$ 11,549
	Commodity Usage						
60	First Tier - First 10,000 Gals.	940	(96)	844	$ 1.9859	$ 1,676	
61	Second Tier - Over 10,000 Gals.	9,595	-	9,595	$ 2.5503	$ 24,471	
							$ 26,147
62	1" Meter	50	4	55	$ 38.43	$ 25,203	$ 25,203
	Commodity Usage						
63	First Tier - First 25,000 Gals.	3,087	266	3,353	$ 1.9859	$ 6,659	
64	Second Tier - Over 25,000 Gals.	36,814	696	37,510	$ 2.5503	$ 95,662	
							$ 102,321
65	1-1/2" Meter	83	9	92	$ 76.87	$ 84,882	$ 84,882
	Commodity Usage						
66	First Tier - First 50,000 Gals.	8,071	784	8,855	$ 1.9859	$ 17,585	
67	Second Tier - Over 50,000 Gals.	151,856	8,871	160,727	$ 2.5503	$ 409,908	
							$ 427,493
68	2" Meter	77	8	85	$ 122.99	$ 125,000	$ 125,000
	Commodity Usage						
69	First Tier - First 80,000 Gals.	8,681	658	9,339	$ 1.9859	$ 18,546	
70	Second Tier - Over 80,000 Gals.	381,324	24,772	406,096	$ 2.5503	$ 1,035,684	
							$ 1,054,230
71	3" Meter	0	1	2	$ 245.98	$ 4,613	$ 4,613
	Commodity Usage						
72	First Tier - First 160,000 Gals.	-	-	-	$ 1.9859	$ -	
73	Second Tier - Over 160,000 Gals.	-	-	-	$ 2.5503	$ -	
							$ -
74	4" Meter	2	-	2	$ 384.35	$ 8,094	$ 8,094
	Commodity Usage						
75	First Tier - First 250,000 Gals.	2,113	-	2,113	$ 1.9859	$ 4,196	
76	Second Tier - Over 250,000 Gals.	7,919	-	7,919	$ 2.5503	$ 20,196	
							$ 24,392
77	6" Meter	1	-	1	$ 768.70	$ 9,225	$ 9,225
	Commodity Usage						
78	First Tier - First 500,000 Gals.	1,653	-	1,653	$ 1.9859	$ 3,283	
79	Second Tier - Over 500,000 Gals.	-	-	-	$ 2.5503	$ -	
							$ 3,283
80	Total Irrigation Customers	254	24	277			
81	Total Irrigation Usage	612,053	35,951	648,003			
82	TOTAL IRRIGATION CUSTOMERS REVENUE						$ 1,906,433

Johnson Utilities, LLC
Docket Nos. WS-02987A-08-0180
Test Year Ended December 31, 2007

Water District
Schedule RLM-14
Pages 1 thru 3

RATE DESIGN AND PROOF OF RECOMMENDED REVENUE
PROPOSED REVENUE

LINE NO.	DESCRIPTION	(A) TEST YEAR DETERMIN'TS Gallons In Thousands	(B) ANN'ZED ADJUSTM'TS	(C) TEST YEAR ADJUSTED DETERMIN'TS	(D) PRESENT CHARGES & USAGE FEES	(E) TEST YEAR ADJUSTED REVENUES	(F) TOTAL REVENUES
	CONSTRUCTION CUSTOMERS						
83	3/4" Meter	-	-	-	$ 23.06	$ -	$ -
84	Commodity Usage	-	-	-	$ 2.5503	$ -	$ -
86	1" Meter	-	-	-	$ 38.43	$ -	$ -
87	Commodity Usage	-	-	-	$ 2.5503	$ -	$ -
89	1-1/2" Meter	-	-	-	$ 76.87	$ -	$ -
90	Commodity Usage	-	-	-	$ 2.5503	$ -	$ -
92	2" Meter	-	-	-	$ 122.99	$ -	$ -
93	Commodity Usage	-	-	-	$ 2.5503	$ -	$ -
95	3" Meter	13	-	13	$ 245.98	$ 39,356	$ 39,356
96	Commodity Usage	39,930	-	39,930	$ 2.5503	$ 101,835	$ 101,835
98	4" Meter	-	-	-	$ 384.35	$ -	$ -
99	Commodity Usage	-	-	-	$ 2.5503	$ -	$ -
101	6" Meter	12	-	12	$ 768.70	$ 115,304	$ 115,304
102	Commodity Usage	154,448	-	154,448	$ 2.5503	$ 393,895	$ 393,895
104	Total Construction Customers	26	-	26			
105	Total Construction Usage	194,378	-	194,378			
106	TOTALCONSTRUCTION CUSTOMERS REVENUE						$ 650,391
	CAP CUSTOMERS						
107	6" Meter	1	-	1	$ 923.67	$ 6,918	$ 6,918
108	Commodity Usage	32,016	-	32,016	$ 0.83	$ 26,503	$ 26,503
109	Total CAP Customers	1	-	1			
110	Total CAP Usage	32,016	-	32,016			
111	TOTAL CAP CUSTOMERS REVENUE						$ 33,421
112	TOTAL COMPANY CUSTOMER COUNT	15,796	1,165	16,961			
113	TOTAL COMPANY COMMODITY USAGE	1,748,499	97,300	1,845,799			
114	**TOTAL RUCO PROPOSED REVENUE PER BILL COUNT**						$ 10,886,753
115	Unreconciled Difference vs. Billed Revenues						3,186
116	Other Revenues						329,295
117	**TOTAL REVENUE**						$ 11,219,234
118	**PROPOSED REVENUE PER RUCO**						$ 11,219,234
119	Difference						$ (0)
120	Percentage Difference						0.00%

TYPICAL RESIDENTIAL BILL ANALYSIS

LINE NO.	DESCRIPTION	(A) PRESENT	(B) PRESENT	(C) COMPANY PROPOSED	(D) COMPANY PROPOSED	(E) RUCO PROPOSED	(F) RUCO PROPOSED
	REVENUE ALLOCATION						
1	RESIDENTIAL	$ 8,986,698	74.13%	$ 7,790,904	73.44%	$ 7,995,764	73.44%
2	OTHER	$ 3,135,896	25.87%	$ 2,817,595	26.56%	$ 2,890,989	26.56%
3	TOTAL	$ 12,122,594	100.00%	$ 10,608,499	100.00%	$ 10,886,753	100.00%
	ALLOCATION RATIOS						
4	FIX REVENUE	6,438,743	53.11%	$ 5,044,004	47.55%	$ 5,176,636	47.55%
5	VARIABLE REVENUE	5,683,851	46.89%	$ 5,564,495	52.45%	$ 5,710,117	52.45%
6	TOTAL	12,122,594	100.00%	$ 10,608,499	100.00%	$ 10,886,753	100.00%

	RESIDENTIAL (5/8" X 3/4") RATE DESIGN		PRESENT	COMPANY PROPOSED	RUCO PROPOSED
7	BASIC MONTHLY CHARGE		$ 27.00	$ 22.47	$ 23.06
	COMMODITY CHARGE				
	PRESENT	PROPOSED			
8	First Tier - First 7,000 Gals.	First Tier - First 4,000 Gals.	$ 2.2500	$ 1.4850	$ 1.5240
9	Second Tier - Over 7,000 Gals.	Second Tier - Next 6,000 Gals.	$ 2.5000	$ 1.9350	$ 1.9859
10		Third Tier - Over 10,000 Gals.	N/A	$ 2.4850	$ 2.5503

	RESIDENTIAL BILL COMPARISONS COST OF WATER SERVICE AT DIFFERENT LEVELS OF USAGE WITH PERCENTAGE INCREASE IN BILL		% OF AVERAGE MONTH USAGE OF 6,931 Gal.	PRESENT MONTHLY WATER COST	RUCO PROP'D MONTHLY WATER COST	RUCO PROP'D MONTHLY INCREASE	RUCO PROP'D MONTHLY % INCREASE
11		1,733	25.00%	$ 30.90	$ 25.70	$ (5.20)	-16.82%
12		3,466	50.00%	$ 34.80	$ 28.34	$ (6.45)	-18.55%
13		6,931	100.00%	$ 42.59	$ 34.98	$ (7.62)	-17.88%
14		10,397	150.00%	$ 51.24	$ 42.08	$ (9.16)	-17.87%
15		13,862	200.00%	$ 59.91	$ 50.92	$ (8.98)	-15.00%

Johnson Utilities, LLC
Docket Nos. WS-02987A-08-0180
Test Year Ended December 31, 2007

Wastewater District

TABLE OF CONTENTS TO RLM SCHEDULES

SCH. NO.	PAGE NO.	TITLE
RLM-1	1	REVENUE REQUIREMENT AND GROSS REVENUE CONVERSION FACTOR
RLM-2	1	RATE BASE
RLM-3	1	SUMMARY OF ORIGINAL COST RATE BASE ADJUSTMENTS
RLM-4		(WATER ONLY) - NOT INCLUDED IN THIS FILING - NO ADJUSTMENT TO TEST-YEAR PLANT
RLM-5	1	RATE BASE ADJUSTMENT NO. 1 - (WASTEWATER ONLY) - POST TEST-YEAR PLANT
TESTIMONY		RATE BASE ADJUSTMENT NO. 2 - REINSTATE ACC. AMORT. ON CIAC ASSOCIATED WITH HOOK UP FEES
TESTIMONY		RATE BASE ADJUSTMENT NO. 3 - REINSTATE CIAC ASSOCIATED WITH HOOK UP FEES
RLM-6		(WATER ONLY) - NOT INCLUDED IN THIS FILING - NO ADJUSTMENT FOR ALLOWANCE FOR WORKING CAPITAL
RLM-7	1	OPERATING INCOME
RLM-8	1	SUMMARY OF OPERATING INCOME ADJUSTMENTS
RLM-9	1	OPERATING INCOME ADJUSTMENT NO. 1 - TEST YEAR DEPRECIATION EXPENSE
RLM-10	1	OPERATING INCOME ADJUSTMENT NO. 2 - PROPERTY TAX COMPUTATION
TESTIMONY		OPERATING INCOME ADJUSTMENT NO. 3 - REVENUE ADJUSTMENT
RLM-11	1	OPERATING INCOME ADJUSTMENT NO. 4 RATE CASE EXPENSE
		OPERATING INCOME ADJUSTMENT NO. 5 - (WATER ONLY) - INTENTIONALLY LEFT BLANK
RLM-12	1	OPERATING INCOME ADJUSTMENT NO. 6 - UNNECESSARY EXPENSES
		OPERATING INCOME ADJUSTMENT NO. 7 - (WATER ONLY) - INTENTIONALLY LEFT BLANK
TESTIMONY		OPERATING INCOME ADJUSTMENT NO. 8 - INCOME TAX EXPENSE
RLM-13	1	COST OF CAPITAL
RLM-14	1	RATE DESIGN AND PROOF OF RECOMMENDED REVENUE
RLM-15	1	TYPICAL RESIDENTIAL BILL ANALYSIS

Johnson Utilities, LLC
Docket Nos. WS-02987A-08-0180
Test Year Ended December 31, 2007

Wastewater District
Schedule RLM-1

REVENUE REQUIREMENT

LINE NO.	DESCRIPTION	(A) COMPANY OCRB/FVRB COST	(B) RUCO OCRB/FVRB COST
1	Original Cost Rate Base	$ 19,149,173	$ 19,457,670
2	Adjusted Operating Income (Loss)	$ 592,491	$ 984,174
3	Current Rate Of Return (L2 / L1)	3.09%	5.06%
4	Required Operating Income (L5 X L1)	$ 1,997,259	$ 1,592,460
5	Required Rate Of Return On Fair Value Rate Base	10.43%	8.18%
6	Operating Income Deficiency (L4 - L2)	$ 1,404,768	$ 608,286
7	Gross Revenue Conversion Factor (RLM-1, Page 2)	1.5944	1.0000
8	Increase In Gross Revenue Requirement (L7 X L6)	$ 2,239,804	$ 608,286
9	Adjusted Test Year Revenue	$ 11,288,663	$ 11,354,014
10	Proposed Annual Revenue (L8 + L9)	$ 13,528,467	$ 11,962,300
11	Required Percentage Increase In Revenue (L8 / L9)	19.84%	5.36%
12	Rate Of Return On Common Equity	10.50%	8.31%

References:

Column (A): Company Schedules A-1 and C-1
Column (B): RUCO Schedule RLM-2, RLM-7, And RLM-13

Johnson Utilities, LLC
Docket Nos. WS-02987A-08-0180
Test Year Ended December 31, 2007

Wastewater District
Schedule RLM-2

RATE BASE - ORIGINAL COST

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED OCRB/FVRB	(B) RUCO OCRB/FVRB ADJUSTMENTS	(C) RUCO ADJ'TED OCRB/FVRB
1	Gross Utility Plant In Service	$ 126,534,592	$ 689,382	$ 127,223,974
2	Accumulated Depreciation	(7,923,684)	-	(7,923,684)
3	Net Utility Plant In Service (Sum L1 & L2)	$ 118,610,908	$ 689,382	$ 119,300,290
4	Advances In Aid Of Const.	$ (54,440,657)	$ -	$ (54,440,657)
5	Contribution In Aid Of Const.	$ (46,007,904)	$ (397,390)	$ (46,405,294)
6	Accumulated Amortization Of CIAC	-	16,505	16,505
7	NET CIAC (L5 + L6)	$ (46,007,904)	$ (380,885)	$ (46,388,789)
8	Customer Meter Deposits	$ -	$ -	$ -
9	Deferred Income Taxes And Credits	$ -	$ -	$ -
10	Investment Tax Credits	$ -	$ -	$ -
11	Shared Gain On Well	$ -	$ -	$ -
12	Prepayments	$ -	$ -	$ -
13	Materials And Supplies	$ -	$ -	$ -
14	Deferred Assets	$ 986,826	$ -	$ 986,826
15	Allowance For Working Capital	$ -	$ -	$ -
16	Rounding	$ -	$ -	$ -
17	TOTAL RATE BASE (Sum L's 3, 4, & 7 Thru 16)	$ 19,149,173	$ 308,497	$ 19,457,670

References:
Column (A): Company Schedule B-1
Column (B): Schedule RLM-3
Column (C): Column (A) + Column (B)

Johnson Utilities, LLC
Docket Nos. WS-02987A-08-0180
Test Year Ended December 31, 2007

Wastewater District
Schedule RLM-3

SUMMARY OF ORIGINAL COST RATE BASE ADJUSTMENTS

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED OCRB	(B) ADJMT NO. 1 POST TEST YEAR PLANT	(C) ADJMT NO. 2 ACC AMORT ON (HUF) CIAC	(D) ADJMT NO. 3 REINSTATE (HUF) CIAC	(E) ADJMT NO. 4 LEFT BLANK	(F) ADJMT NO. 5 LEFT BLANK	(G) ADJMT NO. 6 LEFT BLANK	(H) RUCO ADJ'TED OCRB/FVRB
1	Gross Utility Plant In Service	$ 126,534,592	$ 689,382	$ -	$ -	$ -	$ -	$ -	$ 127,223,974
2	Accumulated Depreciation	(7,923,684)	-	-	-	-	-	-	(7,923,684)
3	Net Utility Plant In Service (Sum L1 & L3)	$ 118,610,908	$ 689,382	$ -	$ -	$ -	$ -	$ -	$ 119,300,290
4	Advances In Aid Of Const.	$ (54,440,657)	$ -	$ -	$ -	$ -	$ -	$ -	$ (54,440,657)
5	Contribution In Aid Of Const.	$ (48,915,085)	$ -	$ -	$ (397,390)	$ -	$ -	$ -	$ (49,312,475)
6	Accumulated Amortization Of CIAC	2,907,181	-	16,505	-	-	-	-	2,923,687
7	NET CIAC (L5 + L6)	$ (46,007,903)	$ -	$ 16,505	$ (397,390)	$ -	$ -	$ -	$ (46,388,788)
8	Customer Meter Deposits	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
9	Deferred Income Taxes And Credits	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
10	Investment Tax Credits	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
11	Shared Gain On Well	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
12	Prepayments	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
13	Materials And Supplies	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
14	Deferred Assets	$ 986,826	$ -	$ -	$ -	$ -	$ -	$ -	$ 986,826
15	Allowance For Working Capital	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
16	Rounding	$ -							$ (1)
17	TOTAL RATE BASE (Sum L's 3, 4, & 7 Thru 16)	$ 19,149,174	$ 689,382	$ 16,505	$ (397,390)	$ -	$ -	$ -	$ 19,457,670

References:

Column (A): Company Schedule B-2
Column (B): Adjustment No. 1 - Adjust Test-Year Accumulated Depreciation (See RLM-5 And Testimony, RLM)
Column (C): Adjustment No. 2 - Reverse Company's Adjustment To Remove The CIAC's Accumulated Amortization Associated With Unexpended Hook-Up Fees (See Testimony, RLM)
Column (D): Adjustment No. 3 - Reverse Company's Adjustment To Remove The CIAC Associated With Unexpended Hook-Up Fees (See Testimony, RLM)
Column (E): Adjustment No. 4 - Intentionally Left Blank
Column (F): Adjustment No. 5 - Intentionally Left Blank
Column (G): Adjustment No. 6 - Intentionally Left Blank
Column (H): Sum Of Columns (A), (B), (C), (D), (E), (F) & (G)

EXPLANATION OF RATE BASE ADJUSTMENT NO. 1
POST TEST-YEAR PLANT

LINE NO.	ACCT NO.	ACCOUNT NAME	(A) TEST-YEAR PLANT	(B) POST TY ADJUSTM'TS	(C) POST TY ADDITIONS	(D) PLANT RETIRM'TS	(E) POST TY PLANT VALUE
1	351	Organization	$ -	$ -	$ -	$ -	$ -
2	352	Franchises	-	-	-	-	-
3	353	Land and Land Rights	4,122,800	-	-	-	4,122,800
4	354	Structures And Improvements	453,663	-	-	-	453,663
5	355	Power Generation Equipment	-	-	-	-	-
6	360	Collection Sewers - Force	20,136,241	-	689,382	-	20,825,623
7	361	Collection Sewers - Gravity	24,287,592	-	-	-	24,287,592
8	362	Special Collecting Structures	-	-	-	-	-
9	363	Services To Customers	-	-	-	-	-
10	364	Flow Measuring Devices	-	-	-	-	-
11	365	Flow Measuring Installations	-	-	-	-	-
12	370	Receiving Wells	-	-	-	-	-
13	371	Pumping Equipment	7,613,724	-	-	-	7,613,724
14	375	Reuse T & D	958,645	-	-	-	958,645
15	380	Treatment And Disposal Equipment	-	-	-	-	-
16	381	Plant Sewers	66,277,037	-	-	-	66,277,037
17	382	Outfall Sewer Lines	-	-	-	-	-
18	389	Other Plant And Miscellaneous Equipment	-	-	-	-	-
19	390	Office Furniture And Equipment	-	-	-	-	-
20	391	Transportation Equipment	-	-	-	-	-
21	393	Tools, Shop And Garage Equipment	-	-	-	-	-
22	394	Laboratory Equipment	-	-	-	-	-
23	395	Power Operated Equipment	-	-	-	-	-
24	398	Other Tangible Plant	-	-	-	-	-
25		TOTAL WASTEWATER PLANT	$ 123,849,702	$ -	$ 689,382	$ -	$ 124,539,084
26		Company As Filed	123,849,702				123,849,702
27		Difference	$ -	$ -	$ 689,382	$ -	$ 689,382

References:

Column (A): Company Schedules B-2 And Its Response To Staff Data Request 4-6
Column (B): No Adjustments
Column (C): Company Response To Staff Data Request 4-6
Column (D): No Adjustments
Column (E): Sum Of Columns (A) Thru (D)

OPERATING INCOME

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED	(B) RUCO TEST YEAR ADJM'TS	(C) RUCO TEST YEAR AS ADJ'TED	(D) RUCO PROP'D CHANGES	(E) RUCO AS RECOMM'D
	Revenues:					
1	Flate Rate Revenues	$ 10,786,457	$ 65,351	$ 10,851,808	$ 608,286	$ 11,460,094
2	Misc. Service Revenues	-	-	-	-	-
3	Other Wastewater Revenues	502,206	-	502,206	-	502,206
4	TOTAL OPERATING REVENUE	$ 11,288,663	$ 65,351	$ 11,354,014	$ 608,286	$ 11,962,300
	Operating Expenses:					
5	Salaries And Wages	$ -	$ -	$ -	$ -	$ -
6	Purchased Wastewater Treatment	-	-	-	-	-
7	Sludge Removal Expense	286,429	-	286,429	-	286,429
8	Purchased Power	688,557	-	688,557	-	688,557
9	Fuel For Power Production	-	-	-	-	-
10	Chemicals	147,196	-	147,196	-	147,196
11	Materials And Supplies	32,762	-	32,762	-	32,762
12	Contractual Services	4,826,240	-	4,826,240	-	4,826,240
13	Repairs And Maintenance	116,474	-	116,474	-	116,474
14	Rents	48,151	-	48,151	-	48,151
15	Transportation Expenses	-	-	-	-	-
16	Insurance	21,039	-	21,039	-	21,039
18	Regulatory Comm. Exp. - Rate Case	33,333	(13,333)	20,000	-	20,000
19	Miscellaneous Expense	231,593	924	232,517	-	232,517
20	Depreciation Expense	3,142,068	13,788	3,155,856	-	3,155,856
21	Taxes Other Than Income	6,525	-	6,525	-	6,525
22	Property Taxes	785,281	2,813	788,094	-	788,094
23	Income Tax	330,522	(330,522)	-	-	-
24	Rounding	2				
25	TOTAL OPERATING EXPENSES	$ 10,696,172	$ (326,330)	$ 10,369,840	$ -	$ 10,369,840
26	OPERATING INCOME (LOSS)	$ 592,491	$ 391,681	$ 984,174	$ 608,286	$ 1,592,460

References:

Column (A): Company Schedule C-1
Column (B): RLM-8, Columns (B) Thru (I)
Column (C): Column (A) + Column (B)
Column (D): RLM-1
Column (E): Column (C) + Column (D)

Johnson Utilities, LLC
Docket Nos. WS-02987A-08-0180
Test Year Ended December 31, 2007

Wastewater District
Schedule RLM-8

SUMMARY OF OPERATING INCOME ADJUSTMENTS
TEST YEAR AS FILED AND ADJUSTMENTS

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED	(B) ADJMT NO. 1 DEPRECIAT'N & AMORTIZ'N	(C) ADJMT NO. 2 PROPERTY TAX	(D) ADJMT NO. 3 REVENUE ADJUSTMENT	(E) ADJMT NO. 4 RATE CASE EXPENSE	(F) ADJMT NO. 5 LEFT BLANK	(G) ADJMT NO. 6 UNNECESS'Y EXPENSE	(H) ADJMT NO. 7 LEFT BLANK	(I) ADJMT NO. 8 INCOME TAX	(J) RUCO AS ADJT'D
	Revenues:										
1	Flate Rate Revenues	$ 10,786,457	$ -	$ -	$ 65,351	$ -	$ -	$ -	$ -	$ -	$ 10,851,808
2	Misc. Service Revenues	-	-	-	-	-	-	-	-	-	-
3	Other Wastewater Revenues	502,206	-	-	-	-	-	-	-	-	502,206
4	TOTAL OPERATING REV.	$ 11,288,663	$ -	$ -	$ 65,351	$ -	$ -	$ -	$ -	$ -	$ 11,354,014
	Operating Expenses:										
5	Salaries And Wages	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
6	Purchased Wastewater Treatment	-	-	-	-	-	-	-	-	-	-
7	Sludge Removal Expense	286,429	-	-	-	-	-	-	-	-	286,429
8	Purchased Power	688,557	-	-	-	-	-	-	-	-	688,557
9	Fuel For Power Production	-	-	-	-	-	-	-	-	-	-
10	Chemicals	147,196	-	-	-	-	-	-	-	-	147,196
11	Materials And Supplies	32,762	-	-	-	-	-	-	-	-	32,762
12	Contractual Services	4,826,240	-	-	-	-	-	-	-	-	4,826,240
13	Repairs And Maintenance	116,474	-	-	-	-	-	-	-	-	116,474
14	Rents	48,151	-	-	-	-	-	-	-	-	48,151
15	Transportation Expenses	-	-	-	-	-	-	-	-	-	-
16	Insurance	21,039	-	-	-	-	-	-	-	-	21,039
18	Regulatory Comm. Exp. - Rate Case	33,333	-	-	-	(13,333)	-	-	-	-	20,000
19	Miscellaneous Expense	231,593	-	-	-	-	-	924	-	-	232,517
20	Depreciation Expense	3,142,068	13,788	-	-	-	-	-	-	-	3,155,856
21	Taxes Other Than Income	6,525	-	-	-	-	-	-	-	-	6,525
22	Property Taxes	785,281	-	2,813	-	-	-	-	-	-	788,094
23	Income Tax	330,522	-	-	-	-	-	-	-	(330,522)	-
24	Rounding	2									
25	TOTAL OPERATING EXP.	$ 10,696,172	$ 13,788	$ 2,813	$ -	$ (13,333)	$ -	$ 924	$ -	$ (330,522)	$ 10,369,840
26	OPERATING INC. (LOSS)	$ 592,491									$ 984,174

ADJUSTMENTS:	REFERENCE:
1 Depreciation And Amortization Expense	Testimony, RLM And Schedule RLM-9
2 Property Tax Computation	Testimony, RLM And Schedule RLM-10
3 Revenue Adjustment	Testimony, RLM
4 Rate Case Expense	Testimony, RLM And Schedule RLM-11
5 Intentionally Left Blank	
6 Unnecessary Expenses	Testimony, RLM And Schedule RLM-12
7 Intentionally Left Blank	
8 Income Tax	Testimony, RLM And Schedule RLM-13

EXPLANATION OF OPERATING INCOME ADJUSTMENT NO. 1
TEST YEAR DEPRECIATION EXPENSE

LINE NO.	ACCOUNT NO.	ACCOUNT NAME	(A) TOTAL PLANT VALUE	(B) COMPANY PROPOSED DEP. RATES	(C) TEST YEAR DEPRECIATION EXPENSE
1	351	Organization	$ -	0.00%	$ -
2	352	Franchises	-	0.00%	-
3	353	Land and Land Rights	4,122,800	0.00%	-
4	354	Structures And Improvements	453,663	3.33%	15,107
5	355	Power Generation Equipment	-	5.00%	-
6	360	Collection Sewers - Force	20,825,623	2.00%	416,512
7	361	Collection Sewers - Gravity	24,287,592	2.00%	485,752
8	362	Special Collecting Structures	-	2.00%	-
9	363	Services To Customers	-	2.00%	-
10	364	Flow Measuring Devices	-	10.00%	-
11	365	Flow Measuring Installations	-	10.00%	-
12	370	Receiving Wells	-	3.33%	-
13	371	Pumping Equipment	7,613,724	12.50%	951,716
14	375	Reuse T & D	958,645	2.50%	23,966
15	380	Treatment And Disposal Equipment	-	5.00%	-
16	381	Plant Sewers	66,277,037	5.00%	3,313,852
17	382	Outfall Sewer Lines	-	3.33%	-
18	389	Other Plant And Miscellaneous Equipment	-	6.67%	-
19	390	Office Furniture And Equipment	-	20.00%	-
20	391	Transportation Equipment	-	20.00%	-
21	393	Tools, Shop And Garage Equipment	-	5.00%	-
22	394	Laboratory Equipment	-	10.00%	-
23	395	Power Operated Equipment	-	5.00%	-
24	398	Other Tangible Plant	-	10.00%	-
25		TOTAL TEST-YEAR GROSS PLANT AND DEPRECIATION EXPENSE	$ 124,539,084		$ 5,206,905
26		AMORTIZATION OF CONTRIBUTIONS			(2,051,049)
27		Rounding			-
28	**TOTAL DEPRECIATION EXPENSE**				$ 3,155,856
29	Company As Filed				3,142,068
30	Difference				$ 13,788
31	RUCO Adjustment (See RLM-8, Column (B))				$ 13,788

References:

Column (A): RLM-5, Column (E)
Column (B): Company Workpapers
Column (C): Column (A) X Column (B)

EXPLANATION OF OPERATING INCOME ADJUSTMENT NO. 2
PROPERTY TAX COMPUTATION

LINE NO.	DESCRIPTION	REFERENCE	(A)	(B)
	Calculation Of The Company's Full Cash Value:			
	Annual Operating Revenues:			
1	Adjusted Revenues In Year Ended December 2007	Sch. RLM-6, Col (C), Ln 4	$ 11,354,014	
2	Adjusted Revenues In Year Ended December 2007	Sch. RLM-6, Col (C), Ln 4	11,354,014	
3	Proposed Revenues	Sch. RLM-6, Col (D), Ln 4	13,528,467	
4	Total Three Year Operating Revenues	Sum Of Lines 1, 2 & 3	$ 36,236,495	
5	Average Annual Operating Revenues	Line 4 / 3	12,078,832	
6	Two Times Three Year Average Operating Revenues	Line 5 X 2		$ 24,157,663
	ADD:			
	10% Of Construction Work In Progress ("CWIP"):			
7	Test Year CWIP	Company Workpapers	$ -	
8	10% Of CWIP	Line 7 X 10%		$ -
	SUBTRACT:			
	Transportation At Book Value:			
9	Original Cost Of Transportation Equipment	Company Workpapers	$ -	
10	Acc. Dep. Of Transportation Equipment	Company Workpapers	-	
11	Book Value Of Transportation Equipment	Line 9 + Line 10		$ -
12	Company's Full Cash Value ("FCV")	Sum Of Lines 6, 8 & 11		$ 24,157,663
	Calculation Of The Company's Tax Liability:			
	MULTIPLY:			
	FCV X Valuation Assessment Ratio X Property Tax Rates:			
13	Assessment Ratio	House Bill 2779	23.0%	
14	Assessed Value	Line 12 X Line 13	$ 5,556,263	
	Property Tax Rates:			
15	Primary Tax Rate	Company Workpapers	14.04%	
16	Secondary Tax Rate	Company Workpapers	0.00%	
17	Estimated Tax Rate Liability	Line 15 + Line 16	14.04%	
	Property Tax			$ 779,986
	Tax On Parcel			8,108
18	Company's Total Tax Liability - Based On Full Cash Value	Line 14 X Line 17		$ 788,094
19	Test Year Adjusted Property Tax Expense As Filed	Co. Sch. C-1		785,281
20	Decrease In Property Tax Expense	Line 18 - Line 19		$ 2,813
21	RUCO Adjustment (See RLM-8, Column (C))	Line 20		$ 2,813

EXPLANATION OF OPERATING INCOME ADJUSTMENT NO. 4
RATE CASE EXPENSE

LINE NO.	DESCRIPTION	(A) COMPANY ESTIMATE	(B) RUCO ADJUSTMENT	(C) RUCO AS ADJUSTED
1	Rate Case Expense Total	$ 200,000	$ -	$ 200,000
2	Allocation Factor (See NOTE Below)			50.00%
3	Wastewater District (Line 1 X Line 2)			$ 100,000
4	Amortization Period - 5 Years			5
5	RUCO Adjusted Rate Case Expense For Instant Case (Line 3 / 5 Years)			$ 20,000
6	Company Rate Case Expenses As Filed (Company Sch. C-2)			$ 33,333
7	RUCO Pro Forma Rate Case Expense (Lines 5 - 6)			$ (13,333)
8	RUCO Adjustment (Line 7) (See RLM-8, Column (E))			$ (13,333)

EXPLANATION OF OPERATING INCOME ADJUSTMENT NO. 6
UNNECESSARY EXPENSES

LINE NO.	DESCRIPTION	REFERENCE	(A) RUCO AS ADJUSTED
	SPLIT ACCOUNT		
1	Miscellaneous - Sponsorships	Co. Response To Staff DR 1-32	$ 1,850
2	Allocation Factor	Co. Workpapers	46.12%
3	Wastewater District - Miscellaneous	Lines 1 X 2	$ 853
	WASTEWATER DISTRICT SPECIFIC		
4	Miscellaneous - Food & Beverages	Co. Response To Staff DR 1-33	$ 71
5	RUCO Test-Year Disallowance Of Unnecessary Expense	Sum Of Lines 3 & 4	$ 924
6	RUCO Adjustment (See RLM-8, Column (G))	Line 5	$ 924

Johnson Utilities, LLC
Docket Nos. WS-02987A-08-0180
Test Year Ended December 31, 2007

Wastewater District
Schedule RLM-13

COST OF CAPITAL

LINE NO.	DESCRIPTION	(A) CAPITAL RATIO	(B) COST	(C) WEIGHTED COST RATE
1	Long -Term Debt	40.00%	8.00%	3.20%
2	Common Equity	60.00%	8.31%	4.98%
3	Total Capitalization	100.00%		
4	WEIGHTED AVERAGE COST OF CAPITAL			8.18%

References:
Columns (A) Thru (C): Testimony, WAR

Johnson Utilities, LLC
Docket Nos. WS-02987A-08-0180
Test Year Ended December 31, 2007

Wastewater District
Schedule RLM-14
Page 1 of 1

RATE DESIGN AND PROOF OF RECOMMENDED REVENUE
PROPOSED REVENUE

LINE NO.	DESCRIPTION	(A) TEST YEAR DETERMIN'TS	(B) ANN'ZED ADJUSTM'TS	(C) TEST YEAR ADJUSTED DETERMIN'TS	PRESENT CHARGES & USAGE FEES	(E) TEST YEAR ADJUSTED REVENUES	(F) TOTAL REVENUES
	RESIDENTIAL CUSTOMERS						
1	3/4" Meter	21,448	1,476	22,924	$ 40.92	$ 11,257,068	$ 11,257,068
2	1" Meter	77	6	83	$ 52.09	$ 51,883	$ 51,883
3	2" Meter	0	0	0	$ 107.89	$ -	$ -
4	3" Meter	0	1	1	$ 409.26	$ 4,911	$ 4,911
5	Total Residential Customers	21,525	1,483	23,008			
6	TOTAL RESIDENTIAL CUSTOMERS REVENUE						$ 11,313,862
	COMMERCIAL CUSTOMERS						
7	3/4" Meter	5	1	5	$ 40.92	$ 2,455	$ 2,455
8	1" Meter	5	1	6	$ 52.09	$ 3,751	$ 3,751
9	1-1/2" Meter	30	-4	26	$ 66.97	$ 20,895	$ 20,895
10	2" Meter	25	5	30	$ 107.89	$ 38,842	$ 38,842
11	3" Meter	1	0	1	$ 409.26	$ 4,911	$ 4,911
12	4" Meter	2	0	2	$ 781.31	$ 18,751	$ 18,751
13	Total Commercial Customers	68	2	70			
14	TOTAL COMMERCIAL CUSTOMERS REVENUE						$ 89,605
	PUBLIC AUTHORITY CUSTOMERS						
15	3/4" Meter	1	0	1	$ 40.92	$ 491	$ 491
16	1" Meter	0	0	0	$ 52.09	$ -	$ -
17	1-1/2" Meter	0	0	0	$ 66.97	$ -	$ -
18	2" Meter	7	0	7	$ 107.89	$ 9,495	$ 9,495
19	3" Meter	1	0	1	$ 409.26	$ 4,911	$ 4,911
20	4" Meter	1	0	1	$ 781.31	$ 9,376	$ 9,376
21	Total Public Authority Customers	10	0	10			
22	TOTAL PUBLIC AUTHORITY CUSTOMERS REVENUE						$ 24,273
	EFFLUENT CUSTOMERS						
23	6" Meter	0	0	0	$ -	$ -	$ -
24	Commodity Usage	53,489	0	53,489	$ 0.62	$ 33,163	$ 33,163
25	Total Effluent Customers	0	0	0			
26	Total Effluent Usage	53,489	0	53,489			
27	TOTAL COMPANY CUSTOMER COUNT	21,603	1,485	23,088			
28	TOTAL COMPANY EFFLUENT SALES	53,489	0	53,489			
29	TOTAL EFFLUENT CUSTOMERS REVENUE						$ 33,163
30	**TOTAL RUCO PROPOSED REVENUE PER BILL COUNT**						$ 11,460,902
31	Unreconciled Difference vs. Billed Revenues						(809)
32	Other Revenues						502,206
33	**TOTAL REVENUE**						$ 11,962,300
34	**PROPOSED REVENUE PER RUCO**						$ 11,962,300
35	Difference						$ (0)
36	Percentage Difference						0.00%

TYPICAL RESIDENTIAL BILL ANALYSIS

LINE NO.	DESCRIPTION	(A) PRESENT	(B) PRESENT	(C) COMPANY PROPOSED	(D) COMPANY PROPOSED	(E) RUCO PROPOSED	(F) RUCO PROPOSED
	REVENUE ALLOCATION						
1	RESIDENTIAL	$ 9,955,813	98.65%	$ 12,864,422	98.75%	$ 11,313,862	98.72%
2	OTHER	136,707	1.35%	162,648	1.25%	147,041	1.28%
3	TOTAL	$ 10,092,520	100.00%	$ 13,027,070	100.00%	$ 11,460,902	100.00%
	ALLOCATION RATIOS						
4	FIX REVENUE	$ 10,059,357	99.67%	$ 12,993,907	99.75%	$ 11,427,739	99.71%
5	VARIABLE REVENUE	33,163	0.33%	33,163	0.25%	33,163	0.29%
6	TOTAL	$ 10,092,520	100.00%	$ 13,027,070	100.00%	$ 11,460,902	100.00%

	RESIDENTIAL (5/8" X 3/4") RATE DESIGN		PRESENT	COMPANY PROPOSED	RUCO PROPOSED
7	BASIC MONTHLY CHARGE		$ 38.50	$ 46.53	$ 40.92
	COMMODITY CHARGE				
	PRESENT	PROPOSED			
8	Flat Rate	Flat Rate	$ -	$ -	$ -
9	Effluent - Per 1,00 Gallons	Effluent - Per 1,00 Gallons	$ 0.62	$ 0.62	$ 0.62

RESIDENTIAL BILL COMPARISONS

	MONTHLY CONSUMPTION	PRESENT MONTHLY WATER COST	RUCO PROP'D MONTHLY WATER COST	RUCO PROP'D MONTHLY INCREASE	RUCO PROP'D MONTHLY % INCREASE
10	Flat Rate	$ 38.50	$ 40.92	$ 2.42	6.29%

EXHIBIT
R-2
ADMITTED

JOHNSON UTILITIES, L.L.C.

DOCKET NO. WS-02987A-08-0180

SURREBUTTAL TESTIMONY

OF

RODNEY L. MOORE

ON BEHALF OF

THE

RESIDENTIAL UTILITY CONSUMER OFFICE

MARCH 31, 2009

TABLE OF CONTENTS

INTRODUCTION....2

SUMMARY OF ADJUSTMENTS....2

RATE BASE:....4

- ADJUSTMENT NO. 1 – GROSS PLANT IN SERVICE....4
- ADJUSTMENT NO. 2 – POST TEST-YEAR PLANT....5
- ADJUSTMENT NO. 3 – ACCUMULATED DEPRECIATION....5
- ADJUSTMENT NO. 4 – ACCUMULATED AMORTIZATION OF CIAC....6
- ADJUSTMENT NO. 5 – MATERIALS AND SUPPLIES....7
- ADJUSTMENT NO. 6 – RECLASSIFICATION OF PLANT....8

OPERATING INCOME:....9

- ADJUSTMENT NO. 1 – TEST-YEAR DEPRECIATION EXPENSE....9
- ADJUSTMENT NO. 2 – PROPERTY TAX COMPUTATION....10
- ADJUSTMENT NO. 3 – SLUDGE REMOVAL EXPENSES....10
- ADJUSTMENT NO. 4 – MISCELLANEOUS EXPENSES....11
- ADJUSTMENT NO. 5 – PURCHASED POWER EXPENSES....11

OPERATING MARGIN....12

COST OF CAPITAL....13

RATE DESIGN AND PROOF OF RECOMMENDED REVENUE....13

TYPICAL RESIDENTIAL BILL ANALYSIS....14

INTRODUCTION

Q. Please state your name for the record.

A. My name is Rodney Lane Moore.

Q. Have you previously filed testimony regarding this docket?

A. Yes, I have. I filed direct testimony in this docket on February 4, 2009.

Q. What is the purpose of your surrebuttal testimony?

A. My surrebuttal testimony will address Company's rebuttal comments pertaining to adjustments I sponsored in my direct testimony. I also accept adjustments identified by the Engineering Section of the Arizona Corporation Commission ("ACC").

SUMMARY OF ADJUSTMENTS

Q. What areas will you address in your surrebuttal testimony?

A. My surrebuttal testimony will address the following RUCO proposed adjustments:

RATE BASE ADJUSTMENTS

1. (WATER DISTRICT ONLY) Rate Base Adjustment No. 1 – Gross Plant In Service;
2. (WASTEWATER DISTRICT ONLY) Rate Base Adjustment No. 1 – Direct Post Test-Year Plant;

3. (WATER DISTRICT ONLY) Rate Base Adjustment No. 2 – Accumulated Depreciation;
4. (WASTEWATER DISTRICT ONLY) Rate Base Adjustment No. 2 – Accumulated Amortization Of CIAC;
5. (WASTEWATER DISTRICT ONLY) Rate Base Adjustment No. 4 – Gross Plant In Service;
6. (WATER DISTRICT ONLY) Rate Base Adjustment No. 5 – Materials and Supplies;
7. (WASTEWATER DISTRICT ONLY) Rate Base Adjustment No. 5 – Accumulated Depreciation;
8. (WATER DISTRICT ONLY) Rate Base Adjustment No. 6 – Service Line and Meter Charges;
9. (WATER DISTRICT ONLY) Rate Base Adjustment No. 7 – Customer Security Deposits;

OPERATING INCOME ADJUSTMENTS

1. Operating Income Adjustment No. 1 – Depreciation Expense;
2. Operating Income Adjustment No. 2 – Property Tax Computation;
3. (WATER DISTRICT ONLY) Operating Income Adjustment No. 3 – Outside Services;
4. (WASTEWATER DISTRICT ONLY) Operating Income Adjustment No. 5 – Sludge Removal Expenses;
5. Operating Income Adjustment No. 6 – Miscellaneous Expenses;

6. Operating Income Adjustment No. 7 – Purchased Power Expenses;
7. Rate Design and Proof of Recommended Revenue; and
8. Typical Residential Bill Analysis.

To support the adjustments in my surrebuttal testimony, I prepared eleven Surrebuttal Schedules for each Division, which is filed concurrently in my surrebuttal testimony.

RATE BASE

Rate Base Adjustment No. 1 – Surrebuttal Adjustment To Gross Plant In Service

Q. Please explain your surrebuttal adjustment to gross plant in service.

A. This adjustment is consistent with the analysis and conclusions reached by the Engineering Section of the ACC as stated in the direct testimony of Staff witness Marlin Scott, Jr.. RUCO accepts Mr. Scott's findings with respect to his analysis of the Company's infrastructure and his conclusion that the Company has requested inclusion of plant into rate base that is not used and useful, provides unnecessary excess capacity and/or is not properly classified to the correct account codes.

Therefore, as shown on Schedule SURR RLM-3, and supporting Schedule SURR RLM-6, this adjustment reflects the plant decreases as recommended by Staff Engineering for each District:

Water District by ($5,254,084); and

Wastewater District by ($10,038,359).

(WASTEWATER DISTRICT ONLY) Rate Base Adjustment No. 1 – Revised Direct Post Test-Year Plant

Q. Please explain your surrebuttal adjustment to post test-year plant.

A. This is a conforming adjustment to correct the calculation of post test-year plant based on revised data outlined in the Company's rebuttal testimony.

Therefore, as shown on (WASTEWATER DISTRICT ONLY) Schedule SURR RLM-3, I revised my original direct testimony to reflect the correct level of post test-year plant with an adjustment to the Wastewater District for:

$490,896.

(WATER DISTRICT ONLY) Rate Base Adjustment No. 2 – Revised Direct Accumulated Depreciation

Q. Please explain your surrebuttal adjustment to accumulated depreciation.

A. This adjustment reflects, in part, RUCO's acceptance of several Staff Engineering adjustments associated with reclassified plant, excess

capacity and plant not deemed used and useful plant, and also in part for my revision to the level of post test-year plant (as described above).

Therefore, as shown on Schedule SURR RLM-3, my revised adjustment to accumulated depreciated for the Water District by:

$436,975.

(WASTEWATER DISTRICT ONLY) Rate Base Adjustment No. 2 – Accumulated Amortization Of Contributions In Aid of Construction ("CIAC")

Q. Please explain your surrebuttal adjustment to the accumulated amortization of CIAC.

A. My adjustment corrects RUCO's original direct testimony calculation. I discovered my companion adjustment to CIAC was not reflected in this adjustment. My work papers for the CIAC amortization adjustment did not include the increase to CIAC as recommended in my direct testimony Rate Base Adjustment No. 3.

Therefore, as shown on (WASTEWATER DISTRICT ONLY) Schedule SURR RLM-3, and on supporting Schedule SURR RLM-5, this adjustment increases the total rate base of the Wastewater District by:

$1,058,281.

(WATER DISTRICT ONLY) Rate Base Adjustment No. 4 – Surrebuttal Adjustment To Material and Supplies

Q. Please explain your surrebuttal adjustment to Material and Supplies.

A. My original adjustment was based on the premise of accepting the Company's proposal but with amendments to reflect RUCO's recommended level of O & M expenses. However, after further analysis, I determined it's RUCO's historical position not to allow a utility to pick and choose which of the elements will comprise the working capital allowance. Since the Company did not perform a complete working capital analysis to compute the test-year level of all the elements (i.e. working cash capital, materials, supplies and prepayments) there should be a disallowance of the Company's proposed recovery of just the materials and supplies elements.

Therefore, as shown on (WATER DISTRICT ONLY) Schedule SURR RLM-3, I have reduced the Company's total allowance for working capital to zero by an adjustment to the Water District for:
($348,852).

(WATER DISTRICT ONLY) Rate Base Adjustment No. 6– Surrebuttal Adjustment To Service Line and Meter Charges

Q. Please explain your surrebuttal adjustment to service line and meter charges.

A. This adjustment is a companion adjustment to (WATER DISTRICT ONLY) Rate Base Adjustment No. 7 below and corrects an accounting error in which the Company recorded $6,779,771 in costs incurred for "service line and meter advances costs" as "customer security deposits".

As shown on (WATER DISTRICT ONLY) Schedule SURR RLM-3, this adjustment, in conjunction the following adjustment, moves $6,779,771 from "customer security deposits" to "service line and meter charges".

(WATER DISTRICT ONLY) Rate Base Adjustment No. 8– Surrebuttal Adjustment To Customer Security Deposits

Q. Please explain your surrebuttal adjustment to customer security deposits.

A. This adjustment is a companion adjustment to (WATER DISTRICT ONLY) Rate Base Adjustment No. 6 above and corrects an accounting error in which the Company recorded $6,779,771 in costs incurred for "service line and meter advances costs" as "customer security deposits".

As shown on (WATER DISTRICT ONLY) Schedule SURR RLM-3, this adjustment, in conjunction the preceding adjustment, moves $6,779,771

from "customer security deposits" to "service line and meter charges". This adjustment also recognizes the test year-end customer security deposit balance of $378,138; therefore the net transfer from the customer security deposit is $6,779,771 - $378,138 = $6,401,633.

OPERATING INCOME

Operating Income Adjustment No. 1 – Surrebuttal Adjustment To Depreciation Expense

Q. Please explain your surrebuttal adjustment to the test-year depreciation expense.

A. This adjustment reflects RUCO's end of test year gross plant in service. The adjustment is driven by the disallowance of several plant additions as explained previously in my testimony.

As shown on Schedule SURR RLM-8, and supporting Schedule SURR RLM-9, this adjustment decreases adjusted test-year operating expenses of each District:

Water District by ($398,648); and

Wastewater District by ($362,533).

Operating Income Adjustment No. 2 – Surrebuttal Adjustment To Property Taxes

Q. Please explain your surrebuttal adjustment to the test-year property tax expense.

A. This adjustment reflects RUCO's recommended proposed annual revenue.

As shown on Schedule SURR RLM-8, and supporting Schedule SURR RLM-10, this adjustment changes adjusted test-year operating expenses of each District:

Water District by an increase of $15,946; and

Wastewater District by decrease of ($54,330).

(WASTEWATER DISTRICT ONLY) Operating Income Adjustment No. 5 – Surrebuttal Adjustment To Sludge Removal Expense

Q. Please explain your surrebuttal adjustment to the test-year sludge removal expense.

A. This is a conforming adjustment to reflects the Company's adoption of Staff's wastewater district operating income adjustment 2, which disallows sludge removal expenses that occurred outside the test year in 2008.

As shown on (WASTEWATER DISTRICT ONLY) Schedule SURR RLM-8, this adjustment decreases adjusted test-year operating expenses for the Wastewater District by:

($7,688).

Operating Income Adjustment No. 6 – Surrebuttal Adjustment To Miscellaneous Expenses

Q. Please explain your surrebuttal adjustment to the test-year miscellaneous expense.

A. As shown on Schedule SURR RLM-8, this is a conforming adjustment to reflect the Company's adoption of both RUCO's and Staff's direct testimony recommendation which decreases adjusted test-year operating expenses for each District:

Water District by ($31,192); and

Wastewater District by ($993).

Operating Income Adjustment No. 7 – Surrebuttal Adjustment To Purchased Power Expenses

Q. Please explain your surrebuttal adjustment to the test-year purchased power expense.

A. This is a conforming adjustment to reflect the Company's adoption of both RUCO's and Staff's reinstatement of purchased power costs to include:

1. An accounting error by the Company where it had credited meter deposit refunds to the purchased power account;
2. A reduction for purchased power costs of an affiliate; and
3. An increase in purchased power costs for a known and measurable contractual agreement.

As shown on Schedule SURR RLM-8, this adjustment increases adjusted test-year operating expenses for each District:

Water District by $2,631; and

Wastewater District by $26,003.

OPERATING MARGIN (WATER DISTRICT ONLY)

Q. Is RUCO proposing a surrebuttal adjustment to the Company proposed rate of return?

A. Yes, it is. Since RUCO's adjusted rate base is now negative, the revenue requirement will be determined by an operating margin. RUCO recommends an operating margin equal to RUCO's recommended weighted average cost of capital of 8.18 percent.

RUCO's cost of capital determination is fully explained in the testimonies of RUCO witness William A. Rigsby.

COST OF CAPITAL

Q. Is RUCO proposing any surrebuttal adjustments to its proposed cost of capital?

A. No.

This adjustment is fully explained in the testimony of RUCO witness William A. Rigsby.

RATE DESIGN AND PROOF OF RECOMMENDED REVENUE

Q. Have you revised your Schedule presenting your recommended rate designs?

A. Yes, as shown on Schedule SURR RLM-14, I am recommending a rate design that is consistent with RUCO's recommended revenue allocations and requirement as revised in my surrebuttal testimony.

The Water District's rate design provides for an 11.25 percent decrease equally across all classes of service, which is an increase of 5.71 percent over the Company's requested 16.96 percent decrease. However, if you impute the Company's proposed CAGRD tax surcharge, the Company's request decrease is reduced to 12.03 percent; which is 0.78 percent higher than RUCO's overall proposal.

The Wastewater District's rate design provides for a 4.52 percent decrease equally across all classes of service, which is a decrease of 24.36 percent over the Company's requested 19.84 percent increase.

Q. Have you revised your Schedule presenting proof of your recommended revenue?

A. Yes, I have. As shown on Schedule SURR RLM-14, my recommended rate design will produce the recommended required revenue as revised in my surrebuttal testimony.

TYPICAL RESIDENTIAL BILL ANALYSIS

Q. Has RUCO prepared a Schedule representing the financial impact of RUCO's recommended rate design on the typical residential customer?

A. Yes. A typical bill analysis for residential customers with various levels of usage is presented on Schedule SURR RLM-15.

Q. Does this conclude your surrebuttal testimony?

A. Yes, it does.

Johnson Utilities, LLC
Docket Nos. WS-02987A-08-0180
Test Year Ended December 31, 2007

Water District

TABLE OF CONTENTS TO RLM SURREBUTTAL SCHEDULES

SCH. NO.	PAGE NO.	TITLE
SURR RLM-1	1	SURREBUTTAL REVENUE REQUIREMENT
SURR RLM-2	1	SURREBUTTAL RATE BASE
SURR RLM-3	1	SURREBUTTAL SUMMARY OF ORIGINAL COST RATE BASE ADJUSTMENTS
TESTIMONY		RATE BASE ADJUSTMENT NO. 1 - SURREBUTTAL ADJUSTED GROSS PLANT IN SERVICE
TESTIMONY		RATE BASE ADJUSTMENT NO. 2 - SURREBUTTAL ADJUSTED ACCUMULATED DEPRECIATION
TESTIMONY		RATE BASE ADJUSTMENT NO. 5 - SURREBUTTAL ADJUSTED MATERIALS AND SUPPLIES
TESTIMONY		RATE BASE ADJUSTMENT NO. 6 - SURREBUTTAL RECLASSIFY SERVICE LINE CHARGES
TESTIMONY		RATE BASE ADJUSTMENT NO. 7 - SURREBUTTAL RECLASSIFY CUSTOMER DEPOSITS
SURR RLM-6	1	SURREBUTTAL GROSS PLANT ADJUSTMENTS
SURR RLM-7	1	SURREBUTTAL OPERATING INCOME
SURR RLM-8	1	SURREBUTTAL SUMMARY OF OPERATING INCOME ADJUSTMENTS
SURR RLM-9	1	OPERATING INCOME ADJUSTMENT NO. 1 - SURREBUTTAL ADJUSTED TEST YEAR DEPRECIATION EXPENSE
SURR RLM-10	1	OPERATING INCOME ADJUSTMENT NO. 2 - SURREBUTTAL ADJUSTED PROPERTY TAX COMPUTATION
TESTIMONY		OPERATING INCOME ADJUSTMENT NO. 3 - SURREBUTTAL ADJUSTED OUTSIDE SERVICES
TESTIMONY		OPERATING INCOME ADJUSTMENT NO. 6 - SURREBUTTAL ADJUSTED MISCELLANEOUS EXPENSES
TESTIMONY		OPERATING INCOME ADJUSTMENT NO. 7 - SURREBUTTAL ADJUSTED ANNUALIZED POWER EXPENSES
SURR RLM-14	1 TO 3	SURREBUTTAL RATE DESIGN AND PROOF OF RECOMMENDED REVENUE
SURR RLM-15	1	SURREBUTTAL TYPICAL RESIDENTIAL BILL ANALYSIS

SURREBUTTAL REVENUE REQUIREMENT

LINE NO.	DESCRIPTION	(A) COMPANY OCRB/FVRB COST	(B) RUCO OCRB/FVRB COST
1	Original Cost Rate Base	$ 6,607,841	$ (5,556,766)
2	Adjusted Operating Income (Loss)	$ 2,118,161	$ 2,438,370
3	Recommended Operating Income (8.18% Operating Margin) (L11 X 10%)	N/A	$ 956,311
4	Current Rate Of Return (L2 / L1)	32.06%	N/A
5	Required Operating Income (L5 X L1)	$ 689,198	N/A
6	Required Rate Of Return On Fair Value Rate Base	10.43%	N/A
7	Operating Income Deficiency (L4 - L2)	$ (1,428,963)	N/A
8	Gross Revenue Conversion Factor	1.5630	N/A
9	Increase In Gross Revenue Requirement (L7 X L6)	$ (2,233,480)	$ (1,482,059)
10	Adjusted Test Year Revenue	$ 13,172,899	$ 13,172,899
11	Proposed Annual Revenue (L8 + L9)	$ 10,939,419	$ 11,690,840
12	Required Percentage Increase In Revenue (L8 / L9)	-16.96%	-11.25%
13	Rate Of Return On Common Equity	10.50%	N/A
14	Required Operating Margin	N/A	8.18%

References:

Column (A): Company Schedules A-1 and C-1
Column (B): RUCO Schedule SURR RLM-2, SURR RLM-7 And RLM-13

SURREBUTTAL RATE BASE - ORIGINAL COST

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED OCRB/FVRB	(B) RUCO OCRB/FVRB ADJUSTMENTS	(C) RUCO ADJ'TED OCRB/FVRB
1	Gross Utility Plant In Service	$ 79,591,151	$ (5,254,084)	$ 74,337,067
2	Accumulated Depreciation	(6,199,124)	436,975	(5,762,149)
3	Net Utility Plant In Service (Sum L1 & L2)	$ 73,392,027	$ (4,817,109)	$ 68,574,918
4	Advances In Aid Of Const.	$ (37,840,520)	$ -	$ (37,840,520)
5	Service Line And Meter Advances	$ -	$ (6,779,771)	$ (6,779,771)
6	Contribution In Aid Of Const.	$ (25,004,821)	$ (6,931,078)	$ (31,935,899)
7	Accumulated Amortization Of CIAC	1,858,537	$ 310,570	2,169,107
8	NET CIAC (L6 + L7)	$ (23,146,284)	$ (6,620,508)	$ (29,766,792)
9	Customer Meter Deposits	$ (6,779,771)	$ 6,401,633	$ (378,138)
10	Deferred Income Taxes And Credits	$ -	$ -	$ -
11	Investment Tax Credits	$ -	$ -	$ -
12	Shared Gain On Well	$ -	$ -	$ -
13	Prepayments	$ -	$ -	$ -
14	Materials And Supplies	$ 348,852	$ (348,852)	$ -
15	Deferred Assets	$ 633,537	$ -	$ 633,537
16	Allowance For Working Capital	$ -	$ -	$ -
17	TOTAL RATE BASE (Sum L's 3, 4, 5, & 8 Thru 16)	$ 6,607,841	$ (12,164,607)	$ (5,556,766)

References:
Column (A): Company Schedule B-1
Column (B): Schedule SURR RLM-3
Column (C): Column (A) + Column (B)

Johnson Utilities, LLC
Docket Nos. WS-02987A-08-0180
Test Year Ended December 31, 2007

Water District
Schedule SURR RLM-3
Page 1 of 2

SURREBUTTAL SUMMARY OF ORIGINAL COST RATE BASE ADJUSTMENTS

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED OCRB/FVRB	(B) SURR'BTAL ADJMT NO. 1 GROSS PLANT	(C) SURR'BTAL ADJMT NO. 2 ACCUMULT'D DEPRECT'N	(D) ADJMT NO. 3 ACC AMORT ON (HUF) CIAC	(E) ADJMT NO. 4 REINSTATE (HUF) CIAC	(F) SURR'BTAL ADJMT NO. 5 MATERIALS & SUPPLIES	(G) SURR'BTAL ADJMT NO. 6 RECLASSIFY SERVICE LINE	(H) SURR'BTAL ADJMT NO. 7 RECLASSIFY CUST DEPOSIT	(I) RUCO ADJ'TED OCRB/FVRB
1	Gross Utility Plant In Service	$ 79,591,151	$ (5,254,084)	$ -	$ -	$ -	$ -	$ -	$ -	$ (5,254,084)
2	Accumulated Depreciation	(6,199,124)	-	436,975	-	-	-	-	-	436,975
3	Net Utility Plant In Service (Sum L1 & L2)	$ 73,392,027	$ (5,254,084)	$ 436,975	$ -	$ -	$ -	$ -	$ -	$ (4,817,109)
4	Advances In Aid Of Const.	$ (37,840,520)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
5	Service Line And Meter Advances	$ -	$ -	$ -	$ -	$ -	$ -	$ (6,779,771)	$ -	$ (6,779,771)
6	Contribution In Aid Of Const.	$ (25,004,821)	$ -	$ -	$ -	$ (6,931,078)	$ -	$ -	$ -	(6,931,078)
7	Accumulated Amortization Of CIAC	1,858,537	-	-	310,570	-	-	-	-	310,570
8	NET CIAC (L6 + L7)	$ (23,146,284)	$ -	$ -	$ 310,570	$ (6,931,078)	$ -	$ (6,779,771)	$ -	$ (6,620,508)
9	Customer Meter Deposits	$ (6,779,771)	$ -	$ -	$ -	$ -	$ -	$ -	$ 6,401,633	$ 6,401,633
10	Deferred Income Taxes And Credits	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
11	Investment Tax Credits	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
12	Shared Gain On Well	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
13	Prepayments	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
14	Materials And Supplies	$ 348,852	$ -	$ -	$ -	$ -	$ (348,852)	$ -	$ -	$ (348,852)
15	Deferred Assets	$ 633,537	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
16	Allowance For Working Capital	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
17	TOTAL RATE BASE (Sum Ls 3, 4, 5 & 7 Thru 16	$ 6,607,841	$ (5,254,084)	$ 436,975	$ 310,570	$ (6,931,078)	$ (348,852)	$ (13,559,542)	$ 6,401,633	$ (12,164,607)

References:

Column (A): Company Schedule B-2
Column (B): Adjustment No. 1 - Surrebuttal Adjustment To Gross Plant In Service (See SURR RLM-6 And Surrebuttal Testimony, RLM)
Column (C): Adjustment No. 2 - Surrebuttal Adjustment To Accumulated Depreciation (See Surrebuttal Testimony, RLM)
Column (D): Adjustment No. 3 - Direct Testimony To Reverse Company's Adjustment To Remove The CIAC's Accumulated Amortization (See Direct Testimony, RLM)
Column (E): Adjustment No. 4 - Direct Testimony To Reverse Company's Adjustment To Remove The CIAC Associated With Unexpended Hook-Up Fees (See Direct Testimony, RLM)
Column (F): Adjustment No. 5 - Surrebuttal Adjustment To Deferred Assets (See Surrebuttal Testimony, RLM)
Column (G): Adjustment No. 6 - Surrebuttal Adjustment To Material And Supplies (See Surrebuttal Testimony, RLM)
Column (H): Adjustment No. 7 - Surrebuttal Adjustment To Reclassify Cutomer Deposits (See Surrebuttal Testimony, RLM)
Column (I): Sum Of Columns (A)Thru (H)

Johnson Utilities, LLC
Docket Nos. WS-02987A-08-0180
Test Year Ended December 31, 2007

Water District
Schedule SURR RLM-6

SURREBUTTAL GROSS PLANT ADJUSTMENTS

LINE NO.	ACCT NO.	ACCOUNT NAME	(A) DIRECT TEST-YEAR TY PLANT	(B) ADJMT NO. 1 NOT USED AND USEFUL PLANT	(C) ADJMT NO. 2 EXCESS CAPACITY	(D) ADJMT NO. 3 RECLASSIFIED PLANT	(E) LEFT BLANK	(F) LEFT BLANK	(G) LEFT BLANK	(H) ADJUSTED TEST-YEAR PLANT
1	301	Organization Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
2	302	Franchises	-	-	-	-	-	-	-	-
3	303	Land and Land Rights	272,438	-	-	-	-	-	-	272,438
4	304	Structures And Improvements	9,482,165	-	-	(6,657,837)	-	-	-	2,824,328
5	305	Collecting And Impounding Reservoirs	-	-	-	-	-	-	-	-
6	306	Lake, River And Other Intakes	-	-	-	-	-	-	-	-
7	307	Wells And Springs	5,226,030	(2,052,564)	(433,238)	-	-	-	-	2,740,228
8	308	Infiltration Gallaries And Tunnels	-	-	-	-	-	-	-	-
9	309	Supply Mains	-	-	-	-	-	-	-	-
10	310	Power Generation Equipment	-	-	-	-	-	-	-	-
11	311	Electric Pumping Equipment	764,112	-	-	-	-	-	-	764,112
12	320	Water Treatment Plant	21,856	-	-	-	-	-	-	21,856
13	330	Distribution Reservoirs And Standpipes	248,272	-	-	-	-	-	-	248,272
14	331	Transmission And Distribution Lines	53,432,585	(2,074,455)	(693,827)	7,529,449	-	-	-	58,193,752
15	333	Services	527,473	-	-	(871,612)	-	-	-	(344,139)
16	334	Meters And Meter Installations	6,068,504	-	-	-	-	-	-	6,068,504
17	335	Hydrants	3,547,718	-	-	-	-	-	-	3,547,718
18	336	Backflow Prevention Devices	-	-	-	-	-	-	-	-
19	339	Other Plant And Miscellaneous Equipment	-	-	-	-	-	-	-	-
20	340	Office Furniture And Equipment	-	-	-	-	-	-	-	-
21	341	Transportation Equipment	-	-	-	-	-	-	-	-
22	342	Stores Equipment	-	-	-	-	-	-	-	-
23	343	Tools And Equipment	-	-	-	-	-	-	-	-
24	344	Laboratory Equipment	-	-	-	-	-	-	-	-
25	345	Power Operated Equipment	-	-	-	-	-	-	-	-
26	346	Communication Equipment	-	-	-	-	-	-	-	-
27	347	Miscellaneous Equipment	-	-	-	-	-	-	-	-
28	348	Other Tangible Plant	-	-	-	-	-	-	-	-
29		**TOTAL WATER PLANT**	$ 79,591,153	$ (4,127,019)	$ (1,127,065)	$ -	$ -	$ -	$ -	$ 74,337,069
30		Company As Filed (Column (A), Line 29)								$ 79,591,153
31		Difference (Line 29 - Line 30)								$ (5,254,084)
32		RUCO Adjustment (Line 31) (See SURR RLM-3, Page 1, Column (F))								$ (5,254,084)

References:
Column (A): Company Schedules B-2
Columns (B) Thru (D): Staff Schedule JMM-WW3
Column (E): Intentionally Left Blank
Column (F): Intentionally Left Blank
Column (G): Intentionally Left Blank
Column (H): Sum Of Columns (A) Thru (G)

SURREBUTTAL OPERATING INCOME

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED	(B) RUCO TEST YEAR ADJM'TS	(C) RUCO TEST YEAR AS ADJ'TED	(D) RUCO PROP'D CHANGES	(E) RUCO AS RECOMM'D
	Revenues:					
1	Metered Water Revenues	$ 12,843,604	$ -	$ 12,843,604	$ (1,482,059)	$ 11,361,545
2	Unmetered Water Revenues	-	-	-	-	-
3	Other Water Revenues	329,295	-	329,295	-	329,295
4	TOTAL OPERATING REVENUE	$ 13,172,899	$ -	$ 13,172,899	$ (1,482,059)	$ 11,690,840
	Operating Expenses:					
5	Salaries And Wages	$ -	$ -	$ -	$ -	$ -
6	Purchased Water	334,948	1,295,865	1,630,813	-	1,630,813
7	Purchased Power	828,900	2,631	831,531	-	831,531
8	Chemicals	16,189	-	16,189	-	16,189
9	Repairs And Maintenance	14,333	-	14,333	-	14,333
10	Office Supplies And Expenses	1,119	-	1,119	-	1,119
11	Outside Services	5,877,591	(5,799)	5,871,792	-	5,871,792
12	Water Testing	55,007	-	55,007	-	55,007
13	Rents	53,444	-	53,444	-	53,444
14	Transportation Expenses	-	-	-	-	-
15	Insurance - General Liability	21,565	-	21,565	-	21,565
16	Insurance - Health And Life	-	-	-	-	-
17	Regulatory Comm. Exp. - Rate Case	33,333	(13,333)	20,000	-	20,000
18	Miscellaneous Expense	286,747	(31,192)	255,555	-	255,555
19	Depreciation Expense	1,548,515	(398,648)	1,149,867	-	1,149,867
20	Taxes Other Than Income	-	-	-	-	-
21	Property Taxes	797,368	15,946	813,314	-	813,314
22	Income Tax	1,185,679	(1,185,679)	-	-	-
23	Rounding	-				
24	TOTAL OPERATING EXPENSES	$ 11,054,738	$ (320,209)	$ 10,734,529	$ -	$ 10,734,529
25	OPERATING INCOME (LOSS)	$ 2,118,161	$ 320,209	$ 2,438,370	$ (1,482,059)	$ 956,311

References:

Column (A): Company Schedule C-1
Column (B): SURR RLM-8, Columns (B) Thru (I)
Column (C): Column (A) + Column (B)
Column (D): SURR RLM-1
Column (E): Column (C) + Column (D)

Johnson Utilities, LLC
Docket Nos. WS-02987A-08-0180
Test Year Ended December 31, 2007

Water District
Schedule SURR RLM-8
Page 1 of 1

SURREBUTTAL SUMMARY OF OPERATING INCOME ADJUSTMENTS
TEST YEAR AS FILED AND ADJUSTMENTS

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED	(B) REVISED ADJMT NO. 1 DEPRECIAT'N & AMORTIZ'N	(C) REVISED ADJMT NO. 2 PROPERTY TAX	(D) SURR'BTAL ADJMT NO. 3 OUTSIDE SERVICES	(E) ADJMT NO. 4 RATE CASE EXPENSE	(F) ADJMT NO. 5 CAGRD TAX EXPENSE	(G) REVISED ADJMT NO. 6 UNNECESS'Y EXPENSES	(H) REVISED ADJMT NO. 7 ANNUAL'ZD POWER EXP.	(I) ADJMT NO. 8 INCOME TAX	(J) RUCO AS ADJT'D
	Revenues:										
1	Metered Water Revenues	$ 12,843,604	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 12,843,604
2	Unmetered Water Revenues	-	-	-	-	-	-	-	-	-	-
3	Other Water Revenues	329,295	-	-	-	-	-	-	-	-	329,295
4	TOTAL OPERATING REV.	$ 13,172,899	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 13,172,899
	Operating Expenses:										
5	Salaries And Wages	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
6	Purchased Water	334,948	-	-	-	-	1,295,865	-	-	-	1,630,813
7	Purchased Power	828,900	-	-	-	-	-	-	2,631	-	831,531
8	Chemicals	16,189	-	-	-	-	-	-	-	-	16,189
9	Repairs And Maintenance	14,333	-	-	-	-	-	-	-	-	14,333
10	Office Supplies And Expenses	1,119	-	-	-	-	-	-	-	-	1,119
11	Outside Services	5,877,591	-	-	(5,799)	-	-	-	-	-	5,871,792
12	Water Testing	55,007	-	-	-	-	-	-	-	-	55,007
13	Rents	53,444	-	-	-	-	-	-	-	-	53,444
14	Transportation Expenses	-	-	-	-	-	-	-	-	-	-
15	Insurance - General Liability	21,565	-	-	-	-	-	-	-	-	21,565
16	Insurance - Health And Life	-	-	-	-	-	-	-	-	-	-
17	Regulatory Comm. Exp. - Rate Case	33,333	-	-	-	(13,333)	-	-	-	-	20,000
18	Miscellaneous Expense	286,747	-	-	-	-	-	(31,192)	-	-	255,555
19	Depreciation Expense	1,548,515	(398,648)	-	-	-	-	-	-	-	1,149,867
20	Taxes Other Than Income	-	-	-	-	-	-	-	-	-	-
21	Property Taxes	797,368	-	15,946	-	-	-	-	-	-	813,314
22	Income Tax	1,185,679	-	-	-	-	-	-	-	(1,185,679)	-
23	Rounding	-									
24	TOTAL OPERATING EXP.	$ 11,054,738	$ (398,648)	$ 15,946	$ (5,799)	$ (13,333)	$ 1,295,865	$ (31,192)	$ 2,631	$ (1,185,679)	$ 10,734,529
25	OPERATING INC. (LOSS)	$ 2,118,161									$ 2,438,370

ADJUSTMENTS:
1 Depreciation And Amortization Expense
2 Property Tax Computation
3 Contractual Outside Services
4 Rate Case Expense
5 CAGRD Tax Expense
6 Unnecessary Expenses
7 Annualize Power Expenses
8 Income Tax

REFERENCE:
Surrebuttal Testimony, RLM And Schedule SURR RLM-9
Surrebuttal Testimony, RLM And Schedule SURR RLM-10
Surrebuttal Testimony, RLM
Testimony, RLM And Schedule RLM-11
Testimony, RLM
Testimony, RLM And Schedule RLM-12
Testimony, RLM
Testimony, RLM

SURREBUTTAL EXPLANATION OF OPERATING INCOME ADJUSTMENT NO. 1
TEST YEAR DEPRECIATION EXPENSE

LINE NO.	ACCOUNT NO.	ACCOUNT NAME	(A) TOTAL PLANT VALUE	(B) COMPANY PROPOSED DEP. RATES	(C) TEST YEAR DEPRECIATION EXPENSE
1	301	Organization Costs	$ -	0.00%	$ -
2	302	Franchises	-	0.00%	-
3	303	Land and Land Rights	272,438	0.00%	-
4	304	Structures And Improvements	2,824,328	3.33%	94,050
5	305	Collecting And Impounding Reservoirs	-	2.50%	-
6	306	Lake, River And Other Intakes	-	2.50%	-
7	307	Wells And Springs	2,740,228	3.33%	91,250
8	308	Infiltration Gallaries And Tunnels	-	6.67%	-
9	309	Supply Mains	-	2.00%	-
10	310	Power Generation Equipment	-	5.00%	-
11	311	Electric Pumping Equipment	764,112	12.50%	95,514
12	320	Water Treatment Plant	21,856	3.33%	728
13	330	Distribution Reservoirs And Standpipes	248,272	2.22%	5,512
14	331	Transmission And Distribution Lines	58,193,752	2.00%	1,163,875
15	333	Services	(344,139)	3.33%	(11,460)
16	334	Meters And Meter Installations	6,068,504	8.33%	505,506
17	335	Hydrants	3,547,718	2.00%	70,954
18	336	Backflow Prevention Devices	-	6.67%	-
19	339	Other Plant And Miscellaneous Equipment	-	6.67%	-
20	340	Office Furniture And Equipment	-	6.67%	-
21	341	Transportation Equipment	-	20.00%	-
22	342	Stores Equipment	-	4.00%	-
23	343	Tools And Equipment	-	5.00%	-
24	344	Laboratory Equipment	-	10.00%	-
25	345	Power Operated Equipment	-	5.00%	-
26	346	Communication Equipment	-	10.00%	-
27	347	Miscellaneous Equipment	-	10.00%	-
28	348	Other Tangible Plant	-	10.00%	-
29		TEST YEAR GROSS PLANT AND DEPRECIATION EXPENSE	$ 74,337,069		$ 2,015,929
48		AMORTIZATION OF CONTRIBUTIONS	(31,935,899)	2.7119%	(866,062)
50		Rounding			-
51	**TOTAL DEPRECIATION EXPENSE**				$ 1,149,867
52	Company As Filed				1,548,515
53	Difference				$ (398,648)
54	RUCO Adjustment (See SURR RLM-8, Column (B))				$ (398,648)

References:

Column (A): SURR RLM-4, Page 11, Column (E)
Column (B): Company Workpapers
Column (C): Column (A) X Column (B)

SURREBUTTAL EXPLANATION OF OPERATING INCOME ADJUSTMENT NO. 2
PROPERTY TAX COMPUTATION

LINE NO.	DESCRIPTION	REFERENCE	(A)	(B)
	Calculation Of The Company's Full Cash Value:			
	Annual Operating Revenues:			
1	Adjusted Revenues In Year Ended December 2007	SURR RLM-6, Col (C), Ln 4	$ 13,172,899	
2	Adjusted Revenues In Year Ended December 2007	SURR RLM-6, Col (C), Ln 4	13,172,899	
3	Proposed Revenues	SURR RLM-6, Col (D), Ln 4	11,690,840	
4	Total Three Year Operating Revenues	Sum Of Lines 1, 2 & 3	$ 38,036,637	
5	Average Annual Operating Revenues	Line 4 / 3	12,678,879	
6	Two Times Three Year Average Operating Revenues	Line 5 X 2		$ 25,357,758
	ADD:			
	10% Of Construction Work In Progress ("CWIP"):			
7	Test Year CWIP	Company Workpapers	$ -	
8	10% Of CWIP	Line 7 X 10%		$ -
	SUBTRACT:			
	Transportation At Book Value:			
9	Original Cost Of Transportation Equipment	Company Workpapers	$ -	
10	Acc. Dep. Of Transportation Equipment	Company Workpapers	-	
11	Book Value Of Transportation Equipment	Line 9 + Line 10		$ -
12	Company's Full Cash Value ("FCV")	Sum Of Lines 6, 8 & 11		$ 25,357,758
	Calculation Of The Company's Tax Liability:			
	MULTIPLY:			
	FCV X Valuation Assessment Ratio X Property Tax Rates:			
13	Assessment Ratio	House Bill 2779	23.0%	
14	Assessed Value	Line 12 X Line 13	$ 5,832,284	
	Property Tax Rates:			
15	Primary Tax Rate	Company Workpapers	13.93%	
16	Secondary Tax Rate	Company Workpapers	0.00%	
17	Estimated Tax Rate Liability	Line 15 + Line 16	13.93%	
	Property Tax			$ 812,227
	Tax On Parcel			1,184
18	Company's Total Tax Liability - Based On Full Cash Value	Line 14 X Line 17		$ 813,411
19	Test Year Adjusted Property Tax Expense As Filed	Co. Sch. C-1		797,466
20	Decrease In Property Tax Expense	Line 18 - Line 19		$ 15,946
21	RUCO Adjustment (See SURR RLM-8, Column (C))	Line 20		$ 15,946

Johnson Utilities, LLC
Docket Nos. WS-02987A-08-0180
Test Year Ended December 31, 2007

Water District
Schedule SURR RLM-14
Pages 1 thru 3

SURREBUTTAL RATE DESIGN AND PROOF OF RECOMMENDED REVENUE
PROPOSED REVENUE

LINE NO.	DESCRIPTION	(A) TEST YEAR DETERMIN'TS Gallons In Thousands	(B) ANN'ZED ADJUSTM'TS	(C) TEST YEAR ADJUSTED DETERMIN'TS	(D) PRESENT CHARGES & USAGE FEES	(E) TEST YEAR ADJUSTED REVENUES	(F) TOTAL REVENUES
	RESIDENTIAL CUSTOMERS						
1	3/4" Meter	15,212	1,132	16,344	$ 24.06	$ 4,719,198	$ 4,719,198
	Commodity Usage						
2	First Tier - First 4,000 Gals.	157,703	54,312	212,015	$ 1.5902	$ 337,153	
3	Second Tier - Next 6,000 Gals.	575,393	35,724	611,117	$ 2.0721	$ 1,266,306	
4	Third Tier - Over 10,000Gals.	668,195	-	668,195	$ 2.6611	$ 1,778,129	
							$ 3,381,588
5	1" Meter	260	5	265	$ 40.10	$ 127,695	$ 127,695
	Commodity Usage						
6	First Tier - First 25,000 Gals.	20,673	667	21,340	$ 2.0721	$ 44,218	
7	Second Tier - Over 25,000 Gals.	22,591	-	22,591	$ 2.6611	$ 60,117	
							$ 104,335
8	2" Meter	1	(0)	1	$ 128.33	$ 1,069	$ 1,069
	Commodity Usage						
9	First Tier - First 80,000 Gals.	79	-	79	$ 2.0721	$ 164	
10	Second Tier - Over 80,000 Gals.	3,762	(406)	3,356	$ 2.6611	$ 8,931	
							$ 9,095
11	3" Meter	0	(0)	-	$ 256.66	$ -	$ -
	Commodity Usage						
12	First Tier - First 160,000 Gals.	-	-	-	$ 2.0721	$ -	
13	Second Tier - Over 160,000 Gals.	-	-	-	$ 2.6611	$ -	
							$ -
14	Total Residential Customers	15,473	1,137	16,610			
15	Total Residential Usage	1,448,397	90,296	1,538,693			
16	TOTAL RESIDENTIAL CUSTOMERS REVENUE						$ 8,342,980
	COMMERCIAL CUSTOMERS						
17	3/4" Meter	4	0	5	$ 24.06	$ 1,350	$ 1,350
	Commodity Usage						
18	First Tier - First 10,000 Gals.	86	(74)	12	$ 2.0721	$ 25	
19	Second Tier - Over 10,000 Gals.	607	-	607	$ 2.6611	$ 1,615	
							$ 1,640
20	1" Meter	6	1	7	$ 40.10	$ 3,156	$ 3,156
	Commodity Usage						
21	First Tier - First 25,000 Gals.	409	63	472	$ 2.0721	$ 978	
22	Second Tier - Over 25,000 Gals.	2,192	213	2,405	$ 2.6611	$ 6,401	
							$ 7,379
23	1-1/2" Meter	18	(2)	17	$ 80.21	$ 15,921	$ 15,921
	Commodity Usage						
24	First Tier - First 50,000 Gals.	1,605	(63)	1,542	$ 2.0721	$ 3,195	
25	Second Tier - Over 50,000 Gals.	5,515	(429)	5,086	$ 2.6611	$ 13,534	
							$ 16,729
26	2" Meter	26	5	31	$ 128.33	$ 48,136	$ 48,136
	Commodity Usage						
27	First Tier - First 80,000 Gals.	3,499	420	3,919	$ 2.0721	$ 8,121	
28	Second Tier - Over 80,000 Gals.	43,206	6,673	49,879	$ 2.6611	$ 132,732	
							$ 140,853
29	3" Meter	2	-	2	$ 256.66	$ 6,181	$ 6,181
	Commodity Usage						
30	First Tier - First 160,000 Gals.	-	-	-	$ 2.0721	$ -	
31	Second Tier - Over 160,000 Gals.	6,359	-	6,359	$ 2.6611	$ 16,921	
							$ 16,921
32	4" Meter	2	-	2	$ 401.04	$ 9,036	$ 9,036
	Commodity Usage						
33	First Tier - First 250,000 Gals.	360	-	360	$ 2.0721	$ 745	
34	Second Tier - Over 250,000 Gals.	2,649	-	2,649	$ 2.6611	$ 7,049	
							$ 7,794
35	Total Commercial Customers	59	4	63			
36	Total Commercial Usage	66,486	6,804	73,290			
37	TOTAL COMMERCIAL CUSTOMERS REVENUE						$ 275,097

SURREBUTTAL RATE DESIGN AND PROOF OF RECOMMENDED REVENUE
PROPOSED REVENUE

LINE NO.	DESCRIPTION	(A) TEST YEAR DETERMIN'TS Gallons In Thousands	(B) ANN'ZED ADJUSTM'TS	(C) TEST YEAR ADJUSTED DETERMIN'TS	(D) PRESENT CHARGES & USAGE FEES	(E) TEST YEAR ADJUSTED REVENUES	(F) TOTAL REVENUES
	PUBLIC AUTHORITY CUSTOMERS						
38	3/4" Meter	-	-	-	$ 24.06	$ -	$ -
	Commodity Usage						
39	First Tier - First 10,000 Gals.	-	-	-	$ 2.0721	$ -	
40	Second Tier - Over 10,000 Gals.	-	-	-	$ 2.6611	$ -	
							$ -
41	1" Meter	-	-	-	$ 40.10	$ -	$ -
	Commodity Usage						
42	First Tier - First 10,000 Gals.	-	-	-	$ 2.0721	$ -	
43	Second Tier - Over 10,000 Gals.	-	-	-	$ 2.6611	$ -	
							$ -
44	1-1/2" Meter	-	-	-	$ 80.21	$ -	$ -
	Commodity Usage						
45	First Tier - First 50,000 Gals.	-	-	-	$ 2.0721	$ -	
46	Second Tier - Over 50,000 Gals.	-	-	-	$ 2.6611	$ -	
							$ -
47	2" Meter	8	1	9	$ 128.33	$ 13,458	$ 13,458
	Commodity Usage						
48	First Tier - First 80,000 Gals.	1,869	-	1,869	$ 2.0721	$ 3,873	
49	Second Tier - Over 80,000 Gals.	1,636	201	1,837	$ 2.6611	$ 4,887	
							$ 8,760
50	3" Meter	1	-	1	$ 256.66	$ 2,986	$ 2,986
	Commodity Usage						
51	First Tier - First 160,000 Gals.	265	-	265	$ 2.0721	$ 549	
52	Second Tier - Over 160,000 Gals.	922	-	922	$ 2.6611	$ 2,454	
							$ 3,003
53	4" Meter	1	-	1	$ 401.04	$ 4,421	$ 4,421
	Commodity Usage						
54	First Tier - First 250,000 Gals.	1,110	-	1,110	$ 2.0721	$ 2,300	
55	Second Tier - Over 250,000 Gals.	1,420	-	1,420	$ 2.6611	$ 3,779	
							$ 6,079
56	Total Public Authority Customers	10	1	11			
57	Total Public Authority Usage	7,222	201	7,423			
58	TOTAL PUBLIC AUTHORITY CUSTOMERS REVENUE						$ 38,706
	IRRIGATION CUSTOMERS						
59	3/4" Meter	41	1	42	$ 24.06	$ 12,050	$ 12,050
	Commodity Usage						
60	First Tier - First 10,000 Gals.	940	(96)	844	$ 2.0721	$ 1,749	
61	Second Tier - Over 10,000 Gals.	9,595	-	9,595	$ 2.6611	$ 25,533	
							$ 27,282
62	1" Meter	50	4	55	$ 40.10	$ 26,298	$ 26,298
	Commodity Usage						
63	First Tier - First 25,000 Gals.	3,087	266	3,353	$ 2.0721	$ 6,948	
64	Second Tier - Over 25,000 Gals.	36,814	696	37,510	$ 2.6611	$ 99,816	
							$ 106,764
65	1-1/2" Meter	83	9	92	$ 80.21	$ 88,568	$ 88,568
	Commodity Usage						
66	First Tier - First 50,000 Gals.	8,071	784	8,855	$ 2.0721	$ 18,349	
67	Second Tier - Over 50,000 Gals.	151,856	8,871	160,727	$ 2.6611	$ 427,709	
							$ 446,057
68	2" Meter	77	8	85	$ 128.33	$ 130,428	$ 130,428
	Commodity Usage						
69	First Tier - First 80,000 Gals.	8,681	658	9,339	$ 2.0721	$ 19,352	
70	Second Tier - Over 80,000 Gals.	381,324	24,772	406,096	$ 2.6611	$ 1,080,659	
							$ 1,100,010
71	3" Meter	0	1	2	$ 256.66	$ 4,814	$ 4,814
	Commodity Usage						
72	First Tier - First 160,000 Gals.	-	-	-	$ 2.0721	$ -	
73	Second Tier - Over 160,000 Gals.	-	-	-	$ 2.6611	$ -	
							$ -
74	4" Meter	2	-	2	$ 401.04	$ 8,445	$ 8,445
	Commodity Usage						
75	First Tier - First 250,000 Gals.	2,113	-	2,113	$ 2.0721	$ 4,378	
76	Second Tier - Over 250,000 Gals.	7,919	-	7,919	$ 2.6611	$ 21,073	
							$ 25,452
77	6" Meter	1	-	1	$ 802.08	$ 9,625	$ 9,625
	Commodity Usage						
78	First Tier - First 500,000 Gals.	1,653	-	1,653	$ 2.0721	$ 3,425	
79	Second Tier - Over 500,000 Gals.	-	-	-	$ 2.6611	$ -	
							$ 3,425
80	Total Irrigation Customers	254	24	277			
81	Total Irrigation Usage	612,053	35,951	648,003			
82	TOTAL IRRIGATION CUSTOMERS REVENUE						$ 1,989,220

Johnson Utilities, LLC
Docket Nos. WS-02987A-08-0180
Test Year Ended December 31, 2007

Water District
Schedule SURR RLM-14
Pages 1 thru 3

SURREBUTTAL RATE DESIGN AND PROOF OF RECOMMENDED REVENUE
PROPOSED REVENUE

LINE NO.	DESCRIPTION	(A) TEST YEAR DETERMIN'TS Gallons In Thousands	(B) ANN'ZED ADJUSTM'TS	(C) TEST YEAR ADJUSTED DETERMIN'TS	(D) PRESENT CHARGES & USAGE FEES	(E) TEST YEAR ADJUSTED REVENUES	(F) TOTAL REVENUES
	CONSTRUCTION CUSTOMERS						
83	3/4" Meter	-	-	-	$ 24.06	$ -	$ -
84	Commodity Usage	-	-	-	$ 2.6611	$ -	$ -
86	1" Meter	-	-	-	$ 40.10	$ -	$ -
87	Commodity Usage	-	-	-	$ 2.6611	$ -	$ -
89	1-1/2" Meter	-	-	-	$ 80.21	$ -	$ -
90	Commodity Usage	-	-	-	$ 2.6611	$ -	$ -
92	2" Meter	-	-	-	$ 128.33	$ -	$ -
93	Commodity Usage	-	-	-	$ 2.6611	$ -	$ -
95	3" Meter	13	-	13	$ 256.66	$ 41,065	$ 41,065
96	Commodity Usage	39,930	-	39,930	$ 2.6611	$ 106,257	$ 106,257
98	4" Meter	-	-	-	$ 401.04	$ -	$ -
99	Commodity Usage	-	-	-	$ 2.6611	$ -	$ -
101	6" Meter	12	-	12	$ 802.08	$ 120,311	$ 120,311
102	Commodity Usage	154,448	-	154,448	$ 2.6611	$ 411,000	$ 411,000
104	Total Construction Customers	26	-	26			
105	Total Construction Usage	194,378	-	194,378			
106	TOTALCONSTRUCTION CUSTOMERS REVENUE						$ 678,634
	CAP CUSTOMERS						
107	6" Meter	1	-	1	$ 983.78	$ 7,219	$ 7,219
108	Commodity Usage	32,016	-	32,016	$ 0.83	$ 26,503	$ 26,503
109	Total CAP Customers	1	-	1			
110	Total CAP Usage	32,016	-	32,016			
111	TOTAL CAP CUSTOMERS REVENUE						$ 33,722
112	TOTAL COMPANY CUSTOMER COUNT	15,796	1,165	16,961			
113	TOTAL COMPANY COMMODITY USAGE	1,748,499	97,300	1,845,799			
114	**TOTAL RUCO PROPOSED REVENUE PER BILL COUNT**						$ 11,358,359
115	Unreconciled Difference vs. Billed Revenues						3,186
116	Other Revenues						329,295
117	**TOTAL REVENUE**						$ 11,690,840
118	**PROPOSED REVENUE PER RUCO**						$ 11,690,840
119	Difference						$ 0
120	Percentage Difference						0.00%

SURREBUTTAL TYPICAL RESIDENTIAL BILL ANALYSIS

LINE NO.	DESCRIPTION	(A) PRESENT	(B) PRESENT	(C) COMPANY PROPOSED	(D) COMPANY PROPOSED	(E) RUCO PROPOSED	(F) RUCO PROPOSED
	REVENUE ALLOCATION						
1	RESIDENTIAL	$ 8,986,698	74.13%	$ 7,790,904	73.44%	$ 8,342,980	73.45%
2	OTHER	$ 3,135,896	25.87%	$ 2,817,595	26.56%	$ 3,015,379	26.55%
3	TOTAL	$ 12,122,594	100.00%	$ 10,608,499	100.00%	$ 11,358,359	100.00%
	ALLOCATION RATIOS						
4	FIX REVENUE	6,438,743	53.11%	$ 5,044,004	47.55%	$ 5,401,431	47.55%
5	VARIABLE REVENUE	5,683,851	46.89%	$ 5,564,495	52.45%	$ 5,956,928	52.45%
6	TOTAL	12,122,594	100.00%	$ 10,608,499	100.00%	$ 11,358,359	100.00%

	RESIDENTIAL (5/8" X 3/4") RATE DESIGN		PRESENT	COMPANY PROPOSED	RUCO PROPOSED
7	BASIC MONTHLY CHARGE		$ 27.00	$ 22.47	$ 24.06
	COMMODITY CHARGE				
	PRESENT	PROPOSED			
8	First Tier - First 7,000 Gals.	First Tier - First 4,000 Gals.	$ 2.2500	$ 1.4850	$ 1.5902
9	Second Tier - Over 7,000 Gals.	Second Tier - Next 6,000 Gals.	$ 2.5000	$ 1.9350	$ 2.0721
10		Third Tier - Over 10,000 Gals.	N/A	$ 2.4850	$ 2.6611

	RESIDENTIAL BILL COMPARISONS COST OF WATER SERVICE AT DIFFERENT LEVELS OF USAGE WITH PERCENTAGE INCREASE IN BILL		% OF AVERAGE MONTH USAGE OF 6,931 Gal.	PRESENT MONTHLY WATER COST	RUCO PROP'D MONTHLY WATER COST	RUCO PROP'D MONTHLY INCREASE	RUCO PROP'D MONTHLY % INCREASE
11		1,733	25.00%	$ 30.90	$ 26.82	$ (4.08)	-13.21%
12		3,466	50.00%	$ 34.80	$ 29.57	$ (5.22)	-15.01%
13		6,931	100.00%	$ 42.59	$ 36.50	$ (6.10)	-14.32%
14		10,397	150.00%	$ 51.24	$ 43.91	$ (7.33)	-14.30%
15		13,862	200.00%	$ 59.91	$ 53.13	$ (6.77)	-11.30%

Johnson Utilities, LLC
Docket Nos. WS-02987A-08-0180
Test Year Ended December 31, 2007

Wastewater District

TABLE OF CONTENTS TO RLM SURREBUTTAL SCHEDULES

SCH. NO.	PAGE NO.	TITLE
SURR RLM-1	1	SURREBUTTAL REVENUE REQUIREMENT
SURR RLM-2	1	SURREBUTTAL RATE BASE
SURR RLM-3	1	SURREBUTTAL SUMMARY OF ORIGINAL COST RATE BASE ADJUSTMENTS
TESTIMONY		RATE BASE ADJUSTMENT NO. 1 - REVISED DIRECT POST TEST-YEAR PLANT
SURR RLM-5	1	RATE BASE ADJUSTMENT NO. 2 - REVISED DIRECT REINSTATEMENT OF ACC. AMORT. ON CIAC
TESTIMONY		RATE BASE ADJUSTMENT NO. 4 - SURREBUTTAL ADJUSTED GROSS PLANT IN SERVICE
TESTIMONY		RATE BASE ADJUSTMENT NO. 5 - SURREBUTTAL ADJUSTED ACCUMULATED DEPRECIATION
SURR RLM-6	1	SURREBUTTAL PRO FORMA PLANT ADJUSTMENTS
SURR RLM-7	1	SURREBUTTAL OPERATING INCOME
SURR RLM-8	1	SURREBUTTAL SUMMARY OF OPERATING INCOME ADJUSTMENTS
SURR RLM-9	1	OPERATING INCOME ADJUSTMENT NO. 1 - SURREBUTTAL ADJUSTED TEST YEAR DEPRECIATION EXPENSE
SURR RLM-10	1	OPERATING INCOME ADJUSTMENT NO. 2 - SURREBUTTAL ADJUSTED PROPERTY TAX COMPUTATION
TESTIMONY		OPERATING INCOME ADJUSTMENT NO. 5 - SURREBUTTAL ADJUSTED SLUDGE REMOVAL
		OPERATING INCOME ADJUSTMENT NO. 6 - SURREBUTTAL ADJUSTED MISCELLANEOUS EXPENSES
TESTIMONY		OPERATING INCOME ADJUSTMENT NO. 7 - SURREBUTTAL ADJUSTED PURCHASED POWER
SURR RLM-13	1	COST OF CAPITAL
SURR RLM-14	1	SURREBUTTAL RATE DESIGN AND PROOF OF RECOMMENDED REVENUE
SURR RLM-15	1	SURREBUTTAL TYPICAL RESIDENTIAL BILL ANALYSIS

SURREBUTTAL REVENUE REQUIREMENT

LINE NO.	DESCRIPTION	(A) COMPANY OCRB/FVRB COST	(B) RUCO OCRB/FVRB COST
1	Original Cost Rate Base	$ 19,149,173	$ 11,252,776
2	Adjusted Operating Income (Loss)	$ 592,491	$ 1,401,240
3	Current Rate Of Return (L2 / L1)	3.09%	12.45%
4	Required Operating Income (L5 X L1)	$ 1,997,259	$ 920,953
5	Required Rate Of Return On Fair Value Rate Base	10.43%	8.18%
6	Operating Income Deficiency (L4 - L2)	$ 1,404,768	$ (480,287)
7	Gross Revenue Conversion Factor	1.5944	1.0000
8	Increase In Gross Revenue Requirement (L6 X L7)	$ 2,239,804	$ (480,287)
9	Adjusted Test Year Revenue	$ 11,288,663	$ 11,354,014
10	Proposed Annual Revenue (L8 + L9)	$ 13,528,467	$ 10,873,727
11	Required Percentage Increase In Revenue (L8 / L9)	19.84%	-4.23%
12	Rate Of Return On Common Equity	10.50%	8.31%

References:

Column (A): Company Schedules A-1 and C-1
Column (B): RUCO Schedule SURR RLM-2, SURR RLM-7 And SURR RLM-13

SURREBUTTAL RATE BASE - ORIGINAL COST

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED OCRB/FVRB	(B) RUCO OCRB/FVRB ADJUSTMENTS	(C) RUCO ADJ'TED OCRB/FVRB
1	Gross Utility Plant In Service	$ 126,534,592	$ (9,547,463)	$ 116,987,129
2	Accumulated Depreciation	(7,923,684)	609,288	(7,314,396)
3	Net Utility Plant In Service (Sum L1 & L2)	$ 118,610,908	$ (8,938,175)	$ 109,672,733
4	Advances In Aid Of Const.	$ (54,440,657)	$ -	$ (54,440,657)
5	Contribution In Aid Of Const.	$ (46,007,904)	$ (16,505)	$ (46,024,409)
6	Accumulated Amortization Of CIAC	-	1,058,281	1,058,281
7	NET CIAC (L5 + L6)	$ (46,007,904)	$ 1,041,776	$ (44,966,128)
8	Customer Meter Deposits	$ -	$ -	$ -
9	Deferred Income Taxes And Credits	$ -	$ -	$ -
10	Investment Tax Credits	$ -	$ -	$ -
11	Shared Gain On Well	$ -	$ -	$ -
12	Prepayments	$ -	$ -	$ -
13	Materials And Supplies	$ -	$ -	$ -
14	Deferred Assets	$ 986,826	$ -	$ 986,826
15	Allowance For Working Capital	$ -	$ -	$ -
16	Rounding	$ -	$ 2	$ 2
17	TOTAL RATE BASE (Sum L's 3, 4, & 7 Thru 16)	$ 19,149,173	$ (7,896,397)	$ 11,252,776

References:
Column (A): Company Schedule B-1
Column (B): Schedule SURR RLM-3
Column (C): Column (A) + Column (B)

Johnson Utilities, LLC
Docket Nos. WS-02987A-08-0180
Test Year Ended December 31, 2007

Wastewater District
Schedule SURR RLM-3

SURREBUTTAL SUMMARY OF ORIGINAL COST RATE BASE ADJUSTMENTS

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED OCRB	(B) REVISED ADJMT NO. 1 POST TEST YEAR PLANT	(C) REVISED ADJMT NO. 2 ACC AMORT ON (HUF) CIAC	(D) ADJMT NO. 3 REINSTATE (HUF) CIAC	(E) SURR'BTAL ADJMT NO. 4 GROSS PLANT	(F) SURR'BTAL ADJMT NO. 5 ACCUMULT'D DEPRECT'N	(G) LEFT BLANK	(H) LEFT BLANK	(I) RUCO ADJ'TED OCRB/FVRB
1	Gross Utility Plant In Service	$ 126,534,592	$ 490,896	$ -	$ -	$(10,038,359)	$ -	$ -	$ -	$ 116,987,129
2	Accumulated Depreciation	(7,923,684)	-	-	-	-	609,288	-	-	(7,314,396)
3	Net Utility Plant In Service (Sum L1 & L3)	$ 118,610,908	$ 490,896	$ -	$ -	$(10,038,359)	$ 609,288	$ -	$ -	$ 109,672,733
4	Advances In Aid Of Const.	$ (54,440,657)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ (54,440,657)
5	Contribution In Aid Of Const.	$ (48,915,085)	$ -	$ -	$ (16,505)	$ -	$ -	$ -	$ -	$ (48,931,590)
6	Accumulated Amortization Of CIAC	2,907,181	-	1,058,281	-	-	-	-	-	3,965,462
7	NET CIAC (L5 + L6)	$ (46,007,903)	$ -	$ 1,058,281	$ (16,505)	$ -	$ -	$ -	$ -	$ (44,966,128)
8	Customer Meter Deposits	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
9	Deferred Income Taxes And Credits	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
10	Investment Tax Credits	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
11	Shared Gain On Well	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
12	Prepayments	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
13	Materials And Supplies	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
14	Deferred Assets	$ 986,826	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 986,826
15	Allowance For Working Capital	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
16	Rounding	$ (1)								2
17	TOTAL RATE BASE (Sum L's 3, 4, & 7 Thru 16)	$ 19,149,173	$ 490,896	$ 1,058,281	$ (16,505)	$(10,038,359)	$ 609,288	$ -	$ -	$ 11,252,776

References:

Column (A): Company Schedule B-2
Column (B): Adjustment No. 1 - Revised Direct Adjustment To Post Test-Year Plant (See Surrebuttal Testimony, RLM)
Column (C): Adjustment No. 2 - Revised Direct Adjustment To Reverse Company's Adjustment To Remove The CIAC's Accumulated Amortization (See SURR RLM-5 And Surrebuttal Testimony, RLM)
Column (D): Adjustment No. 3 - Reverse Company's Adjustment To Remove The CIAC Associated With Unexpended Hook-Up Fees (See Direct Testimony, RLM)
Column (E): Adjustment No. 4 - Surrebuttal Adjusted Gross Plant In Service Plant (See SURR RLM-6 And Surrebuttal Testimony, RLM)
Column (F): Adjustment No. 5 - Surrebuttal Adjusted Accumulated Depreciation (See Surrebuttal Testimony, RLM)
Column (G): Intentionally Left Blank
Column (H): Intentionally Left Blank
Column (I): Sum Of Columns (A), (B), (C), (D), (E), (F), (G) & (H)

EXPLANATION OF RATE BASE ADJUSTMENT NO. 2
COMPUTATION OF ACCUMULATED AMORTIZATION ON CIAC BALANCES

LINE NO.	DESCRIPTION	(A) AMOUNT RECORDED	(B) UNEXP'D CASH	(C) AMORT BALANCE	(D) AMORT RATE	(E) AMORTIZ'N	(F) YEAR	(G) TOTAL AMORTIZ'N	(H) ACC AMORTIZ'N
1	Balance at 12/31/1997	$ -		-	0.00%	$ -		$ -	$ -
2	Additions 1998	35,000							
3	Balance at 12/31/1998	35,000		35,000	2.50%	875	1998	875	875
4	Additions 1999	303,000							
5	Balance at 12/31/1999	338,000		338,000	2.50%	8,450	1999	8,450	9,325
6	Additions 2000	1,067,352							
7	Balance at 12/31/2000	1,405,352		1,405,352	2.50%	35,134	2000	35,134	44,459
8	Additions 2001	893,800							
9	Balance at 12/31/2001	2,299,152		2,299,152	2.50%	57,479	2001	57,479	101,938
10	Additions 2002	2,909,170							
11	Balance at 12/31/2002	5,208,322		5,208,322	2.50%	130,208	2002	130,208	232,146
12	Additions 2003	6,455,300							
13	Balance at 12/31/2003	11,663,622		11,663,622	2.50%	291,591	2003	291,591	523,736
14	Additions 2004	8,679,970							
15	Balance at 12/31/2004	20,343,592		20,343,592	2.50%	508,590	2004	508,590	1,032,326
16	Additions 2005	8,119,350							
17	Balance at 12/31/2005	28,462,942		28,462,942	2.50%	711,574	2005	711,574	1,743,900
18	Additions 2006	11,467,949							
19	Balance at 12/31/2006	39,930,891		39,930,891	2.50%	998,272	2006	998,272	2,742,172
20	Additions 2007	9,000,699							
21	Balance at 12/31/2007	48,931,590		48,931,590	2.50%	1,223,290	2007	1,223,290	3,965,462
22	RUCO As Calculated								$ 3,965,462
23	Company As Filed								2,907,181
24	Difference								$ 1,058,281
25	RUCO Adjustment (See SURR RLM-3, Column (C))								$ 1,058,281

References:

Johnson Utilities, LLC
Docket Nos. WS-02987A-08-0180
Test Year Ended December 31, 2007

Wastewater District
Schedule SURR RLM-6

SURREBUTTAL PRO FORMA PLANT ADJUSTMENTS

LINE NO.	ACCT NO.	ACCOUNT NAME	(A) COMPANY ADJUSTED TY PLANT	(B) ADJMT NO. 1 POST TEST YEAR PLANT	(C) ADJMT NO. 2 NOT USED AND USEFUL PLANT	(D) ADJMT NO. 3 EXCESS CAPACITY	(E) LEFT BLANK	(F) LEFT BLANK	(G) LEFT BLANK	(H) ADJUSTED TEST-YEAR PLANT
1	351	Organization	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
2	352	Franchises	-	-	-	-	-	-	-	-
3	353	Land and Land Rights	4,122,800	-	-	-	-	-	-	4,122,800
4	354	Structures And Improvements	453,663	-	(14,491)	-	-	-	-	439,172
5	355	Power Generation Equipment	-	-	-	-	-	-	-	-
6	360	Collection Sewers - Force	22,821,129	-	(1,579,593)	-	-	-	-	21,241,536
7	361	Collection Sewers - Gravity	24,287,592	-	-	-	-	-	-	24,287,592
8	362	Special Collecting Structures	-	-	-	-	-	-	-	-
9	363	Services To Customers	-	-	-	-	-	-	-	-
10	364	Flow Measuring Devices	-	-	-	-	-	-	-	-
11	365	Flow Measuring Installations	-	-	-	-	-	-	-	-
12	370	Receiving Wells	-	-	-	-	-	-	-	-
13	371	Pumping Equipment	7,613,724	-	-	-	-	-	-	7,613,724
14	375	Reuse T & D	958,645	-	-	-	-	-	-	958,645
15	380	Treatment And Disposal Equipment	-	-	-	-	-	-	-	-
16	381	Plant Sewers	66,277,037	-	(3,001,214)	(5,443,062)	-	-	-	57,832,761
17	382	Outfall Sewer Lines	-	-	-	-	-	-	-	-
18	389	Other Plant And Miscellaneous Equipment	-	-	-	-	-	-	-	-
19	390	Office Furniture And Equipment	-	-	-	-	-	-	-	-
20	391	Transportation Equipment	-	-	-	-	-	-	-	-
21	393	Tools, Shop And Garage Equipment	-	-	-	-	-	-	-	-
22	394	Laboratory Equipment	-	-	-	-	-	-	-	-
23	395	Power Operated Equipment	-	-	-	-	-	-	-	-
24	398	Other Tangible Plant	-	-	-	-	-	-	-	-
		Rounding	1							2
29		**TOTAL WATER PLANT**	$ 126,534,591	$ -	$ (4,595,298)	$ (5,443,062)	$ -	$ -	$ -	$ 116,496,232
30		Company As Filed (Column (A), Line 29)								$ 126,534,591
31		Difference (Line 29 - Line 30)								$ (10,038,359)
32		*RUCO Adjustment (Line 31) (See SURR RLM-3, Page 1, Column (F))*								$ (10,038,359)

References:
- Column (A): Company Schedules B-2
- Column (B): Intentionally Left Blank
- Columns (C) & (D): Staff Schedule JMM-WW3
- Column (E): Intentionally Left Blank
- Column (F): Intentionally Left Blank
- Column (G): Intentionally Left Blank
- Column (H): Sum Of Columns (A) Thru (G)

Johnson Utilities, LLC
Docket Nos. WS-02987A-08-0180
Test Year Ended December 31, 2007

Wastewater District
Schedule SURR RLM-7
Page 1 of 1

SURREBUTTAL OPERATING INCOME

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED	(B) RUCO TEST YEAR ADJM'TS	(C) RUCO TEST YEAR AS ADJ'TED	(D) RUCO PROP'D CHANGES	(E) RUCO AS RECOMM'D
	Revenues:					
1	Flate Rate Revenues	$ 10,786,457	$ 65,351	$ 10,851,808	$ (480,287)	$ 10,371,521
2	Misc. Service Revenues	-	-	-	-	-
3	Other Wastewater Revenues	502,206	-	502,206	-	502,206
4	TOTAL OPERATING REVENUE	$ 11,288,663	$ 65,351	$ 11,354,014	$ (480,287)	$ 10,873,727
	Operating Expenses:					
5	Salaries And Wages	$ -	$ -	$ -	$ -	$ -
6	Purchased Wastewater Treatment	-	-	-	-	-
7	Sludge Removal Expense	286,429	(7,688)	278,741	-	278,741
8	Purchased Power	688,557	26,003	714,560	-	714,560
9	Fuel For Power Production	-	-	-	-	-
10	Chemicals	147,196	-	147,196	-	147,196
11	Materials And Supplies	32,762	-	32,762	-	32,762
12	Contractual Services	4,826,240	-	4,826,240	-	4,826,240
13	Repairs And Maintenance	116,474	-	116,474	-	116,474
14	Rents	48,151	-	48,151	-	48,151
15	Transportation Expenses	-	-	-	-	-
16	Insurance	21,039	-	21,039	-	21,039
18	Regulatory Comm. Exp. - Rate Case	33,333	(13,333)	20,000	-	20,000
19	Miscellaneous Expense	231,593	(993)	230,600	-	230,600
20	Depreciation Expense	3,142,068	(362,533)	2,779,535	-	2,779,535
21	Taxes Other Than Income	6,525	-	6,525	-	6,525
22	Property Taxes	785,281	(54,330)	730,951	-	730,951
23	Income Tax	330,522	(330,522)	-	-	-
24	Rounding	2				
25	TOTAL OPERATING EXPENSES	$ 10,696,172	$ (743,396)	$ 9,952,774	$ -	$ 9,952,774
26	OPERATING INCOME (LOSS)	$ 592,491	$ 808,747	$ 1,401,240	$ (480,287)	$ 920,953

References:
- Column (A): Company Schedule C-1
- Column (B): SURR RLM-8, Columns (B) Thru (I)
- Column (C): Column (A) + Column (B)
- Column (D): SURR RLM-1
- Column (E): Column (C) + Column (D)

Johnson Utilities, LLC
Docket Nos. WS-02987A-08-0180
Test Year Ended December 31, 2007

Wastewater District
Schedule SURR RLM-8

SURREBUTTAL SUMMARY OF OPERATING INCOME ADJUSTMENTS
TEST YEAR AS FILED AND ADJUSTMENTS

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED	(B) REVISED ADJMT NO. 1 DEPRECIAT'N & AMORTIZ'N	(C) REVISED ADJMT NO. 2 PROPERTY TAX	(D) ADJMT NO. 3 REVENUE ADJUSTMENT	(E) ADJMT NO. 4 RATE CASE EXPENSE	(F) SURR'BTAL ADJMT NO. 5 SLUDGE REMOVAL	(G) REVISED ADJMT NO. 6 UNNECESS'Y EXPENSE	(H) SURR'BTAL ADJMT NO. 7 PURCHASED POWER	(I) LEFT BLANK	(J) ADJMT NO. 9 INCOME TAX	(K) RUCO AS ADJT'D
	Revenues:											
1	Flate Rate Revenues	$ 10,786,457	$ -	$ -	$ 65,351	$ -	$ -	$ -	$ -	$ -	$ -	$ 10,851,808
2	Misc. Service Revenues	-	-	-	-	-	-	-	-	-	-	-
3	Other Wastewater Revenues	502,206	-	-	-	-	-	-	-	-	-	502,206
4	TOTAL OPERATING REV.	$ 11,288,663	$ -	$ -	$ 65,351	$ -	$ -	$ -	$ -	$ -	$ -	$ 11,354,014
	Operating Expenses:											
5	Salaries And Wages	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
6	Purchased Wastewater Treatment	-	-	-	-	-	-	-	-	-	-	-
7	Sludge Removal Expense	286,429	-	-	-	-	(7,688)	-	-	-	-	278,741
8	Purchased Power	688,557	-	-	-	-	-	-	26,003	-	-	714,560
9	Fuel For Power Production	-	-	-	-	-	-	-	-	-	-	-
10	Chemicals	147,196	-	-	-	-	-	-	-	-	-	147,196
11	Materials And Supplies	32,762	-	-	-	-	-	-	-	-	-	32,762
12	Contractual Services	4,826,240	-	-	-	-	-	-	-	-	-	4,826,240
13	Repairs And Maintenance	116,474	-	-	-	-	-	-	-	-	-	116,474
14	Rents	48,151	-	-	-	-	-	-	-	-	-	48,151
15	Transportation Expenses	-	-	-	-	-	-	-	-	-	-	-
16	Insurance	21,039	-	-	-	-	-	-	-	-	-	21,039
18	Regulatory Comm. Exp. - Rate Case	33,333	-	-	-	(13,333)	-	-	-	-	-	20,000
19	Miscellaneous Expense	231,593	-	-	-	-	-	(993)	-	-	-	230,600
20	Depreciation Expense	3,142,068	(362,533)	-	-	-	-	-	-	-	-	2,779,535
21	Taxes Other Than Income	6,525	-	-	-	-	-	-	-	-	-	6,525
22	Property Taxes	785,281	-	(54,330)	-	-	-	-	-	-	-	730,951
23	Income Tax	330,522	-	-	-	-	-	-	-	-	(330,522)	-
24	Rounding	2										
25	TOTAL OPERATING EXP.	$ 10,696,172	$ (362,533)	$ (54,330)	$ -	$ (13,333)	$ (7,688)	$ (993)	$ 26,003	$ -	$ (330,522)	$ 9,952,774
26	OPERATING INC. (LOSS)	$ 592,491										$ 1,401,240

ADJUSTMENTS:
1 Depreciation And Amortization Expense
2 Property Tax Computation
3 Revenue Adjustment
4 Rate Case Expense
5 Sludge Removal
6 Unnecessary Expenses
7 Purchased Power
8 Intentionally Left Blank
9 Income Tax

REFERENCE:
Surrebuttal Testimony, RLM And Schedule SURR RLM-9
Surrebuttal Testimony, RLM And Schedule SURR RLM-10
Ditrect Testimony, RLM
Direct Testimony, RLM And Schedule RLM-11
Surrebuttal Testimony, RLM
Direct Testimony, RLM And Schedule RLM-12
Surrebuttal Testimony, RLM

Testimony, RLM And Schedule RLM-13

SURREBUTTAL EXPLANATION OF OPERATING INCOME ADJUSTMENT NO. 1
TEST YEAR DEPRECIATION EXPENSE

LINE NO.	ACCOUNT NO.	ACCOUNT NAME	(A) TOTAL PLANT VALUE	(B) COMPANY PROPOSED DEP. RATES	(C) TEST YEAR DEPRECIATION EXPENSE
1	351	Organization	$ -	0.00%	$ -
2	352	Franchises	-	0.00%	-
3	353	Land and Land Rights	4,122,800	0.00%	-
4	354	Structures And Improvements	439,172	3.33%	14,624
5	355	Power Generation Equipment	-	5.00%	-
6	360	Collection Sewers - Force	21,241,536	2.00%	424,831
7	361	Collection Sewers - Gravity	24,287,592	2.00%	485,752
8	362	Special Collecting Structures	-	2.00%	-
9	363	Services To Customers	-	2.00%	-
10	364	Flow Measuring Devices	-	10.00%	-
11	365	Flow Measuring Installations	-	10.00%	-
12	370	Receiving Wells	-	3.33%	-
13	371	Pumping Equipment	7,613,724	12.50%	951,716
14	375	Reuse T & D	958,645	2.50%	23,966
15	380	Treatment And Disposal Equipment	-	5.00%	-
16	381	Plant Sewers	57,832,761	5.00%	2,891,638
17	382	Outfall Sewer Lines	-	3.33%	-
18	389	Other Plant And Miscellaneous Equipment	-	6.67%	-
19	390	Office Furniture And Equipment	-	20.00%	-
20	391	Transportation Equipment	-	20.00%	-
21	393	Tools, Shop And Garage Equipment	-	5.00%	-
22	394	Laboratory Equipment	-	10.00%	-
23	395	Power Operated Equipment	-	5.00%	-
24	398	Other Tangible Plant	-	10.00%	-
25		TOTAL TEST-YEAR GROSS PLANT AND DEPRECIATION EXPENSE	$ 116,496,230		$ 4,792,527
26		AMORTIZATION OF CONTRIBUTIONS	(48,931,590)	4.11%	(2,012,992)
27		Rounding			-
28	**TOTAL DEPRECIATION EXPENSE**				$ 2,779,535
29	Company As Filed				3,142,068
30	Difference				$ (362,533)
31	RUCO Adjustment (See SURR RLM-8, Column (B))				$ (362,533)

References:

Column (A): SURR RLM-6, Column (H)
Column (B): Company Workpapers
Column (C): Column (A) X Column (B)

SURREBUTTAL EXPLANATION OF OPERATING INCOME ADJUSTMENT NO. 2
PROPERTY TAX COMPUTATION

LINE NO.	DESCRIPTION	REFERENCE	(A)	(B)
	Calculation Of The Company's Full Cash Value:			
	Annual Operating Revenues:			
1	Adjusted Revenues In Year Ended December 2007	Sch. RLM-6, Col (C), Ln 4	$ 11,354,014	
2	Adjusted Revenues In Year Ended December 2007	Sch. RLM-6, Col (C), Ln 4	11,354,014	
3	Proposed Revenues	Sch. RLM-6, Col (D), Ln 4	10,873,727	
4	Total Three Year Operating Revenues	Sum Of Lines 1, 2 & 3	$ 33,581,755	
5	Average Annual Operating Revenues	Line 4 / 3	11,193,918	
6	Two Times Three Year Average Operating Revenues	Line 5 X 2		$ 22,387,837
	ADD:			
	10% Of Construction Work In Progress ("CWIP"):			
7	Test Year CWIP	Company Workpapers	$ -	
8	10% Of CWIP	Line 7 X 10%		$ -
	SUBTRACT:			
	Transportation At Book Value:			
9	Original Cost Of Transportation Equipment	Company Workpapers	$ -	
10	Acc. Dep. Of Transportation Equipment	Company Workpapers	-	
11	Book Value Of Transportation Equipment	Line 9 + Line 10		$ -
12	Company's Full Cash Value ("FCV")	Sum Of Lines 6, 8 & 11		$ 22,387,837
	Calculation Of The Company's Tax Liability:			
	MULTIPLY:			
	FCV X Valuation Assessment Ratio X Property Tax Rates:			
13	Assessment Ratio	House Bill 2779	23.0%	
14	Assessed Value	Line 12 X Line 13	$ 5,149,202	
	Property Tax Rates:			
15	Primary Tax Rate	Company Workpapers	14.04%	
16	Secondary Tax Rate	Company Workpapers	0.00%	
17	Estimated Tax Rate Liability	Line 15 + Line 16	14.04%	
	Property Tax			$ 722,843
	Tax On Parcel			8,108
18	Company's Total Tax Liability - Based On Full Cash Value	Line 14 X Line 17		$ 730,951
19	Test Year Adjusted Property Tax Expense As Filed	Co. Sch. C-1		785,281
20	Decrease In Property Tax Expense	Line 18 - Line 19		$ (54,330)
21	RUCO Adjustment (See SURR RLM-8, Column (C))	Line 20		$ (54,330)

COST OF CAPITAL

LINE NO.	DESCRIPTION	(A) CAPITAL RATIO	(B) COST	(C) WEIGHTED COST RATE
1	Long -Term Debt	40.00%	8.00%	3.20%
2	Common Equity	60.00%	8.31%	4.98%
3	Total Capitalization	100.00%		
4	WEIGHTED AVERAGE COST OF CAPITAL			8.18%

References:
Columns (A) Thru (C): Testimony, WAR

SURREBUTTAL RATE DESIGN AND PROOF OF RECOMMENDED REVENUE
PROPOSED REVENUE

LINE NO.	DESCRIPTION	(A) TEST YEAR DETERMIN'TS	(B) ANN'ZED ADJUSTM'TS	(C) TEST YEAR ADJUSTED DETERMIN'TS	PRESENT CHARGES & USAGE FEES	(E) TEST YEAR ADJUSTED REVENUES	(F) TOTAL REVENUES
	RESIDENTIAL CUSTOMERS						
1	3/4" Meter	21,448	1,476	22,924	$ 37.02	$ 10,184,753	$ 10,184,753
2	1" Meter	77	6	83	$ 47.13	$ 46,940	$ 46,940
3	2" Meter	0	0	0	$ 97.62	$ -	$ -
4	3" Meter	0	1	1	$ 370.28	$ 4,443	$ 4,443
5	Total Residential Customers	21,525	1,483	23,008			
6	TOTAL RESIDENTIAL CUSTOMERS REVENUE						$ 10,236,136
	COMMERCIAL CUSTOMERS						
7	3/4" Meter	5	1	5	$ 37.02	$ 2,221	$ 2,221
8	1" Meter	5	1	6	$ 47.13	$ 3,393	$ 3,393
9	1-1/2" Meter	30	-4	26	$ 60.59	$ 18,905	$ 18,905
10	2" Meter	25	5	30	$ 97.62	$ 35,142	$ 35,142
11	3" Meter	1	0	1	$ 370.28	$ 4,443	$ 4,443
12	4" Meter	2	0	2	$ 706.89	$ 16,965	$ 16,965
13	*Total Commercial Customers*	68	2	70			
14	TOTAL COMMERCIAL CUSTOMERS REVENUE						$ 81,070
	PUBLIC AUTHORITY CUSTOMERS						
15	3/4" Meter	1	0	1	$ 37.02	$ 444	$ 444
16	1" Meter	0	0	0	$ 47.13	$ -	$ -
17	1-1/2" Meter	0	0	0	$ 60.59	$ -	$ -
18	2" Meter	7	0	7	$ 97.62	$ 8,590	$ 8,590
19	3" Meter	1	0	1	$ 370.28	$ 4,443	$ 4,443
20	4" Meter	1	0	1	$ 706.89	$ 8,483	$ 8,483
21	Total Public Authority Customers	10	0	10			
22	TOTAL PUBLIC AUTHORITY CUSTOMERS REVENUE						$ 21,960
	EFFLUENT CUSTOMERS						
23	6" Meter	0	0	0	$ -	$ -	$ -
24	Commodity Usage	53,489	0	53,489	$ 0.62	$ 33,163	$ 33,163
25	Total Effluent Customers	0	0	0			
26	Total Effluent Usage	53,489	0	53,489			
27	TOTAL COMPANY CUSTOMER COUNT	21,603	1,485	23,088			
28	TOTAL COMPANY EFFLUENT SALES	53,489	0	53,489			
29	TOTAL EFFLUENT CUSTOMERS REVENUE						$ 33,163
30	**TOTAL RUCO PROPOSED REVENUE PER BILL COUNT**						$ 10,372,329
31	Unreconciled Difference vs. Billed Revenues						(809)
32	Other Revenues						502,206
33	**TOTAL REVENUE**						$ 10,873,727
34	**PROPOSED REVENUE PER RUCO**						$ 10,873,727
35	Difference						$ (0)
36	Percentage Difference						0.00%

Johnson Utilities, LLC
Docket Nos. WS-02987A-08-0180
Test Year Ended December 31, 2007

Wastewater District
Schedule SURR RLM-15
Page 1 of 1

SURREBUTTAL TYPICAL RESIDENTIAL BILL ANALYSIS

LINE NO.	DESCRIPTION	(A) PRESENT	(B) PRESENT	(C) COMPANY PROPOSED	(D) COMPANY PROPOSED	(E) RUCO PROPOSED	(F) RUCO PROPOSED
	REVENUE ALLOCATION						
1	RESIDENTIAL	$ 9,955,813	98.65%	$ 12,864,422	98.75%	$ 10,236,136	98.69%
2	OTHER	136,707	1.35%	162,648	1.25%	136,193	1.31%
3	TOTAL	$ 10,092,520	100.00%	$ 13,027,070	100.00%	$ 10,372,329	100.00%
	ALLOCATION RATIOS						
4	FIX REVENUE	$ 10,059,357	99.67%	$ 12,993,907	99.75%	$ 10,339,166	99.68%
5	VARIABLE REVENUE	33,163	0.33%	33,163	0.25%	33,163	0.32%
6	TOTAL	$ 10,092,520	100.00%	$ 13,027,070	100.00%	$ 10,372,329	100.00%

	RESIDENTIAL (5/8" X 3/4") RATE DESIGN		PRESENT	COMPANY PROPOSED	RUCO PROPOSED
7	BASIC MONTHLY CHARGE		$ 38.50	$ 46.53	$ 37.02
	COMMODITY CHARGE				
	PRESENT	PROPOSED			
8	Flat Rate	Flat Rate	$ -	$ -	$ -
9	Effluent - Per 1,00 Gallons	Effluent - Per 1,00 Gallons	$ 0.62	$ 0.62	$ 0.62

RESIDENTIAL BILL COMPARISONS

	MONTHLY CONSUMPTION	PRESENT MONTHLY WATER COST	RUCO PROP'D MONTHLY WATER COST	RUCO PROP'D MONTHLY INCREASE	RUCO PROP'D MONTHLY % INCREASE
10	Flat Rate	$ 38.50	$ 37.02	$ (1.48)	-3.83%

EXHIBIT
R-3
ADMITTED

Johnson Utilities, LLC
Docket Nos. WS-02987A-08-0180
Test Year Ended December 31, 2007

Water District

REVISED
TABLE OF CONTENTS TO RLM SURREBUTTAL SCHEDULES

SCH. NO.	PAGE NO.	TITLE
SURR RLM-1	1	SURREBUTTAL REVENUE REQUIREMENT
SURR RLM-2	1	SURREBUTTAL RATE BASE
SURR RLM-3	1	SURREBUTTAL SUMMARY OF ORIGINAL COST RATE BASE ADJUSTMENTS
TESTIMONY		RATE BASE ADJUSTMENT NO. 1 - SURREBUTTAL ADJUSTED GROSS PLANT IN SERVICE
TESTIMONY		RATE BASE ADJUSTMENT NO. 2 - SURREBUTTAL ADJUSTED ACCUMULATED DEPRECIATION
TESTIMONY		RATE BASE ADJUSTMENT NO. 5 - SURREBUTTAL ADJUSTED MATERIALS AND SUPPLIES
TESTIMONY		RATE BASE ADJUSTMENT NO. 6 - SURREBUTTAL RECLASSIFY SERVICE LINE CHARGES
TESTIMONY		RATE BASE ADJUSTMENT NO. 7 - SURREBUTTAL RECLASSIFY CUSTOMER DEPOSITS
SURR RLM-6	1	SURREBUTTAL GROSS PLANT ADJUSTMENTS
SURR RLM-7	1	SURREBUTTAL OPERATING INCOME
SURR RLM-8	1	SURREBUTTAL SUMMARY OF OPERATING INCOME ADJUSTMENTS
SURR RLM-9	1	OPERATING INCOME ADJUSTMENT NO. 1 - SURREBUTTAL ADJUSTED TEST YEAR DEPRECIATION EXPENSE
SURR RLM-10	1	OPERATING INCOME ADJUSTMENT NO. 2 - SURREBUTTAL ADJUSTED PROPERTY TAX COMPUTATION
TESTIMONY		OPERATING INCOME ADJUSTMENT NO. 3 - SURREBUTTAL ADJUSTED OUTSIDE SERVICES
TESTIMONY		OPERATING INCOME ADJUSTMENT NO. 6 - SURREBUTTAL ADJUSTED MISCELLANEOUS EXPENSES
TESTIMONY		OPERATING INCOME ADJUSTMENT NO. 7 - SURREBUTTAL ADJUSTED ANNUALIZED POWER EXPENSES
SURR RLM-14	1 TO 3	SURREBUTTAL RATE DESIGN AND PROOF OF RECOMMENDED REVENUE
SURR RLM-15	1	SURREBUTTAL TYPICAL RESIDENTIAL BILL ANALYSIS
SURR RLM-16	1	OPERATING INCOME ADJUSTMENT NO. 4 - SURREBUTTAL ADJUSTED CAGRD FEES

Johnson Utilities, LLC
Docket Nos. WS-02987A-08-0180
Test Year Ended December 31, 2007

Water District
Schedule SURR RLM-1

REVISED
SURREBUTTAL REVENUE REQUIREMENT

LINE NO.	DESCRIPTION	(A) COMPANY OCRB/FVRB COST	(B) RUCO OCRB/FVRB COST
1	Original Cost Rate Base	$ 6,607,841	$ (5,556,766)
2	Adjusted Operating Income (Loss)	$ 2,118,161	$ 1,145,231
3	Recommended Operating Income (8.18% Operating Margin) (L11 X 10%)	N/A	$ 1,071,513
4	Current Rate Of Return (L2 / L1)	32.06%	N/A
5	Required Operating Income (L5 X L1)	$ 689,198	N/A
6	Required Rate Of Return On Fair Value Rate Base	10.43%	N/A
7	Operating Income Deficiency (L4 - L2)	$ (1,428,963)	N/A
8	Gross Revenue Conversion Factor	1.5630	N/A
9	Increase In Gross Revenue Requirement (L7 X L6)	$ (2,233,480)	$ (73,718)
10	Adjusted Test Year Revenue	$ 13,172,899	$ 13,172,899
11	Proposed Annual Revenue (L8 + L9)	$ 10,939,419	$ 13,099,181
12	Required Percentage Increase In Revenue (L8 / L9)	-16.96%	-0.56%
13	Rate Of Return On Common Equity	10.50%	N/A
14	Required Operating Margin	N/A	8.18%

References:
Column (A): Company Schedules A-1 and C-1
Column (B): RUCO Schedule SURR RLM-2, SURR RLM-7 And RLM-13

Johnson Utilities, LLC
Docket Nos. WS-02987A-08-0180
Test Year Ended December 31, 2007

Water District
Schedule SURR RLM-2

REVISED
SURREBUTTAL RATE BASE - ORIGINAL COST

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED OCRB/FVRB	(B) RUCO OCRB/FVRB ADJUSTMENTS	(C) RUCO ADJ'TED OCRB/FVRB
1	Gross Utility Plant In Service	$ 79,591,151	$ (5,254,084)	$ 74,337,067
2	Accumulated Depreciation	(6,199,124)	436,975	(5,762,149)
3	Net Utility Plant In Service (Sum L1 & L2)	$ 73,392,027	$ (4,817,109)	$ 68,574,918
4	Advances In Aid Of Const.	$ (37,840,520)	$ -	$ (37,840,520)
5	Service Line And Meter Advances	$ -	$ (6,779,771)	$ (6,779,771)
6	Contribution In Aid Of Const.	$ (25,004,821)	$ (6,931,078)	$ (31,935,899)
7	Accumulated Amortization Of CIAC	1,858,537	$ 310,570	2,169,107
8	NET CIAC (L6 + L7)	$ (23,146,284)	$ (6,620,508)	$ (29,766,792)
9	Customer Meter Deposits	$ (6,779,771)	$ 6,401,633	$ (378,138)
10	Deferred Income Taxes And Credits	$ -	$ -	$ -
11	Investment Tax Credits	$ -	$ -	$ -
12	Shared Gain On Well	$ -	$ -	$ -
13	Prepayments	$ -	$ -	$ -
14	Materials And Supplies	$ 348,852	$ (348,852)	$ -
15	Deferred Assets	$ 633,537	$ -	$ 633,537
16	Allowance For Working Capital	$ -	$ -	$ -
17	TOTAL RATE BASE (Sum L's 3, 4, 5, & 8 Thru 16)	$ 6,607,841	$ (12,164,607)	$ (5,556,766)

References:
Column (A): Company Schedule B-1
Column (B): Schedule SURR RLM-3
Column (C): Column (A) + Column (B)

Johnson Utilities, LLC
Docket Nos. WS-02987A-08-0180
Test Year Ended December 31, 2007

Water District
Schedule SURR RLM-3

REVISED

SURREBUTTAL SUMMARY OF ORIGINAL COST RATE BASE ADJUSTMENTS

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED OCRB/FVRB	(B) SURR'BTAL ADJMT NO. 1 GROSS PLANT	(C) SURR'BTAL ADJMT NO. 2 ACCUMULT'D DEPRECT'N	(D) ADJMT NO. 3 ACC AMORT ON (HUF) CIAC	(E) ADJMT NO. 4 REINSTATE (HUF) CIAC	(F) SURR'BTAL ADJMT NO. 5 MATERIALS & SUPPLIES	(G) SURR'BTAL ADJMT NO. 6 RECLASSIFY SERVICE LINE	(H) SURR'BTAL ADJMT NO. 7 RECLASSIFY CUST DEPOSIT	(I) RUCO ADJ'TED OCRB/FVRB
1	Gross Utility Plant In Service	$ 79,591,151	$ (5,254,084)	$ -	$ -	$ -	$ -	$ -	$ -	$ (5,254,084)
2	Accumulated Depreciation	(6,199,124)	-	436,975	-	-	-	-	-	436,975
3	Net Utility Plant In Service (Sum L1 & L2)	$ 73,392,027	$ (5,254,084)	$ 436,975	$ -	$ -	$ -	$ -	$ -	$ (4,817,109)
4	Advances In Aid Of Const.	$ (37,840,520)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
5	Service Line And Meter Advances	$ -	$ -	$ -	$ -	$ -	$ -	$ (6,779,771)	$ -	$ (6,779,771)
6	Contribution In Aid Of Const.	$ (25,004,821)	$ -	$ -	$ -	$ (6,931,078)	$ -	$ -	$ -	(6,931,078)
7	Accumulated Amortization Of CIAC	1,858,537	-	-	310,570	-	-	-	-	310,570
8	NET CIAC (L6 + L7)	$ (23,146,284)	$ -	$ -	$ 310,570	$ (6,931,078)	$ -	$ (6,779,771)	$ -	$ (6,620,508)
9	Customer Meter Deposits	$ (6,779,771)	$ -	$ -	$ -	$ -	$ -	$ -	$ 6,401,633	$ 6,401,633
10	Deferred Income Taxes And Credits	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
11	Investment Tax Credits	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
12	Shared Gain On Well	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
13	Prepayments	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
14	Materials And Supplies	$ 348,852	$ -	$ -	$ -	$ -	$ (348,852)	$ -	$ -	$ (348,852)
15	Deferred Assets	$ 633,537	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
16	Allowance For Working Capital	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
17	TOTAL RATE BASE (Sum Ls 3, 4, 5 & 7 Thru 16	$ 6,607,841	$ (5,254,084)	$ 436,975	$ 310,570	$ (6,931,078)	$ (348,852)	$ (13,559,542)	$ 6,401,633	$ (12,164,607)

References:

Column (A): Company Schedule B-2
Column (B): Adjustment No. 1 - Surrebuttal Adjustment To Gross Plant In Service (See SURR RLM-6 And Surrebuttal Testimony, RLM)
Column (C): Adjustment No. 2 - Surrebuttal Adjustment To Accumulated Depreciation (See Surrebuttal Testimony, RLM)
Column (D): Adjustment No. 3 - Direct Testimony To Reverse Company's Adjustment To Remove The CIAC's Accumulated Amortization (See Direct Testimony, RLM)
Column (E): Adjustment No. 4 - Direct Testimony To Reverse Company's Adjustment To Remove The CIAC Associated With Unexpended Hook-Up Fees (See Direct Testimony, RLM)
Column (F): Adjustment No. 5 - Surrebuttal Adjustment To Deferred Assets (See Surrebuttal Testimony, RLM)
Column (G): Adjustment No. 6 - Surrebuttal Adjustment To Material And Supplies (See Surrebuttal Testimony, RLM)
Column (H): Adjustment No. 7 - Surrebuttal Adjustment To Reclassify Cutomer Deposits (See Surrebuttal Testimony, RLM)
Column (I): Sum Of Columns (A)Thru (H)

Johnson Utilities, LLC
Docket Nos. WS-02987A-08-0180
Test Year Ended December 31, 2007

Water District
Schedule SURR RLM-6

REVISED
SURREBUTTAL GROSS PLANT ADJUSTMENTS

LINE NO.	ACCT NO.	ACCOUNT NAME	(A) DIRECT TEST-YEAR TY PLANT	(B) ADJMT NO. 1 NOT USED AND USEFUL PLANT	(C) ADJMT NO. 2 EXCESS CAPACITY	(D) ADJMT NO. 3 RECLASSIFIED PLANT	(E) LEFT BLANK	(F) LEFT BLANK	(G) LEFT BLANK	(H) ADJUSTED TEST-YEAR PLANT
1	301	Organization Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
2	302	Franchises	-	-	-	-	-	-	-	-
3	303	Land and Land Rights	272,438	-	-	-	-	-	-	272,438
4	304	Structures And Improvements	9,482,165	-	-	(6,657,837)	-	-	-	2,824,328
5	305	Collecting And Impounding Reservoirs	-	-	-	-	-	-	-	-
6	306	Lake, River And Other Intakes	-	-	-	-	-	-	-	-
7	307	Wells And Springs	5,226,030	(2,052,564)	(433,238)	-	-	-	-	2,740,228
8	308	Infiltration Gallaries And Tunnels	-	-	-	-	-	-	-	-
9	309	Supply Mains	-	-	-	-	-	-	-	-
10	310	Power Generation Equipment	-	-	-	-	-	-	-	-
11	311	Electric Pumping Equipment	764,112	-	-	-	-	-	-	764,112
12	320	Water Treatment Plant	21,856	-	-	-	-	-	-	21,856
13	330	Distribution Reservoirs And Standpipes	248,272	-	-	-	-	-	-	248,272
14	331	Transmission And Distribution Lines	53,432,585	(2,074,455)	(693,827)	7,529,449	-	-	-	58,193,752
15	333	Services	527,473	-	-	(871,612)	-	-	-	(344,139)
16	334	Meters And Meter Installations	6,068,504	-	-	-	-	-	-	6,068,504
17	335	Hydrants	3,547,718	-	-	-	-	-	-	3,547,718
18	336	Backflow Prevention Devices	-	-	-	-	-	-	-	-
19	339	Other Plant And Miscellaneous Equipment	-	-	-	-	-	-	-	-
20	340	Office Furniture And Equipment	-	-	-	-	-	-	-	-
21	341	Transportation Equipment	-	-	-	-	-	-	-	-
22	342	Stores Equipment	-	-	-	-	-	-	-	-
23	343	Tools And Equipment	-	-	-	-	-	-	-	-
24	344	Laboratory Equipment	-	-	-	-	-	-	-	-
25	345	Power Operated Equipment	-	-	-	-	-	-	-	-
26	346	Communication Equipment	-	-	-	-	-	-	-	-
27	347	Miscellaneous Equipment	-	-	-	-	-	-	-	-
28	348	Other Tangible Plant	-	-	-	-	-	-	-	-
29		**TOTAL WATER PLANT**	$ 79,591,153	$ (4,127,019)	$ (1,127,065)	$ -	$ -	$ -	$ -	$ 74,337,069
30		Company As Filed (Column (A), Line 29)								$ 79,591,153
31		Difference (Line 29 - Line 30)								$ (5,254,084)
32		RUCO Adjustment (Line 31) (See SURR RLM-3, Page 1, Column (F))								$ (5,254,084)

References:
Column (A): Company Schedules B-2
Columns (B) Thru (D): Staff Schedule JMM-WW3
Column (E): Intentionally Left Blank
Column (F): Intentionally Left Blank
Column (G): Intentionally Left Blank
Column (H): Sum Of Columns (A) Thru (G)

REVISED
SURREBUTTAL OPERATING INCOME

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED	(B) RUCO TEST YEAR ADJM'TS	(C) RUCO TEST YEAR AS ADJ'TED	(D) RUCO PROP'D CHANGES	(E) RUCO AS RECOMM'D
	Revenues:					
1	Metered Water Revenues	$ 12,843,604	$ -	$ 12,843,604	$ (73,718)	$ 12,769,886
2	Unmetered Water Revenues	-	-	-	-	-
3	Other Water Revenues	329,295	-	329,295	-	329,295
4	TOTAL OPERATING REVENUE	$ 13,172,899	$ -	$ 13,172,899	$ (73,718)	$ 13,099,181
	Operating Expenses:					
5	Salaries And Wages	$ -	$ -	$ -	$ -	$ -
6	Purchased Water	334,948	2,558,930	2,893,878	-	2,893,878
7	Purchased Power	828,900	2,631	831,531	-	831,531
8	Chemicals	16,189	-	16,189	-	16,189
9	Repairs And Maintenance	14,333	-	14,333	-	14,333
10	Office Supplies And Expenses	1,119	-	1,119	-	1,119
11	Outside Services	5,877,591	(5,799)	5,871,792	-	5,871,792
12	Water Testing	55,007	-	55,007	-	55,007
13	Rents	53,444	-	53,444	-	53,444
14	Transportation Expenses	-	-	-	-	-
15	Insurance - General Liability	21,565	-	21,565	-	21,565
16	Insurance - Health And Life	-	-	-	-	-
17	Regulatory Comm. Exp. - Rate Case	33,333	(13,333)	20,000	-	20,000
18	Miscellaneous Expense	286,747	(31,192)	255,555	-	255,555
19	Depreciation Expense	1,548,515	(398,648)	1,149,867	-	1,149,867
20	Taxes Other Than Income	-	-	-	-	-
21	Property Taxes	797,368	46,019	843,387	-	843,387
22	Income Tax	1,185,679	(1,185,679)	-	-	-
23	Rounding	-				
24	TOTAL OPERATING EXPENSES	$ 11,054,738	$ 972,929	$ 12,027,668	$ -	$ 12,027,668
25	OPERATING INCOME (LOSS)	$ 2,118,161	$ (972,929)	$ 1,145,231	$ (73,718)	$ 1,071,513

References:
Column (A): Company Schedule C-1
Column (B): SURR RLM-8, Columns (B) Thru (I)
Column (C): Column (A) + Column (B)
Column (D): SURR RLM-1
Column (E): Column (C) + Column (D)

Johnson Utilities, LLC
Docket Nos. WS-02987A-08-0180
Test Year Ended December 31, 2007

Water District
Schedule SURR RLM-8

REVISED
TEST YEAR AS FILED AND ADJUSTMENTS

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED	(B) REVISED ADJMT NO. 1 DEPRECIAT'N & AMORTIZ'N	(C) REVISED ADJMT NO. 2 PROPERTY TAX	(D) SURR'BTAL ADJMT NO. 3 OUTSIDE SERVICES	(E) ADJMT NO. 4 RATE CASE EXPENSE	(F) ADJMT NO. 5 CAGRD TAX EXPENSE	(G) REVISED ADJMT NO. 6 UNNECESS'Y EXPENSES	(H) REVISED ADJMT NO. 7 ANNUAL'ZD POWER EXP.	(I) ADJMT NO. 8 INCOME TAX	(J) RUCO AS ADJT'D
	Revenues:										
1	Metered Water Revenues	$ 12,843,604	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 12,843,604
2	Unmetered Water Revenues	-	-	-	-	-	-	-	-	-	-
3	Other Water Revenues	329,295	-	-	-	-	-	-	-	-	329,295
4	TOTAL OPERATING REV.	$ 13,172,899	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 13,172,899
	Operating Expenses:										
5	Salaries And Wages	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
6	Purchased Water	334,948	-	-	-	-	2,558,930	-	-	-	2,893,878
7	Purchased Power	828,900	-	-	-	-	-	-	2,631	-	831,531
8	Chemicals	16,189	-	-	-	-	-	-	-	-	16,189
9	Repairs And Maintenance	14,333	-	-	-	-	-	-	-	-	14,333
10	Office Supplies And Expenses	1,119	-	-	-	-	-	-	-	-	1,119
11	Outside Services	5,877,591	-	-	(5,799)	-	-	-	-	-	5,871,792
12	Water Testing	55,007	-	-	-	-	-	-	-	-	55,007
13	Rents	53,444	-	-	-	-	-	-	-	-	53,444
14	Transportation Expenses	-	-	-	-	-	-	-	-	-	-
15	Insurance - General Liability	21,565	-	-	-	-	-	-	-	-	21,565
16	Insurance - Health And Life	-	-	-	-	-	-	-	-	-	-
17	Regulatory Comm. Exp. - Rate Case	33,333	-	-	-	(13,333)	-	-	-	-	20,000
18	Miscellaneous Expense	286,747	-	-	-	-	-	(31,192)	-	-	255,555
19	Depreciation Expense	1,548,515	(398,648)	-	-	-	-	-	-	-	1,149,867
20	Taxes Other Than Income	-	-	-	-	-	-	-	-	-	-
21	Property Taxes	797,368	-	46,019	-	-	-	-	-	-	843,387
22	Income Tax	1,185,679	-	-	-	-	-	-	-	(1,185,679)	-
23	Rounding	-									
24	TOTAL OPERATING EXP.	$ 11,054,738	$ (398,648)	$ 46,019	$ (5,799)	$ (13,333)	$ 2,558,930	$ (31,192)	$ 2,631	$ (1,185,679)	$ 12,027,668
25	OPERATING INC. (LOSS)	$ 2,118,161									$ 1,145,231

ADJUSTMENTS:	REFERENCE:
1 Depreciation And Amortization Expense	Surrebuttal Testimony, RLM And Schedule SURR RLM-9
2 Property Tax Computation	Surrebuttal Testimony, RLM And Schedule SURR RLM-10
3 Contractual Outside Services	Surrebuttal Testimony, RLM
4 Rate Case Expense	Testimony, RLM And Schedule RLM-11
5 CAGRD Tax Expense	Surrebuttal Testimony, RLM And Schedule SURR RLM-16
6 Unnecessary Expenses	Testimony, RLM And Schedule RLM-12
7 Annualize Power Expenses	Testimony, RLM
8 Income Tax	Testimony, RLM

REVISED
SURREBUTTAL EXPLANATION OF OPERATING INCOME ADJUSTMENT NO. 1
TEST YEAR DEPRECIATION EXPENSE

LINE NO.	ACCOUNT NO.	ACCOUNT NAME	(A) TOTAL PLANT VALUE	(B) COMPANY PROPOSED DEP. RATES	(C) TEST YEAR DEPRECIATION EXPENSE
1	301	Organization Costs	$ -	0.00%	$ -
2	302	Franchises	-	0.00%	-
3	303	Land and Land Rights	272,438	0.00%	-
4	304	Structures And Improvements	2,824,328	3.33%	94,050
5	305	Collecting And Impounding Reservoirs	-	2.50%	-
6	306	Lake, River And Other Intakes	-	2.50%	-
7	307	Wells And Springs	2,740,228	3.33%	91,250
8	308	Infiltration Gallaries And Tunnels	-	6.67%	-
9	309	Supply Mains	-	2.00%	-
10	310	Power Generation Equipment	-	5.00%	-
11	311	Electric Pumping Equipment	764,112	12.50%	95,514
12	320	Water Treatment Plant	21,856	3.33%	728
13	330	Distribution Reservoirs And Standpipes	248,272	2.22%	5,512
14	331	Transmission And Distribution Lines	58,193,752	2.00%	1,163,875
15	333	Services	(344,139)	3.33%	(11,460)
16	334	Meters And Meter Installations	6,068,504	8.33%	505,506
17	335	Hydrants	3,547,718	2.00%	70,954
18	336	Backflow Prevention Devices	-	6.67%	-
19	339	Other Plant And Miscellaneous Equipment	-	6.67%	-
20	340	Office Furniture And Equipment	-	6.67%	-
21	341	Transportation Equipment	-	20.00%	-
22	342	Stores Equipment	-	4.00%	-
23	343	Tools And Equipment	-	5.00%	-
24	344	Laboratory Equipment	-	10.00%	-
25	345	Power Operated Equipment	-	5.00%	-
26	346	Communication Equipment	-	10.00%	-
27	347	Miscellaneous Equipment	-	10.00%	-
28	348	Other Tangible Plant	-	10.00%	-
29		TEST YEAR GROSS PLANT AND DEPRECIATION EXPENSE	$ 74,337,069		$ 2,015,929
48		AMORTIZATION OF CONTRIBUTIONS	(31,935,899)	2.7119%	(866,062)
50		Rounding			-
51	**TOTAL DEPRECIATION EXPENSE**				$ 1,149,867
52	Company As Filed				1,548,515
53	Difference				$ (398,648)
54	RUCO Adjustment (See SURR RLM-8, Column (B))				$ (398,648)

References:

Column (A): SURR RLM-4, Page 11, Column (E)
Column (B): Company Workpapers
Column (C): Column (A) X Column (B)

REVISED

SURREBUTTAL EXPLANATION OF OPERATING INCOME ADJUSTMENT NO. 2
PROPERTY TAX COMPUTATION

LINE NO.	DESCRIPTION	REFERENCE	(A)	(B)
	Calculation Of The Company's Full Cash Value:			
	Annual Operating Revenues:			
1	Adjusted Revenues In Year Ended December 2007	SURR RLM-6, Col (C), Ln 4	$ 13,172,899	
2	Adjusted Revenues In Year Ended December 2007	SURR RLM-6, Col (C), Ln 4	13,172,899	
3	Proposed Revenues	SURR RLM-6, Col (D), Ln 4	13,099,181	
4	Total Three Year Operating Revenues	Sum Of Lines 1, 2 & 3	$ 39,444,978	
5	Average Annual Operating Revenues	Line 4 / 3	13,148,326	
6	Two Times Three Year Average Operating Revenues	Line 5 X 2		$ 26,296,652
	ADD:			
	10% Of Construction Work In Progress ("CWIP"):			
7	Test Year CWIP	Company Workpapers	$ -	
8	10% Of CWIP	Line 7 X 10%		$ -
	SUBTRACT:			
	Transportation At Book Value:			
9	Original Cost Of Transportation Equipment	Company Workpapers	$ -	
10	Acc. Dep. Of Transportation Equipment	Company Workpapers	-	
11	Book Value Of Transportation Equipment	Line 9 + Line 10		$ -
12	Company's Full Cash Value ("FCV")	Sum Of Lines 6, 8 & 11		$ 26,296,652
	Calculation Of The Company's Tax Liability:			
	MULTIPLY:			
	FCV X Valuation Assessment Ratio X Property Tax Rates:			
13	Assessment Ratio	House Bill 2779	23.0%	
14	Assessed Value	Line 12 X Line 13	$ 6,048,230	
	Property Tax Rates:			
15	Primary Tax Rate	Company Workpapers	13.93%	
16	Secondary Tax Rate	Company Workpapers	0.00%	
17	Estimated Tax Rate Liability	Line 15 + Line 16	13.93%	
	Property Tax			$ 842,301
	Tax On Parcel			1,184
18	Company's Total Tax Liability - Based On Full Cash Value	Line 14 X Line 17		$ 843,485
19	Test Year Adjusted Property Tax Expense As Filed	Co. Sch. C-1		797,466
20	Decrease In Property Tax Expense	Line 18 - Line 19		$ 46,019
21	RUCO Adjustment (See SURR RLM-8, Column (C))	Line 20		$ 46,019

Johnson Utilities, LLC
Docket Nos. WS-02987A-08-0180
Test Year Ended December 31, 2007

Water District
Schedule SURR RLM-14
Pages 1 thru 3

REVISED
SURREBUTTAL RATE DESIGN AND PROOF OF RECOMMENDED REVENUE
PROPOSED REVENUE

LINE NO.	DESCRIPTION	(A) TEST YEAR DETERMIN'TS Gallons In Thousands	(B) ANN'ZED ADJUSTM'TS	(C) TEST YEAR ADJUSTED DETERMIN'TS	(D) PRESENT CHARGES & USAGE FEES	(E) TEST YEAR ADJUSTED REVENUES	(F) TOTAL REVENUES
	RESIDENTIAL CUSTOMERS						
1	3/4" Meter	15,212	1,132	16,344	$ 27.05	$ 5,305,708	$ 5,305,708
	Commodity Usage						
2	First Tier - First 4,000 Gals.	157,703	54,312	212,015	$ 1.7879	$ 379,054	
3	Second Tier - Next 6,000 Gals.	575,393	35,724	611,117	$ 2.3296	$ 1,423,684	
4	Third Tier - Over 10,000Gals.	668,195	-	668,195	$ 2.9918	$ 1,999,118	
							$ 3,801,857
5	1" Meter	260	5	265	$ 45.09	$ 143,565	$ 143,565
	Commodity Usage						
6	First Tier - First 25,000 Gals.	20,673	667	21,340	$ 2.3296	$ 49,714	
7	Second Tier - Over 25,000 Gals.	22,591	-	22,591	$ 2.9918	$ 67,588	
							$ 117,302
8	2" Meter	1	(0)	1	$ 144.28	$ 1,202	$ 1,202
	Commodity Usage						
9	First Tier - First 80,000 Gals.	79	-	79	$ 2.3296	$ 184	
10	Second Tier - Over 80,000 Gals.	3,762	(406)	3,356	$ 2.9918	$ 10,041	
							$ 10,225
11	3" Meter	0	(0)	-	$ 288.56	$ -	$ -
	Commodity Usage						
12	First Tier - First 160,000 Gals.	-	-	-	$ 2.3296	$ -	
13	Second Tier - Over 160,000 Gals.	-	-	-	$ 2.9918	$ -	
							$ -
14	Total Residential Customers	15,473	1,137	16,610			
15	Total Residential Usage	1,448,397	90,296	1,538,693			
16	TOTAL RESIDENTIAL CUSTOMERS REVENUE						$ 9,379,858
	COMMERCIAL CUSTOMERS						
17	3/4" Meter	4	0	5	$ 27.05	$ 1,518	$ 1,518
	Commodity Usage						
18	First Tier - First 10,000 Gals.	86	(74)	12	$ 2.3296	$ 28	
19	Second Tier - Over 10,000 Gals.	607	-	607	$ 2.9918	$ 1,816	
							$ 1,844
20	1" Meter	6	1	7	$ 45.09	$ 3,548	$ 3,548
	Commodity Usage						
21	First Tier - First 25,000 Gals.	409	63	472	$ 2.3296	$ 1,100	
22	Second Tier - Over 25,000 Gals.	2,192	213	2,405	$ 2.9918	$ 7,197	
							$ 8,296
23	1-1/2" Meter	18	(2)	17	$ 90.18	$ 17,900	$ 17,900
	Commodity Usage						
24	First Tier - First 50,000 Gals.	1,605	(63)	1,542	$ 2.3296	$ 3,592	
25	Second Tier - Over 50,000 Gals.	5,515	(429)	5,086	$ 2.9918	$ 15,216	
							$ 18,809
26	2" Meter	26	5	31	$ 144.28	$ 54,118	$ 54,118
	Commodity Usage						
27	First Tier - First 80,000 Gals.	3,499	420	3,919	$ 2.3296	$ 9,130	
28	Second Tier - Over 80,000 Gals.	43,206	6,673	49,879	$ 2.9918	$ 149,228	
							$ 158,358
29	3" Meter	2	-	2	$ 288.56	$ 6,949	$ 6,949
	Commodity Usage						
30	First Tier - First 160,000 Gals.	-	-	-	$ 2.3296	$ -	
31	Second Tier - Over 160,000 Gals.	6,359	-	6,359	$ 2.9918	$ 19,024	
							$ 19,024
32	4" Meter	2	-	2	$ 450.88	$ 10,159	$ 10,159
	Commodity Usage						
33	First Tier - First 250,000 Gals.	360	-	360	$ 2.3296	$ 838	
34	Second Tier - Over 250,000 Gals.	2,649	-	2,649	$ 2.9918	$ 7,925	
							$ 8,763
35	*Total Commercial Customers*	59	4	63			
36	Total Commercial Usage	66,486	6,804	73,290			
37	TOTAL COMMERCIAL CUSTOMERS REVENUE						$ 309,286

Johnson Utilities, LLC
Docket Nos. WS-02987A-08-0180
Test Year Ended December 31, 2007

Water District
Schedule SURR RLM-14
Pages 1 thru 3

REVISED
SURREBUTTAL RATE DESIGN AND PROOF OF RECOMMENDED REVENUE
PROPOSED REVENUE

LINE NO.	DESCRIPTION	(A) TEST YEAR DETERMIN'TS Gallons In Thousands	(B) ANN'ZED ADJUSTM'TS	(C) TEST YEAR ADJUSTED DETERMIN'TS	(D) PRESENT CHARGES & USAGE FEES	(E) TEST YEAR ADJUSTED REVENUES	(F) TOTAL REVENUES
	PUBLIC AUTHORITY CUSTOMERS						
38	3/4" Meter	-	-	-	$ 27.05	$ -	$ -
	Commodity Usage						
39	First Tier - First 10,000 Gals.	-	-	-	$ 2.3296	$ -	
40	Second Tier - Over 10,000 Gals.	-	-	-	$ 2.9918	$ -	
							$ -
41	1" Meter	-	-	-	$ 45.09	$ -	$ -
	Commodity Usage						
42	First Tier - First 10,000 Gals.	-	-	-	$ 2.3296	$ -	
43	Second Tier - Over 10,000 Gals.	-	-	-	$ 2.9918	$ -	
							$ -
44	1-1/2" Meter	-	-	-	$ 90.18	$ -	$ -
	Commodity Usage						
45	First Tier - First 50,000 Gals.	-	-	-	$ 2.3296	$ -	
46	Second Tier - Over 50,000 Gals.	-	-	-	$ 2.9918	$ -	
							$ -
47	2" Meter	8	1	9	$ 144.28	$ 15,131	$ 15,131
	Commodity Usage						
48	First Tier - First 80,000 Gals.	1,869	-	1,869	$ 2.3296	$ 4,354	
49	Second Tier - Over 80,000 Gals.	1,636	201	1,837	$ 2.9918	$ 5,495	
							$ 9,849
50	3" Meter	1	-	1	$ 288.56	$ 3,357	$ 3,357
	Commodity Usage						
51	First Tier - First 160,000 Gals.	265	-	265	$ 2.3296	$ 617	
52	Second Tier - Over 160,000 Gals.	922	-	922	$ 2.9918	$ 2,758	
							$ 3,376
53	4" Meter	1	-	1	$ 450.88	$ 4,970	$ 4,970
	Commodity Usage						
54	First Tier - First 250,000 Gals.	1,110	-	1,110	$ 2.3296	$ 2,586	
55	Second Tier - Over 250,000 Gals.	1,420	-	1,420	$ 2.9918	$ 4,248	
							$ 6,834
56	Total Public Authority Customers	10	1	11			
57	Total Public Authority Usage	7,222	201	7,423			
58	TOTAL PUBLIC AUTHORITY CUSTOMERS REVENUE						$ 43,517
	IRRIGATION CUSTOMERS						
59	3/4" Meter	41	1	42	$ 27.05	$ 13,548	$ 13,548
	Commodity Usage						
60	First Tier - First 10,000 Gals.	940	(96)	844	$ 2.3296	$ 1,967	
61	Second Tier - Over 10,000 Gals.	9,595	-	9,595	$ 2.9918	$ 28,706	
							$ 30,673
62	1" Meter	50	4	55	$ 45.09	$ 29,566	$ 29,566
	Commodity Usage						
63	First Tier - First 25,000 Gals.	3,087	266	3,353	$ 2.3296	$ 7,811	
64	Second Tier - Over 25,000 Gals.	36,814	696	37,510	$ 2.9918	$ 112,222	
							$ 120,033
65	1-1/2" Meter	83	9	92	$ 90.18	$ 99,576	$ 99,576
	Commodity Usage						
66	First Tier - First 50,000 Gals.	8,071	784	8,855	$ 2.3296	$ 20,629	
67	Second Tier - Over 50,000 Gals.	151,856	8,871	160,727	$ 2.9918	$ 480,865	
							$ 501,494
68	2" Meter	77	8	85	$ 144.28	$ 146,638	$ 146,638
	Commodity Usage						
69	First Tier - First 80,000 Gals.	8,681	658	9,339	$ 2.3296	$ 21,757	
70	Second Tier - Over 80,000 Gals.	381,324	24,772	406,096	$ 2.9918	$ 1,214,965	
							$ 1,236,721
71	3" Meter	0	1	2	$ 288.56	$ 5,412	$ 5,412
	Commodity Usage						
72	First Tier - First 160,000 Gals.	-	-	-	$ 2.3296	$ -	
73	Second Tier - Over 160,000 Gals.	-	-	-	$ 2.9918	$ -	
							$ -
74	4" Meter	2	-	2	$ 450.88	$ 9,495	$ 9,495
	Commodity Usage						
75	First Tier - First 250,000 Gals.	2,113	-	2,113	$ 2.3296	$ 4,923	
76	Second Tier - Over 250,000 Gals.	7,919	-	7,919	$ 2.9918	$ 23,692	
							$ 28,615
77	6" Meter	1	-	1	$ 901.76	$ 10,822	$ 10,822
	Commodity Usage						
78	First Tier - First 500,000 Gals.	1,653	-	1,653	$ 2.3296	$ 3,851	
79	Second Tier - Over 500,000 Gals.	-	-	-	$ 2.9918	$ -	
							$ 3,851
80	Total Irrigation Customers	254	24	277			
81	Total Irrigation Usage	612,053	35,951	648,003			
82	TOTAL IRRIGATION CUSTOMERS REVENUE						$ 2,236,444

Johnson Utilities, LLC
Docket Nos. WS-02987A-08-0180
Test Year Ended December 31, 2007

Water District
Schedule SURR RLM-14
Pages 1 thru 3

REVISED
SURREBUTTAL RATE DESIGN AND PROOF OF RECOMMENDED REVENUE
PROPOSED REVENUE

LINE NO.	DESCRIPTION	(A) TEST YEAR DETERMIN'TS Gallons In Thousands	(B) ANN'ZED ADJUSTM'TS	(C) TEST YEAR ADJUSTED DETERMIN'TS	(D) PRESENT CHARGES & USAGE FEES	(E) TEST YEAR ADJUSTED REVENUES	(F) TOTAL REVENUES
	CONSTRUCTION CUSTOMERS						
83	3/4" Meter	-	-	-	$ 27.05	$ -	$ -
84	Commodity Usage	-	-	-	$ 2.9918	$ -	$ -
86	1" Meter	-	-	-	$ 45.09	$ -	$ -
87	Commodity Usage	-	-	-	$ 2.9918	$ -	$ -
89	1-1/2" Meter	-	-	-	$ 90.18	$ -	$ -
90	Commodity Usage	-	-	-	$ 2.9918	$ -	$ -
92	2" Meter	-	-	-	$ 144.28	$ -	$ -
93	Commodity Usage	-	-	-	$ 2.9918	$ -	$ -
95	3" Meter	13	-	13	$ 288.56	$ 46,169	$ 46,169
96	Commodity Usage	39,930	-	39,930	$ 2.9918	$ 119,463	$ 119,463
98	4" Meter	-	-	-	$ 450.88	$ -	$ -
99	Commodity Usage	-	-	-	$ 2.9918	$ -	$ -
101	6" Meter	12	-	12	$ 901.76	$ 135,263	$ 135,263
102	Commodity Usage	154,448	-	154,448	$ 2.9918	$ 462,080	$ 462,080
104	Total Construction Customers	26	-	26			
105	Total Construction Usage	194,378	-	194,378			
106	TOTALCONSTRUCTION CUSTOMERS REVENUE						$ 762,976
	CAP CUSTOMERS						
107	6" Meter	1	-	1	$ 1,083.56	$ 8,116	$ 8,116
108	Commodity Usage	32,016	-	32,016	$ 0.83	$ 26,503	$ 26,503
109	Total CAP Customers	1	-	1			
110	Total CAP Usage	32,016	-	32,016			
111	TOTAL CAP CUSTOMERS REVENUE						$ 34,619
112	TOTAL COMPANY CUSTOMER COUNT	15,796	1,165	16,961			
113	TOTAL COMPANY COMMODITY USAGE	1,748,499	97,300	1,845,799			
114	**TOTAL RUCO PROPOSED REVENUE PER BILL COUNT**						$ 12,766,700
115	*Unreconciled Difference vs. Billed Revenues*						3,186
116	Other Revenues						329,295
117	**TOTAL REVENUE**						$ 13,099,181
118	**PROPOSED REVENUE PER RUCO**						$ 13,099,181
119	Difference						$ 0
120	Percentage Difference						0.00%

REVISED

SURREBUTTAL TYPICAL RESIDENTIAL BILL ANALYSIS

LINE NO.	DESCRIPTION	(A) PRESENT	(B) PRESENT	(C) COMPANY PROPOSED	(D) COMPANY PROPOSED	(E) RUCO PROPOSED	(F) RUCO PROPOSED
	REVENUE ALLOCATION						
1	RESIDENTIAL	$ 8,986,698	74.13%	$ 7,790,904	73.44%	$ 9,379,858	73.47%
2	OTHER	$ 3,135,896	25.87%	$ 2,817,595	26.56%	$ 3,386,841	26.53%
3	TOTAL	$ 12,122,594	100.00%	$ 10,608,499	100.00%	$ 12,766,700	100.00%
	ALLOCATION RATIOS						
4	FIX REVENUE	6,438,743	53.11%	$ 5,044,004	47.55%	$ 6,072,729	47.57%
5	VARIABLE REVENUE	5,683,851	46.89%	$ 5,564,495	52.45%	$ 6,693,970	52.43%
6	TOTAL	12,122,594	100.00%	$ 10,608,499	100.00%	$ 12,766,700	100.00%

	RESIDENTIAL (5/8" X 3/4") RATE DESIGN	PRESENT	COMPANY PROPOSED	RUCO PROPOSED
7	BASIC MONTHLY CHARGE	$ 27.00	$ 22.47	$ 27.05
8	CAGRD SURCHARGE (Average Customer Using 6,931 Gallons)	-	6.74	-
9	TOTAL BASIC MONTHLY CHARGE	$ 27.00	$ 29.21	$ 27.05

	COMMODITY CHARGE PRESENT	PROPOSED	PRESENT	COMPANY PROPOSED	RUCO PROPOSED
10	First Tier - First 7,000 Gals.	First Tier - First 4,000 Gals.	$ 2.2500	$ 1.4850	$ 1.7879
11	Second Tier - Over 7,000 Gals.	Second Tier - Next 6,000 Gals.	$ 2.5000	$ 1.9350	$ 2.3296
12		Third Tier - Over 10,000 Gals.	N/A	$ 2.4850	$ 2.9918

	RESIDENTIAL BILL COMPARISONS COST OF WATER SERVICE AT DIFFERENT LEVELS OF USAGE WITH PERCENTAGE INCREASE IN BILL		% OF AVERAGE MONTH USAGE OF 6,931 Gal.	PRESENT MONTHLY WATER COST	RUCO PROP'D MONTHLY WATER COST	RUCO PROP'D MONTHLY INCREASE	RUCO PROP'D MONTHLY % INCREASE
13		1,733	25.00%	$ 30.90	$ 30.15	$ (0.75)	-2.42%
14		3,466	50.00%	$ 34.80	$ 33.25	$ (1.55)	-4.45%
15		6,931	100.00%	$ 42.59	$ 41.03	$ (1.56)	-3.67%
16		10,397	150.00%	$ 51.24	$ 49.37	$ (1.87)	-3.65%
17		13,862	200.00%	$ 59.91	$ 59.74	$ (0.17)	-0.28%

Johnson Utilities, LLC
Docket Nos. WS-02987A-08-0180
Test Year Ended December 31, 2007

Water District
Schedule SURR RLM-16
Page 1 of 1

REVISED
SURREBUTTAL EXPLANATION OF OPERATING INCOME ADJUSTMENT NO. 5
CAGRD EXPENSE

LINE NO.	DESCRIPTION	REFERENCE	(A) VALUES	(B) PERCENTAGES	(C) WEIGHTED ALLOCATION FACTOR	(D) COMPOSITE FEES
1	TEST-YEAR CAGRD FEES - PHOENIX AMA	G/L	$ 858,000	97.08%		
2	TEST-YEAR CAGRD FEES - PINAL AMA	G/L	25,842	2.92%		
3	TOTALS	Sum Lines 1 & 2	$ 883,842	100.00%		
	2009/2010 CAGRD FEES (Per Thousand Gallons)					
4	CAGRD - PHOENIX AMA	CAGRD Web Site	$ 0.976	53.28%		
5	CAGRD - PINAL AMA	CAGRD Web Site	$ 0.856	46.72%		
6	TOTALS	Sum Lines 4 & 5	$ 1.832	100.00%		
	CALCULATION OF THE COMPOSITE 2009/2010 CAGRD FEE					
7	CAGRD - PHOENIX AMA	Lines 1 & 4	97.08%	53.28%	0.5172	$ 0.947
8	CAGRD - PINAL AMA	Lines 2 & 5	2.92%	46.72%	0.0137	$ 0.025
9	TOTALS	Sum Lines 7 & 8	100.00%	100.00%		$ 0.972
10	TEST-YEAR GALLONS SOLD (In Thousands Of Gallons)	Co. Application Pg 16	2,631,314			
11	COMPOSITE 2009/2010 CAGRD FEE	Line 9	$ 0.972			
12	ADJUSTED CAGRD FEES	Line 10 X Line 11	$ 2,558,930			
13	RUCO ADJUSTED CAGRD FEES (See RLM-8, Col. (F))	Line 12	$ 2,558,930			

DC

BEFORE THE ARIZONA CORP

DOCKETED

MAR 0 4 2002

DOCKETED BY UV

EXHIBIT R4. admin notice

WILLIAM A. MUNDELL
Chairman
JIM IRVIN
Commissioner
MARC SPITZER
Commissioner

IN THE MATTER OF THE APPLICATION OF JOHNSON UTILITIES COMPANY TO CLARIFY THE ITS TARIFF LANGUAGE PERTAINING TO COLLECTION OF CENTRAL ARIZONA GROUNDWATER REPLENISHMENT DISTRICT TAXES	DOCKET NO. SW-02987A-01-0795 DECISION NO. 64598 ORDER

Open Meeting
February 26 and 27, 2002
Phoenix, Arizona

BY THE COMMISSION:

FINDINGS OF FACT

1. Johnson Utilities Company ("Johnson" or "Company") is an Arizona corporation engaged in the business of providing water and wastewater utility service pursuant to Certificates of Convenience and Necessity granted by this Commission.

2. On October 10, 2001, Johnson Utilities Company ("Johnson" or "Company") filed an application for clarification of the collection of the Central Arizona Groundwater Replenishment District ("GRD") Taxes assessed pursuant to ARS § 48-3781.

3. The application requests that the Commission clarify the language in its May 27, 1997 tariff, which the Company believes it is authorized to collect those taxes.

4. The rules provide that the Commission has 30 days to "approve, disapprove, or suspend for further consideration" an application seeking a waiver or change.

5. On October 17, 2001, Staff executed a memorandum requesting an extension of the time to approve, disapprove or suspend for an additional one hundred twenty days (120) to March 8, 2002, to provide Staff with additional time to analyze the request.

6. This suspension was granted by the Commission in Decision No. 64171, dated October 30, 2001.

7. Staff determined that the GRD tax cannot be treated as a pass-through tax within the Arizona Administrative Code R14-2-409.D.5 because it is not a "privilege, sales or use tax" since GRD taxes are not based on sales revenue. Therefore, GRD taxes do not fall within the scope of the Company's current tariff.

8. Staff filed a memorandum recommending that (1) the Company's application be denied and (2) that the matter of GRD taxes should be addressed in the Company's next full rate case.

CONCLUSIONS OF LAW

1. Johnson Utilities Company is an Arizona public service corporation within the meaning of Article XV, Section 2, of the Arizona Constitution.

2. The Commission has jurisdiction over Johnson Utilities Company and over the subject matter of the application

3. The Commission having reviewed the application and Staff's Memorandum dated January 31, 2002, concludes that the GRD tax is not the type of tax that can be passed through within Arizona Administrative Code, R14-2-409.D.5 and is, therefore, not included in the Company's current tariff.

4. Staff's recommendations described in Findings of Fact No. 8 are reasonable and shall be adopted.

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ORDER

THEREFORE, IT IS ORDERED that the Company's application is denied.

IT IS FURTHER ORDERED that this Decision shall become effective immediately

BY ORDER OF THE ARIZONA CORPORATION COMMISSION

CHAIRMAN COMMISSIONER COMMISSIONER

IN WITNESS WHEREOF, I, BRIAN C. McNEIL, Executive Secretary of the Arizona Corporation Commission, have hereunto, set my hand and caused the official seal of this Commission to be affixed at the Capitol, in the City of Phoenix, this 4TH day of MARCH, 2002.

BRIAN C. McNEIL
Executive Secretary

DISSENT: _____

EGJ:CRM:lhm

SERVICE LIST FOR: Johnson Utilities Company
DOCKET NO. SW-02987A-01-0795

Mr. George H. Johnson
Managing Member
Johnson Utilities Company
5320 East Shea Boulevard
Scottsdale, Arizona 85254

Mr. Richard L. Sallquist
Sallquist & Drummond, P.C.
2525 East Arizona Biltmore Circle, Suite A-117
Phoenix, Arizona 85016-2129

Mr. Ernest G. Johnson
Director, Utilities Division
Arizona Corporation Commission
1200 West Washington Street
Phoenix, Arizona 85007

Mr. Christopher C. Kempley
Chief Counsel
Arizona Corporation Commission
1200 West Washington
Phoenix, Arizona 85007

EXHIBIT R-5 Admin Notice

5. The Commission shall be notified of interruptions in service affecting the entire system or any major division thereof. The interruption of service and cause shall be reported within four hours after the responsible representative of the utility becomes aware of said interruption by telephone to the Commission and followed by a written report to the Commission.

E. Minimum delivery pressure. Each utility shall maintain a minimum standard delivery pressure of 20 pounds per square inch gauge (PSIG) at the customer's meter or point of delivery.

F. Construction standards. Each utility shall construct all facilities in accordance with the guidelines established by the state Department of Health Services.

Historical Note

Adopted effective March 2, 1982 (Supp. 82-2). Amended subsection (F) effective September 28, 1982 (Supp. 82-5). Amended to correct subsection numbering (Supp. 99-4).

R14-2-408. Meter reading

A. Frequency. Each meter shall be read monthly on as close to the same day as practical.

B. Measuring of service
1. All water delivered by the utility shall be billed upon the basis of metered volume sales except that the utility may, at its option, provide a fixed charge schedule for the following:
   a. Temporary service where the water use can be readily estimated
   b. Public and private fire protection service
   c. Water used for street sprinkling and sewer flushing, when provided for by contract between the utility and the municipality or other local governmental authority
   d. Other fixed charge schedules as shall be submitted to and approved by the Commission.
2. When there is more than one meter at a location, the metering equipment shall be so tagged or plainly marked as to indicate the facilities being metered.

C. Customer requested retreads
1. Each utility shall at the request of a customer reread the customer's meter within 10 working days after such request by the customer.
2. Any rereads shall be charged to the customer at a rate on file and approved by the Commission, provided that the original reading was not in error.
3. When a reading is found to be in error, the reread shall be at no charge to the customer.

D. Access to customer premises. Each utility shall have the right of safe ingress to and egress from the customer's premises at all reasonable hours for any purpose reasonably connected with the utility's property used in furnishing service and the exercise of any and all rights secured to it by law or these rules.

E. Meter testing and maintenance program. Each utility shall establish a regular program of meter testing taking into account the following factors:
1. Size of meter
2. Age of meter
3. Consumption
4. Characteristics of water.

F. Customer requested meter tests. A utility shall test a meter upon customer request and each utility shall be authorized to charge the customer for such meter test according to the tariff on file and approved by the Commission. However, if the meter is found to be in error by more than 3%, no meter testing fee will be charged to the customer.

Historical Note

Adopted effective March 2, 1982 (Supp. 82-2). Amended to correct subsection numbering (Supp. 99-4).

R14-2-409. Billing and collection

A. Frequency and estimated bills
1. Each utility shall bill monthly for services rendered. Meter readings shall be scheduled for periods of not less than 25 days or more than 35 days.
2. If the utility is unable to read the meter on the scheduled meter read date, the utility will estimate the consumption for the billing period giving consideration to the following factors where applicable:
   a. The customer's usage during the same month of the previous year
   b. The amount of usage during the preceding month.
3. After the second consecutive month of estimating the customer's bill for reasons other than severe weather, the utility will attempt to secure an accurate reading of the meter.
4. Failure on the part of the customer to comply with a reasonable request by the utility for access to its meter may lead to the discontinuance of service.
5. Estimated bills will be issued only under the following conditions:
   a. Failure of a customer who read his own meter to deliver his meter reading card to the utility in accordance with the requirements of the utility billing cycle.
   b. Severe weather conditions which prevent the utility from reading the meter.
   c. Circumstances that make it dangerous or impossible to read the meter, i.e., locked gates, blocked meters, vicious or dangerous animals, etc.
6. Each bill based on estimated usage will indicate that it is an estimated bill.

B. Combining meters, minimum bill information
1. Each meter at a customer's premises will be considered separately for billing purposes, and the readings of two or more meters will not be combined.
2. Each bill for residential service will contain the following minimum information:
   a. Date and meter reading at the start of billing period
   b. Previous month's meter reading
   c. Billed usage
   d. Utility telephone number
   e. Customer's name
   f. Service account number (if available)
   g. Amount due and due date
   h. Past due amount (where appropriate)
   i. Adjustment factor, where applicable
   j. Other approved tariff charges.

C. Billing terms
1. All bills for utility services are due and payable when rendered. Any payment not received within 15 days from the date the bill was rendered shall be considered delinquent.
2. For purposes of this rule, the date a bill is rendered may be evidenced by:
   a. The postmark date
   b. The mailing date:
      i. Certified mail
      ii. Certificate of mailing.

3. All delinquent bills shall be subject to the provisions of the utility's termination procedures as set forth in R14-2-410.
4. All payments shall be made at or mailed to the office of the utility or to the utility's duly authorized representative.

D. Applicable tariffs, prepayment, failure to receive, commencement date, taxes
1. Each customer shall be billed under the applicable tariff indicated in the customer's application for service.
2. Each utility shall make provisions for advance payment for utility services.
3. Failure to receive bills or notices which have been properly placed in the United States mail shall not prevent such bills from becoming delinquent nor relieve the customer of his obligations therein.
4. Charges for service commence when the service is installed and connection made, whether used or not.
5. In addition to the collection of regular rates, each utility may collect from its customers a proportionate share of any privilege, sales or use tax.

E. Meter error corrections
1. If any meter after testing is found to be more than 3% in error, either fast or slow, proper correction between 3% and the amount of the error shall be made of previous readings and adjusted bills shall be rendered according to the following terms:
   a. For the period of three months immediately preceding the removal of such meter from service for test or from the time the meter was in service since last tested, but not exceeding three months since the meter shall have been shown to be in error by such test, or
   b. From the date the error occurred, if the date of the cause can be definitely fixed.
2. No adjustment shall be made by the utility except to the customer last served by the meter tested.

F. Insufficient funds (NSF) checks
1. A utility shall be allowed to recover a fee, as approved by the Commission for each instance where a customer tenders payment for utility service with an insufficient funds check.
2. When the utility is notified by the customer's bank that there are insufficient funds to cover the check tendered for utility service, the utility may require the customer to make payment in cash, by money order, certified check, or other means which guarantee the customer's payment to the utility.
3. A customer who tenders an insufficient check shall in no way be relieved of the obligation to render payment to the utility under the original terms of the bill nor defer the utility's provision for termination of service for nonpayment of bills.

G. Deferred payment plan
1. Each utility may, prior to termination, offer to qualifying residential customers a deferred payment plan for the customer to retire unpaid bills for utility service.
2. Each deferred payment agreement entered into by the utility and the customer due to the customer's inability to pay an outstanding bill in full shall provide that service will not be discontinued if:
   a. Customer agrees to pay a reasonable amount of the outstanding bill at the time the parties enter into the deferred payment agreement.
   b. Customer agrees to pay all future bills for utility service in accordance with the billing and collection tariffs of the utility.
   c. Customer agrees to pay a reasonable portion of the remaining outstanding balance in installments over a period not to exceed six months.
3. For the purposes of determining a reasonable installment payment schedule under these rules, the utility and the customer shall give consideration to the following conditions:
   a. Size of the delinquent account
   b. Customer's ability to pay
   c. Customer's payment history
   d. Length of time that the debt has been outstanding
   e. Circumstances which resulted in the debt being outstanding
   f. Any other relevant factors related to the circumstances of the customer.
4. Any customer who desires to enter into a deferred payment agreement shall establish such agreement prior to the utility's scheduled termination date for nonpayment of bills; customer failure to execute a deferred payment agreement prior to the scheduled termination date shall not prevent the utility from discontinuing service for nonpayment.
5. Deferred payment agreements may be in writing and may be signed by the customer and an authorized utility representative.
6. A deferred payment agreement may include a finance charge as approved by the Commission in a tariff proceeding.
7. If a customer has not fulfilled the terms of a deferred payment agreement, the utility shall have the right to disconnect service pursuant to the utility's termination of service rules and, under such circumstances, it shall not be required to offer subsequent negotiation of a deferred payment agreement prior to disconnection.

H. Change of occupancy
1. Not less than three working days advance notice must be given in person, in writing, or by telephone at the utility's office to discontinue service or to change occupancy.
2. The outgoing party shall be responsible for all utility services provided and/or consumed up to the scheduled turn-off date.

Historical Note

Adopted effective March 2, 1982 (Supp. 82-2). Amended subsection (C) effective September 28, 1982 (Supp. 82-5).

R14-2-410. Termination of service

A. Nonpermissible reasons to disconnect service. A utility may not disconnect service for any of the reasons stated below:
1. Delinquency in payment for services rendered to a prior customer at the premises where service is being provided, except in the instance where the prior customer continues to reside on the premises.
2. Failure of the customer to pay for services or equipment which are not regulated by the Commission.
3. Nonpayment of a bill related to another class of service.
4. Failure to pay for a bill to correct a previous underbilling due to an inaccurate meter or meter failure if the customer agrees to pay over a reasonable period of time.

B. Termination of service without notice
1. Utility service may be disconnected without advance written notice under the following conditions:

EXHIBIT
R-6
ADMITTED

THIS TEXT WAS TRANSCRIBED FROM AN AUDIO RECORDING

BEFORE THE ARIZONA CORPORATION COMMISSION

IN THE MATTER OF THE APPLICATION OF JOHNSON UTILITIES, L.L.C., DBA JOHNSON UTILITIES COMPANY FOR AN INCREASE IN ITS WATER AND WASTEWATER RATES FOR CUSTOMERS WITHIN PINAL COUNTY, ARIZONA.	DOCKET NO. WS-02987A-08-0180

TRANSCRIPT OF RECORDED CONVERSATION
Mr. David Ashton and Mr. Gary Larsen

February 1, 2008

ARIZONA REPORTING SERVICE, INC.
Court Reporting
Suite 502
2200 North Central Avenue
Phoenix, Arizona 85004-1481

Transcribed by:

Katherine A. McNally
CERTIFIED TRANSCRIBER
CET**D-323

1 THIS TEXT WAS TRANSCRIBED FROM AN AUDIO RECORDING

[redacted]

6 MR. LARSEN: Well, that's -- that's all
7 (indiscernible). What you need to do is any -- anything I
8 told you is confidential between us, and you don't know
9 about that.
10 And -- and -- and the only thing that worries
11 me, right now, is that invoice right there. If they find
12 out I've given that to you, then I'm fucked.
13 Anything else that I've done through the
14 company, that maybe you -- you need to disclose, that's
15 fine. But everything I've told you, one on one, needs to
16 stay (indiscernible), okay? (Indiscernible) about a loan,
17 or whatever else, is fine, you know? But if he finds out
18 I've been talking to you, I'm fucked.

[redacted]

1 THIS TEXT WAS TRANSCRIBED FROM AN AUDIO RECORDING

2 [redacted]

3 [redacted]

4 [redacted]

5 [redacted]

6 [redacted]

7 [redacted]

8 [redacted]

9 [redacted]

10 [redacted]

11 MR. LARSEN: In -- in my opinion -- you're not

12 recording me or anything, are you?

13 MR. ASHTON: No, come on.

14 MR. LARSEN: Well, when you brought that up,

15 you lost a lot of trust from me. When you told the

16 (indiscernible), you had a copy of that invoice, and you

17 knew it was between me and you, okay? That concerned me.

18 I felt like you rolled on me, and I need to make goddamn

19 sure that doesn't happen.

20 MR. ASHTON: Okay. So...

21 MR. LARSEN: And -- and I just asked you right

22 now, and I've -- and I've also asked Jim, I want assurance

23 from you that that piece of paper you have, that you told

24 December you have, is going to disappear. And still won't

25 (indiscernible).

What paper

[redacted]

4 MR. ASHTON: -- and I said, "December, you guys
5 changed my water rates in August of -- of '06 to be
6 three-seventy-five a gallon," essentially.
7 And she was, like, "We didn't do that."
8 And I said, "Yes, you did, December. You guys
9 changed it."
10 And she acknowledged that you got a call from
11 George, to call your third-party provider, to change our
12 rates.
13 MR. LARSEN: Yeah.
14 [redacted]

24 MR. ASHTON: I have -- you guys -- you guys
25 have been delivering effluent to me for 24 months.

1 THIS TEXT WAS TRANSCRIBED FROM AN AUDIO RECORDING

2 MR. LARSEN: I fucked you or George fucked

3 you? I think you're getting it confused.

4 MR. ASHTON: Are you the guy who executed on

5 it?

6 MR. LARSEN: Well, yeah. I do it on corporate

7 deals.

8 MR. ASHTON: Okay. And George -- and George

9 told you to charge me 83 cents for effluent from the very

10 beginning.

11 MR. LARSEN: I don't think it was 83.

12 MR. ASHTON: Because we've been charged that

13 every single month from the beginning.

14 MR. LARSEN: Well, there -- we found a flaw in

15 our system where we were selling it at 62, but behind the

16 scenes it was charging 83.

17 MR. ASHTON: I'm a software guy, Gary. That

18 doesn't happen.

19 MR. LARSEN: It does. It does.

20 There's two screens on our computer. You

21 set -- you set, under the meter size, what type of water

22 you're getting.

23 Behind the scenes, okay, when you set that

24 rate, behind the scenes there's -- there's a field that

25 tells that screen what to charge, okay?

1 THIS TEXT WAS TRANSCRIBED FROM AN AUDIO RECORDING

2 And behind the scenes -- I don't know how it

3 happened, honestly, I don't know how it happened -- but it

4 was set for 83 cents. So even though when the girls set

5 up your account at 62 cents, it was still charging you the

6 83.

7 MR. ASHTON: Then why did I get so much

8 resistance? If that's the case, then why did I get so

9 much resistance to fixing the bills? Why did my water

10 have to get shut off twice, and I had to go to the

11 Corporation Commission, before Johnson Utilities even

12 thought about trying to resolve that problem? Which still

13 isn't resolved.

14 MR. LARSEN: Well, I think -- I think it is

15 now.

16 MR. ASHTON: I got a bill in January for

17 83 cents.

18 MR. LARSEN: Right. And then December went and

19 credited all of it.

20 MR. ASHTON: Yeah. But am I -- what am I going

21 to get (indiscernible) for it?

22 MR. LARSEN: You should get the 62 cents. I

23 mean, they have to fix it.

24 MR. ASHTON: Why do they have to fix it now?

25 MR. LARSEN: Huh?

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MR. ASHTON: Why do they have to fix it now?

MR. LARSEN: Well, because it was wrong. We -- I'm serious. That problem was not obvious to anybody, not even remotely.

MR. ASHTON: So are they going to be go back and fix it for San Tan Heights? For Johnson Ranch? For --

MR. LARSEN: Why do you (indiscernible)?

[redacted]

[redacted]

25 MR. ASHTON: What would you do if you were in

1 THIS TEXT WAS TRANSCRIBED FROM AN AUDIO RECORDING

2 my position, Gary?

3 MR. LARSEN: I'd get rid of that one piece of

4 paper.

5 MR. ASHTON: That -- that's what you would do

6 for yourself, okay?

7 This -- this isn't a piece of paper, Gary. You

8 e-mailed it to me. Okay? I have it in e-mail.

9 I mean, if I was going to expose you, Gary, if

10 I wanted to expose you, you know I would have sent that.

11 I could -- in two seconds, five seconds -- I could pull

12 out my BlackberryŽ and e-mail it. I don't want to expose

13 you.

14 [redacted]

[redacted]

4 MR. LARSEN: Yeah. You told December you had a
5 copy of it. And you're telling me right now, you sent her
6 an e-mail and you have a copy of it, and it can be
7 dispersed in five seconds.
8 MR. ASHTON: I'm telling you that I have an
9 e-mail. You sent it to me. You know that.
10 [redacted]

[redacted]

3 MR. ASHTON: I understand that. How do you
4 think I --
5 Look, we're -- we're not -- we're not getting
6 anywhere. I -- I need to get somewhere by understanding
7 the depth of the illegality that George was engaged in. I
8 need to understand that stuff.
9 I mean, I already have bills from residents
10 that show them being overcharged on their water meters,
11 okay? On -- on their --
12 MR. LARSEN: You're -- you're going to wrong
13 direction. You can't fight other people's battles. It
14 doesn't matter.
15 MR. ASHTON: It doesn't matter?
16 MR. LARSEN: It doesn't matter, whether Joe
17 Blow was mischarged or anything else.
18 What concerns you is (indiscernible).
19 MR. ASHTON: I know. But I can't get that
20 resolved either.
21 MR. LARSEN: But if you start going into other
22 areas -- getting the HOA involved, the Corporation
23 Commission -- you're fighting other people's battles.
24 Do you think Corporation Commission doesn't see
25 that as -- as -- as desperation?

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2 MR. ASHTON: I -- I don't think that -- I think

3 the Corporation Commission --

4 MR. LARSEN: Yeah. The only thing you're going

5 to get, okay, is you're going to get everything

6 straightened out, okay?

7 If you were charged wrong on the

8 (indiscernible), okay, that will be credited to you,

9 okay? Anything -- everything will be kept straight.

10 The only thing that's going to happen is your

11 account's going to get straightened out.

12 MR. ASHTON: Why isn't it straightened out yet?

13 MR. LARSEN: (Indiscernible.)

14 MR. ASHTON: Why am I still having problems?

15 MR. LARSEN: It -- it --

16 MR. ASHTON: Okay.

17 MR. LARSEN: There -- there's a lot of issues

18 there. There's some of them they will address and some of

19 them may not be. I don't know.

20 MR. ASHTON: Okay. Let -- let me ask you

21 something. If -- in the spirit of honesty, let -- let me

22 ask you a couple of things.

23 Why did they come in? First of all, why -- why

24 did the utility charge me for six months, for -- for --

25 for a 6-inch water meter for two years, when I had a

1 THIS TEXT WAS TRANSCRIBED FROM AN AUDIO RECORDING
2 3-inch water meter? Why'd they do that?
3 MR. LARSEN: (Indiscernible.) That's -- you
4 know, between whoever set the account up, they clicked the
5 wrong screen and sent you -- I mean, they -- they clicked
6 on the thing, and they sold us the meters, and you know,
7 normal construction is (indiscernible) 6-inch meter, you
8 know?
9 MR. ASHTON: So do I have a 6-inch or a 3-inch
10 cap meter?
11 MR. LARSEN: Actually, you've got a 12-inch.
12 But we don't have a (indiscernible) for that, so we
13 charged you a 6-inch.
14 MR. ASHTON: So why did the -- why did Brian
15 and George call you and say, "Change Dave's meter," last
16 month?
17 I mean, I know you didn't do that. I know they
18 did it. So why -- what's -- what's the real reason why
19 they did that?
20 MR. LARSEN: I get that, okay?
21 And I wasn't going to tell anybody.
22 You're the one that -- who fucking messed up on
23 that. I have a line restriction. My line on that
24 highway, as you know, delivered fucking 18 times, okay?
25 It was due to that restriction. It had an 8-inch line

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2 going into a 3-inch meter that was restricted, okay?

3 That's why I changed that neighborhood. I

4 wasn't going to say nothing, and I was going to continue

5 to tell them it was a fucking 3-inch meter.

[redacted]

23 MR. ASHTON: I mean, it was a good thing

24 because I was getting billed for a 6-inch meter, and I

25 only had a 3, and so now we have huge problems.

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2 MR. LARSEN: Okay. All right. I think they --

3 they adjusted that.

4 MR. ASHTON: No, it hasn't.

5 MR. LARSEN: Because I'm the one

6 (indiscernible) --

7 MR. ASHTON: Seriously, they haven't done shit,

8 Gary, really.

9 MR. LARSEN: Well --

10 MR. ASHTON: Seriously. The only thing they've

11 done is file a lawsuit against me in Superior Court,

12 okay? You know they're looking to fight.

13 Tell me what George says.

14 MR. LARSEN: I don't know what George says. I

15 don't even talk to George, okay?

16 All I know is I get my ass fucking chewed daily

17 about this shit (indiscernible).

[redacted]

1 THIS TEXT WAS TRANSCRIBED FROM AN AUDIO RECORDING

2 [redacted]

3 [redacted]

4 [redacted]

5 [redacted]

6 [redacted]

7 [redacted]

8 [redacted]

9 [redacted]

10 [redacted]

11 [redacted]

12 [redacted].

13 [redacted]

14 [redacted]

15 [redacted]

16 [redacted]

17 [redacted]

18 [redacted]?

19 MR. ASHTON: Were you told to change my rates

20 by George?

21 MR. LARSEN: Are you recording, me?

22 MR. ASHTON: No, dude. No. I -- I'm looking

23 for you to help me (indiscernible).

24 MR. LARSEN: (Indiscernible.)

25 MR. ASHTON: I'm looking to expose George.

[redacted]

14 MR. ASHTON: I'll be honest with you -- I'm
15 trying to be honest with you.
16 I had a conversation with December for over an
17 hour (indiscernible).
18 MR. LARSEN: (Indiscernible.) And she wrote
19 every fucking thing down, and she went over everything
20 with a fucking (indiscernible). I know what she's
21 checked.
22 MR. ASHTON: And I know what she -- I'm not
23 trying to change it. Have I tried to change anything that
24 I said?
25 I was just about to tell you that she

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acknowledged the things that the utility's been doing. And -- and I mean, the CFO of the company, I mean, the whole time she's sitting there saying, "You know, I don't -- I'm not going to say that it was -- that it was done intentionally, but I acknowledge that the mistakes have been made and we've done all of these things," and you know?

I mean, a lot was said during that -- that meeting. So you know that. You know, I --

MR. LARSEN: And that's fine, okay? That's okay.

And if you need to use that, use that.

But leave that fucking piece of paper out of this shit.

[redacted]

MR. LARSEN: You're going to promise me you're going to destroy it?

MR. ASHTON: Yes. I -- it's in e-mail, okay?

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2 I'll leave it out, okay?

3 You will never see a paper copy. I will never

4 send it to George, Brian, ever.

5 MR. LARSEN: And you will never give it to

6 anybody?

7 MR. ASHTON: I will never give it to anybody.

8 Let me say this, if I -- I don't understand

9 the -- this system at the Corporation Commission, you know

10 that, okay? You know I'm being honest with you.

11 If -- if people --

12 MR. LARSEN: That piece of paper ain't going to

13 do you no good (indiscernible).

14 MR. ASHTON: I agree.

15 MR. LARSEN: Because George never fucking did

16 charge me for that.

[redacted]

[redacted]

19 MR. ASHTON: So in my complaints --

20 Okay, let me ask you this, When are you going

21 to fix it? Because this situation keeps getting worse

22 because you guys are not fixing it.

23 MR. LARSEN: Right.

24 MR. ASHTON: Do you have the power to fix it?

25 MR. LARSEN: We -- we fixed the last one.

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2 We've already done that. This -- that -- this --
3 MR. ASHTON: Which? The January bill?
4 MR. LARSEN: They've taken everything out of my
5 hands because they don't trust me with you, because they
6 know we talk.
7 MR. ASHTON: But they took it out of your hands
8 before I ever talked to December.
9 MR. LARSEN: No, no.
10 MR. ASHTON: Gary, the only reason I ever
11 talked to December is because you told me to go talk to
12 her.
13 MR. LARSEN: I know. But I didn't tell you to
14 tell her what I told you out of fucking confidential
15 (indiscernible).
16 MR. ASHTON: But she didn't -- that's the only
17 time your name ever came up.
18 MR. LARSEN: Okay.
19 MR. ASHTON: Okay? You know that.
20 MR. LARSEN: But it's -- when Tom turned your
21 water back on to fill that fucking lake, okay, that's when
22 I got accused of being in bed with you.
23 MR. ASHTON: That's fucking ridiculous.
24 MR. LARSEN: I know it's fucking ridiculous,
25 but that's what happened. That's reality.

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2 MR. ASHTON: Gary, he was force -- he was
3 forced by the Corporation Commission to turn it back on.
4 MR. LARSEN: Not at that time, okay? George
5 told me he shut the water (indiscernible) turned back,
6 before the Corporation Commission told us to turn it back
7 on, Bob had accidentally filled your fucking lake, okay?
8 Because I told him, well, we may have resolution by
9 Monday, blah, blah, blah, whatever, Bob went and turned
10 the fucking (indiscernible) okay? Bob said, "Fuck you."
11 MR. ASHTON: Okay.
12 MR. LARSEN: That's when George told you,
13 December, you handle (indiscernible) pressure. The only
14 one allowed to handle (indiscernible).
15 MR. ASHTON: If that's the case, so why didn't
16 she call me for two months? I called her two -- that
17 happened almost three months ago, Gary.
18 MR. LARSEN: I -- I -- I don't know. Since
19 then, I've been out of it. I haven't been out allowed to
20 fucking call you, I haven't been allowed to do nothing.
21 And George tell -- tells me (indiscernible)
22 take tomorrow off, and I go take pictures of the meters
23 and the lakes every day, because he doesn't fucking trust
24 me with you, okay?
25 And now when you got that from December, we'll

1 THIS TEXT WAS TRANSCRIBED FROM AN AUDIO RECORDING

2 (indiscernible) situation (indiscernible).

3 MR. ASHTON: I mean, I -- I --

4 MR. LARSEN: You need to fight the battles you

5 can win.

6 MR. ASHTON: The battles I'm trying to fight --

7 the battle I'm trying to fight is to get them to bill me

8 honestly -- which last month didn't happen, okay?

9 MR. LARSEN: Right.

10 MR. ASHTON: Okay?

11 MR. LARSEN: Right.

12 MR. ASHTON: Okay.

13 MR. LARSEN: You brought it to our attention.

14 They made all their -- the adjustments. You're going to

15 see it in this month's (indiscernible) bill, okay? And

16 everything is going to be straight, from here on out.

[redacted]

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2 [redacted]

3 [redacted]

4 [redacted]

5 [redacted]

6 [redacted]

7 [redacted]

8 [redacted]

9 [redacted]

10 [redacted]

11 [redacted]

12 [redacted]

13 [redacted]

14 [redacted]

15 [redacted]

16 [redacted]

17 [redacted]

18 [redacted]

19 MR. LARSEN: I think you are now.

20 You want George to go in front of the

21 commission and be honest about his -- his business

22 dealings. Do you think that's ever going to happen?

23 I mean, come on, Dave. That's -- that's how

24 they operate. George took on the State of Arizona --

25 MR. ASHTON: But he lost.

22 MR. ASHTON: What happens if George tells you

23 to come and turn off my water again?

24 MR. LARSEN: That's a legit thing. You can

25 take him to the commission, okay?

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2 MR. ASHTON: Is he going to tell you to change

3 my rates again?

4 MR. LARSEN: No. He can't.

5 MR. ASHTON: So you don't think there's any

6 more shenanigans that are going to go on?

7 MR. LARSEN: He can't. Not when we're under

8 the eye of the Corporation Commission. He cannot.

[redacted]

3 MR. ASHTON: So there -- what you're saying to
4 me is they're not going to straighten it out on their
5 own. They're just going to wait until -- for the ACC to
6 force them to straighten it out.
7 MR. LARSEN: They're straightening it out now.
8 MR. ASHTON: Because it --
9 MR. LARSEN: (Indiscernible) ACC.
10 What they're going to do is say, Yeah, we
11 overcharged him, and it was a mistake. We credited this
12 amount for all of these years of there -- (indiscernible)
13 rate. We fixed it. Yeah, we fucked it up. We fixed it.
14 Let's move forward.
15 That's going to be their position.
16 [redacted]

[redacted]

20 MR. ASHTON: We -- we know that some of it
21 was.
22 But -- but don't -- isn't that worse?
23 I mean, if the Corporation Commission knows
24 that Johnson Utilities got it worse, couldn't they have
25 gotten it wrong for somebody else, just by accident?

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2 MR. LARSEN: They're not going to look at

3 that. They go -- they inspect this individually.

4 MR. ASHTON: Yeah. But these people --

5 MR. LARSEN: We're going through

6 (indiscernible) cases at the end of this year anyway, so

7 they're going to go through their books. So don't you

8 think that's what (indiscernible)?

9 We've already issued the -- the credits for San

10 Tan Heights.

11 MR. ASHTON: She's pissed, Gary.

12 MR. LARSEN: Who?

13 MR. ASHTON: Those people over there. Those

14 people at San Tan Heights are pissed.

15 MR. LARSEN: No. What we're going to fucking

16 do is we've already made the adjustments, we've already

17 credited their accounts. They think we're going to keep

18 fighting. And I'll tell you what, George is going to do,

19 he's going to find somewhere else for that effluent to go

20 (indiscernible).

21 MR. ASHTON: They can't.

22 MR. LARSEN: Yeah, they can.

[redacted]

[redacted]

10 MR. ASHTON: My -- yeah. As long as I can get
11 honesty from the utility, we're going to be fine.
12 MR. LARSEN: Well, yeah. And we're going to
13 get honesty from the utility. We have to be. We have no
14 choice.
15 MR. ASHTON: Let me ask you, why -- Gary, why
16 wasn't -- why wasn't the utility not that honest with me
17 before? Why?
18 MR. LARSEN: Well, you know how this worked for
19 George (indiscernible), okay? He has gotten -- everything
20 goes around. People are doing what they're told to do.
21 And we don't ask no questions about that. We don't ask
22 George about it. He tells you certain things.
23 MR. ASHTON: Why does he do that, Gary? I
24 mean, you've worked exactly what? Ten years? Well, why
25 does he fucking do it?

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2 MR. LARSEN: Because he's gotten away with it

3 for so long. He's not getting away with it any more.

4 Okay? And he's starting to know that. And -- and

5 (indiscernible) people like (indiscernible), that's a good

6 thing, because she is fighting (indiscernible).

[redacted]

19 MR. LARSEN: You know? And -- and so we want

20 everything to be on the straight and narrow. I don't like

21 (indiscernible), okay?

22 MR. ASHTON: I mean, I know you don't like

23 doing illegal things. You and I have had conversations

24 about it. I -- I guess --

25 MR. LARSEN: There's no need for it, okay?

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2 [redacted]

3 [redacted]

4 [redacted]

5 [redacted]

6 [redacted]

7 [redacted]

8 [redacted]

9 [redacted]

10 [redacted]

11 [redacted]

12 MR. LARSEN: He was. We pulled out of the

13 selling (indiscernible). I mean, (indiscernible) and he

14 may be trying to sell it (indiscernible). If they're

15 going to lower his rates, you know, he can't be selling to

16 get out of it, you know.

17 And -- and that's my thought was he was losing

18 his shirt, you know. If something comes up,

19 (indiscernible), possibly, you know. There's a couple of

20 things I've been working on (indiscernible), and you know,

21 it was (indiscernible) in the past (indiscernible).

22 MR. ASHTON: All right. I understand. I'm

23 just going to reiterate, that you don't have to worry

24 about -- about any of that shit. You're not going to be

25 exposed. I mean, I am going to be honest with the

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2 Corporation Commission about what the utility has done.

3 And you know that.

4 I think you and I have established a line

5 that -- that I understand, and so do you, you know?

6 The -- the managers and the employees of the --

7 of the utility are going to be exposed as having engaged

8 in fraudulent activity. But I am not going to expose you

9 for having advised me or done legal things, after George

10 forced you to do illegal things. I -- I'm am not going to

11 do that.

12 [redacted]

13 [redacted]

14 [redacted]

15 [redacted]

16 [redacted]

17 [redacted]

18 [redacted]

19 [redacted]

20 [redacted]

21 [redacted]

22 [redacted]

23 [redacted]

24 [redacted]

25 [redacted]

[redacted]

16 MR. ASHTON: They're -- the ACC is afraid of

17 George?

18 MR. LARSEN: Everybody is --

19 MR. ASHTON: [redacted]

[redacted]

6 But if you have to -- if you feel like you have
7 to lie in front of the Corporation Commission, then, as a
8 separate party with you and Gary and -- and Brian and
9 George, as the other side, I have to do everything I can
10 to say, "Well, the law is this, and this is what they
11 did." You know, so --
12 MR. LARSEN: And a mistake isn't a lie.
13 MR. ASHTON: You mean that's -- that's how
14 it'll be positioned?
15 MR. LARSEN: Yeah. That would be the case.
16 [redacted]

[redacted]

20 MR. ASHTON: Should I call December?

21 I mean, Gary, I just want this resolved, you

22 know, but I -- I -- you understand that I've been left

23 with no choice but to do what I've done.

24 MR. LARSEN: Right.

25 MR. ASHTON: And --

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2 MR. LARSEN: Well, it would be good. I mean,

3 you had to do that to get the accounting straightened

4 out. You did that. You haven't seen it yet, but you did

5 do it.

6 MR. ASHTON: So you can at least understand my

7 skepticism because I haven't seen it?

8 MR. LARSEN: Right.

9 MR. ASHTON: And this is the first I've heard

10 about it.

11 Why can't they just call me and say, "We're

12 working through it" or "we've solved it"? Why can't they

13 just do that, Gary?

14 MR. LARSEN: I thought they had. I don't

15 know. I thought you knew that.

16 [redacted]

[redacted]

21 MR. ASHTON: I will -- if it gets straight,

22 I'll move on.

23 But if they -- nothing that's happened, at any

24 point ever, has suggested to me -- including up to now --

25 that they're at all interested in resolving that kind of

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stuff. That all they want to do is continue to pocket as much as they can.

And the issue I have, Gary, is, you know, I understand why they want to fuck me now. I don't understand why they wanted to fuck me two years ago or three years ago, when it was happening.

MR. LARSEN: George gets high off of this, you know? It happens to me and it happens to you. It happens to everyone.

[redacted]

EXHIBIT
R-8
admitted

JOHNSON UTILITIES, L.L.C.

DOCKET NO. WS-02987A-08-0180

DIRECT TESTIMONY ON COST OF CAPITAL

OF

WILLIAM A. RIGSBY

ON BEHALF OF

THE

RESIDENTIAL UTILITY CONSUMER OFFICE

FEBRUARY 4, 2009

TABLE OF CONTENTS

INTRODUCTION 1

SUMMARY OF TESTIMONY AND RECOMMENDATIONS 3

COST OF EQUITY CAPITAL 7

Discounted Cash Flow (DCF) Method 7
Capital Asset Pricing Model (CAPM) Method 29
Current Economic Environment 36

COST OF DEBT 55

CAPITAL STRUCTURE 56

WEIGHTED COST OF CAPITAL 58

COMMENTS ON JOHNSON UTILITIES' COST OF EQUITY CAPITAL TESTIMONY 58

DCF Comparison 59
CAPM Comparison 62

APPENDIX 1 – Qualifications of William A. Rigsby, CRRA

ATTACHMENT A – Value Line Water Utility Industry Update

ATTACHMENT B – Value Line Natural Gas Utility Industry Update

ATTACHMENT C – Zacks Earnings Projections

ATTACHMENT D – Historical Value Line Water Utility Industry Projections

ATTACHMENT E – Value Line Selected Yields for January 23, 2009

SCHEDULES WAR-1 THROUGH WAR-9

INTRODUCTION

Q. Please state your name, occupation, and business address.

A. My Name is William A. Rigsby. I am a Public Utilities Analyst V employed by the Residential Utility Consumer Office ("RUCO") located at 1110 W. Washington, Suite 220, Phoenix, Arizona 85007.

Q. Please describe your qualifications in the field of utilities regulation and your educational background.

A. I have been involved with utilities regulation in Arizona since 1994. During that period of time I have worked as a utilities rate analyst for both the Arizona Corporation Commission ("ACC" or "Commission") and for RUCO. I hold a Bachelor of Science degree in the field of finance from Arizona State University and a Master of Business Administration degree, with an emphasis in accounting, from the University of Phoenix. I have been awarded the professional designation, Certified Rate of Return Analyst ("CRRA") by the Society of Utility and Regulatory Financial Analysts ("SURFA"). The CRRA designation is awarded based upon experience and the successful completion of a written examination. Appendix I, which is attached to this testimony, further describes my educational background and also includes a list of the rate cases and regulatory matters that I have been involved with.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to present recommendations that are based on my analysis of Johnson Utilities Utilities, L.L.C.'s ("Johnson Utilities Utilities" or "Company") application for a permanent rate increase ("Application") for the Company's Water and Wastewater operations in Pinal County, Arizona. Johnson Utilities Utilities filed the Application with the ACC on March 31, 2008. The Company has chosen the operating period ended December 31, 2007 for the test year ("Test Year") in this proceeding.

Q. Briefly describe Johnson Utilities' operations in Arizona.

A. Johnson Utilities is organized as a limited liability company which was organized under the laws of Arizona. According to the Company's Application, Johnson Utilities provided water service to approximately 17,190 customers (of which roughly 97.0 percent were residential ratepayers) and wastewater service to approximately 21,603 (of which roughly 97.0 percent were residential ratepayers) customers during the Test Year.

Q. Please explain your role in RUCO's analysis of Johnson Utilities's Application.

A. I reviewed Johnson Utilities' Application and performed a cost of capital analysis to determine a fair rate of return on the Company's invested

capital. In addition to my recommended capital structure, my direct testimony will present my recommended costs of common equity and my recommended cost of long-term debt (Johnson Utilities has no preferred stock). The recommendations contained in this testimony are based on information obtained from Company responses to data requests, the Company's Application and from market-based research that I conducted during my analysis.

Q. Were you also responsible for conducting an analysis on the Company's proposed revenue level, rate base and rate design?

A. No. RUCO witness Rodney L. Moore handled those aspects of the Company's Application.

Q. What areas will you address in your testimony?

A. I will address the cost of capital issues associated with the case.

Q. Please identify the exhibits that you are sponsoring.

A. I am sponsoring Schedules WAR-1 through WAR-9.

SUMMARY OF TESTIMONY AND RECOMMENDATIONS

Q. Briefly summarize how your cost of capital testimony is organized.

A. My cost of capital testimony is organized into seven sections. First, the introduction I have just presented and second, the summary of my

testimony that I am about to give. Third, I will present the findings of my cost of equity capital analysis, which utilized both the discounted cash flow ("DCF") method, and the capital asset pricing model ("CAPM"). These are the two methods that RUCO and ACC Staff have consistently used for calculating the cost of equity capital in rate case proceedings in the past, and are the methodologies that the ACC has given the most weight to in setting allowed rates of returns for utilities that operate in the Arizona jurisdiction. In this third section I will also provide a brief overview of the current economic climate that Johnson Utilities is operating in. Fourth, I will discuss my recommended cost of long-term debt. Fifth, I will compare my recommended capital structure with the Company-proposed capital structure. Sixth, I will explain my weighted cost of capital recommendation and seventh, I will comment on Johnson Utilities' cost of capital testimony. Schedules WAR-1 through WAR-9 will provide support for my cost of capital analysis.

Q. Please summarize the recommendations and adjustments that you will address in your testimony.

A. Based on the results of my analysis of Johnson Utilities, I am making the following recommendations:

<u>Cost of Equity Capital</u> – I am recommending an 8.31 percent cost of equity capital to be applied to the Company's fair value rate base ("FVRB"). This

8.31 percent figure is based on the results that I obtained in my cost of equity analysis, which employed both the DCF and CAPM methodologies.

Cost of Long-Term Debt – I am recommending an 8.00 percent cost of long-term debt. This is based on my review of the costs associated with Johnson Utilities' only loan agreement.

Capital Structure – I am recommending that a hypothetical capital structure, comprised of 40.00 percent long-term debt and 60.00 percent common equity, be adopted by the Commission.

Weighted Average Cost of Capital – Based on the results of my recommended capital structure, cost of common equity, and long-term debt analyses, I am recommending an 8.18 percent weighted average cost of capital for Johnson Utilities. This figure represents the weighted cost of my recommended costs of long-term debt and common equity.

Q. Why do you believe that your recommended 8.18 percent cost of capital is an appropriate rate of return for Johnson Utilities to earn on its invested capital?

A. The 8.18 percent cost of capital figure that I have recommended meets the criteria established in the landmark Supreme Court cases of Bluefield Water Works & Improvement Co. v. Public Service Commission of West

Virginia (262 U.S. 679, 1923) and Federal Power Commission v. Hope Natural Gas Company (320 U.S. 391, 1944). Simply stated, these two cases affirmed that a public utility that is efficiently and economically managed is entitled to a return on investment that instills confidence in its financial soundness, allows the utility to attract capital, and also allows the utility to perform its duty to provide service to ratepayers. The rate of return adopted for the utility should also be comparable to a return that investors would expect to receive from investments with similar risk.

The Hope decision allows for the rate of return to cover both the operating expenses and the "capital costs of the business" which includes interest on debt and dividend payment to shareholders. This is predicated on the belief that, in the long run, a company that cannot meet its debt obligations and provide its shareholders with an adequate rate of return will not continue to supply adequate public utility service to ratepayers.

Q. Do the Bluefield and Hope decisions indicate that a rate of return sufficient to cover all operating and capital costs is guaranteed?

A. No. Neither case *guarantees* a rate of return on utility investment. What the Bluefield and Hope decisions *do allow*, is for a utility to be provided with the *opportunity* to earn a reasonable rate of return on its investment. That is to say that a utility, such as Johnson Utilities, is provided with the opportunity to earn an appropriate rate of return if the Company's

management exercises good judgment and manages its assets and resources in a manner that is both prudent and economically efficient.

COST OF EQUITY CAPITAL

Q. What is your final recommended cost of equity capital for Johnson Utilities?

A. I am recommending a cost of equity of 8.31 percent. My recommended 8.31 percent cost of equity figure represents the 8.31 percent mean average of the results of my DCF and CAPM analyses, which utilized both a sample of publicly traded water providers and a sample of publicly traded natural gas local distribution companies ("LDC"). This calculation is exhibited on page 2 of my Schedule WAR-1.

Discounted Cash Flow (DCF) Method

Q. Please explain the DCF method that you used to estimate Johnson Utilities' cost of equity capital.

A. The DCF method employs a stock valuation model known as the constant growth valuation model, that bears the name of Dr. Myron J. Gordon (i.e. the Gordon model), the professor of finance who was responsible for its development. Simply stated, the DCF model is based on the premise that the current price of a given share of common stock is determined by the present value of all of the future cash flows that will be generated by that share of common stock. The rate that is used to discount these cash

flows back to their present value is often referred to as the investor's cost of capital (i.e. the cost at which an investor is willing to forego other investments in favor of the one that he or she has chosen).

Another way of looking at the investor's cost of capital is to consider it from the standpoint of a company that is offering its shares of stock to the investing public. In order to raise capital, through the sale of common stock, a company must provide a required rate of return on its stock that will attract investors to commit funds to that particular investment. In this respect, the terms "cost of capital" and "investor's required return" are one in the same. For common stock, this required return is a function of the dividend that is paid on the stock. The investor's required rate of return can be expressed as the percentage of the dividend that is paid on the stock (dividend yield) plus an expected rate of future dividend growth. This is illustrated in mathematical terms by the following formula:

$$k = \frac{D_1}{P_0} + g$$

where: k = the required return (cost of equity, equity capitalization rate),

$\frac{D_1}{P_0}$ = the dividend yield of a given share of stock calculated by dividing the expected dividend by the current market price of the given share of stock, and

g = the expected rate of future dividend growth

This formula is the basis for the standard growth valuation model that I used to determine Johnson Utilities' cost of equity capital.

Q. In determining the rate of future dividend growth for Johnson Utilities, what assumptions did you make?

A. There are two primary assumptions regarding dividend growth that must be made when using the DCF method. First, dividends will grow by a constant rate into perpetuity, and second, the dividend payout ratio will remain at a constant rate. Both of these assumptions are predicated on the traditional DCF model's basic underlying assumption that a company's earnings, dividends, book value and share growth all increase at the same constant rate of growth into infinity. Given these assumptions, if the dividend payout ratio remains constant, so does the earnings retention ratio (the percentage of earnings that are retained by the company as opposed to being paid out in dividends). This being the case, a company's dividend growth can be measured by multiplying its retention ratio (1 - dividend payout ratio) by its book return on equity. This can be stated as $g = b \times r$.

...

Q. Would you please provide an example that will illustrate the relationship that earnings, the dividend payout ratio and book value have with dividend growth?

A. RUCO consultant Stephen Hill illustrated this relationship in a Citizens Utilities Company 1993 rate case by using a hypothetical utility.[1]

Table I

	Year 1	Year 2	Year 3	Year 4	Year 5	Growth
Book Value	$10.00	$10.40	$10.82	$11.25	$11.70	4.00%
Equity Return	10%	10%	10%	10%	10%	N/A
Earnings/Sh.	$1.00	$1.04	$1.082	$1.125	$1.170	4.00%
Payout Ratio	0.60	0.60	0.60	0.60	0.60	N/A
Dividend/Sh	$0.60	$0.624	$0.649	$0.675	$0.702	4.00%

Table I of Mr. Hill's illustration presents data for a five-year period on his hypothetical utility. In Year 1, the utility had a common equity or book value of $10.00 per share, an investor-expected equity return of ten percent, and a dividend payout ratio of sixty percent. This results in earnings per share of $1.00 ($10.00 book value x 10 percent equity return) and a dividend of $0.60 ($1.00 earnings/sh. x 0.60 payout ratio) during Year 1. Because forty percent (1 - 0.60 payout ratio) of the utility's earnings are retained as opposed to being paid out to investors, book value increases to $10.40 in Year 2 of Mr. Hill's illustration. Table I

[1] Citizens Utilities Company, Arizona Gas Division, Docket No. E-1032-93-111, Prepared Testimony, dated December 10, 1993, p. 25.

presents the results of this continuing scenario over the remaining five-year period.

The results displayed in Table I demonstrate that under "steady-state" (i.e. constant) conditions, book value, earnings and dividends all grow at the same constant rate. The table further illustrates that the dividend growth rate, as discussed earlier, is a function of (1) the internally generated funds or earnings that are retained by a company to become new equity, and (2) the return that an investor earns on that new equity. The DCF dividend growth rate, expressed as g = b x r, is also referred to as the internal or sustainable growth rate.

Q. If earnings and dividends both grow at the same rate as book value, shouldn't that rate be the sole factor in determining the DCF growth rate?

A. No. Possible changes in the expected rate of return on either common equity or the dividend payout ratio make earnings and dividend growth by themselves unreliable. This can be seen in the continuation of Mr. Hill's illustration on a hypothetical utility.

Table II

	Year 1	Year 2	Year 3	Year 4	Year 5	Growth
Book Value	$10.00	$10.40	$10.82	$11.47	$12.158	5.00%
Equity Return	10%	10%	15%	15%	15%	10.67%
Earnings/Sh	$1.00	$1.04	$1.623	$1.720	$1.824	16.20%
Payout Ratio	0.60	0.60	0.60	0.60	0.60	N/A
Dividend/Sh	$0.60	$0.624	$0.974	$1.032	$1.094	16.20%

In the example displayed in Table II, a sustainable growth rate of four percent[2] exists in Year 1 and Year 2 (as in the prior example). In Year 3, Year 4 and Year 5, however, the sustainable growth rate increases to six percent.[3] If the hypothetical utility in Mr. Hill's illustration were expected to earn a fifteen-percent return on common equity on a continuing basis, then a six percent long-term rate of growth would be reasonable. However, the compound growth rate for earnings and dividends, displayed in the last column, is 16.20 percent. If this rate was to be used in the DCF model, the utility's return on common equity would be expected to increase by fifty percent every five years, [(15 percent ÷ 10 percent) – 1]. This is clearly an unrealistic expectation.

Although it is not illustrated in Mr. Hill's hypothetical example, a change in only the dividend payout ratio will eventually result in a utility paying out more in dividends than it earns. While it is not uncommon for a utility in the real world to have a dividend payout ratio that exceeds one hundred percent on occasion, it would be unrealistic to expect the practice to continue over a sustained long-term period of time.

...

[2] [(Year 2 Earnings/Sh – Year 1 Earnings/Sh) ÷ Year 1 Earnings/Sh] = [($1.04 - $1.00) ÷ $1.00] = [$0.04 ÷ $1.00] = 4.00%

[3] [(1 – Payout Ratio) x Rate of Return] = [(1 - 0.60) x 15.00%] = 0.40 x 15.00% = 6.00%

Q. Other than the retention of internally generated funds, as illustrated in Mr. Hill's hypothetical example, are there any other sources of new equity capital that can influence an investor's growth expectations for a given company?

A. Yes, a company can raise new equity capital externally. The best example of external funding would be the sale of new shares of common stock. This would create additional equity for the issuer and is often the case with utilities that are either in the process of acquiring smaller systems or providing service to rapidly growing areas.

Q. How does external equity financing influence the growth expectations held by investors?

A. Rational investors will put their available funds into investments that will either meet or exceed their given cost of capital (i.e. the return earned on their investment). In the case of a utility, the book value of a company's stock usually mirrors the equity portion of its rate base (the utility's earning base). Because regulators allow utilities the opportunity to earn a reasonable rate of return on rate base, an investor would take into consideration the effect that a change in book value would have on the rate of return that he or she would expect the utility to earn. If an investor believes that a utility's book value (i.e. the utility's earning base) will increase, then he or she would expect the return on the utility's common stock to increase. If this positive trend in book value continues over an

extended period of time, an investor would have a reasonable expectation for sustained long-term growth.

Q. Please provide an example of how external financing affects a utility's book value of equity.

A. As I explained earlier, one way that a utility can increase its equity is by selling new shares of common stock on the open market. If these new shares are purchased at prices that are higher than those shares sold previously, the utility's book value per share will increase in value. This would increase both the earnings base of the utility and the earnings expectations of investors. However, if new shares sold at a price below the pre-sale book value per share, the after-sale book value per share declines in value. If this downward trend continues over time, investors might view this as a decline in the utility's sustainable growth rate and will have lower expectations regarding growth. Using this same logic, if a new stock issue sells at a price per share that is the same as the pre-sale book value per share, there would be no impact on either the utility's earnings base or investor expectations.

...

Q. Please explain how the external component of the DCF growth rate is determined.

A. In his book, The Cost of Capital to a Public Utility,[4] Dr. Gordon (the individual responsible for the development of the DCF or constant growth model) identified a growth rate that includes both expected internal and external financing components. The mathematical expression for Dr. Gordon's growth rate is as follows:

$$g = (br) + (sv)$$

where:	g	=	DCF expected growth rate,
	b	=	the earnings retention ratio,
	r	=	the return on common equity,
	s	=	the fraction of new common stock sold that accrues to a current shareholder, and
	v	=	funds raised from the sale of stock as a fraction of existing equity.
and	v	=	$1 - [(BV) \div (MP)]$
where:	BV	=	book value per share of common stock, and
	MP	=	the market price per share of common stock.

...

[4] Gordon, M.J., The Cost of Capital to a Public Utility, East Lansing, MI: Michigan State University, 1974, pp. 30-33.

Q. Did you include the effect of external equity financing on long-term growth rate expectations in your analysis of expected dividend growth for the DCF model?

A. Yes. The external growth rate estimate (sv) is displayed on Page 1 of Schedule WAR-4, where it is added to the internal growth rate estimate (br) to arrive at a final sustainable growth rate estimate.

Q. Please explain why your calculation of external growth on page 2 of Schedule WAR-4, is the current market-to-book ratio averaged with 1.0 in the equation [(M ÷ B) + 1] ÷ 2.

A. The market price of a utility's common stock will tend to move toward book value, or a market-to-book ratio of 1.0, if regulators allow a rate of return that is equal to the cost of capital (one of the desired effects of regulation). As a result of this situation, I used [(M ÷ B) + 1] ÷ 2 as opposed to the current market-to-book ratio by itself to represent investor's expectations that, in the future, a given utility will achieve a market-to-book ratio of 1.0.

Q. Has the Commission ever adopted a cost of capital estimate that included this assumption?

A. Yes. In a prior Southwest Gas Corporation rate case[5], the Commission adopted the recommendations of ACC Staff's cost of capital witness, Stephen Hill, who I noted earlier in my testimony. In that case, Mr. Hill

[5] Decision No. 68487, Dated February 23, 2006 (Docket No. G-01551A-04-0876)

used the same methods that I have used in arriving at the inputs for the DCF model. His final recommendation for Southwest Gas Corporation was largely based on the results of his DCF analysis, which incorporated the same valid market-to-book ratio assumption that I have used consistently in the DCF model as a cost of capital witness for RUCO.

Q. How did you develop your dividend growth rate estimate?

A. I analyzed data on two separate proxy groups. A water company proxy group comprised of three publicly traded water companies and a natural gas proxy group consisting of ten natural gas local distribution companies ("LDC") that have similar operating characteristics to water providers.

Q. Why did you use a proxy group methodology as opposed to a direct analysis of Johnson Utilities?

A. One of the problems in performing this type of analysis is that the utility applying for a rate increase is not always a publicly traded company, as is the case with Johnson Utilities itself. Consequently it was necessary to create a proxy by analyzing publicly traded water companies and LDC's with similar risk characteristics.

Q. Are there any other advantages to the use of a proxy?

A. Yes. As I noted earlier, the U.S. Supreme Court ruled in the Hope decision that a utility is entitled to earn a rate of return that is

commensurate with the returns on investments of other firms with comparable risk. The proxy technique that I have used derives that rate of return. One other advantage to using a sample of companies is that it reduces the possible impact that any undetected biases, anomalies, or measurement errors may have on the DCF growth estimate.

Q. Didn't you state earlier that Johnson Utilities is seeking rates for both its water and wastewater operations in Arizona?

A. Yes, I did.

Q. Why did you analyze only publicly traded water utilities and LDC's as opposed to firms that provide wastewater service?

A. The use of water utilities and LDC's was necessitated by the fact that there is a lack of financial and market information available on stand-alone wastewater utilities. This in itself is not a problem, given the fact that both water and wastewater utilities share similar risk characteristics. Both types of utilities provide a basic service for which there are no substitutes and are also subject to strict federal and state regulations.

Q. What criteria did you use in selecting the companies that make up your water company proxy for Johnson Utilities?

A. The three water companies used in the proxy are publicly traded on the New York Stock Exchange ("NYSE"). All three water companies are

followed by The Value Line Investment Survey ("Value Line") and are the same companies that comprise Value Line's large capitalization Water Utility Industry segment of the U.S. economy (Attachment A contains Value Line's January 23, 2009 update of the water utility industry and evaluations of the water companies used in my proxy).

Q. Are these the same water utilities that you have used in prior rate case proceedings?

A. Yes. However, in prior proceedings I have also included a fourth water provider known as Southwest Water Company which is traded over the counter through the National Association of Securities Dealers Automated Quotation System ("NASDAQ").

Q. Why did you exclude Southwest Water Company from your sample in this proceeding?

A. Value Line has suspended its long-term projections on Southwest Water Company as a result of accounting errors that were recently discovered by Southwest Water Company's management. The lack of projected data made Southwest Water Company unsuitable for my sample group of water providers.

...

Q. Please describe the companies that comprise your water company proxy group.

A. My water company proxy group includes American States Water Co. (stock ticker symbol "AWR"), California Water Service Group ("CWT") and Aqua America, Inc. ("WTR"). Each of these water companies face the same types of risk that Johnson Utilities faces. For the sake of brevity, I will refer to each of these companies by their appropriate stock ticker symbols henceforth.

Q. Briefly describe the areas served by the companies in your water company sample proxy.

A. In addition to providing water service to residents of Fountain Hills, Arizona through its wholly owned subsidiary Chaparral City Water Company, AWR also serves communities located in Los Angeles, Orange and San Bernardino counties in California. CWT provides service to customers in seventy-five communities in California, New Mexico and Washington. CWT's principal service areas are located in the San Francisco Bay area, the Sacramento, Salinas and San Joaquin Valleys and parts of Los Angeles. WTR is a holding company for a large number of water and wastewater utilities operating in nine different states including Pennsylvania, Ohio, New Jersey, Illinois, Maine, North Carolina, Texas, Florida and Kentucky.

Q. Are these the same water companies that Johnson Utilities used in its application?

A. Johnson Utilities' cost of equity witness, Mr. Thomas Bourassa, used the same water companies included in my proxy. Mr. Bourassa also used three other water companies in his cost of capital analysis[6] which are included in Value Line's Small and Mid Cap Edition.

Q. Why did you exclude the water companies that are followed in Value Line's Small and Mid Cap Edition?

A. Value Line does not provide the same type of forward-looking information (i.e. long-term estimates on return on common equity and share growth) on small and mid-cap companies that it provides on the three water companies that I used in my proxy. Consequently, as in the case of Southwest Water Company, these water providers are not as suitable as the ones that I have used in my analysis.

Q. What criteria did you use in selecting the natural gas LDC's included in your proxy for Johnson Utilities?

A. As are the water companies that I just described, each of the natural gas LDC's used in the proxy are publicly traded on a major stock exchange (all ten trade on the NYSE) and are followed by Value Line. Each of the ten LDC's in my sample are tracked in Value Line's natural gas Utility industry

[6] Connecticut Water Service, Inc., Middlesex Water Company and SJW Corp.

segment. All of the companies in the proxy are engaged in the provision of regulated natural gas distribution services. Attachment B of my testimony contains Value Line's most recent evaluation of the natural gas proxy group that I used for my cost of common equity analysis.

Q. What companies are included your natural gas proxy?

A. The ten natural gas LDC's included in my proxy (and their NYSE ticker symbols) are AGL Resources, Inc. ("ATG"), Atmos Energy Corp. ("ATO"), Laclede Group, Inc. ("LG"), New Jersey Resources Corporation ("NJR"), Nicor, Inc. ("GAS"), Northwest Natural Gas Co. ("NWN"), Piedmont Natural Gas Company ("PNY"), South Jersey Industries, Inc. ("SJI") Southwest Gas Corporation ("SWX"), which is the dominant natural gas provider in Arizona, and WGL Holdings, Inc. ("WGL"). These are the same ten LDC's that I analyzed in the most recent UNS Gas, Inc. proceeding.[7]

Q. Briefly describe the regions of the U.S. served by the ten natural gas LDC's that make up your sample proxy.

A. The ten LDC's listed above provide natural gas service to customers in the Middle Atlantic region (i.e. NJI which serves portions of northern New Jersey, SJI which serves southern New Jersey and WGL which serves the Washington D.C. metro area), the Southeast and South Central portions

[7] Docket No. G-04204A-06-0463

of the U.S. (i.e. ATG which serves Virginia, southern Tennessee and the Atlanta, Georgia area and PNY which serves customers in North Carolina, South Carolina and Tennessee), the South, deep South and Midwest (i.e. ATO which serves customers in Kentucky, Mississippi, Louisiana, Texas, Colorado and Kansas, GAS which provides service to northern and western Illinois, and LG which serves the St. Louis area), and the Pacific Northwest (i.e. NWN which serves Washington state and Oregon). Portions of Arizona, Nevada and California are served by SWX.

Q. Did the Company's witness also perform a similar analysis using natural gas LDC's?

A. No, he did not.

Q. Please explain your DCF growth rate calculations for the sample companies used in your proxy.

A. Schedule WAR-5 provides retention ratios, returns on book equity, internal growth rates, book values per share, numbers of shares outstanding, and the compounded share growth for each of the utilities included in the sample for the historical observation period 2003 to 2007 for both the water and LDC industries. Schedule WAR-5 also includes Value Line's projected 2008, 2009 and 2011-13 values for the retention ratio, equity return, book value per share growth rate, and number of shares outstanding for both the water utilities and the LDC's.

Q. Please describe how you used the information displayed in Schedule WAR-5 to estimate each comparable utility's dividend growth rate.

A. In explaining my analysis, I will use AWR as an example. The first dividend growth component that I evaluated was the internal growth rate. I used the "b x r" formula (described on pages 10 and 11) to multiply AWR's earned return on common equity by its earnings retention ratio for each year in the 2003 to 2007 observation period to derive the utility's annual internal growth rates. I used the mean average of this five-year period as a benchmark against which I compared the projected growth rate trends provided by Value Line. Because an investor is more likely to be influenced by recent growth trends, as opposed to historical averages, the five-year mean noted earlier was used only as a benchmark figure. As shown on Schedule WAR-5, Page 1, AWR's average internal growth rate of 2.51% over the 2003 to 2007 time frame reflects an upward trend that began during the 2004 operating period. AWR rebounded from non-meaningful negative growth in 2003 to 1.01% in 2004. Internal growth climbed from 1.01% in 2004 to 3.79% during 2007. Value Line is predicting that growth will fall from 3.79% in 2007, to 4.12% during 2008. Internal growth is expected to increase to 6.30% during the 2011-13 time frame. After weighing Value Line's lower estimates on internal growth, and no change in projected earnings, dividends and book value, I believe that a 5.75% rate of growth is reasonable for AWR (Schedule WAR-4, Page 1 of 2).

Q. Please continue with the external growth rate component portion of your analysis.

A. Schedule WAR-5 demonstrates that the pattern of shares outstanding for AWR increased from 15.21 million to 17.23 million from 2003 to 2007. Value Line is predicting that this level will increase from 18.25 million in 2008 to 21.00 million by the end of 2013. Based on this data, I believe that a 4.75 percent growth in shares is not unreasonable for AWR. My final dividend growth rate estimate for AWR is 7.48 percent (5.75 percent internal + 1.73 percent external) and is shown on Page 1 of Schedule WAR-4.

Q. What is your average dividend growth rate estimate using the DCF model for the sample water utilities?

A. Based on the DCF model, my average dividend growth rate estimate is 6.51 percent as displayed on page 1 of Schedule WAR-4.

Q. Did you use the same approach to determine an average dividend growth rate for the proxy comprised of natural gas LDC's?

A. Yes.

...

Q. What is your average dividend growth rate estimate using the DCF model for the sample natural gas utilities?

A. Based on the DCF model, my average dividend growth rate estimate is 6.29 percent, which is also displayed on page 1 of Schedule WAR-4.

Q. How does your average dividend growth rate estimates on water companies compare to the growth rate data published by Value Line and other analysts?

A. Schedule WAR-6 compares my sustainable growth estimates with the five-year projections of analysts at both Zacks Investment Research, Inc. ("Zacks") (Attachment C) and Value Line. In the case of the water companies, my 6.51 percent estimate falls between Zacks' average long-term EPS projection of 9.47 percent and Value Line's growth projection of 5.03 percent (which is an average of EPS, DPS and BVPS). My 6.51 percent estimate is also 93 basis points higher than the 5.58 percent average of Value Line's historical and projected data (and the consensus opinions published by Zacks) but is 48 basis points lower than Value Lines 5-year compound historical average of EPS, DPS and BVPS. The estimates of analysts at Value Line indicate that investors are expecting somewhat lower increased performance from water utilities in the future. On balance, I would say my 6.51 percent estimate is a good representation of the growth projections that are available to the investing public.

Q. How do your average dividend growth rate estimates on natural gas LDC's compare to the growth rate data published by Value Line and other analysts?

A. In regard to the natural gas LDC's, my 6.29 percent estimate also falls between the average 9.02 percent long-term consensus projections published by Zacks, and the 4.80 percent Value Line projected estimate (which is an average of EPS, DPS and BVPS). As can also be seen on Schedule WAR-6, the 6.29 percent estimate that I have calculated is 73 basis points higher than the 5.56 percent average of the 5-year historic EPS, DPS and BVPS means of Value Line and 55 basis points higher than the 5.74 percent five-year compound historical average of Value Line data (on EPS, DPS and BVPS). In fact, my 6.29 percent estimate is 54 basis points higher than the combined 5.75 percent Value Line and Zacks averages displayed in Schedule WAR-6. The estimates of both Value Line's and Zacks' analysts indicate that investors are expecting increased performance from natural gas distribution companies in the future. In the case of the LDC's I would say that my 6.29 percent estimate, which is lower than Zack's projections but higher than Value Line's forecasts, is a fair representation of the growth projections presented by securities analysts at this point in time.

...

Q. How did you calculate the dividend yields displayed in Schedule WAR-3?

A. For both the water companies and the natural gas LDC's I used the estimated annual dividends, for the next twelve-month period, that appeared in Value Line's January 23, 2009 Ratings and Reports water services industry update and Value Line's December 12, 2008 Ratings and Reports natural gas utility update. I then divided those figures by the eight-week average price per share of the appropriate utility's common stock. The eight-week average price is based on the daily closing stock prices for each of the companies in my proxies for the period December 1, 2008 to January 23, 2009.

Q. Based on the results of your DCF analysis, what is your cost of equity capital estimate for the water and natural gas utilities included in your sample?

A. As shown on page 2 of Schedule WAR-2, the cost of equity capital derived from my DCF analysis is 9.39 percent for the water utilities and 10.72 percent for the natural gas LDC's.

Capital Asset Pricing Model (CAPM) Method

Q. Please explain the theory behind CAPM and why you decided to use it as an equity capital valuation method in this proceeding.

A. CAPM is a mathematical tool that was developed during the early 1960's by William F. Sharpe[8], the Timken Professor Emeritus of Finance at Stanford University, who shared the 1990 Nobel Prize in Economics for research that eventually resulted in the CAPM model. CAPM is used to analyze the relationships between rates of return on various assets and risk as measured by beta.[9] In this regard, CAPM can help an investor to determine how much risk is associated with a given investment so that he or she can decide if that investment meets their individual preferences. Finance theory has always held that as the risk associated with a given investment increases, so should the expected rate of return on that investment and vice versa. According to CAPM theory, risk can be classified into two specific forms: nonsystematic or diversifiable risk, and systematic or non-diversifiable risk. While nonsystematic risk can be virtually eliminated through diversification (i.e. by including stocks of various companies in various industries in a portfolio of securities), systematic risk, on the other hand, cannot be eliminated by diversification.

[8] William F. Sharpe, "A Simplified Model of Portfolio Analysis," Management Science, Vol. 9, No. 2 (January 1963), pp. 277-93.

[9] Beta is defined as an index of volatility, or risk, in the return of an asset relative to the return of a market portfolio of assets. It is a measure of systematic or non-diversifiable risk. The returns on a stock with a beta of 1.0 will mirror the returns of the overall stock market. The returns on stocks with betas greater than 1.0 are more volatile or riskier than those of the overall stock market; and if a stock's beta is less than 1.0, its returns are less volatile or riskier than the overall stock market.

Thus, systematic risk is the only risk of importance to investors. Simply stated, the underlying theory behind CAPM states that the expected return on a given investment is the sum of a risk-free rate of return plus a market risk premium that is proportional to the systematic (non-diversifiable risk) associated with that investment. In mathematical terms, the formula is as follows:

$$k = r_f + [\, ß\, (r_m - r_f)\,]$$

where:

k	=	the expected return of a given security,
r_f	=	risk-free rate of return,
$ß$	=	beta coefficient, a statistical measurement of a security's systematic risk,
r_m	=	average market return (e.g. S&P 500), and
$r_m - r_f$	=	market risk premium.

Q. What types of financial instruments are generally used as a proxy for the risk-free rate of return in the CAPM model?

A. Generally speaking, the yields of U.S. Treasury instruments are used by analysts as a proxy for the risk-free rate of return component.

...

Q. Please explain why U.S. Treasury instruments are regarded as a suitable proxy for the risk-free rate of return?

A. As citizens and investors, we would like to believe that U.S. Treasury securities (which are backed by the full faith and credit of the United States Government) pose no threat of default no matter what their maturity dates are. However, a comparison of various Treasury instruments will reveal that those with longer maturity dates do have slightly higher yields. Treasury yields are comprised of two separate components,[10] a real rate of interest (believed to be approximately 2.00 percent) and an inflationary expectation. When the real rate of interest is subtracted from the total treasury yield, all that remains is the inflationary expectation. Because increased inflation represents a potential capital loss, or risk, to investors, a higher inflationary expectation by itself represents a degree of risk to an investor. Another way of looking at this is from an opportunity cost standpoint. When an investor locks up funds in long-term T-Bonds, compensation must be provided for future investment opportunities foregone. This is often described as maturity or interest rate risk and it can affect an investor adversely if market rates increase before the instrument matures (a rise in interest rates would decrease the value of the debt instrument). As discussed earlier in the DCF portion of my

[10] As a general rule of thumb, there are three components that make up a given interest rate or rate of return on a security: the real rate of interest, an inflationary expectation, and a risk premium. The approximate risk premium of a given security can be determined by simply subtracting a 91-day T-Bill rate from the yield on the security.

testimony, this compensation translates into higher rates of returns to the investor.

Q. What security did you use for a risk-free rate of return in your CAPM analysis?

A. I used an eight-week average of the yield on a 5-year U.S. Treasury instrument. The yields were published in Value Line's Selection and Opinion publication dated December 5, 2008 through January 23, 2009 (Attachment E). This resulted in a risk-free (r_f) rate of return of 1.60 percent.

Q. Why did you use the yield on a 5-year year U.S. Treasury instrument as opposed to a short-term T-Bill?

A. While a shorter term instrument, such as a 91-day T-Bill, presents the lowest possible total risk to an investor, a good argument can be made that the yield on an instrument that matches the investment period of the asset being analyzed in the CAPM model should be used as the risk-free rate of return. Since utilities in Arizona generally file for rates every three to five years, the yield on a 5-year U.S. Treasury Instrument closely matches the investment period or, in the case of regulated utilities, the period that new rates will be in effect.

...

Q. How did you calculate the market risk premium used in your CAPM analysis?

A. I used both a geometric and an arithmetic mean of the historical total returns on the S&P 500 index from 1926 to 2007 as the proxy for the market rate of return (r_m). For the risk-free portion of the risk premium component (r_f), I used the geometric mean of the total returns of long-term government bonds for the same eighty-one year period. The market risk premium (r_m - r_f) that results by using these inputs is 5.10 percent (10.40% - 5.30% = 5.10%). The market risk premium that results by using the arithmetic mean calculation is 6.80 percent (12.30% - 5.50% = 6.80%).

Q. How did you select the beta coefficients that were used in your CAPM analysis?

A. The beta coefficients (ß), for the individual utilities used in both my proxies, were calculated by Value Line and were current as of January 23, 2009 for the water companies and December 12, 2008 for the natural gas LDC's. Value Line calculates its betas by using a regression analysis between weekly percentage changes in the market price of the security being analyzed and weekly percentage changes in the NYSE Composite Index over a five-year period. The betas are then adjusted by Value Line for their long-term tendency to converge toward 1.00. The beta coefficients for the service providers included in my water company sample ranged from 0.90 to 1.05 with an average beta of 0.97. The beta

coefficients for the LDC's included in my natural gas sample ranged from 0.60 to 0.75 with an average beta of 0.70.

Q. What are the results of your CAPM analysis?

A. As shown on pages 1 and 2 of Schedule WAR-7, my CAPM calculation using a geometric mean to calculate the risk premium results in an average expected return of 6.53 percent for the water companies and 5.17 percent for the natural gas LDC's. My calculation using an arithmetic mean results in an average expected return of 8.17 percent for the water companies and 6.36 percent for the natural gas LDC's.

Q. Please summarize the results derived under each of the methodologies presented in your testimony.

A. The following is a summary of the cost of equity capital derived under each methodology used:

METHOD	RESULTS
DCF (Water Sample)	9.39%
DCF (Natural Gas Sample)	10.72%
CAPM (Water Sample)	6.53% – 8.17%
CAPM (Natural Gas)	5.17% – 6.36%

Based on these results, my best estimate of an appropriate range for a cost of common equity for Johnson Utilities is 5.17 percent to 10.72

percent. My final recommended cost of common equity figure is 8.31 percent.

Q How did you arrive at your final recommended 8.31 percent cost of common equity?

A. My recommended 8.31 percent cost of common equity is the mean average of my DCF and CAPM results. The calculation of my 8.31 percent cost of common equity can be seen on Schedule WAR-1, Page 2 of 2.

Q. Did you make any direct adjustment to your recommended cost of common equity that takes into consideration the higher level of equity contained in Johnson Utilities' capital structure?

A. No, I did not. However, I am recommending a hypothetical capital structure that puts the Company's capital structure roughly in line with the capital structures of the utilities included in my sample.

Q. How does your recommended cost of equity capital compare with the cost of equity capital proposed by the Company?

A. The 10.50 percent cost of equity capital proposed by the Company is 219 basis points higher than the 8.31 percent OCRB cost of equity capital that I am recommending.

...

Current Economic Environment

Q. Please explain why it is necessary to consider the current economic environment when performing a cost of equity capital analysis for a regulated utility.

A. Consideration of the economic environment is necessary because trends in interest rates, present and projected levels of inflation, and the overall state of the U.S. economy determine the rates of return that investors earn on their invested funds. Each of these factors represent potential risks that must be weighed when estimating the cost of equity capital for a regulated utility and are, most often, the same factors considered by individuals who are also investing in non-regulated entities.

Q. Please discuss your analysis of the current economic environment.

A. My analysis includes a brief review of the economic events that have occurred since 1990. Schedule WAR-8 displays various economic indicators and other data that I will refer to during this portion of my testimony.

In 1991, as measured by the most recently revised annual change in gross domestic product ("GDP"), the U.S. economy experienced a rate of growth of negative 0.20 percent. This decline in GDP marked the beginning of a mild recession that ended sometime before the end of the first half of 1992. Reacting to this situation, the Federal Reserve Board

("Federal Reserve" or "Fed"), then chaired by noted economist Alan Greenspan, lowered its benchmark federal funds rate[11] in an effort to further loosen monetary constraints - an action that resulted in lower interest rates.

During this same period, the nation's major money center banks followed the Federal Reserve's lead and began lowering their interest rates as well. By the end of the fourth quarter of 1993, the prime rate (the rate charged by banks to their best customers) had dropped to 6.00 percent from a 1990 level of 10.01 percent. In addition, the Federal Reserve's discount rate on loans to its member banks had fallen to 3.00 percent and short-term interest rates had declined to levels that had not been seen since 1972.

Although GDP increased in 1992 and 1993, the Federal Reserve took steps to increase interest rates beginning in February of 1994, in order to keep inflation under control. By the end of 1995, the Federal discount rate had risen to 5.21 percent. Once again, the banking community followed the Federal Reserve's moves. The Fed's strategy, during this period, was to engineer a "soft landing." That is to say that the Federal Reserve

[11] This is the interest rate charged by banks with excess reserves at a Federal Reserve district bank to banks needing overnight loans to meet reserve requirements. The federal funds rate is the most sensitive indicator of the direction of interest rates, since it is set daily by the market, unlike the prime rate and the discount rate, which are periodically changed by banks and by the Federal Reserve Board, respectively.

wanted to foster a situation in which economic growth would be stabilized without incurring either a prolonged recession or runaway inflation.

Q. Did the Federal Reserve achieve its goals during this period?

A. Yes. The Fed's strategy of decreasing interest rates to stimulate the economy worked. The annual change in GDP began an upward trend in 1992. A change of 4.50 percent and 4.20 percent were recorded at the end of 1997 and 1998 respectively. Based on daily reports that were presented in the mainstream print and broadcast media during most of 1999, there appeared to be little doubt among both economists and the public at large that the U.S. was experiencing a period of robust economic growth highlighted by low rates of unemployment and inflation. Investors, who believed that technology stocks and Internet company start-ups (with little or no history of earnings) had high growth potential, purchased these types of issues with enthusiasm. These types of investors, who exhibited what former Chairman Greenspan described as "irrational exuberance," pushed stock prices and market indexes to all time highs from 1997 to 2000.

Q. What has been the state of the economy since 2001?

A. The U.S. economy entered into a recession near the end of the first quarter of 2001. The bullish trend, which had characterized the last half of the 1990's, had already run its course sometime during the third quarter of

2000. Economic data released since the beginning of 2001 had already been disappointing during the months preceding the September 11, 2001 terrorist attacks on the World Trade Center and the Pentagon. Slower growth figures, rising layoffs in the high technology manufacturing sector, and falling equity prices (due to lower earnings expectations) prompted the Fed to begin cutting interest rates as it had done in the early 1990's. The now infamous terrorist attacks on New York City and Washington D.C. marked a defining point in this economic slump and prompted the Federal Reserve to continue its rate cutting actions through December 2001. Prior to the 9/11 attacks, commentators, reporting in both the mainstream financial press and various economic publications including Value Line, believed that the Federal Reserve was cutting rates in the hope of avoiding a recession.

Despite several intervals during 2002 and 2003 in which the Federal Open Market Committee ("FOMC") decided not to change interest rates – moves which indicated that the worst may be over and that the recession might have bottomed out during the last quarter of 2001 – a lackluster economy persisted. The continuing economic malaise and even fears of possible deflation prompted the FOMC to make a thirteenth rate cut on June 25, 2003. The quarter point cut reduced the federal funds rate to 1.00 percent, the lowest level in forty-five years.

Even though some signs of economic strength, mainly attributed to consumer spending, began to crop up during the latter part of 2002 and into 2003, Chairman Greenspan appeared to be concerned with sharp declines in capital spending in the business sector.

During the latter part of 2003, the FOMC went on record as saying that it intended to leave interest rates low "for a considerable period." After its two-day meeting that ended on January 28, 2004, the FOMC announced "that with inflation 'quite low' and plenty of excess capacity in the economy, policy-makers 'can be patient in removing its policy accommodation.[12]"

Q. What actions has the Federal Reserve taken in terms of interest rates since the beginning of 2001?

A. As noted earlier, from January 2001 to June 2003 the Federal Reserve cut interest rates a total of thirteen times. During this period, the federal funds rate fell from 6.50 percent to 1.00 percent. The FOMC reversed this trend on June 29, 2004 and raised the federal funds rate 25 basis points to 1.25 percent. From June 29, 2004 to January 31, 2006, the FOMC raised the federal funds rate thirteen more times to a level of 4.50 percent.

The FOMC's January 31, 2006 meeting marked the final appearance of Alan Greenspan, who had presided over the rate setting body for a total of

[12] Wolk, Martin, "Fed holds interest rates steady," MSNBC, January 28, 2004.

eighteen years. On that same day, Greenspan's successor, Ben Bernanke, the former chairman of the President's Council of Economic Advisers and a former Fed governor under Greenspan from 2002 to 2005, was confirmed by the U.S. Senate to be the new Federal Reserve chief. As expected by Fed watchers, Chairman Bernanke picked up where his predecessor left off and increased the federal funds rate by 25 basis points during each of the next three FOMC meetings for a total of seventeen consecutive rate increases since June 2004, and raising the federal funds rate to a level of 5.25 percent. The Fed's rate increase campaign finally came to a halt at the FOMC meeting held on August 8, 2006, when the FOMC decided not to raise rates.

Q. What was the reaction in the financial community to the Fed's decision not to raise interest rates?

A. As in the past, banks followed the Fed's lead once again and held the prime rate to a level of 8.25 percent, or 300 basis points higher than the federal funds rate of 5.25 percent established on June 29, 2006.

Q. How did analysts view the Fed's actions between January 2001 and August 2006?

A. According to an article that appeared in the December 2, 2004 edition of The Wall Street Journal, the FOMC's decision to begin raising rates two years ago was viewed as a move to increase rates from emergency lows

in order to avoid creating an inflation problem in the future as opposed to slowing down the strengthening economy.[13] In other words, the Fed was trying to head off inflation *before* it became a problem. During the period following the August 8, 2006 FOMC meeting, the Fed's decisions not to raise rates were viewed as a gamble that a slower U.S. economy would help to cap growing inflationary pressures.[14]

Q. Was the Fed attempting to engineer another "soft landing", as it did in the mid-nineties, by holding interest rates steady?

A. Yes, however, as pointed out in an August 2006 article in The Wall Street Journal by E.S. Browning, soft landings – like the one that the Fed managed to pull off during the 1994-95 time frame, in which a recession or a bear market were avoided – rarely happen[15]. Since it began increasing the federal funds rate in June 2004, the Fed had assured investors that it would increase rates at a "measured" pace. Many analysts and economists interpreted this language to mean that former Chairman Greenspan would be cautious in increasing interest rates too quickly in order to avoid what is considered to be one of the Fed's few blunders during Greenspan's tenure – a series of increases in 1994 that caught the

[13] McKinnon, John D. and Greg IP, "Fed Raises Rates by a Quarter Point," The Wall Street Journal, September 22, 2004.

[14] Ip, Greg, "Fed Holds Interest Rates Steady As Slowdown Outweighs Inflation," The Wall Street Journal Online Edition, August 8, 2006.

[15] Browning, E.S, "Not Too Fast, Not Too Slow...," The Wall Street Journal Online Edition, August 21, 2006.

financial markets by surprise after a long period of low rates. The rapid rise in rates contributed to the bankruptcy of Orange County, California and the Mexican peso crisis[16]. According to Mr. Browning, at the time that his article was published, the hope was that Chairman Bernanke would succeed in slowing the economy "just enough to prevent serious inflation, but not enough to choke off growth." In other words, "a 'Goldilocks economy,' in which growth is not too hot and not too cold."

Q. Was the Fed's attempt to engineer a soft landing successful during the period that followed the August 8, 2006 FOMC meeting?

A. It would appear so. Articles published in the mainstream financial press were generally upbeat on the economy during that period. An example of this is an article written by Nell Henderson that appeared in the January 30, 2007 edition of The Washington Post. According to Ms. Henderson, "a year into [Fed Chairman] Bernanke's tenure, the [economic] picture has turned considerably brighter. Inflation is falling; unemployment is low; wages are rising; and the economy, despite continued problems in housing, is growing at a brisk clip."[17]

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[16] Associated Press (AP), "Fed begins debating interest rates" USA Today, June 29, 2004.

[17] Henderson, Nell, "Bullish on Bernanke" The Washington Post, January 30, 2007.

Q. What has been the state of the economy over the past two years?

A. Reports in the mainstream financial press during the majority of 2007 reflected the view that the U.S. economy was slowing as a result of a worsening situation in the housing market and higher oil prices. The overall outlook for the economy was one of only moderate growth at best. Also during this period the Fed's key measure of inflation began to exceed the rate setting body's comfort level.

On August 7, 2007, the FOMC decided not to increase or decrease the federal funds rate for the ninth straight time and left its target rate unchanged at 5.25 percent.[18] At the time of the Fed's decision, analysts speculated that a rate cut over the next several months was unlikely given the Fed's concern that inflation would fail to moderate. However, during this same period, evidence of an even slower economy and a possible recession was beginning to surface. Within days of the Fed's decision to stand pat on rates, a borrowing crises rooted in a deterioration of the market for subprime mortgages and securities linked to them, forced the Fed to inject $24 billion in funds (raised through open market operations) into the credit markets.[19] By Friday, August 17, 2007, after a turbulent week on Wall Street, the Fed made the decision to lower its discount rate (i.e. the rate charged on direct loans to banks) by 50 basis points, from

[18] Ip, Greg, "Markets Gyrate As Fed Straddles Inflation, Growth" The Wall Street Journal, August 8, 2007

[19] Ip, Greg, "Fed Enters Market To Tamp Down Rate" The Wall Street Journal, August 9, 2007

6.25 percent to 5.75 percent, and took steps to encourage banks to borrow from the Fed's discount window in order to provide liquidity to lenders. According to an article that appeared in the August 18, 2007 edition of The Wall Street Journal, [20] the Fed had used all of its tools to restore normalcy to the financial markets. If the markets failed to settle down, the Fed's only weapon left was to cut the Federal Funds rate – possibly before the next FOMC meeting scheduled on September 18, 2007.

Q. Did the Fed cut rates as a result of the subprime mortgage borrowing crises?

A. Yes. At its regularly scheduled meeting on September 18, 2007, the FOMC surprised the investment community and cut both the federal funds rate and the discount rate by 50 basis points (25 basis points more than what was anticipated). This brought the federal funds rate down to a level of 4.75 percent. The Fed's action was seen as an effort to curb the aforementioned slowdown in the economy. Over the course of the next four months, the FOMC reduced the Federal funds rate by a total 175 basis points to a level of 3.00 percent – mainly as a result of concerns that the economy was slipping into a recession. This included a 75 basis point reduction that occurred one week prior to the FOMC's meeting on January 29, 2008.

[20] Ip, Greg, Robin Sidel and Randall Smith, "Fed Offers Banks Loans Amid Crises" The Wall Street Journal, August 9, 2007

Q. What actions has the Fed taken in regard to interest rates over the past year?

A. The Fed made two more rate cuts which included a 75 basis point reduction in the federal funds rate on March 18, 2008 and an additional 25 basis point reduction on April 30, 2008. The Fed's decision to cut rates was based on its belief that the slowing economy was a greater concern than the current rate of inflation (which the majority of FOMC members believed would moderate during the economic slowdown).[21] As a result of the Fed's actions, the federal funds rate was reduced to a level of 2.00 percent. From April 30, 2008 through September 16, 2008, the Fed took no further action on its key interest rate. However, the days before and after the Fed's September 16, 2008 meeting saw longstanding Wall Street firms such as Lehman Brothers, Merrill Lynch and AIG failing as a result of their subprime holdings. By the end of the week, the Bush administration had announced plans to deal with the deteriorating financial condition which had now become a worldwide crisis. The administrations actions included Treasury Secretary Henry Paulson's request to Congress for $700 billion to buy distressed assets as part of a plan to halt what has been described as the worst financial crisis since the 1930's[22]. Amidst this turmoil, the Fed made the decision to cut the federal funds rate by another

[21] Ip, Greg, "Credit Worries Ease as Fed Cuts, Hints at More Relief" The Wall Street Journal, March 19, 2008

[22] Soloman, Deborah, Michael R. Crittenden and Damian Paletta, "U.S. Bailout Plan Calms Markets, But Struggle Looms Over Details" The Wall Street Journal, September 20, 2008

50 basis points in a coordinated move with foreign central banks on October 8, 2008. This was followed by another 50 basis point cut during the regular FOMC meeting on October 29, 2008. At the time of this writing, the federal funds target rate now stands at 0.25 percent, the result of a 75 basis point cut announced on December 16, 2008. After a two-day FOMC meeting on January 28, 2009, the Fed elected not to make any changes in the federal funds rate, stating that rate would remain low "for some time."[23] Presently, the Fed's discount rate is at 0.50 percent, a level not seen since 1940s.[24] Based on data released during the early part of December 2008, the U.S. is now officially in a recession which began in December of 2007.

Q. Putting this all into perspective, how have the Fed's actions since 2000 affected benchmark rates?

A. U.S. Treasury instruments are for the most part still at historically low levels. The Fed's actions have also had the overall effect of reducing the cost of many types of business and consumer loans. As can be seen in Schedule WAR-8, the previously mentioned federal discount rate (the rate charged to the Fed's member banks), has fallen to 0.50 percent from 5.86 percent in 2007.

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[23] Hilsenrath, Jon and Liz Rappaport, "Fed Weighs Idea of Buying Treasurys as Focus Shifts" The Wall Street Journal, January 29, 2009

[24] Hilsenrath, Jon, "Fed Cuts Rates Near Zero to Battle Slump" The Wall Street Journal, December 17, 2008

Q. What has been the trend in other leading interest rates over the last year?

A. As of January 23, 2009, the leading interest rates have all dropped from the levels that existed a year ago (Attachment E, Value Line Selection & Opinion page 3737). The prime rate has fallen from 7.25 percent a year ago to 3.25 percent. The benchmark federal funds rate, just discussed, has decreased from 4.25 percent, in January 2008, to a level of 0.25 percent (as a result of the December 16, 2008 rate cut discussed above). The yields on all of the non-inflation protected maturities of U.S. Treasury instruments exhibited in my Attachment E have also decreased over the past year. A previous trend, described by former Chairman Greenspan as a "conundrum"[25], in which long-term rates fell as short-term rates increased, thus creating a somewhat inverted yield curve that existed as late as June 2007, is completely reversed and a more traditional yield curve (one where yields increase as maturity dates lengthen) presently exists (Attachment E). The 5-year Treasury yield, used in my CAPM analysis, has fallen from 3.01 percent, in January 2008, to 1.35 percent as of January 14, 2009. The 1-Year Treasury constant maturity rate also decreased from 2.87 percent over the past year to 0.41 percent. These current yields are considerably lower than corresponding yields that existed during the early nineties and at the beginning of the current decade (as can be seen on Schedule WAR-8).

[25] Wolk, Martin, "Greenspan wrestling with rate 'conundrum'," MSNBC, June 8, 2005

Q. What is the current outlook for the economy?

A. Value Line's analysts have been decidedly pessimistic in their outlook on the economy as of late and had this to say in their Economic and Stock Market Commentary that appeared in the December 12, 2008 edition of Value Line's Selection and Opinion publication:

> **The economic picture continues to darken**, with data recently showing additional slippage in manufacturing activity (to a 26-year low), a sharp decline in construction spending, and another setback in nonmanufacturing. Add to this, expectations for a weak holiday shopping season and for new turmoil in the housing and automobile industries and it is not hard to make a case that the current quarter could see a drop in the U.S. gross domestic product of 3% to 5%.

Value Line's analysts went on to state:

> **We face several difficult quarters up ahead**. Our sense is that the first and second quarters of 2009 will see declines in business activity of 2% to 3%, as the broad contraction in the economy drones on for a possible six to nine months more. At this point, none of the consumer and industrial markets that we view as critical to a sustained revival in economic activity (such as the housing, retail, auto, and manufacturing sectors) appears to be even close to bottoming out.

Q. What is Value Line's outlook for credit availability and interest rates?

A. In the Selection and Opinion publication noted above, Value Line's analysts had this to say:

> **Challenges will await the Obama Administration and the Federal Reserve**. Those challenges are likely to center around the need for greater credit availability, more lending by the banks, the adoption of a program to revive the auto industry, the passage of an effective stimulus plan, and, possibly, further in interest rate cuts. How well these issues are addressed will go a long way toward determining the severity of the recession, which the National Bureau of Economic Research now claims has been under way since December of 2007.

Value Line's analysts continued to state:

> **It is likely to be late next year before we see a durable economic comeback start to take hold**. Once that recovery does unfold, it is likely

> to be led, ironically, by the housing market, which was the first area of the economy to falter and could be the first to revive thanks to falling home prices and lower mortgage rates.

In its January 23, Selection and Opinion publication, Value Lines Analysts were somewhat more optimistic and stated the following:

> We continue to have hopes for a second-half recovery. Our forecast reflects expectations that the various rescue packages already in place and the massive efforts that are expected to follow should give the flagging economy enough of a lift by midyear for GDP to perhaps start to increase modestly by the third quarter of this year. That possible recovery is likely to be tepid and uneven in its early stages.

Q. How has the current economic environment of lower interest rates affected various regulated utility industries as a whole?

A. Value Line analyst Nils C. Van Liew took note of the environment of low interest rates that existed in the early part of 2007. In Value Line's Electric Utility (East) Industry update dated March 2, 2007, Mr. Van Liew had this to say:

> **Low Interest Rates.** Several factors are, no doubt, driving the electric utilities' strong share-price performance. Perhaps most important is a benign interest-rate environment. Utilities frequently tap the credit markets to fund their operations. (Low interest rates mean they can cost effectively build new power plants and maintain existing ones.) "Cheap money" also tends to drive economic expansion, thereby increasing electricity demand. That said, interest rates should remain relatively low, though the likelihood that the Federal Reserve eases (monetary) policy is small, given persistent inflation concerns.

While Mr. Van Liew's views appeared in Value Line's Electric Utility Industry update, I believe his comments hold true for all regulated utilities including the water and natural gas distribution segments. Given the fact that interest rates are even lower now than they were at the time of Mr.

Van Liew's writing, and A-rated utility bond rates are currently lower than their 2007 averages (Schedule WAR 8), I believe that his views are still valid.

Q. Has the subprime mortgage crises had an impact on borrowing?

A. Yes. The situation has had a strong impact on liquidity for both banks and the capital markets. Hopefully the actions of both the U.S. Treasury and the Fed will succeed in eliminating the credit crunch that presently exists and restore the credit markets to their pre-subprime status.

Q. How are water utilities faring in the current economic environment?

A. Although there are some concerns regarding long-term infrastructure requirements, water utilities appear to be doing well according to Value Line analyst Andre J. Costanza. In the October 24, 2008 quarterly update on the water utility industry Mr. Costanza stated the following:

> The Water Utility Industry has held up relatively well over the past few months. Although the broad market has been sent into a tailspin by growing economic uncertainties and a tightening credit market, water utility stocks have given little, if any, ground, and have thus jumped into the middle of the pack of The Value Line Investment Survey for Timeliness. Companies here are enjoying an increasingly favorable regulatory environment, but the primary reason for the share-price strength boils down to their perceived safety. Indeed, because of the steady stream of income these stocks generate and the necessity for water itself, the group provides shelter for investors looking to get out of the treacherous economic waters that have been pulling many under without having to take too conservative a stance. With no end to the volatility in sight, these stocks are likely to continue outpacing the broad market averages over the coming six to 12 months.

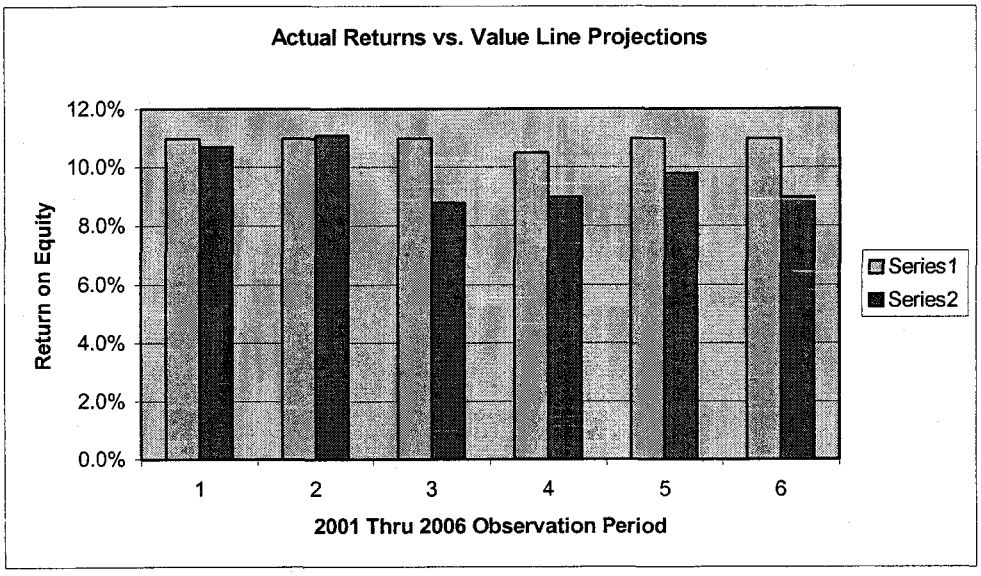
Mr. Costanza reiterated his sentiments on the water utility industry in the most recent Value Line update published on January 23, 2009:

> Not much has changed in the Water Utility Industry since our October report. Stocks here have held their ground for the most part, whereas the broader market continued to struggle with ongoing economic uncertainty. Although an improving regulatory environment has played a hand, the industry is really benefiting from the its perceived safety, stemming from the necessity of water itself as well as the steady stream of income that the stocks here generate. The group as a whole ranks near the top of the Value Line Investment Survey for Timeliness and should continue to do well over the next six to 12 months, as investors look for a place to ride out the economic turbulence that is likely to persist.

Q. What has been the trend in Value Line's return on common equity projections for the water utility industry within the last eight years?

A. Up until 2005, and with the exception of 2003, Value Line's analysts have been making downward projections on water industry book returns on common equity ("ROE"). In addition to the downward trend in projections that I just addressed (exhibited in Attachment D), Value Line's analysts have been somewhat more optimistic in their forward-looking one-year and long-term projections. As can be seen in the chart below, Value Line's analysts have been somewhat high in their coming year projections on ROE.

...



The bar chart above illustrates Value Line's water utility industry projections on ROE (the lighter bar identified as series 1), over the 2001 to 2006 period, versus the actual returns (the darker bar identified as series 2) that actually occurred during that same time frame (observation periods 1 through 6). The actual basis point spreads between the Value Line projections and the actual returns on ROE are as follows:

Year	Value Line Projected	Actual Book Return on ROE	Difference
2001	11.0%	10.7%	-30 Basis Points
2002	11.0%	11.1%	+10 Basis Points
2003	10.5%	8.8%	-170 Basis Points
2004	11.0%	9.0%	-200 Basis Points
2005	11.0%	9.8%	-120 Basis Points
2006	11.0%	9.0%	-200 Basis Points

As can be seen above, with the exception of the 2002 operating period, Value Line's analyst's projections on water utility ROE's from one year out were 30 to 200 basis points higher than the actual returns booked by the

water utilities. This is why I rarely rely on projections at face value, and only use Value Line's and Zacks' analyst's projections as guides in developing my growth estimates for the DCF model. According to the most recent Value Line update for the water utility industry, average returns on common equity for the industry are expected to range from 6.00 percent in 2008 to 7.50 percent through the end of 2013.

Q. After weighing the economic information that you've just discussed, do you believe that the 8.31 percent cost of equity capital that you have estimated is reasonable for Johnson Utilities?

A. I believe that my recommended 8.31 percent cost of equity will provide Johnson Utilities with a reasonable rate of return on the Company's invested capital when economic data on interest rates (that are low by historical standards), the current slowdown in growth in new housing construction, and the Fed's ability to keep inflation in check are all taken into consideration. As I noted earlier, the Hope decision determined that a utility is entitled to earn a rate of return that is commensurate with the returns it would make on other investments with comparable risk. I believe that my cost of equity analysis, which is an average of the results of both the DCF and CAPM models, has produced such a return.

COST OF DEBT

Q. Have you reviewed Johnson Utilities' testimony on the Company-proposed cost of long-term debt?

A. Yes.

Q. How did Johnson Utilities calculate the Company-proposed cost of long-term debt?

A. The Company-proposed 8.00 percent cost of long-term debt represents the interest rate associated with a promissory note[26] for $772,000 (Attachment F). The loan agreement was entered into by Johnson Utilities and the Company's Managing Member, George Johnson December 31, 1999. Under the terms of the loan agreement Johnson Utilities is required to make only quarterly interest payments of 8.00 percent per annum over the ten year life of the loan and to make a balloon payment of the principal amount, plus any accrued interest, on December 31, 2009.

Q. have you accepted the Company-proposed 8.00 percent cost of long-term debt?

A. Yes.

[26] Obtained through ACC Staff data request JMM 1-54.

CAPITAL STRUCTURE

Q. Have you reviewed Johnson Utilities' testimony regarding the Company's proposed capital structure?

A. Yes.

Q. Please describe the Company's proposed capital structure.

A. The Company is proposing a Test Year capital structure comprised of 2.79 percent long-term debt and 97.21 percent common equity.

Q. Is Johnson Utilities' capital structure in line with industry averages?

A. No. Johnson Utilities' capital structure is much heavier in equity than the capital structures of the water companies included in my cost of capital analysis (Schedule WAR-9). The capital structures for those utilities averaged 50.2 percent for debt and 49.8 percent for equity (49.7 percent common equity + 0.1 percent preferred equity).

The same is true when Johnson Utilities' capital structure is compared to the LDC's in my sample. The capital structures for those utilities averaged 45.7 percent for debt and 54.3 percent for equity (53.6 percent common equity + 0.7 percent preferred equity).

...

Q. In terms of risk, how does Johnson Utilities' capital structure compare to the water utilities in your sample?

A. The water utilities in my sample would be considered as having a higher level of financial risk (i.e. the risk associated with debt repayment) because of their higher levels of debt and lower levels of common equity. The additional financial risk is due to debt leverage which is embedded in the cost of equities derived for those companies through the DCF analysis. Thus, the cost of equity derived in my DCF analysis is applicable to companies that are more leveraged and, theoretically speaking, riskier than a utility with a lower level of debt similar to Johnson Utilities'. In the case of a publicly traded company, such as those included in my proxy, a company with Johnson Utilities' level of debt would be perceived as having a lower level of financial risk and would therefore also have a lower expected return on common equity.

Q. What capital structure are you proposing for Johnson Utilities?

A. I am recommending a capital structure which is comprised of 40.00 percent long-term debt and 60.00 percent common equity.

Q. Have you made an adjustment to your cost of common equity estimate based on the aforementioned perception of lower financial risk?

A. No. The higher level of equity in my recommended hypothetical capital structure will compensate the Company's shareholders for any perceived

higher levels of company-specific business risk that they believe Johnson Utilities faces by providing a higher weighted cost of common equity.

WEIGHTED COST OF CAPITAL

Q. How does the Company's proposed weighted cost of capital compare with your recommendation?

A. The Company has proposed a weighted cost of capital of 10.43 percent. This figure is the result of a weighted average of Johnson Utilities' proposed 8.00 percent cost of long-term debt and 10.50 percent cost of common equity capital. The Company-proposed 10.43 percent weighted cost of capital is 225 basis points higher than the 8.18 percent weighted cost of capital that I am recommending.

COMMENTS ON JOHNSON UTILITIES' COST OF EQUITY CAPITAL TESTIMONY

Q. How does your recommended cost of equity capital compare with the cost of equity capital proposed by the Company?

A. The Company's cost of capital witness, Mr. Bourassa is recommending a cost of common equity of 10.50 percent. His 10.50 percent cost of equity capital is 2.19 basis points higher than the 8.31 percent cost of equity capital that I have calculated.

...

Q. What methods did Mr. Bourassa use to arrive at his cost of common equity for Johnson Utilities?

A. Mr. Bourassa used both the DCF and CAPM methods. His DCF analysis relies on two constant growth versions of the DCF model that are similar to the model that I have used. His first constant growth model relies only on earnings growth estimates for the "g" component of the model while his second constant growth model relies on sustainable growth estimates for the "g" component. Mr. Bourassa also uses a two-stage growth version of the DCF model. The results of his DCF analysis range from 9.20 percent to 11.30 percent. His CAPM analysis uses the same model that I have used but he obtains two different results: one obtained by using an historical risk premium and the other by using a current market risk premium. His CAPM analysis produces results of 10.80 percent using an historical risk premium and 13.40 percent using a current market risk premium. His overall CAPM results range from 10.00 percent to 12.30 percent.

DCF Comparison

Q. What are the main reasons for the difference in the results that you obtained from your DCF analysis and the results that Mr. Bourassa obtained from his DCF analysis using the constant growth model?

A. Mr. Bourassa conducted his analysis in the first quarter of 2008 and consequently much of the data that he used in his analysis is now dated.

This can be seen in a price comparison of three of the water company stocks that we both used in our samples: The difference between the average closing stock prices used in my DCF model and spot prices used by Mr. Bourassa in his DCF models are as follows:

	Rigsby	Bourassa	Difference
AWR	$31.77	$33.15	- $1.38
CWT	$42.48	$35.77	$6.71
WTR	$19.85	$19.81	$0.04

Q. What is the main difference between your constant growth DCF results and Mr. Bourassa's first constant growth model which relied strictly on earnings growth?

A. In respect to Mr. Bourassa's first constant growth model, which relied strictly on earnings growth, there is a 17 basis point difference between the average dividend yields of the three water utilities that our samples have in common; his 3.05 to my 2.88. However, there is a 116 basis point difference between his 7.67 percent average growth estimate ("g") for the three common utilities (i.e. AWR, CWT, and WTR) as opposed to my 6.51 percent estimate which also takes into account other growth estimates on dividends and book value. Subsequently Mr. Bourassa's DCF estimate, relying only on earnings growth, is 10.74 percent as opposed to my estimate of 9.39 percent which takes into account more recent data on

stock prices and growth projections for earnings, dividends and book value on the three water utilities our samples have in common.

Q. Please explain the main difference between your constant growth DCF results and Mr. Bourassa's second constant growth model which relied on sustainable growth?

A. The same 17 basis point difference between our estimated dividend yields exists in Mr. Bourassa's sustainable growth version of the constant growth model. However, his estimate for the "g" component is seriously flawed. As I noted earlier in my testimony, Value Line does not provide long-term projections on earnings, dividends and book value on the other three water utilities used by Mr. Bourassa in his sample. Consequently, Mr. Bourassa uses an unrealistic 5.97 percent average of his growth estimates for AWR, CWT and WTR for the other three water utilities included in his sample as opposed to using actual accounting information that is specific to those water utilities. This has the effect of increasing his DCF model's median average estimate by 30 basis points.

Q. Did you conduct a two-stage DCF analysis like the one conducted by Mr. Bourassa?

A. No. Primarily because the growth rate component that I estimated for my single-stage model already takes into consideration both the near-term and long-term growth rate projections that Mr. Bourassa averaged in his

multi-stage model. This being the case, I saw no need to conduct a separate DCF analysis.

CAPM Comparison

Q. What are the main differences between your CAPM results and Mr. Bourassa's CAPM results?

A. The main differences between our CAPM results is attributable to the selection of U.S. Treasury instruments used as inputs for the risk-free rate of return and the time period that has expired since Mr. Bourassa filed his direct testimony. As I explained in my testimony on the economy, the interest rates on U.S. Treasury instruments have fallen over the past year as a result of the Fed's rate cutting actions (Attachment E). In addition, Mr. Bourassa tends to rely on longer term maturities greater than five years that are unrealistic proxies when one takes into account that utilities generally file for new rates every three to five years.

Q. Have you updated Mr. Bourassa's CAPM inputs?

A. Yes. Based on data for the week ended January 23, 2009 (obtained in a Federal Reserve Statistical Release dated February 2, 2009), the average yield of the 5, 7 and 10-year U.S. treasury instruments, that Mr. Bourassa used as the risk free rate in his historical market risk premium CAPM model, was 2.04 percent as opposed to the average yield of 3.40 percent that he relied on. The yield on the 30-year rate was 3.17 percent as

opposed to the 4.70 percent rate that Mr. Bourassa used in his current market risk premium CAPM model.

Q. How did Mr. Bourassa arrive at his final 10.50 percent cost of common equity for Johnson Utilities?

A. Mr. Bourassa's final estimate of 10.50 percent is based upon his review of the results of his various DCF and CAPM models, along with consideration of other factors relevant to Johnson Utilities. He states that he believes that the 10.50 percent figure is a conservative estimate due to Johnson Utilities' smaller size and higher operational/business risks are taken into consideration.

Q. Does your silence on any of the issues, matters or findings addressed in the testimony of Mr. Bourassa or any other witness for Johnson Utilities constitute your acceptance of their positions on such issues, matters or findings?

A. No, it does not.

Q. Does this conclude your testimony on Johnson Utilities?

A. Yes, it does.

Appendix 1

Qualifications of William A. Rigsby, CRRA

EDUCATION:

University of Phoenix
Master of Business Administration, Emphasis in Accounting, 1993

Arizona State University
College of Business
Bachelor of Science, Finance, 1990

Mesa Community College
Associate of Applied Science, Banking and Finance, 1986

Society of Utility and Regulatory Financial Analysts
38th Annual Financial Forum and CRRA Examination
Georgetown University Conference Center, Washington D.C.
Awarded the Certified Rate of Return Analyst designation
after successfully completing SURFA's CRRA examination.

Michigan State University
Institute of Public Utilities
N.A.R.U.C. Annual Regulatory Studies Program, 1997 &1999

Florida State University
Center for Professional Development & Public Service
N.A.R.U.C. Annual Western Utility Rate School, 1996

EXPERIENCE:

Public Utilities Analyst V
Residential Utility Consumer Office
Phoenix, Arizona
April 2001 – Present

Senior Rate Analyst
Accounting & Rates - Financial Analysis Unit
Arizona Corporation Commission, Utilities Division
Phoenix, Arizona
July 1999 – April 2001

Senior Rate Analyst
Residential Utility Consumer Office
Phoenix, Arizona
December 1997 – July 1999

Utilities Auditor II and III
Accounting & Rates – Revenue Requirements Analysis Unit
Arizona Corporation Commission, Utilities Division
Phoenix, Arizona
October 1994 – November 1997

Tax Examiner Technician I / Revenue Auditor II
Arizona Department of Revenue
Transaction Privilege / Corporate Income Tax Audit Units
Phoenix, Arizona
July 1991 – October 1994

Appendix 1

RESUME OF RATE CASE AND REGULATORY PARTICIPATION

Utility Company	Docket No.	Type of Proceeding
ICR Water Users Association	U-2824-94-389	Original CC&N
Rincon Water Company	U-1723-95-122	Rate Increase
Ash Fork Development Association, Inc.	E-1004-95-124	Rate Increase
Parker Lakeview Estates Homeowners Association, Inc.	U-1853-95-328	Rate Increase
Mirabell Water Company, Inc.	U-2368-95-449	Rate Increase
Bonita Creek Land and Homeowner's Association	U-2195-95-494	Rate Increase
Pineview Land & Water Company	U-1676-96-161	Rate Increase
Pineview Land & Water Company	U-1676-96-352	Financing
Montezuma Estates Property Owners Association	U-2064-96-465	Rate Increase
Houghland Water Company	U-2338-96-603 et al	Rate Increase
Sunrise Vistas Utilities Company – Water Division	U-2625-97-074	Rate Increase
Sunrise Vistas Utilities Company – Sewer Division	U-2625-97-075	Rate Increase
Holiday Enterprises, Inc. dba Holiday Water Company	U-1896-97-302	Rate Increase
Gardener Water Company	U-2373-97-499	Rate Increase
Cienega Water Company	W-2034-97-473	Rate Increase
Rincon Water Company	W-1723-97-414	Financing/Auth. To Issue Stock
Vail Water Company	W-01651A-97-0539 et al	Rate Increase
Bermuda Water Company, Inc.	W-01812A-98-0390	Rate Increase
Bella Vista Water Company	W-02465A-98-0458	Rate Increase
Pima Utility Company	SW-02199A-98-0578	Rate Increase

RESUME OF RATE CASE AND REGULATORY PARTICIPATION (Cont.)

Utility Company	Docket No.	Type of Proceeding
Pineview Water Company	W-01676A-99-0261	WIFA Financing
I.M. Water Company, Inc.	W-02191A-99-0415	Financing
Marana Water Service, Inc.	W-01493A-99-0398	WIFA Financing
Tonto Hills Utility Company	W-02483A-99-0558	WIFA Financing
New Life Trust, Inc. dba Dateland Utilities	W-03537A-99-0530	Financing
GTE California, Inc.	T-01954B-99-0511	Sale of Assets
Citizens Utilities Rural Company, Inc.	T-01846B-99-0511	Sale of Assets
MCO Properties, Inc.	W-02113A-00-0233	Reorganization
American States Water Company	W-02113A-00-0233	Reorganization
Arizona-American Water Company	W-01303A-00-0327	Financing
Arizona Electric Power Cooperative	E-01773A-00-0227	Financing
360networks (USA) Inc.	T-03777A-00-0575	Financing
Beardsley Water Company, Inc.	W-02074A-00-0482	WIFA Financing
Mirabell Water Company	W-02368A-00-0461	WIFA Financing
Rio Verde Utilities, Inc.	WS-02156A-00-0321 et al	Rate Increase/ Financing
Arizona Water Company	W-01445A-00-0749	Financing
Loma Linda Estates, Inc.	W-02211A-00-0975	Rate Increase
Arizona Water Company	W-01445A-00-0962	Rate Increase
Mountain Pass Utility Company	SW-03841A-01-0166	Financing
Picacho Sewer Company	SW-03709A-01-0165	Financing
Picacho Water Company	W-03528A-01-0169	Financing
Ridgeview Utility Company	W-03861A-01-0167	Financing
Green Valley Water Company	W-02025A-01-0559	Rate Increase
Bella Vista Water Company	W-02465A-01-0776	Rate Increase
Arizona Water Company	W-01445A-02-0619	Rate Increase

RESUME OF RATE CASE AND REGULATORY PARTICIPATION (Cont.)

Utility Company	Docket No.	Type of Proceeding
Arizona-American Water Company	W-01303A-02-0867 et al.	Rate Increase
Arizona Public Service Company	E-01345A-03-0437	Rate Increase
Rio Rico Utilities, Inc.	WS-02676A-03-0434	Rate Increase
Qwest Corporation	T-01051B-03-0454	Renewed Price Cap
Chaparral City Water Company	W-02113A-04-0616	Rate Increase
Arizona Water Company	W-01445A-04-0650	Rate Increase
Tucson Electric Power	E-01933A-04-0408	Rate Review
Southwest Gas Corporation	G-01551A-04-0876	Rate Increase
Arizona-American Water Company	W-01303A-05-0405	Rate Increase
Black Mountain Sewer Corporation	SW-02361A-05-0657	Rate Increase
Far West Water & Sewer Company	WS-03478A-05-0801	Rate Increase
Gold Canyon Sewer Company	SW-02519A-06-0015	Rate Increase
Arizona Public Service Company	E-01345A-05-0816	Rate Increase
Arizona-American Water Company	W-01303A-06-0014	Rate Increase
Arizona-American Water Company	W-01303A-05-0718	Transaction Approval
Arizona-American Water Company	W-01303A-05-0405	ACRM Filing
UNS Gas, Inc.	G-04204A-06-0463	Rate Increase
Arizona-American Water Company	W-01303A-07-0209	Rate Increase
Tucson Electric Power	E-01933A-07-0402	Rate Increase
Southwest Gas Corporation	G-01551A-07-0504	Rate Increase
Chaparral City Water Company	W-02113A-07-0551	Rate Increase
Arizona-American Water Company	W-01303A-08-0227 et al.	Rate Increase

ATTACHMENT A

Not much has changed in the Water Utility Industry since our October report. Stocks here have held their ground for the most part, whereas the broader market continued to struggle with ongoing economic uncertainty. Although an improving regulatory environment has played a hand, the industry is really benefiting from the its perceived safety, stemming from the necessity of water itself as well as the steady stream of income that the stocks here generate. The group as a whole ranks near the top of the *Value Line Investment Survey* for Timeliness and should continue to do well over the next six to 12 months, as investors look for a place to ride out the economic turbulence that is likely to persist.

The industry's long-term outlook is a completely different story, however. The aforementioned regulatory changes (see below for further details) undoubtedly boosts earnings growth potential, but the capital intensive nature of the water utility business, coupled with many entities' inadequate financial reserves, will offset most of these gains. Although the dividends add some appeal, none of the stocks in this group stand out for 3- to 5-year total return potential.

Favorable Market Environment

The economy's nosedive has been extremely harsh on most, with precipitous share-price declines becoming somewhat commonplace. However, Water Utility stocks have not been as hard hit, with their lower risk profiles enticing many seeking some shelter. This trend is likely to continue, as there is no recovery in sight just yet.

Improving Regulation

State run regulatory authorities were put in place to help maintain a balance of power between customers and providers and ensure fair business practices were followed. However, such has not always been the case, with the commissions typically backing the public during disputes. That said, regulators appear to have turned over a new leaf, handing down more timely and favorable general rate cases of late. The trend is most noticeable in the Golden State, where the California Public Utilities Commission has been delivering corporate friendly decisions on general rate cases. More recently, it has enacted mechanisms set forth in the

INDUSTRY TIMELINESS: 7 (of 99)

Water Action Plan that are aimed at limiting outside influences (such as weather) on usage rates. This ought to help providers generate smoother earnings results.

Downside

Not all is rosy here, however. Infrastructure costs in the United States are high and expected to increase even further going forward as many waterways are outdated and in need of maintenance and or a complete overhaul. Meanwhile, the threat of bioterrorism has prompted the EPA to up its requirements in recent years, leading us to believe that infrastructure repairs will require hundreds of millions of dollars in maintenance during the coming decade. Unfortunately, most of the companies in the sector are strapped for cash and do not have the finances to fund the necessary improvements. They are forced to seek outside financing, thus diluting shareholder gains, or close up shop.

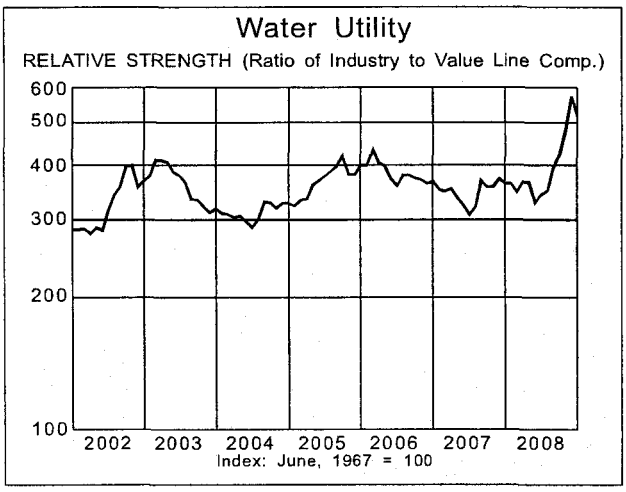
Conclusion

Now more than ever we believe that initiating a position in the Water Utility industry may be prudent. Although the 3- to 5-year prospects of these stocks pale in comparison to the *Value Line* median, projections for many outside the industry are counting on an economic recovery. However, there is no turnaround in sight and a timeline for such a scenario continues to elude Wall Street. That said, water utility stocks are likely to continue to do well regardless of the economic backdrop because water is and will always be a necessity. Even still, it is important to remember that the individual reports of each stock should be carefully reviewed before making a financial commitment. On that note, however, we believe that *California Water Services* is an interesting candidate, given its Above Average (2) ranking for Timeliness. *American Water Works* continues to intrigue us, too, but its short trading history makes it a speculative play. Meanwhile, *Aqua America's* M&A strategy gives it the most upside in our opinion, despite adding more risk.

Andre J. Costanza

Composite Statistics: Water Utility Industry

2004	2005	2006	2007	2008	2009		11-13
1173.6	1256.9	3454.1	3100.0	***3925***	***4300***	Revenues ($mill)	***5275***
127.1	148.2	d5.8	d278.0	***360***	***450***	Net Profit ($mill)	***600***
39.1%	40.5%	NMF	NMF	***38.0%***	***40.0%***	Income Tax Rate	***38.5%***
1.0%	1.1%	3.7%	NMF	***5.0%***	***5.0%***	AFUDC % to Net Profit	***5.0%***
49.1%	50.4%	54.0%	50.1%	***52.0%***	***48.0%***	Long-Term Debt Ratio	***50.0%***
50.7%	49.5%	45.9%	49.9%	***48.0%***	***52.0%***	Common Equity Ratio	***50.0%***
2782.1	3049.9	12110.2	10790.6	***12950***	***13600***	Total Capital ($mill)	***16225***
3836.9	4200.7	13308.3	11522.4	***15180***	***16125***	Net Plant ($mill)	***18350***
6.0%	6.3%	1.6%	NMF	***5.0%***	***5.5%***	Return on Total Cap'l	***6.0%***
9.0%	9.8%	NMF	NMF	***6.0%***	***7.0%***	Return on Shr. Equity	***7.5%***
9.0%	9.8%	NMF	NMF	***6.0%***	***7.0%***	Return on Com Equity	***7.5%***
3.1%	3.7%	NMF	NMF	***3.0%***	***3.0%***	Retained to Com Eq	***3.5%***
66%	62%	NMF	NMF	***51%***	***57%***	All Div'ds to Net Prof	***56%***
25.4	29.4	NMF	NMF	***Bold figures are Value Line estimates***		Avg Ann'l P/E Ratio	***18.0***
.79	1.57	NMF	NMF			Relative P/E Ratio	***1.20***
6.1%	5.2%	2.0%	2.6%			Avg Ann'l Div'd Yield	***2.4%***



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AMER. STATES WATER NYSE-AWR

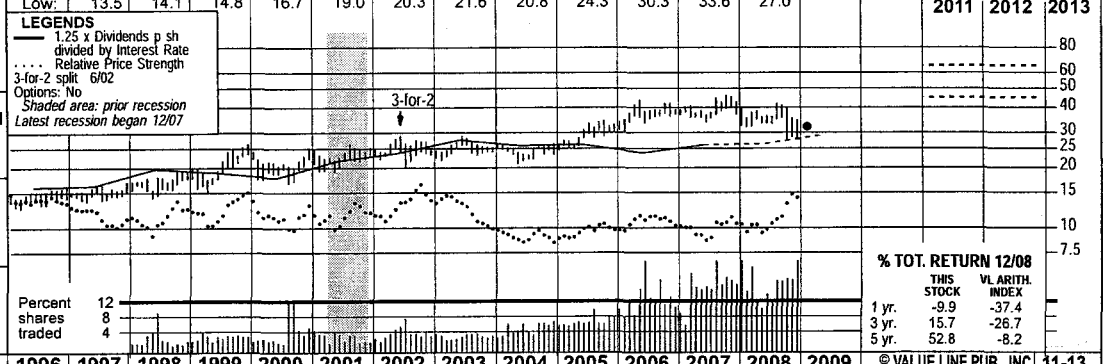
RECENT PRICE 32.07 | P/E RATIO 21.2 (Trailing: 22.3 Median: 20.0) | RELATIVE P/E RATIO 1.81 | DIV'D YLD 3.1% | VALUE LINE

TIMELINESS 3 Lowered 11/14/08
SAFETY 3 New 2/4/00
TECHNICAL 2 Lowered 1/2/09
BETA .95 (1.00 = Market)

High:	17.1	19.5	26.5	25.3	26.4	29.0	29.0	26.8	34.6	43.8	46.1	42.0
Low:	13.5	14.1	14.8	16.7	19.0	20.3	21.6	20.8	24.3	30.3	33.6	27.0

Target Price Range 2011 | 2012 | 2013

LEGENDS
— 1.25 x Dividends p sh divided by Interest Rate
.... Relative Price Strength
3-for-2 split 6/02
Options: No
Shaded area: prior recession
Latest recession began 12/07



2011-13 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	65	(+105%)	21%
Low	45	(+40%)	11%

Insider Decisions

	F	M	A	M	J	J	A	S	O
to Buy	0	0	0	0	2	0	0	0	0
Options	0	0	0	1	0	0	3	0	0
to Sell	0	0	0	1	0	0	3	0	0

Institutional Decisions

	1Q2008	2Q2008	3Q2008
to Buy	53	59	48
to Sell	59	50	54
Hld's(000)	9783	10177	9411

% TOT. RETURN 12/08

	THIS STOCK	VL ARITH. INDEX
1 yr.	-9.9	-37.4
3 yr.	15.7	-26.7
5 yr.	52.8	-8.2

1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	© VALUE LINE PUB., INC.	11-13
10.10	9.27	10.43	11.03	11.37	11.44	11.02	12.91	12.17	13.06	13.78	13.98	13.61	14.06	15.76	17.49	17.15	17.35	Revenues per sh	20.25
1.81	1.67	1.68	1.75	1.75	1.85	2.04	2.26	2.20	2.53	2.54	2.08	2.23	2.64	2.89	3.31	3.25	3.60	"Cash Flow" per sh	4.50
1.15	1.11	.95	1.03	1.13	1.04	1.08	1.19	1.28	1.35	1.34	.78	1.05	1.32	1.33	1.62	1.47	1.75	Earnings per sh A	2.50
.77	.79	.80	.81	.82	.83	.84	.85	.86	.87	.87	.88	.89	.90	.91	.96	1.00	1.08	Div'd Decl'd per sh B■	1.24
2.31	1.90	2.43	2.19	2.40	2.58	3.11	4.30	3.03	3.18	2.68	3.76	5.03	4.24	3.91	2.89	4.40	4.20	Cap'l Spending per sh	4.25
8.85	9.95	10.07	10.29	11.01	11.24	11.48	11.82	12.74	13.22	14.05	13.97	15.01	15.72	16.64	17.53	18.40	18.95	Book Value per sh	19.50
9.96	11.71	11.77	11.77	13.33	13.44	13.44	13.44	15.12	15.12	15.18	15.21	16.75	16.80	17.05	17.23	18.25	19.00	Common Shs Outst'g C	21.00
10.6	13.4	12.8	11.6	12.6	14.5	15.5	17.1	15.9	16.7	18.3	31.9	23.2	21.9	27.7	24.0	23.8		Avg Ann'l P/E Ratio	22.0
.64	.79	.84	.78	.79	.84	.81	.97	1.03	.86	1.00	1.82	1.23	1.17	1.50	1.26	1.50		Relative P/E Ratio	1.45
6.3%	5.3%	6.6%	6.7%	5.8%	5.5%	5.0%	4.2%	4.2%	3.9%	3.6%	3.5%	3.6%	3.1%	2.5%	2.5%	2.9%		Avg Ann'l Div'd Yield	2.4%
						148.1	173.4	184.0	197.5	209.2	212.7	228.0	236.2	268.6	301.4	313	330	Revenues ($mill)	425
						14.6	16.1	18.0	20.4	20.3	11.9	16.5	22.5	23.1	28.0	27.0	33.0	Net Profit ($mill)	53.0
						40.9%	46.0%	45.7%	43.0%	38.9%	43.5%	37.4%	47.0%	40.5%	42.6%	41.0%	40.0%	Income Tax Rate	40.0%
						--	--	--	--	--	--	--	--	12.2%	8.5%	5.0%	5.0%	AFUDC % to Net Profit	Nil
						43.6%	51.0%	47.5%	54.9%	52.0%	52.0%	47.7%	50.4%	48.6%	46.9%	45.0%	44.5%	Long-Term Debt Ratio	44.0%
						55.7%	48.4%	51.9%	44.7%	48.0%	48.0%	52.3%	49.6%	51.4%	53.1%	55.0%	55.5%	Common Equity Ratio	56.0%
						277.1	328.2	371.1	447.6	444.4	442.3	480.4	532.5	551.6	569.4	610	650	Total Capital ($mill)	750
						414.8	449.6	509.1	539.8	563.3	602.3	664.2	713.2	750.6	776.4	825	875	Net Plant ($mill)	1025
						7.0%	6.6%	6.4%	6.1%	6.5%	4.6%	5.2%	5.4%	6.0%	6.7%	6.5%	7.0%	Return on Total Cap'l	9.0%
						9.4%	10.0%	9.2%	10.1%	9.5%	5.6%	6.6%	8.5%	8.1%	9.3%	8.0%	9.0%	Return on Shr. Equity	12.5%
						9.4%	10.1%	9.3%	10.1%	9.5%	5.6%	6.6%	8.5%	8.1%	9.3%	8.0%	9.0%	Return on Com Equity	12.5%
						2.1%	2.9%	3.0%	3.6%	3.3%	NMF	1.0%	2.8%	2.7%	3.9%	2.5%	3.5%	Retained to Com Eq	6.5%
						78%	72%	68%	65%	65%	113%	84%	67%	67%	58%	68%	62%	All Div'ds to Net Prof	49%

CAPITAL STRUCTURE as of 9/30/08
Total Debt $333.1 mill. **Due in 5 Yrs** $50.0 mill.
LT Debt $267.0 mill. **LT Interest** $22.0 mill.
(LT interest earned: 2.5x: total interest coverage: 2.1x) (46% of Cap'l)

Leases, Uncapitalized: None
Pension Assets-12/07 $70.9 mill.
Oblig. $83.4 mill.
Pfd Stock None.

Common Stock 17,288,918 shs.
MARKET CAP: $550 million (Small Cap)

CURRENT POSITION ($MILL.)	2006	2007	9/30/08
Cash Assets	3.2	1.7	1.2
Receivables	14.8	16.1	19.3
Inventory (Avg Cst)	1.6	1.6	1.8
Other	44.8	43.7	54.1
Current Assets	64.4	63.1	76.4
Accts Payable	24.0	29.1	37.6
Debt Due	32.6	37.8	66.1
Other	29.3	27.4	31.3
Current Liab.	85.9	94.3	135.0
Fix. Chg. Cov.	268%	314%	275%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '05-'07 to '11-'13
Revenues	3.5%	4.0%	5.0%
"Cash Flow"	5.0%	4.0%	8.0%
Earnings	3.0%	1.5%	11.0%
Dividends	1.0%	1.5%	5.0%
Book Value	4.5%	4.5%	2.5%

Cal-endar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun. 30	Sep. 30	Dec. 31	Full Year
2005	49.8	60.5	68.1	57.8	236.2
2006	64.3	63.0	75.0	66.3	268.6
2007	72.3	79.3	75.8	74.0	301.4
2008	68.9	80.3	85.3	78.5	313
2009	72.0	85.0	89.0	84.0	330

Cal-endar	EARNINGS PER SHARE A Mar.31	Jun. 30	Sep. 30	Dec. 31	Full Year
2005	.22	.34	.47	.29	1.32
2006	.35	.36	.32	.30	1.33
2007	.40	.42	.44	.35	1.62
2008	.30	.53	.26	.38	1.47
2009	.32	.55	.45	.43	1.75

Cal-endar	QUARTERLY DIVIDENDS PAID B■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2005	.225	.225	.225	.225	.90
2006	.225	.225	.225	.235	.91
2007	.235	.235	.235	.250	.96
2008	.250	.250	.250	.250	1.00
2009					

BUSINESS: American States Water Co. operates as a holding company. Through its principal subsidiary, Golden State Water Company, it supplies water to more than 250,000 customers in 75 communities in 10 counties. Service areas include the greater metropolitan areas of Los Angeles and Orange Counties. The company also provides electric utility services to nearly 23,250 customers in the city of Big Bear Lake and in areas of San Bernardino County. Acquired Chaparral City Water of Arizona (10/00). Has roughly 572 employees. Officers & directors own 4.4% of common stock (4/08 Proxy). Chairman: Lloyd Ross. President & CEO: Floyd Wicks. Inc: CA. Addr.: 630 East Foothill Boulevard, San Dimas, CA 91773. Tele.: 909-394-3600. Internet: www.aswater.com.

American States Water ran into some unexpected problems in the third quarter, as the water utility provider reported earnings of $0.26 a share, which was 41% below last year's mark and well off our estimate. Overall, water usage slipped nearly 7%. The company's Golden State Water Company (GSWC) had trouble offsetting higher operating costs, while its nonregulated subsidiary struggled to lock in expected price redeterminations on its military contracts.

The fourth quarter probably saw earnings get back on track, however. The regulatory environment got much better in late August when the California Public Utilities Commission authorized GSWC to implement a water revenue adjustment mechanism (WRAM) and a modified cost balancing account (MCBA). Although these measures did not go into effect until late November, the benefits are undeniable. MCBA allows the company to recover supply costs due to changes in water supply mix, while basically insulating revenues from incidents that may cause significant variation in usage rates, thus resulting in more predictable earnings. We estimate that American earned $0.38 a share in fourth quarter.

There is probably additional help on the horizon. American has been supplying military bases for less than five years. We believe that this franchise holds promise, and will turn profitable by the end of this year, as the company gets its feet under it. Meanwhile, the regulated business should continue to benefit from the CPUC's ongoing shift to a more business friendly mentality. General rate cases are likely to continue having favorable outcomes. In all, American is pegged to report earnings of $1.75 a share in 2009, representing 19% year-over-year growth.

The stock is neutrally ranked for Timeliness, with the recent earnings hiccup possibly keeping the issue from outperforming the market. Although risk-averse investors may like the good dividend yield, the capital intensive nature of infrastructure maintenance, coupled with the company's dearth of cash, means that it will have to look to outside financiers to foot the bill, diluting shareholder gains to 2011-2013.

Andre J. Costanza *January 23, 2009*

(A) Primary earnings. Excludes nonrecurring gains: '91, 73¢; '92, 13¢; '04, 14¢; '05, 25¢; '06, 6¢. Next earnings report due early February. May not add due to rounding.
(B) Dividends historically paid in early March, June, September, and December. ■ Div'd reinvestment plan available.
(C) In millions, adjusted for splits.

Company's Financial Strength	B++
Stock's Price Stability	80
Price Growth Persistence	75
Earnings Predictability	65

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CALIFORNIA WATER NYSE-CWT

RECENT PRICE	42.26	P/E RATIO	19.7 (Trailing: 21.8 / Median: 22.0)	RELATIVE P/E RATIO	1.68	DIV'D YLD	2.8%	VALUE LINE

TIMELINESS 2 Raised 11/7/08
SAFETY 3 Lowered 7/27/07
TECHNICAL 2 Raised 11/28/08
BETA 1.05 (1.00 = Market)

High:	29.6	33.8	32.0	31.4	28.6	26.9	31.4	37.9	42.1	45.8	45.4	46.6
Low:	18.6	20.8	22.6	21.5	22.9	20.5	23.7	26.1	31.2	32.8	34.2	27.7

Target Price Range 2011 | 2012 | 2013

2011-13 PROJECTIONS

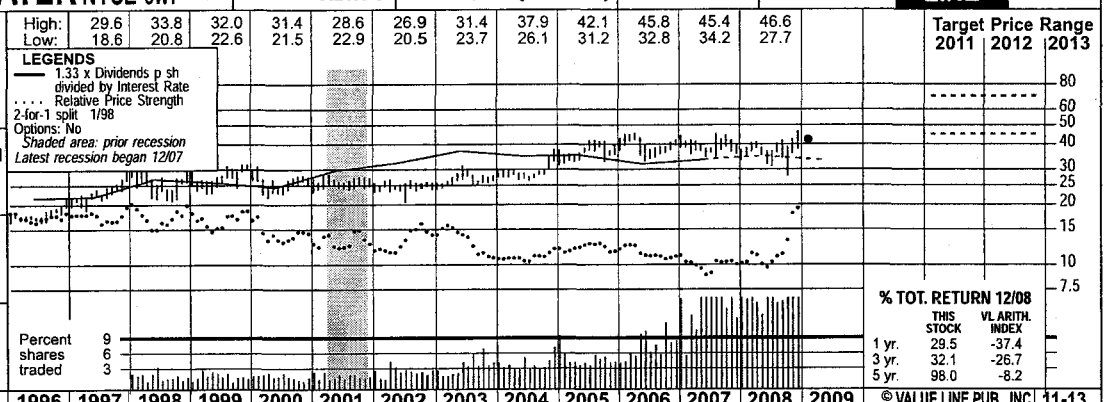
	Price	Gain	Ann'l Total Return
High	70	(+65%)	16%
Low	45	(+5%)	5%

Insider Decisions

	F	M	A	M	J	J	A	S	O
to Buy	0	1	0	0	0	0	0	0	0
Options	0	0	0	0	0	0	0	0	0
to Sell	0	0	0	0	0	0	0	0	0

Institutional Decisions

	1Q2008	2Q2008	3Q2008
to Buy	60	65	49
to Sell	40	45	58
Hld's(000)	10255	9849	9891



% TOT. RETURN 12/08

	THIS STOCK	VL ARITH. INDEX
1 yr.	29.5	-37.4
3 yr.	32.1	-26.7
5 yr.	98.0	-8.2

1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	© VALUE LINE PUB., INC.	11-13
12.29	13.34	12.59	13.17	14.48	15.48	14.76	15.96	16.16	16.26	17.33	16.37	17.18	17.44	16.20	17.76	19.20	20.25	Revenues per sh	22.15
1.92	2.25	2.02	2.07	2.50	2.92	2.60	2.75	2.52	2.20	2.65	2.51	2.83	3.03	2.71	3.12	3.65	4.00	"Cash Flow" per sh	4.65
1.09	1.35	1.22	1.17	1.51	1.83	1.45	1.53	1.31	.94	1.25	1.21	1.46	1.47	1.34	1.50	1.99	2.15	Earnings per sh A	2.65
.93	.96	.99	1.02	1.04	1.06	1.07	1.09	1.10	1.12	1.12	1.12	1.13	1.14	1.15	1.16	1.17	1.18	Div'd Decl'd per sh B ■	1.30
3.09	2.53	2.26	2.17	2.83	2.61	2.74	3.44	2.45	4.09	5.82	4.39	3.73	4.01	4.28	3.68	4.25	4.35	Cap'l Spending per sh	4.80
10.51	10.90	11.56	11.72	12.22	13.00	13.38	13.43	12.90	12.95	13.12	14.44	15.66	15.79	18.15	18.50	18.90	19.60	Book Value per sh C	21.05
11.38	11.38	12.49	12.54	12.62	12.62	12.62	12.94	15.15	15.18	15.18	16.93	18.37	18.39	20.66	20.67	21.00	21.50	Common Shs Outst'g D	23.00
14.1	13.6	14.1	13.7	11.9	12.6	17.8	17.8	19.6	27.1	19.8	22.1	20.1	24.9	29.2	26.1	18.9		Avg Ann'l P/E Ratio	22.0
.86	.80	.92	.92	.75	.73	.93	1.01	1.27	1.39	1.08	1.26	1.06	1.33	1.58	1.37	1.19		Relative P/E Ratio	1.45
6.1%	5.2%	5.8%	6.4%	5.8%	4.6%	4.2%	4.0%	4.3%	4.4%	4.5%	4.2%	3.9%	3.1%	2.9%	3.0%	3.1%		Avg Ann'l Div'd Yield	2.3%
						186.3	206.4	244.8	246.8	263.2	277.1	315.6	320.7	334.7	367.1	403	435	Revenues ($mill)	510
						18.4	19.9	20.0	14.4	19.1	19.4	26.0	27.2	25.6	31.2	40.0	46.0	Net Profit ($mill)	60.0
						36.4%	37.9%	42.3%	39.4%	39.7%	39.9%	39.6%	42.4%	37.4%	39.9%	38.0%	38.5%	Income Tax Rate	39.0%
						--	--	--	--	--	10.3%	3.2%	3.3%	10.6%	8.3%	5.0%	5.0%	AFUDC % to Net Profit	5.0%
						44.2%	46.9%	48.9%	50.3%	55.3%	50.2%	48.6%	48.3%	43.5%	42.9%	45.0%	44.0%	Long-Term Debt Ratio	45.0%
						54.7%	52.0%	50.2%	48.8%	44.0%	49.1%	50.8%	51.1%	55.9%	56.6%	55.0%	56.0%	Common Equity Ratio	55.0%
						308.6	333.8	388.8	402.7	453.1	498.4	565.9	568.1	670.1	674.9	725	760	Total Capital ($mill)	880
						478.3	515.4	582.0	624.3	697.0	759.5	800.3	862.7	941.5	1010.2	1060	1115	Net Plant ($mill)	1275
						7.8%	7.8%	6.8%	5.3%	5.9%	5.6%	6.1%	6.3%	5.2%	5.9%	7.0%	7.5%	Return on Total Cap'l	9.5%
						10.7%	11.2%	10.0%	7.2%	9.4%	7.8%	8.9%	9.3%	6.8%	8.1%	10.0%	11.0%	Return on Shr. Equity	12.5%
						10.8%	11.4%	10.1%	7.2%	9.5%	7.9%	9.0%	9.3%	6.8%	8.1%	10.0%	11.0%	Return on Com Equity	12.5%
						2.8%	3.5%	1.8%	NMF	1.0%	.7%	2.1%	2.1%	1.0%	1.8%	4.0%	5.0%	Retained to Com Eq	6.0%
						74%	70%	82%	119%	90%	91%	77%	78%	86%	77%	61%	55%	All Div'ds to Net Prof	50%

CAPITAL STRUCTURE as of 9/30/08
Total Debt $331.4 mill. **Due in 5 Yrs** $65.0 mill.
LT Debt $288.7 mill. **LT Interest** $21.0 mill.

(LT interest earned: 4.2x; total int. cov.: 3.9x)

Pension Assets-12/07 $85.3 mill. **Oblig.** $105.8 mill.

Pfd Stock None

Common Stock 20,716,702 shs. as of 11/1/08

MARKET CAP: $875 million (Small Cap)

CURRENT POSITION ($MILL.)	2006	2007	9/30/08
Cash Assets	60.3	6.7	9.4
Other	49.3	53.3	74.3
Current Assets	109.6	60.0	83.7
Accts Payable	33.1	36.7	45.6
Debt Due	1.8	2.7	42.7
Other	35.3	30.3	57.7
Current Liab.	70.2	69.7	146.0
Fix. Chg. Cov.	317%	365%	400%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '05-'07 to '11-'13
Revenues	2.0%	0.5%	4.5%
"Cash Flow"	1.5%	4.0%	8.0%
Earnings	-0.5%	4.5%	11.0%
Dividends	1.0%	0.5%	2.0%
Book Value	3.5%	6.0%	3.0%

Cal-endar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2005	60.3	81.5	101.1	77.8	320.7
2006	65.2	81.1	107.8	80.6	334.7
2007	71.6	95.8	113.8	85.9	367.1
2008	72.9	105.6	131.7	92.8	403
2009	80.0	115	140	100	435

Cal-endar	EARNINGS PER SHARE A Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2005	.03	.41	.71	.32	1.47
2006	.04	.31	.68	.31	1.34
2007	.07	.37	.67	.39	1.50
2008	.01	.48	1.06	.44	1.99
2009	.10	.55	1.00	.50	2.15

Cal-endar	QUARTERLY DIVIDENDS PAID B ■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2005	.285	.285	.285	.285	1.14
2006	.2875	.2875	.2875	.2875	1.15
2007	.290	.290	.290	.290	1.16
2008	.293	.293	.293	.293	1.17
2009					

BUSINESS: California Water Service Group provides regulated and nonregulated water service to roughly 463,600 customers in 83 communities in California, Washington, New Mexico, and Hawaii. Main service areas: San Francisco Bay area, Sacramento Valley, Salinas Valley, San Joaquin Valley & parts of Los Angeles. Acquired National Utility Company (5/04); Rio Grande Corp. (11/00). Revenue breakdown, '07: residential, 69%; business, 18%; public authorities, 5%; industrial, 5%; other, 3%. '07 reported depreciation rate: 2.2%. Has roughly 890 employees. Chairman: Robert W. Foy. President & CEO: Peter C. Nelson (4/08 Proxy). Inc.: Delaware. Address: 1720 North First Street, San Jose, California 95112-4598. Telephone: 408-367-8200. Internet: www.calwatergroup.com.

Ongoing improvements on the regulatory front continue to be a windfall for California Water Service Group. The water utility provider reported earnings of $1.06 in the third quarter, 58% better than last year. Revenues increased 16%, to $131.7 million, thanks to favorable decisions regarding General Rate Cases (GRC) by the California Public Utilities Commission (CPUC). Notably, the company recently received a $47 million annual revenue increase retroactive to July 1st for its 2007 GRC. Meanwhile, the CPUC also implemented a water revenue adjustment mechanism, a modified cost-balancing account, and tiered rates. The new mechanisms ought to better enable California to recover incurred costs and generate more consistent revenues.

We expect growth rates to remain solid, albeit slow a bit. Although the aforementioned regulatory changes, along with the recent purchase of Hawaii-based Waikoloa Water and Wastewater Systems, augur well for the top line, the company must still contend with burgeoning infrastructure maintenance expenses (see below). In all, we look for earnings growth to dip back into the high single digits in 2009. Share net is pegged to advance 13% in the fourth quarter.

These shares have picked up considerable steam since our October report. They've swelled roughly 34% in an otherwise sinking market. The issue is now ranked 2 (Above Average) for Timeliness and is expected to continue outperforming the broad market over the next six to 12 months, given the economic uncertainty we envision persisting and the industry's historically safe billing.

That said, these shares do not hold much in the way of 3- to 5-year appreciation potential. Water distribution is a very capital-intense business, with aging infrastructures and increasingly stringent EPA requirements likely to necessitate even higher capital spending budgets going forward. Indeed, CWT is light on cash and will have to look to outside financiers to foot the bill, thus diluting shareholder gains. The stock is testing its all-time high and is already trading within our 2011-2013 Target Price Range. We think there will be a better entry point.

Andre J. Costanza *January 23, 2009*

(A) Basic EPS. Excl. nonrecurring gain (loss): '00, (7¢); '01, 4¢; 02, 8¢. Next earnings report due early Feb.
(B) Dividends historically paid in mid-Feb., May, Aug., and Nov. ■ Div'd reinvestment plan available.
(C) Incl. deferred charges. In '07: $69.7 mill., $3.37/sh.
(D) In millions, adjusted for split.

Company's Financial Strength	B++
Stock's Price Stability	70
Price Growth Persistence	70
Earnings Predictability	75

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AQUA AMERICA NYSE-WTR

RECENT PRICE **19.91** | P/E RATIO **24.6** (Trailing: 25.5 / Median: 24.0) | RELATIVE P/E RATIO **2.10** | DIV'D YLD **2.7%** | VALUE LINE

TIMELINESS 2 Raised 11/14/08
SAFETY 3 Lowered 8/1/03
TECHNICAL 1 Raised 1/9/09
BETA .90 (1.00 = Market)

High:	8.5	11.5	11.5	12.0	14.8	15.0	16.8	18.5	29.2	29.8	26.6	22.0
Low:	4.4	7.2	7.6	6.3	9.4	9.6	11.8	14.2	17.5	20.1	18.9	12.2

Target Price Range 2011 | 2012 | 2013

2011-13 PROJECTIONS

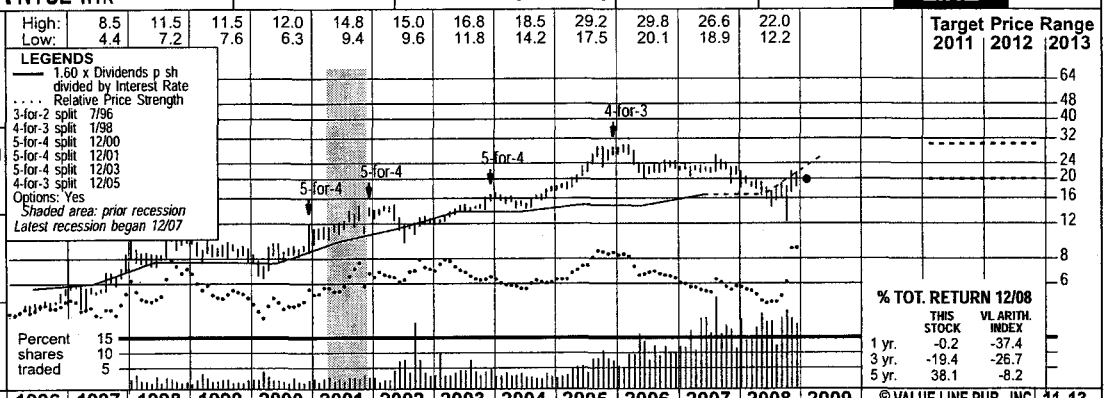
	Price	Gain	Ann'l Total Return
High	30	(+50%)	13%
Low	20	(Nil)	3%

Insider Decisions

	F	M	A	M	J	J	A	S	O
to Buy	0	0	0	0	0	0	0	0	0
Options	1	0	0	1	0	0	0	0	0
to Sell	0	0	0	1	0	0	0	0	0

Institutional Decisions

	1Q2008	2Q2008	3Q2008
to Buy	99	115	103
to Sell	111	111	108
Hld's(000)	62485	66368	62150



% TOT. RETURN 12/08

	THIS STOCK	VL ARITH. INDEX
1 yr.	-0.2	-37.4
3 yr.	-19.4	-26.7
5 yr.	38.1	-8.2

1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	© VALUE LINE PUB., INC.	11-13
1.82	1.70	1.82	1.84	1.86	2.02	2.09	2.41	2.46	2.70	2.85	2.97	3.48	3.85	4.03	4.52	*4.60*	*4.85*	Revenues per sh	*5.45*
.39	.42	.42	.47	.50	.56	.61	.72	.76	.86	.94	.96	1.09	1.21	1.26	1.37	*1.60*	*1.75*	"Cash Flow" per sh	*2.15*
.24	.24	.26	.29	.30	.34	.40	.42	.47	.51	.54	.57	.64	.71	.70	.71	*.77*	*.85*	Earnings per sh A	*1.00*
.20	.21	.21	.22	.23	.24	.26	.27	.28	.30	.32	.35	.37	.40	.44	.48	.51	*.54*	Div'd Decl'd per sh B■	*.60*
.60	.47	.46	.52	.48	.58	.82	.90	1.16	1.09	1.20	1.32	1.54	1.84	2.05	1.79	*1.85*	*1.90*	Cap'l Spending per sh	*2.15*
2.09	2.29	2.41	2.46	2.69	2.84	3.21	3.42	3.85	4.15	4.36	5.34	5.89	6.30	6.96	7.32	*7.60*	*7.95*	Book Value per sh	*9.30*
51.20	59.40	59.77	63.74	65.75	67.47	72.20	106.80	111.82	113.97	113.19	123.45	127.18	128.97	132.33	133.40	*135.25*	*136.00*	Common Shs Outst'g C	*139.00*
12.5	14.4	13.5	12.0	15.6	17.8	22.5	21.2	18.2	23.6	23.6	24.5	25.1	31.8	34.7	32.0	*23.6*		Avg Ann'l P/E Ratio	*25.0*
.76	.85	.89	.80	.98	1.03	1.17	1.21	1.18	1.21	1.29	1.40	1.33	1.69	1.87	1.70	*1.49*		Relative P/E Ratio	*1.65*
6.8%	5.9%	6.0%	6.2%	4.9%	3.9%	2.9%	3.0%	3.3%	2.5%	2.5%	2.5%	2.3%	1.8%	1.8%	2.1%	2.8%		Avg Ann'l Div'd Yield	*2.7%*

CAPITAL STRUCTURE as of 9/30/08
Total Debt $1218.5 mill. **Due in 5 Yrs** $210.0 mill.
LT Debt $1211.4 mill. **LT Interest** $65.0 mill.
(LT interest earned: 3.3x; total interest coverage: 3.1x) (55% of Cap'l)

Pension Assets-12/07 $147.8 mill. **Oblig.** $194.5 mill.

Pfd Stock None
Common Stock 135,163,540 shares as of 10/22/08

MARKET CAP: $2.7 billion (Mid Cap)

1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009		11-13
151.0	257.3	275.5	307.3	322.0	367.2	442.0	496.8	533.5	602.5	*625*	*660*	Revenues ($mill)	*760*
28.8	45.0	50.7	58.5	62.7	67.3	80.0	91.2	92.0	95.0	*105*	*115*	Net Profit ($mill)	*140*
40.5%	38.4%	38.9%	39.3%	38.5%	39.3%	39.4%	38.4%	39.6%	38.9%	*39.0%*	*39.0%*	Income Tax Rate	*39.0%*
--	--	--	--	--	--	--	--	2.9%	3.1%	*2.7%*	*2.8%*	AFUDC % to Net Profit	*2.4%*
52.7%	52.9%	52.0%	52.2%	54.2%	51.4%	50.0%	52.0%	51.6%	55.4%	*55.0%*	*54.5%*	Long-Term Debt Ratio	*52.8%*
46.6%	46.7%	47.8%	47.7%	45.8%	48.6%	50.0%	48.0%	48.4%	44.6%	*45.0%*	*45.5%*	Common Equity Ratio	*47.6%*
496.6	782.7	901.1	990.4	1076.2	1355.7	1497.3	1690.4	1904.4	2191.4	*2275*	*2380*	Total Capital ($mill)	*2745*
609.8	1135.4	1251.4	1368.1	1490.8	1824.3	2069.8	2280.0	2506.0	2792.8	*3000*	*3150*	Net Plant ($mill)	*3600*
7.6%	7.6%	7.4%	7.8%	7.6%	6.4%	6.7%	6.9%	6.4%	5.9%	*6.0%*	*6.0%*	Return on Total Cap'l	*6.0%*
12.3%	12.2%	11.7%	12.3%	12.7%	10.2%	10.7%	11.2%	10.0%	9.7%	*10.0%*	*11.0%*	Return on Shr. Equity	*11.0%*
12.4%	12.3%	11.7%	12.4%	12.7%	10.2%	10.7%	11.2%	10.0%	9.7%	*10.0%*	*11.0%*	Return on Com Equity	*11.0%*
4.5%	4.3%	4.7%	5.1%	5.2%	4.2%	4.6%	4.9%	3.7%	3.2%	*3.5%*	*3.5%*	Retained to Com Eq	*3.0%*
64%	65%	60%	59%	59%	59%	57%	56%	63%	67%	*66%*	*64%*	All Div'ds to Net Prof	*60%*

CURRENT POSITION ($MILL.)	2006	2007	9/30/08
Cash Assets	44.0	14.5	16.0
Receivables	72.1	82.9	94.1
Inventory (AvgCst)	10.2	8.8	11.1
Other	8.4	9.3	8.7
Current Assets	134.7	115.5	129.9
Accts Payable	49.4	45.8	30.8
Debt Due	150.4	80.8	7.1
Other	55.8	56.6	180.4
Current Liab.	255.6	183.2	218.3
Fix. Chg. Cov.	352%	323%	305%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '05-'07 to '11-'13
Revenues	8.0%	9.0%	*4.5%*
"Cash Flow"	9.5%	8.5%	*9.0%*
Earnings	8.5%	7.0%	*6.0%*
Dividends	7.0%	7.5%	*5.5%*
Book Value	10.0%	10.5%	*5.0%*

Cal-endar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2005	114.0	123.1	136.8	122.9	496.8
2006	117.9	131.7	147.0	136.9	533.5
2007	137.3	150.6	165.5	149.1	602.5
2008	139.3	150.8	177.1	*157.8*	*625*
2009	*150*	*160*	*185*	*165*	*660*

Cal-endar	EARNINGS PER SHARE A Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2005	.15	.17	.22	.17	.71
2006	.13	.17	.21	.19	.70
2007	.13	.17	.22	.19	.71
2008	.11	.17	.26	*.23*	*.77*
2009	*.13*	*.19*	*.28*	*.25*	*.85*

Cal-endar	QUARTERLY DIVIDENDS PAID B■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2005	.098	.098	.098	.107	.40
2006	.107	.107	.115	.115	.44
2007	.115	.115	.125	.125	.48
2008	.125	.125	.125	.135	.51
2009					

BUSINESS: Aqua America, Inc. is the holding company for water and wastewater utilities that serve approximately 2.8 million residents in Pennsylvania, Ohio, North Carolina, Illinois, Texas, New Jersey, Florida, Indiana, and five other states. Divested three of four non-water businesses in '91; telemarketing group in '93; and others. Acquired AquaSource, 7/03; Consumers Water, 4/99; and others. Water supply revenues '07: residential, 60%; commercial, 14%; industrial & other, 26%. Officers and directors own 1.4% of the common stock (4/08 Proxy). Chairman & Chief Executive Officer: Nicholas DeBenedictis. Incorporated: Pennsylvania. Address: 762 West Lancaster Avenue, Bryn Mawr, Pennsylvania 19010. Telephone: 610-525-1400. Internet: www.aquaamerica.com.

Aqua America probably ended 2008 on a good note. During the third quarter, earnings increased 18% from the prior year, on the strength of a 7% rise in sales. This was mostly due to pricing initiatives and cost-cutting efforts, and this momentum ought to have carried share net to an 8% gain from the prior year.

Rate increases and restructuring initiatives should bolster top-and bottom-line growth in 2009. The company has a total of eight rate cases in varied stages of the regulatory process, which should add $21 million per annum to the top line, and will probably be instituted in the latter half of 2009. An additional 11 cases were slated to be filed in the December interim. Twenty-five new requests are set to be filed over the next few quarters, and would, if successful, contribute approximately $475 million per annum out to the next decade. Meanwhile, the company has secured funding of $70 million for an infrastructure improvement plan for its Aqua Pennsylvania branch. Available cash flow would be used, and tax-free bonds will also be issued, with $9 million at 6.25% and $13 million at 6.75%, respectively, to help finance this project.

The company is busy on the acquisition front to support sales and earnings growth over the coming 3 to 5 years. In the September interim, Aqua purchased Emlenton Water Co., which serves approximately 1,200 customers in western Pennsylvania. This buyout came after a period of time when Aqua had taken over operations of the entity under an emergency order from the Pennsylvania Public Utility Commission. This will expand its customer base in this region. Other purchases will likely occur well into the next decade to bolster market share.

This stock is ranked to outpace the broader market in the coming six to 12 months. Despite the difficulties in the economic markets, earnings growth should continue at a solid pace over the next few quarters. The markets have shown confidence in these shares, leading to a stock price gain of nearly 14% from our October review. Consequently, the current quotation discounts much of the earnings gains we expect for 2011–2013, limiting its appreciation potential.

John D. Burke *January 23, 2009*

(A) Primary shares outstanding through '96; diluted thereafter. Excl. nonrec. gains (losses): '92, (38¢); '99, (11¢); '00, 2¢; '01, 2¢; '02, 5¢; '03, 4¢. Excl. gain from disc. operations: '96, 2¢. Next earnings report due early February.
(B) Dividends historically paid in early March, June, Sept. & Dec. ■ Div'd. reinvestment plan available (5% discount).
(C) In millions, adjusted for stock splits.

Company's Financial Strength	B+
Stock's Price Stability	90
Price Growth Persistence	70
Earnings Predictability	100

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ATTACHMENT B

INDUSTRY TIMELINESS: 21 (of 99)

The Natural Gas Utility Industry has moved to the top quartile of our industry spectrum for Timeliness since our September review. However, this group has been facing a challenging operating environment due to a tough regulatory climate, frustrating weather conditions, and weakness in the economy. These utilities have remained resilient, though, and have continued to post solid results. Thus, investor sentiment has improved for these good-quality businesses, despite of the turmoil in the world's financial markets.

Macroeconomic Climate

Much has happened since our last report. The global economy has weakened considerably in recent months. Accordingly, the domestic economy has moved into a recession. The weak real estate market and the credit crunch have been among the factors behind the slowdown. Natural Gas Utilities have not been immune to these problems. To be sure, weakness in the housing market has weighed on demand in this industry. Furthermore, consumers are becoming more cost-conscious, which has led to more energy conservation. As a result, usage continues to decline across the industry. What's more, as consumers continue to face this tough economic environment, bill collection will likely become increasingly difficult in the year ahead. Despite these pressures, this sector has become a more attractive choice relative to the rest of the market. Indeed, members in this group tend to offer fairly predictable results, solid balance sheets, and attractive yields.

Regulation

The most important factor for natural gas utilities remains the regulatory environment. This is determined by state commissions that dictate the return on equity these companies can achieve. On point, many of the players in this industry have rate cases pending. The decisions on these cases will be a key factor driving this sector's performance in the near term. If a company receives an unfavorable ruling, it can end up with a tight budget that can hurt profitability. In fact, a few of these utilities appear to be operating with insufficient relief. On the other hand, a positive decision can provide a boost to earnings. Therefore, regulators try to strike a balance between shareholder and consumer interests when evaluating rate cases. All told, investors should keep an eye out for these decisions, which will likely continue to impact this industry's performance going forward.

Weather

The majority of this sector's annual profits will be derived over the next few months during the peak heating seasons. Thus far, earnings have been mostly unimpressive for this group this year. Therefore, the coming months will be key for companies trying to post gains in 2008.

Investors should watch for unseasonably warm or cold weather because these patterns can create volatility for this group. Many enterprises contend with this risk by using weather-adjusted rate mechanisms. This strategy hedges the risk of weather abnormalities, enabling utilities to maintain their steady operating performance.

Conclusion

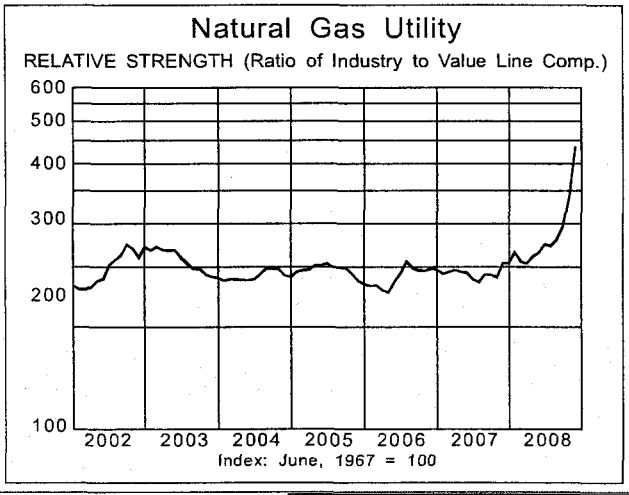
The majority of the stocks in this industry are ranked 3 (Average) for Timeliness. However, *Atmos Energy*, *Laclede Group*, *UGI Corporation*, and *New Jersey Resources* are ranked Above Average for relative price performance. Investors should note that this group has moved to the top quartile of our industry spectrum for Timeliness since our September report. Given these businesses predictable cash flows and solid balance sheets, utilities tend to be more defensive plays when there is volatility in the global economy. However, we recommend interested investors look for companies with a favorable regulatory environment.

The main appeal of this sector is its above-average dividend yield. The average yield for this industry is about 4.4%, which is above the *Value Line* median of 3.5%. Most notably, *AGL Resources*, *Atmos Energy*, *NiSource*, and *Nicor* all offer yields that top the industry norm. Thus, conservative income-oriented accounts may find these stocks of interest.

Richard Gallagher

Composite Statistics: Natural Gas Utility

2004	2005	2006	2007	2008	2009		11-13
21683	28176	30783	30588	*32000*	*34000*	Revenues ($mill)	*40500*
908.1	1087.3	1218.7	1250.4	*1325*	*1400*	Net Profit ($mill)	*1650*
36.4%	36.7%	35.4%	33.5%	*36.0%*	*36.0%*	Income Tax Rate	*36.0%*
4.2%	3.9%	4.0%	4.1%	*4.1%*	*4.1%*	Net Profit Margin	*4.1%*
50.9%	51.3%	51.5%	49.5%	*51.0%*	*51.0%*	Long-Term Debt Ratio	*52.0%*
48.9%	48.6%	48.4%	50.4%	*48.0%*	*48.0%*	Common Equity Ratio	*46.0%*
16806	18933	20687	21592	*22500*	*24000*	Total Capital ($mill)	*27500*
18979	21340	22849	23904	*25250*	*26500*	Net Plant ($mill)	*40000*
6.9%	7.5%	7.5%	7.4%	*6.0%*	*6.0%*	Return on Total Cap'l	*6.0%*
11.0%	11.8%	12.2%	11.5%	*11.0%*	*11.5%*	Return on Shr. Equity	*12.0%*
11.0%	11.8%	12.2%	11.5%	*11.0%*	*11.5%*	Return on Com Equity	*12.0%*
4.3%	4.9%	5.4%	4.9%	*5.3%*	*5.5%*	Retained to Com Eq	*6.0%*
61%	59%	55%	57%	*60%*	*60%*	All Div'ds to Net Prof	*60%*
15.5	15.9	14.7	16.1	*Bold figures are Value Line estimates*		Avg Ann'l P/E Ratio	*13.0*
.82	.85	.79	.85			Relative P/E Ratio	*.85*
3.9%	3.7%	3.8%	3.6%			Avg Ann'l Div'd Yield	*4.6%*
359%	371%	381%	397%	*375%*	*375%*	Fixed Charge Coverage	*400%*



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AGL RESOURCES NYSE-ATG

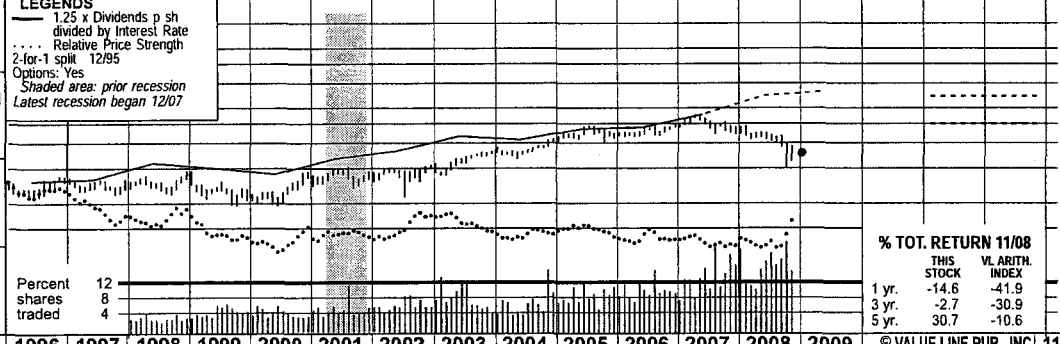
RECENT PRICE **28.54** | P/E RATIO **10.2** (Trailing: 11.0 / Median: 14.0) | RELATIVE P/E RATIO **1.00** | DIV'D YLD **6.0%** | VALUE LINE

TIMELINESS 3 Raised 11/7/08
SAFETY 2 New 7/27/90
TECHNICAL 3 Raised 12/21/07
BETA .75 (1.00 = Market)

High:	21.6	23.4	23.4	23.2	24.5	25.0	29.3	33.7	39.3	40.1	44.7	39.1
Low:	17.8	17.7	15.6	15.5	19.0	17.3	21.9	26.5	32.0	34.4	35.2	24.0

Target Price Range 2011 | 2012 | 2013

LEGENDS
— 1.25 x Dividends p sh divided by Interest Rate
.... Relative Price Strength
2-for-1 split 12/95
Options: Yes
Shaded area: prior recession
Latest recession began 12/07



2011-13 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	55	(+95%)	21%
Low	40	(+40%)	13%

Insider Decisions

	J	F	M	A	M	J	J	A	S
to Buy	0	0	0	0	0	0	0	0	0
Options	3	2	1	0	3	0	0	1	0
to Sell	0	1	0	0	2	0	0	1	0

Institutional Decisions

	1Q2008	2Q2008	3Q2008
to Buy	105	131	92
to Sell	127	106	130
Hld's(000)	47696	46762	48796

% TOT. RETURN 11/08

	THIS STOCK	VL ARITH. INDEX
1 yr.	-14.6	-41.9
3 yr.	-2.7	-30.9
5 yr.	30.7	-10.6

1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	© VALUE LINE PUB., INC.	11-13
20.43	22.73	23.59	19.32	21.91	22.75	23.36	18.71	11.25	19.04	15.32	15.25	23.89	34.98	33.73	32.64	*35.40*	*35.90*	Revenues per sh A	*41.25*
2.31	2.25	2.24	2.33	2.49	2.42	2.65	2.29	2.86	3.31	3.39	3.47	3.29	4.20	4.50	4.64	*4.70*	*4.80*	"Cash Flow" per sh	*5.40*
1.13	1.08	1.17	1.33	1.37	1.37	1.41	.91	1.29	1.50	1.82	2.08	2.28	2.48	2.72	2.72	*2.70*	*2.80*	Earnings per sh A B	*3.15*
1.03	1.04	1.04	1.04	1.06	1.08	1.08	1.08	1.08	1.08	1.08	1.11	1.15	1.30	1.48	1.64	*1.68*	*1.72*	Div'ds Decl'd per sh C■	*1.84*
2.74	2.49	2.37	2.17	2.37	2.59	2.05	2.51	2.92	2.83	3.30	2.46	3.44	3.44	3.26	3.39	*4.20*	*4.35*	Cap'l Spending per sh	*5.00*
9.70	9.90	10.19	10.12	10.56	10.99	11.42	11.59	11.50	12.19	12.52	14.66	18.06	19.29	20.71	21.74	*22.60*	*22.75*	Book Value per sh D	*23.15*
48.69	49.72	50.86	55.02	55.70	56.60	57.30	57.10	54.00	55.10	56.70	64.50	76.70	77.70	77.70	76.40	*77.00*	*78.00*	Common Shs Outst'g E	*80.00*
15.5	17.9	15.1	12.6	13.8	14.7	13.9	21.4	13.6	14.6	12.5	12.5	13.1	14.3	13.5	14.7	*Bold figures are*		Avg Ann'l P/E Ratio	*15.0*
.94	1.06	.99	.84	.86	.85	.72	1.22	.88	.75	.68	.71	.69	.76	.73	.78	*Value Line*		Relative P/E Ratio	*1.00*
5.9%	5.4%	5.9%	6.2%	5.6%	5.4%	5.5%	5.5%	6.2%	4.9%	4.7%	4.3%	3.9%	3.7%	4.0%	4.1%	*estimates*		Avg Ann'l Div'd Yield	*3.9%*

CAPITAL STRUCTURE as of 9/30/08
Total Debt $2444.0 mill. **Due in 5 Yrs** $1088 mill.
LT Debt $1675.0 mill. **LT Interest** $85.0 mill.
(Total interest coverage: 3.8x)

Leases, Uncapitalized Annual rentals $26.0 mill.

Pension Assets-12/07 $383.0 mill. **Oblig.** $427.0 mill.

Pfd Stock None
Common Stock 76,780,439 shs. as of 10/22/08

MARKET CAP: $2.2 billion (Mid Cap)

1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009		11-13
1338.6	1068.6	607.4	1049.3	868.9	983.7	1832.0	2718.0	2621.0	2494.0	*2725*	*2800*	Revenues ($mill) A	*3300*
80.6	52.1	71.1	82.3	103.0	132.4	153.0	193.0	212.0	210.5	*210*	*220*	Net Profit ($mill)	*250*
32.5%	33.1%	34.3%	40.7%	36.0%	35.9%	37.0%	37.7%	37.8%	37.6%	*39.0%*	*38.0%*	Income Tax Rate	*38.0%*
6.0%	4.9%	11.7%	7.8%	11.9%	13.5%	8.4%	7.1%	8.1%	8.4%	*7.7%*	*7.9%*	Net Profit Margin	*7.6%*
47.5%	45.3%	45.9%	61.3%	58.3%	50.3%	54.0%	51.9%	50.2%	50.2%	*49.0%*	*48.0%*	Long-Term Debt Ratio	*45.5%*
47.1%	49.2%	48.3%	38.7%	41.7%	49.7%	46.0%	48.1%	49.8%	49.8%	*51.0%*	*52.0%*	Common Equity Ratio	*54.5%*
1388.4	1345.8	1286.2	1736.3	1704.3	1901.4	3008.0	3114.0	3231.0	3335.0	*3415*	*3425*	Total Capital ($mill)	*3400*
1534.0	1598.9	1637.5	2058.9	2194.2	2352.4	3178.0	3271.0	3436.0	3566.0	*3750*	*3850*	Net Plant ($mill)	*4200*
7.6%	5.7%	7.4%	6.5%	8.1%	8.9%	6.3%	7.9%	8.0%	7.7%	*7.5%*	*7.5%*	Return on Total Cap'l	*8.5%*
11.1%	7.1%	10.2%	12.3%	14.5%	14.0%	11.0%	12.9%	13.2%	12.7%	*12.0%*	*12.5%*	Return on Shr. Equity	*13.5%*
12.3%	7.9%	11.5%	12.3%	14.5%	14.0%	11.0%	12.9%	13.2%	12.7%	*12.0%*	*12.5%*	Return on Com Equity	*13.5%*
4.4%	NMF	3.2%	4.2%	7.0%	6.6%	5.6%	6.2%	6.3%	5.3%	*4.5%*	*5.0%*	Retained to Com Eq	*5.5%*
64%	101%	72%	65%	52%	53%	49%	52%	52%	58%	*62%*	*61%*	All Div'ds to Net Prof	*59%*

CURRENT POSITION ($MILL.)	2006	2007	9/30/08
Cash Assets	20.0	21.0	11.0
Other	1802.0	1790.0	1929.0
Current Assets	1822.0	1811.0	1940.0
Accts Payable	213.0	172.0	181.0
Debt Due	539.0	580.0	769.0
Other	875.0	893.0	872.0
Current Liab.	1627.0	1645.0	1822.0
Fix. Chg. Cov.	397%	391%	390%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '05-'07 to '11-'13
Revenues	3.5%	13.5%	*3.5%*
"Cash Flow"	5.5%	7.0%	*3.5%*
Earnings	7.0%	15.0%	*3.0%*
Dividends	2.5%	4.0%	*4.0%*
Book Value	6.5%	10.5%	*2.0%*

Cal-endar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2005	908	430	387	993	2718
2006	1044	436	434	707	2621
2007	973	467	369	685	2494
2008	1012	444	539	*730*	*2725*
2009	*1040*	*480*	*505*	*775*	*2800*

Cal-endar	EARNINGS PER SHARE B Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2005	1.14	.30	.19	.85	2.48
2006	1.41	.25	.46	.60	2.72
2007	1.29	.40	.17	.86	2.72
2008	1.16	.30	.28	*.96*	*2.70*
2009	*1.20*	*.35*	*.30*	*.95*	*2.80*

Cal-endar	QUARTERLY DIVIDENDS PAID C■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2004	.28	.29	.29	.29	1.15
2005	.31	.31	.31	.37	1.30
2006	.37	.37	.37	.37	1.48
2007	.41	.41	.41	.41	1.64
2008	.42	.42	.42	.42	

BUSINESS: AGL Resources, Inc. is a public utility holding company. Its distribution subsidiaries include Atlanta Gas Light, Chattanooga Gas, and Virginia Natural Gas. The utilities have more than 2.2 million customers in Georgia, Virginia, Tennessee, New Jersey, Florida, and Maryland. Engaged in nonregulated natural gas marketing and other allied services. Also wholesales and retails propane. Deregulated subsidiaries: Georgia Natural Gas markets natural gas at retail. Sold Utilipro, 3/01. Acquired Compass Energy Services, 10/07. Officers/directors own less than 1.0% of common (3/08 Proxy). Pres. & CEO: *John W. Somerhalder II.* Inc.: GA. Addr.: Ten Peachtree Place N.E., Atlanta, GA 30309. Telephone: 404-584-4000. Internet: www.aglresources.com.

Shares of AGL Resources have held up relatively well since our September review, despite considerable weakness in the broader market. The company reported healthy performance in the third quarter. Revenues and share earnings advanced considerably in the recent interim. This was primarily due to strength in the Wholesale Services business, which reported much higher operating income for the period. Elsewhere, performance at the Distribution Operations was helped by greater pipeline replacement revenues for Atlanta Gas Light. However, the utility operations continued to be dampened by weakness in the housing market, and customer growth has slowed significantly in recent times. Despite the challenging economic environment, healthy performance should continue at the company's core businesses. Thus, we anticipate solid results at AGL Resources going forward.

The company continues to progress with its capital projects. The Hampton Roads Crossing Project remains on schedule and within budget. This initiative will connect two pipeline systems crossing the Hampton Roads harbor, and provide for an ample supply of natural gas to the region. The project will likely be completed late in 2009, and ought to earn solid returns for the company. Elsewhere, construction continues on the Spindletop salt dome in Beaumont, Texas. This underground natural gas storage facility will offer up to 12 billion cubic feet (bcf) of gas capacity in two caverns. The project should meet a growing demand for natural gas storage in the region. Meantime, AGL is moving forward with the Magnolia Pipeline Project. This $48 million initiative will provide transportation of regasified liquid natural gas from Elba Island to Atlanta Gas Light in the Macon and Atlanta areas.

Overall, this stock offers attractive total return potential for a utility. We anticipate steady bottom-line growth from 2009 onward, assuming capital projects pay off. Moreover, AGL earns high marks for Safety, Price Stability, and Earnings Predictability. Income investors may find this neutrally-ranked issue's healthy dividend yield appealing. Earnings need to pick up for dividend growth to remain above average, though.

Michael Napoli, CPA *December 12, 2008*

(A) Fiscal year ends December 31st. Ended September 30th prior to 2002.
(B) Diluted earnings per share. Excl. nonrecurring gains (losses): '95, ($0.83); '99, $0.39; '00, $0.13; '01, $0.13; '03, ($0.07); '08, ($0.45). Next earnings report due late January/early February. (C) Dividends historically paid early March, June, Sept., and Dec. ■ Div'd reinvest. plan available. (D) Includes intangibles. At 9/30/08: $418 million, $5.44/share.
(E) In millions, adjusted for stock split.

Company's Financial Strength	B++
Stock's Price Stability	100
Price Growth Persistence	80
Earnings Predictability	85

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ATMOS ENERGY CORP. NYSE-ATO

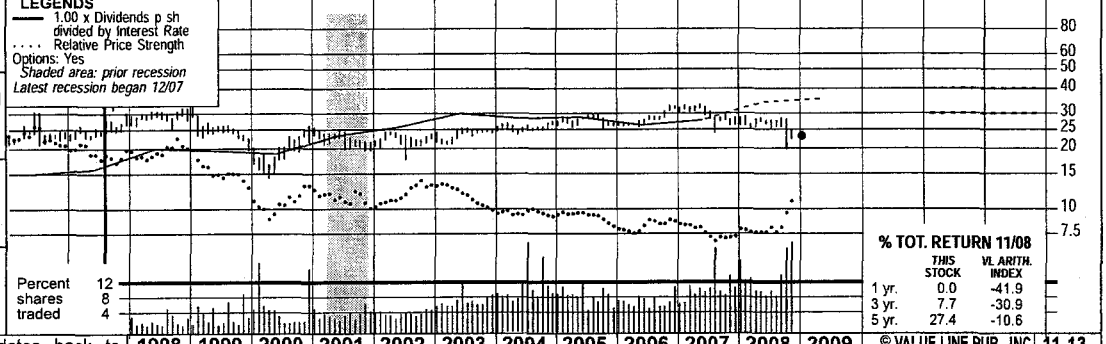
RECENT PRICE	P/E RATIO		RELATIVE P/E RATIO	DIV'D YLD	
23.24	10.8	(Trailing: 11.6 Median: 16.0)	1.06	5.7%	VALUE LINE

TIMELINESS 2 Raised 12/12/08
SAFETY 2 Raised 12/16/05
TECHNICAL 2 Raised 12/12/08
BETA .65 (1.00 = Market)

High:	30.5	32.3	33.0	26.3	25.8	24.5	25.5	27.6	30.0	33.1	33.5	29.3
Low:	22.1	24.8	19.6	14.3	19.5	17.6	20.8	23.4	25.0	25.5	23.9	19.7

Target Price Range 2011 | 2012 | 2013

LEGENDS
— 1.00 x Dividends p sh divided by Interest Rate
.... Relative Price Strength
Options: Yes
Shaded area: prior recession
Latest recession began 12/07



2011-13 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	40	(+70%)	19%
Low	30	(+30%)	11%

Insider Decisions

	J	F	M	A	M	J	J	A	S
to Buy	0	0	1	0	0	0	0	0	0
Options	0	0	0	0	0	0	0	0	0
to Sell	0	0	0	0	0	3	0	1	1

Institutional Decisions

	1Q2008	2Q2008	3Q2008
to Buy	112	119	103
to Sell	103	89	119
Hld's(000)	58504	58318	56301

% TOT. RETURN 11/08

	THIS STOCK	VL ARITH. INDEX
1 yr.	0.0	-41.9
3 yr.	7.7	-30.9
5 yr.	27.4	-10.6

Atmos Energy's history dates back to 1906 in the Texas Panhandle. Over the years, through various mergers, it became part of Pioneer Corporation, and, in 1981, Pioneer named its gas distribution division Energas. In 1983, Pioneer organized Energas as a separate subsidiary and distributed the outstanding shares of Energas to Pioneer shareholders. Energas changed its name to Atmos in 1988. Atmos acquired Trans Louisiana Gas in 1986, Western Kentucky Gas Utility in 1987, Greeley Gas in 1993, United Cities Gas in 1997, and others.

1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	© VALUE LINE PUB., INC.	11-13
27.90	22.09	26.61	35.36	22.82	54.39	46.50	61.75	75.27	66.03	79.35	86.95	Revenues per sh A	93.05
3.38	2.62	3.01	3.03	3.39	3.23	2.91	3.90	4.26	4.14	4.20	4.40	"Cash Flow" per sh	4.65
1.84	.81	1.03	1.47	1.45	1.71	1.58	1.72	2.00	1.94	2.00	2.10	Earnings per sh A B	2.45
1.06	1.10	1.14	1.16	1.18	1.20	1.22	1.24	1.26	1.28	1.30	1.32	Div'ds Decl'd per sh C■	1.40
4.44	3.53	2.36	2.77	3.17	3.10	3.03	4.14	5.20	4.39	5.20	5.65	Cap'l Spending per sh	6.30
12.21	12.09	12.28	14.31	13.75	16.66	18.05	19.90	20.16	22.01	23.65	24.10	Book Value per sh	25.55
30.40	31.25	31.95	40.79	41.68	51.48	62.80	80.54	81.74	89.33	91.00	92.00	Common Shs Outst'g D	115.00
15.4	33.0	18.9	15.6	15.2	13.4	15.9	16.1	13.5	15.9	13.6		Avg Ann'l P/E Ratio	14.5
.80	1.88	1.23	.80	.83	.76	.84	.86	.73	.83	.80		Relative P/E Ratio	.95
3.7%	4.1%	5.9%	5.1%	5.4%	5.2%	4.9%	4.5%	4.7%	4.2%	4.8%		Avg Ann'l Div'd Yield	4.0%
848.2	690.2	850.2	1442.3	950.8	2799.9	2920.0	4973.3	6152.4	5898.4	7221.3	8000	Revenues ($mill) A	10700
55.3	25.0	32.2	56.1	59.7	79.5	86.2	135.8	162.3	170.5	180.3	195	Net Profit ($mill)	280
36.5%	35.0%	36.1%	37.3%	37.1%	37.1%	37.4%	37.7%	37.6%	35.8%	38.4%	38.5%	Income Tax Rate	40.0%
6.5%	3.6%	3.8%	3.9%	6.3%	2.8%	3.0%	2.7%	2.6%	2.9%	2.5%	2.4%	Net Profit Margin	2.6%
51.8%	50.0%	48.1%	54.3%	53.9%	50.2%	43.2%	57.7%	57.0%	52.0%	51.0%	51.0%	Long-Term Debt Ratio	51.0%
48.2%	50.0%	51.9%	45.7%	46.1%	49.8%	56.8%	42.3%	43.0%	48.0%	49.0%	49.0%	Common Equity Ratio	49.0%
769.7	755.1	755.7	1276.3	1243.7	1721.4	1994.8	3785.5	3828.5	4092.1	4170	4450	Total Capital ($mill)	6000
917.9	965.8	982.3	1335.4	1300.3	1516.0	1722.5	3374.4	3629.2	3836.8	4135	4350	Net Plant ($mill)	5800
9.0%	5.1%	6.5%	5.9%	6.8%	6.2%	5.8%	5.3%	6.1%	5.9%	6.0%	6.0%	Return on Total Cap'l	6.0%
14.9%	6.6%	8.2%	9.6%	10.4%	9.3%	7.6%	8.5%	9.8%	8.7%	9.0%	9.0%	Return on Shr. Equity	9.5%
14.9%	6.6%	8.2%	9.6%	10.4%	9.3%	7.6%	8.5%	9.8%	8.7%	9.0%	9.0%	Return on Com Equity	9.5%
6.3%	NMF	NMF	2.1%	1.9%	2.8%	1.7%	2.3%	3.6%	3.0%	3.0%	3.5%	Retained to Com Eq	4.0%
58%	NMF	112%	79%	82%	70%	77%	73%	63%	65%	66%	62%	All Div'ds to Net Prof	58%

CAPITAL STRUCTURE as of 6/30/08
Total Debt $2234.0 mill. **Due in 5 Yrs** $920.0 mill.
LT Debt $2119.7 mill. **LT Interest** $125.0 mill.
(LT interest earned: 2.9x; total interest coverage: 2.8x)
Leases, Uncapitalized Annual rentals $16.9 mill.
Pfd Stock None
Pension Assets-9/07 $389.1 mill. **Oblig.** $335.6 mill.
Common Stock 90,627,522 shs. **as of 7/31/08**
MARKET CAP: $2.1 billion (Mid Cap)

CURRENT POSITION ($MILL.)	2006	2007	6/30/08
Cash Assets	75.8	60.7	46.5
Other	1041.7	1008.2	1350.5
Current Assets	1117.5	1068.9	1397.0
Accts Payable	345.1	355.3	582.4
Debt Due	385.6	154.4	114.3
Other	388.5	410.0	472.1
Current Liab.	1119.2	919.7	1168.8
Fix. Chg. Cov.	408%	405%	410%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '05-'07 to '11-'13
Revenues	8.5%	19.0%	5.5%
"Cash Flow"	4.0%	5.5%	2.0%
Earnings	3.5%	7.5%	4.5%
Dividends	2.5%	1.5%	2.0%
Book Value	7.0%	9.0%	3.5%

Fiscal Year Ends	QUARTERLY REVENUES ($ mill.) A Dec.31	Mar.31	Jun.30	Sep.30	Full Fiscal Year
2005	1371.0	1687.8	909.9	1004.6	4973.3
2006	2283.8	2033.8	863.2	971.6	6152.4
2007	1602.6	2075.6	1218.2	1002.0	5898.4
2008	1657.5	2484.0	1639.1	1440.7	7221.3
2009	1855	2925	1735	1485	8000

Fiscal Year Ends	EARNINGS PER SHARE A B E Dec.31	Mar.31	Jun.30	Sep.30	Full Fiscal Year
2005	.79	1.11	.06	d.21	1.72
2006	.88	1.10	d.22	.25	2.00
2007	.97	1.20	d.15	d.05	1.94
2008	.82	1.24	d.07	.02	2.00
2009	.90	1.30	d.06	d.04	2.10

Cal-endar	QUARTERLY DIVIDENDS PAID C■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2004	.305	.305	.305	.31	1.23
2005	.31	.31	.31	.315	1.25
2006	.315	.315	.315	.32	1.27
2007	.32	.32	.32	.325	1.29
2008	.325	.325	.325	.33	

BUSINESS: Atmos Energy Corporation is engaged primarily in the distribution and sale of natural gas to 3.2 million customers via six regulated natural gas utility operations: Louisiana Division, West Texas Division, Mid-Tex Division, Mississippi Division, Colorado-Kansas Division, and Kentucky/Mid-States Division. Combined 2007 gas volumes: 297 MMcf. Breakdown: 56%, residential; 32%, commercial; 8%, industrial; and 4% other. 2007 depreciation rate 3.7%. Has around 4,470 employees. Officers and directors own approximately 1.8% of common stock (12/07 Proxy). Chairman and Chief Executive Officer: Robert W. Best. Incorporated: Texas. Address: P.O. Box 650205, Dallas, Texas 75265. Telephone: 972-934-9227. Internet: www.atmosenergy.com.

Atmos Energy's core natural gas utility stands to perform decently in fiscal 2009 (began on October 1st). That division should benefit from a rise in throughput, plus more aggressive collection efforts, which should keep bad debt expense under control. Note that revenues from pending rate cases are excluded from our presentation.

We are constructive about the other operations, as well. The regulated transmission and storage segment ought to be boosted by healthy transportation volumes from production in the Barnett Shale region of Texas. Moreover, respectable results seem achievable for the nonregulated marketing segment. But that unit's record showing in fiscal 2006 (when it was able to capture highly favorable arbitrage spreads created by natural gas volatility) probably won't be repeated.

Consolidated share net may rise around 5%, to $2.10, this fiscal year. One threat to this estimate is higher interest expense. The company has normally used short-term commercial paper to finance natural gas purchases. But Atmos had to access a line of credit when the commercial paper market froze. Efficiency gains may provide an offset, though. We expect a similar rate of bottom-line growth (to $2.20 a share) in fiscal 2010.

Steady, albeit unspectacular, annual earnings gains appear to be in store over the 2011-2013 horizon. The utility is one of the country's leading natural gas-only distributors, serving some 3.2 million customers across 12 states. Furthermore, the unregulated segments (contributing between 15% and 35% to net income annually on a historical basis) seem to possess healthy overall prospects. Finally, management should continue to implement its successful strategy of purchasing less-efficient utilities and shoring up their profitability via expense-reduction efforts, rate relief, and aggressive marketing.

These good-quality shares offer a healthy dose of current dividend income, which is adequately covered by earnings. Continued moderate increases in the distribution seem likely, too.

Total return prospects look decent, on a risk-adjusted basis. Also, the stock is ranked 2 (Above Average) for Timeliness.

Frederick L. Harris, III December 12, 2008

(A) Fiscal year ends Sept. 30th. (B) Diluted shrs. Excl. nonrec. items: '99, d23¢; '00, 12¢; '03, d17¢; '06, d18¢; '07, d2¢. Next egs. rpt. due early Feb. (C) Dividends historically paid in early March, June, Sept., and Dec. ■ Div. reinvestment plan. Direct stock purchase plan avail. (D) In millions. (E) Qtrs may not add due to change in shrs outstanding. (F) ATO completed United Cities merger 7/97.

Company's Financial Strength	B+
Stock's Price Stability	100
Price Growth Persistence	40
Earnings Predictability	80

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LACLEDE GROUP NYSE-LG

RECENT PRICE	P/E RATIO		RELATIVE P/E RATIO	DIV'D YLD	
48.89	21.2	(Trailing: 18.4 / Median: 15.0)	2.08	3.1%	VALUE LINE

TIMELINESS **2** Raised 10/10/08
SAFETY **2** Raised 6/20/03
TECHNICAL **1** Raised 12/5/08
BETA .65 (1.00 = Market)

High:	28.6	27.9	27.0	24.8	25.5	25.0	30.0	32.5	34.3	37.5	36.0	55.8
Low:	20.3	22.4	20.0	17.5	21.3	19.0	21.8	26.0	26.9	29.1	28.8	31.9

2011-13 PROJECTIONS

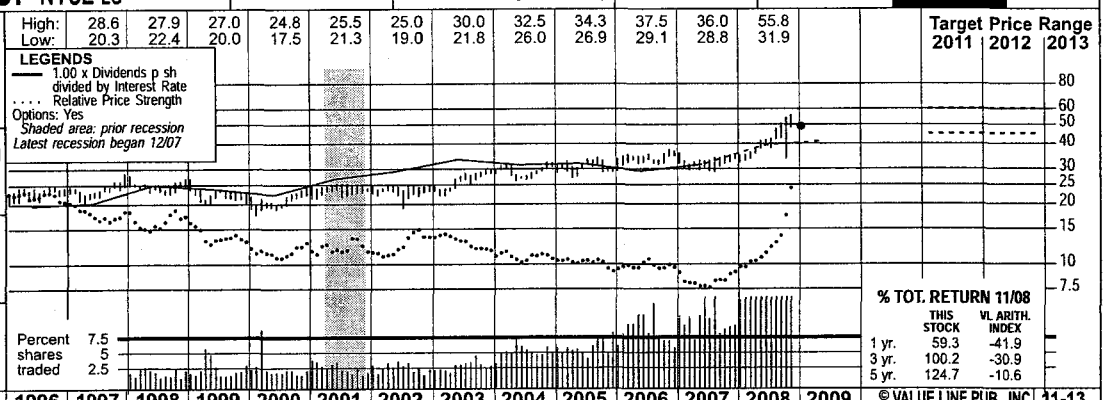
	Price	Gain	Ann'l Total Return
High	60	(+25%)	8%
Low	45	(-10%)	1%

Insider Decisions

	J	F	M	A	M	J	J	A	S
to Buy	0	0	0	0	0	0	0	0	0
Options	0	0	1	0	9	0	0	2	0
to Sell	0	0	1	0	9	0	0	2	0

Institutional Decisions

	1Q2008	2Q2008	3Q2008
to Buy	72	97	82
to Sell	55	50	72
Hld's(000)	10492	11750	11943



% TOT. RETURN 11/08

	THIS STOCK	VL ARITH. INDEX
1 yr.	59.3	-41.9
3 yr.	100.2	-30.9
5 yr.	124.7	-10.6

1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	© VALUE LINE PUB., INC.	11-13
26.83	32.33	33.43	24.79	31.03	34.33	31.04	26.04	29.99	53.08	39.84	54.95	59.59	75.43	93.51	93.40	*100.40*	*96.00*	Revenues per sh	*111.75*
2.32	2.81	2.65	2.55	3.29	3.32	3.02	2.56	2.68	3.00	2.56	3.15	2.79	2.98	3.81	3.87	*4.20*	*4.30*	"Cash Flow" per sh	*5.30*
1.17	1.61	1.42	1.27	1.87	1.84	1.58	1.47	1.37	1.61	1.18	1.82	1.82	1.90	2.37	2.31	2.64	*2.50*	Earnings per sh A B	*2.85*
1.20	1.22	1.22	1.24	1.26	1.30	1.32	1.34	1.34	1.34	1.34	1.34	1.35	1.37	1.40	1.45	1.49	*1.53*	Div'ds Decl'd per sh C■	*1.65*
2.87	2.62	2.50	2.63	2.35	2.44	2.68	2.58	2.77	2.51	2.80	2.67	2.45	2.84	2.97	2.72	*2.55*	*2.65*	Cap'l Spending per sh	*3.40*
11.79	12.19	12.44	13.05	13.72	14.26	14.57	14.96	14.99	15.26	15.07	15.65	16.96	17.31	18.85	19.79	*22.10*	*21.90*	Book Value per sh D	*26.00*
15.59	15.59	15.67	17.42	17.56	17.56	17.63	18.88	18.88	18.88	18.96	19.11	20.98	21.17	21.36	21.65	*22.00*	*22.50*	Common Shs Outst'g E	*25.50*
15.8	13.5	16.4	15.5	11.9	12.5	15.5	15.8	14.9	14.5	20.0	13.6	15.7	16.2	13.6	14.2	14.3		Avg Ann'l P/E Ratio	*18.0*
.96	.80	1.08	1.04	.75	.72	.81	.90	.97	.74	1.09	.78	.83	.86	.73	.75	.85		Relative P/E Ratio	*1.20*
6.5%	5.6%	5.3%	6.3%	5.6%	5.6%	5.4%	5.8%	6.6%	5.7%	5.7%	5.4%	4.7%	4.4%	4.3%	4.4%	3.9%		Avg Ann'l Div'd Yield	*3.1%*

CAPITAL STRUCTURE as of 6/30/08
Total Debt $368.0 mill. **Due in 5 Yrs** $275.0 mill.
LT Debt $309.2 mill. **LT Interest** $20.0 mill.
(Total interest coverage: 3.0x)

Leases, Uncapitalized Annual rentals $.9 mill.
Pension Assets-9/07 $260.3 mill. **Oblig.** $293.3 mill.
Pfd Stock $.5 mill. **Pfd Div'd** $.04 mill.
Common Stock 21,971,760 shs. as of 8/5/08

MARKET CAP: $1.1 billion (Mid Cap)

1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009		11-13
547.2	491.6	566.1	1002.1	755.2	1050.3	1250.3	1597.0	1997.6	2021.6	2209.0	*2160*	Revenues ($mill) A	*2850*
27.9	26.9	26.0	30.5	22.4	34.6	36.1	40.1	50.5	49.8	57.5	*56.5*	Net Profit ($mill)	*75.0*
35.6%	35.5%	35.2%	32.7%	35.4%	35.0%	34.8%	34.1%	32.5%	33.4%	31.3%	*31.5%*	Income Tax Rate	*35.0%*
5.1%	5.5%	4.6%	3.0%	3.0%	3.3%	2.9%	2.5%	2.5%	2.5%	2.6%	*2.6%*	Net Profit Margin	*2.7%*
40.9%	41.8%	45.2%	49.5%	47.5%	50.4%	51.6%	48.1%	49.5%	45.3%	*44.5%*	*45.0%*	Long-Term Debt Ratio	*47.0%*
58.6%	57.8%	54.5%	50.2%	52.3%	49.4%	48.3%	51.8%	50.4%	54.6%	*55.5%*	*55.0%*	Common Equity Ratio	*53.0%*
438.0	488.6	519.2	574.1	546.6	605.0	737.4	707.9	798.9	784.5	*875*	*895*	Total Capital ($mill)	*1250*
490.6	519.4	575.4	602.5	594.4	621.2	646.9	679.5	763.8	793.8	*825*	*855*	Net Plant ($mill)	*1150*
8.1%	7.1%	6.7%	6.9%	6.0%	7.4%	6.6%	7.6%	8.4%	8.5%	*8.0%*	*7.5%*	Return on Total Cap'l	*7.5%*
10.8%	9.5%	9.1%	10.5%	7.8%	11.5%	10.1%	10.9%	12.5%	11.6%	*12.0%*	*11.5%*	Return on Shr. Equity	*11.5%*
10.8%	9.5%	9.1%	10.5%	7.8%	11.6%	10.1%	10.9%	12.5%	11.6%	*12.0%*	*11.5%*	Return on Com Equity	*11.5%*
1.8%	1.0%	.2%	1.8%	NMF	3.1%	2.7%	3.1%	5.1%	4.3%	*5.0%*	*4.5%*	Retained to Com Eq	*5.0%*
83%	89%	98%	83%	113%	74%	73%	72%	59%	63%	*57%*	*61%*	All Div'ds to Net Prof	*56%*

CURRENT POSITION ($MILL.)	2006	2007	6/30/08
Cash Assets	50.8	52.7	33.0
Other	409.0	414.6	395.9
Current Assets	459.8	467.3	428.9
Accts Payable	103.3	106.8	191.4
Debt Due	207.5	251.6	58.8
Other	120.1	115.3	75.3
Current Liab.	430.9	473.7	325.5
Fix. Chg. Cov.	285%	282%	285%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '05-'07 to '11-'13
Revenues	11.5%	16.5%	*4.5%*
"Cash Flow"	1.5%	5.5%	*7.0%*
Earnings	3.0%	9.5%	*4.5%*
Dividends	1.0%	1.0%	*2.5%*
Book Value	3.0%	4.5%	*5.5%*

Fiscal Year Ends	QUARTERLY REVENUES ($ mill.)A Dec.31	Mar.31	Jun.30	Sep.30	Full Fiscal Year
2005	442.5	576.5	311.3	266.7	1597.0
2006	689.2	708.8	330.6	269.0	1997.6
2007	539.6	700.8	457.9	323.3	2021.6
2008	504.0	747.7	505.5	451.8	2209.0
2009	*540*	*540*	*540*	*540*	*2160*

Fiscal Year Ends	EARNINGS PER SHARE A B F Dec.31	Mar.31	Jun.30	Sep.30	Full Fiscal Year
2005	.79	1.06	.29	d.24	1.90
2006	1.23	1.05	.13	d.04	2.37
2007	.89	.97	.43	.03	2.31
2008	.99	1.39	.41	d.14	2.64
2009	*.96*	*1.16*	*.33*	*.05*	*2.50*

Cal-endar	QUARTERLY DIVIDENDS PAID C■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2005	.34	.345	.345	.345	1.38
2006	.345	.355	.355	.355	1.41
2007	.365	.365	.365	.365	1.46
2008	.375	.375	.375	.375	1.50
2009	.385				

BUSINESS: Laclede Group, Inc., is a holding company for Laclede Gas, which distributes natural gas in eastern Missouri, including the city of St. Louis, St. Louis County, and parts of 10 other counties. Has roughly 632,000 customers. Purchased SM&P Utility Resources, 1/02; divested, 3/08. Therms sold and transported in fiscal 2007: 1.12 mill. Revenue mix for regulated operations: residential, 60%; commercial and industrial, 24%; transportation, 1%; other, 15%. Has around 3,845 employees. Officers and directors own approximately 7.0% of common shares (1/08 proxy). Chairman, Chief Executive Officer, and President: Douglas H. Yaeger. Incorporated: Missouri. Address: 720 Olive Street, St. Louis, Missouri 63101. Telephone: 314-342-0500. Internet: www.thelacledegroup.com.

We do not believe that Laclede Group's share net in fiscal 2009 (which began on October 1st) will reach last year's level, attributable mainly to the difficult comparison. Regarding Laclede Gas, accounting for the biggest portion of profits, it appears that the substantial rate increase effective August 1st of 2007 won't be repeated. Furthermore, there may not be a recording of additional previously unrecognized tax benefits here. Meanwhile, Laclede Energy Resources stands to have a respectable performance (depending greatly on natural gas price volatility), but we do not anticipate a reversal of more tax-related expenses. All things considered, consolidated share net ought to decrease roughly 5%, to $2.50, this fiscal year. Laclede Group's bottom line could expand in the mid-single-digit range (to $2.60 a share) in fiscal 2010, assuming additional expansion in operating margins.

Steady, if unspectacular, earnings increases seem achievable over the 3- to 5-year timeframe. Expansion of the customer base for the natural gas distribution unit has been moderate for some time because the service area, located in eastern Missouri, is in a mature stage. That being the case, internal growth here will likely remain a challenge. The non-regulated division has promising expansion opportunities, but it has contributed just a small portion to Laclede Group's profits on a historical basis. A significant acquisition could help to offset this, but it appears that management has no such plans in the works at this juncture. Consequently, annual bottom-line advances could be only between 4% and 5% over the 2011-2013 horizon.

This favorably ranked equity offers a decent level of current dividend income, which is adequately covered by earnings. But further increases in the distribution will probably be slow in coming. This is primarily because of the regulated gas segment's unexciting long-term growth prospects.

Total-return possibilities are limited. That is attributable to these shares' relatively high present quotation and our expectation of moderate increases in the dividend.

Frederick L. Harris, III December 12, 2008

(A) Fiscal year ends Sept. 30th.
(B) Based on average shares outstanding thru. '97, then diluted. Excludes nonrecurring loss: '06, 7¢. Excludes gain from discontinued operations: '08, 94¢. Next earnings report due late Jan. (C) Dividends historically paid in early January, April, July, and October. ■ Dividend reinvestment plan available. (D) Incl. deferred charges. In '07: $289.7 mill., $13.38/sh.
(E) In millions.
(F) Qtly. egs. may not sum due to rounding or change in shares outstanding.

Company's Financial Strength	B+
Stock's Price Stability	100
Price Growth Persistence	60
Earnings Predictability	75

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NEW JERSEY RES. NYSE-NJR

RECENT PRICE **38.42** | P/E RATIO **12.2** (Trailing: 14.2 / Median: 15.0) | RELATIVE P/E RATIO **1.20** | DIV'D YLD **3.2%** | VALUE LINE

TIMELINESS 2 Raised 11/28/08
SAFETY 1 Raised 9/15/06
TECHNICAL 2 Raised 11/21/08
BETA .70 (1.00 = Market)

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
High:	18.7	17.9	18.3	19.8	21.7	22.4	26.4	29.7	32.9	35.4	37.6	41.1
Low:	12.5	14.0	14.9	16.1	16.6	16.2	20.0	24.3	27.1	27.7	30.3	24.6

Target Price Range 2011 | 2012 | 2013

2011-13 PROJECTIONS

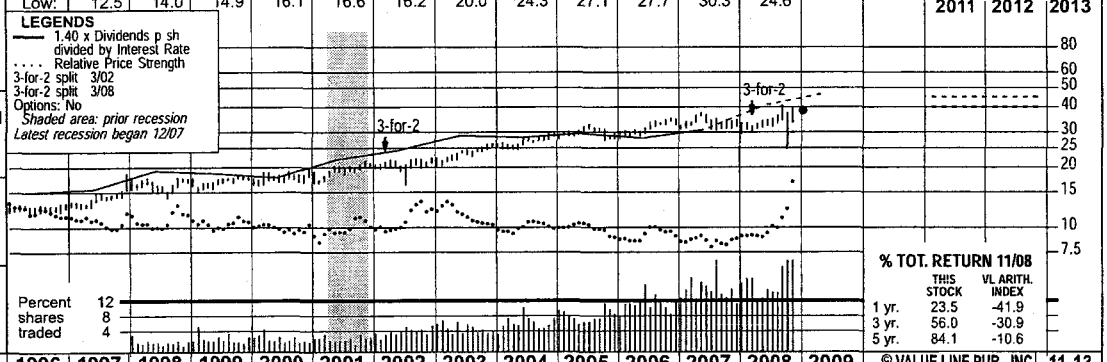
	Price	Gain	Ann'l Total Return
High	45	(+15%)	7%
Low	40	(+5%)	4%

Insider Decisions

	J	F	M	A	M	J	J	A	S
to Buy	0	0	0	0	0	0	0	0	0
Options	2	0	0	1	2	0	0	1	0
to Sell	0	2	0	0	2	0	0	1	0

Institutional Decisions

	1Q2008	2Q2008	3Q2008
to Buy	85	90	64
to Sell	70	62	88
Hld's(000)	26518	26910	26312



% TOT. RETURN 11/08

	THIS STOCK	VL ARITH. INDEX
1 yr.	23.5	-41.9
3 yr.	56.0	-30.9
5 yr.	84.1	-10.6

1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	© VALUE LINE PUB., INC.	11-13
11.25	12.02	12.81	11.36	13.48	17.31	17.73	22.65	29.42	51.22	44.11	62.29	60.89	76.19	79.63	72.62	91.12	92.45	Revenues per sh A	97.60
1.30	1.42	1.54	1.42	1.48	1.63	1.74	1.86	1.99	2.12	2.14	2.38	2.50	2.62	2.73	2.44	3.64	3.70	"Cash Flow" per sh	3.90
.73	.76	.84	.86	.92	.99	1.04	1.11	1.20	1.30	1.39	1.59	1.70	1.77	1.87	1.55	2.70	2.80	Earnings per sh B	3.00
.68	.68	.68	.68	.69	.71	.73	.75	.76	.78	.80	.83	.87	.91	.96	1.01	1.11	1.24	Div'ds Decl'd per sh C■	1.36
1.33	1.54	1.40	1.18	1.19	1.15	1.07	1.21	1.23	1.10	1.02	1.14	1.45	1.28	1.28	1.46	1.73	1.75	Cap'l Spending per sh	1.80
6.29	6.54	6.43	6.47	6.73	6.92	7.26	7.57	8.29	8.80	8.71	10.26	11.25	10.60	15.00	15.50	17.36	19.35	Book Value per sh D	25.75
36.64	37.84	38.93	40.03	40.69	40.23	40.07	39.92	39.59	40.00	41.50	40.85	41.61	41.32	41.44	41.61	41.88	42.50	Common Shs Outst'g E	44.00
12.4	15.1	13.0	11.7	13.6	13.5	15.3	15.2	14.7	14.2	14.7	14.0	15.3	16.8	16.1	21.6	12.3		Avg Ann'l P/E Ratio	14.0
.75	.89	.85	.78	.85	.78	.80	.87	.96	.73	.80	.80	.81	.89	.87	1.13	.73		Relative P/E Ratio	.95
7.5%	5.8%	6.2%	6.7%	5.6%	5.3%	4.6%	4.5%	4.4%	4.2%	3.9%	3.7%	3.3%	3.1%	3.2%	3.0%	3.3%		Avg Ann'l Div'd Yield	3.4%

CAPITAL STRUCTURE as of 9/30/08
Total Debt $693.4 mill. **Due in 5 Yrs** $175.6 mill.
LT Debt $455.1 mill. **LT Interest** $16.9 mill.
Incl. $8.8 mill. capitalized leases.
(LT interest earned: 4.8x; total interest coverage: 4.8x)
Pension Assets-9/08 $80.6 mill. **Oblig.** $102.4 mill.
Pfd Stock None

Common Stock 42,120,169 shs. as of 11/20/08
MARKET CAP: $1.6 billion (Mid Cap)

1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009		11-13
710.3	904.3	1164.5	2048.4	1830.8	2544.4	2533.6	3148.3	3299.6	3021.8	3816.2	3930	Revenues ($mill) A	4295
43.3	44.9	47.9	52.3	56.8	65.4	71.6	74.4	78.5	65.3	113.9	120	Net Profit ($mill)	130
30.4%	36.2%	37.8%	38.0%	38.7%	39.4%	39.1%	39.1%	38.9%	38.8%	37.8%	39.0%	Income Tax Rate	40.0%
6.1%	5.0%	4.1%	2.6%	3.1%	2.6%	2.8%	2.4%	2.4%	2.2%	3.0%	3.1%	Net Profit Margin	3.0%
51.2%	48.7%	47.0%	50.1%	50.6%	38.1%	40.3%	42.0%	34.8%	37.3%	38.5%	38.0%	Long-Term Debt Ratio	32.5%
45.6%	51.2%	52.9%	49.9%	49.4%	61.9%	59.7%	58.0%	65.2%	62.7%	61.5%	62.0%	Common Equity Ratio	67.5%
638.2	590.4	620.1	706.2	732.4	676.8	783.8	755.3	954.0	1028.0	1182.1	1325	Total Capital ($mill)	1680
680.0	705.4	730.6	743.9	756.4	852.6	880.4	905.1	934.9	970.9	1017.3	1040	Net Plant ($mill)	1100
8.1%	9.0%	9.0%	8.5%	8.7%	10.7%	10.1%	11.2%	9.6%	7.7%	10.7%	10.0%	Return on Total Cap'l	8.5%
13.9%	14.8%	14.6%	14.8%	15.7%	15.6%	15.3%	17.0%	12.6%	10.1%	15.7%	14.5%	Return on Shr. Equity	11.5%
14.4%	14.8%	14.6%	14.9%	15.7%	15.6%	15.3%	17.0%	12.6%	10.1%	15.7%	14.5%	Return on Com Equity	11.5%
4.4%	5.0%	5.4%	6.1%	6.9%	7.7%	7.8%	8.5%	6.3%	3.6%	9.3%	8.0%	Retained to Com Eq	6.5%
71%	67%	63%	59%	56%	51%	49%	50%	50%	64%	41%	44%	All Div'ds to Net Prof	46%

CURRENT POSITION ($MILL.)	2006	2007	9/30/08
Cash Assets	5.0	5.1	42.6
Other	960.5	794.8	1067.1
Current Assets	965.5	799.9	1109.7
Accts Payable	46.8	64.4	61.7
Debt Due	284.4	260.8	238.3
Other	566.0	378.1	594.0
Current Liab.	897.2	703.3	894.0
Fix. Chg. Cov.	570%	461%	450%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '05-'07 to '11-'13
Revenues	18.5%	13.0%	4.5%
"Cash Flow"	5.5%	4.5%	7.0%
Earnings	6.5%	6.0%	9.5%
Dividends	3.5%	4.0%	6.0%
Book Value	7.5%	10.0%	11.0%

Fiscal Year Ends	QUARTERLY REVENUES ($ mill.) A Dec.31	Mar.31	Jun.30	Sep.30	Full Fiscal Year
2005	854.1	1065	544.3	684.9	3148.3
2006	1164	1064	536.1	535.5	3299.6
2007	737.4	1029	662.2	593.2	3021.8
2008	811.1	1178	1000	827.1	3816.2
2009	850	1190	1050	840	3930

Fiscal Year Ends	EARNINGS PER SHARE A B Dec.31	Mar.31	Jun.30	Sep.30	Full Fiscal Year
2005	.61	1.23	.05	d.12	1.77
2006	.82	1.43	d.09	d.29	1.87
2007	.70	.19	.60	.06	1.55
2008	.87	.30	d.18	1.86	2.70
2009	.90	.40	--	1.50	2.80

Cal-endar	QUARTERLY DIVIDENDS PAID C E■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2004	.217	.217	.217	.217	.87
2005	.227	.227	.227	.227	.91
2006	.24	.24	.24	.24	.96
2007	.253	.253	.253	.253	1.01
2008	.267	.28	.28	.28	

BUSINESS: New Jersey Resources Corp. is a holding company providing retail/wholesale energy svcs. to customers in New Jersey, and in states from the Gulf Coast to New England, and Canada. New Jersey Natural Gas had about 478,000 customers at 9/30/07 in Monmouth and Ocean Counties, and other N.J. Counties. Fiscal 2007 volume: 102.8 bill. cu. ft. (58% firm, 6% interruptible industrial and electric utility, 36% off-system and capacity release). N.J. Natural Energy subsidiary provides unregulated retail/wholesale natural gas and related energy svcs. 2007 dep. rate: 2.8%. Has 808 empls. Off./dir. own about 2% of common (12/07 Proxy). Chrmn., CEO, & Pres. : Laurence M. Downes. Inc.: N.J. Addr.: 1415 Wyckoff Road, Wall, NJ 07719. Tel.: 732-938-1480. Web: www.njresources.com.

New Jersey Resources posted solid results for its fiscal fourth quarter (ended September 30th) and year. This stemmed from roughly 7,175 new customers last year, as well as about 730 conversions, which boosted results at the New Jersey Natural Gas (NJNG) division. Meanwhile, record performance from NJR Energy Services also contributed nicely.

Capital projects ought to provide room for the expansion of its midstream assets. NJR has been making progress at its Steckman Ridge storage facility in western Pennsylvania. Meanwhile, the company has drilled three wells so far, and expects to have nine others completed in 2009. This facility will provide extra capacity during the peak winter and summer months to the Northeast. Also, the completion of a new 16-inch main pipeline into the Whiting section of Manchester Township, NJ is allowing for new first-time customers.

We have raised our 2009 annual estimate by 30%. This stems a recent base rate case approval for NJNG that boosts annual revenues by $32.5 million, as well as the aforementioned capital projects. New customers at the NJNG division are expected to contribute approximately $4 million annually to utility gross margins. And there is still sizable room for that segment to grow through potential customers and conversions. The NJR Energy Services unit has benefited from its dynamic portfolio of supply storage and transportation contacts. And the Steckman Ridge facility ought to complement that mix nicely. All told, the company's prospects appear bright.

Meanwhile, the balance sheet and financial position appear strong. NJR has ample cash on hand, and solid access to capital through revolving bank credit.

These timely shares have been on a bumpy ride since our September review. Still, they are currently trading up about 6% over that interim, thanks to a dividend increase and solid earnings this past year. Meanwhile, the 10.7% hike in NJR's quarterly dividend may appeal to income-oriented accounts. And conservative investors may find the high Safety rank (1) and solid Financial Strength rating (A) comforting.

Bryan Fong *December 12, 2008*

(A) Fiscal year ends Sept. 30th.
(B) Diluted earnings. Qtly egs may not sum to total due to change in shares outstanding. Next earnings report due late Jan.
(C) Dividends historically paid in early January, April, July, and October. ■ Dividend reinvestment plan available.
(D) Includes regulatory assets in 2008: $340.7 million, $8.09/share.
(E) In millions, adjusted for split.
(F) Restated.

Company's Financial Strength	A
Stock's Price Stability	100
Price Growth Persistence	65
Earnings Predictability	50

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NICOR, INC. NYSE-GAS

RECENT PRICE	36.17	P/E RATIO	18.5 (Trailing: 12.9 / Median: 15.0)	RELATIVE P/E RATIO	1.81	DIV'D YLD	5.1%	VALUE LINE

TIMELINESS 3 Raised 12/7/07
SAFETY 3 Lowered 6/17/05
TECHNICAL 2 Raised 10/10/08
BETA .70 (1.00 = Market)

High:	42.9	44.4	42.9	43.9	42.4	49.0	39.3	39.7	43.0	49.9	53.7	52.0
Low:	30.0	37.1	31.2	29.4	34.0	17.3	23.7	32.0	35.5	38.7	37.8	32.3

Target Price Range 2011 | 2012 | 2013

2011-13 PROJECTIONS

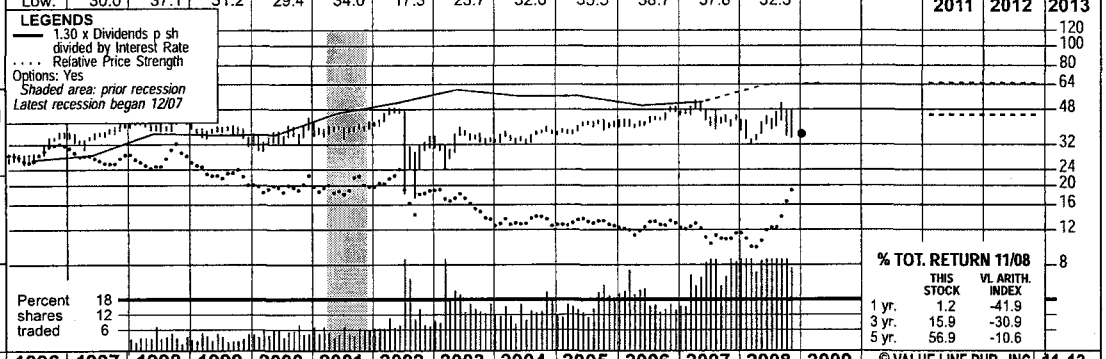
	Price	Gain	Ann'l Total Return
High	65	(+80%)	19%
Low	45	(+25%)	10%

Insider Decisions

	J	F	M	A	M	J	J	A	S
to Buy	0	0	0	0	0	0	0	0	0
Options	0	0	0	0	0	0	0	0	1
to Sell	0	0	0	0	0	0	0	0	1

Institutional Decisions

	1Q2008	2Q2008	3Q2008
to Buy	91	119	105
to Sell	120	90	125
Hld's(000)	31875	32273	32539



% TOT. RETURN 11/08

	THIS STOCK	VL ARITH. INDEX
1 yr.	1.2	-41.9
3 yr.	15.9	-30.9
5 yr.	56.9	-10.6

1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	© VALUE LINE PUB., INC.	11-13
28.90	31.02	31.23	29.42	37.39	41.33	30.84	34.45	50.52	57.30	43.11	60.46	62.12	76.00	65.92	69.20	*83.35*	*86.65*	Revenues per sh	*100.00*
4.14	3.80	4.11	4.19	4.97	5.29	5.21	5.59	6.16	6.41	6.03	5.37	6.00	6.19	6.82	6.96	*6.60*	*7.15*	"Cash Flow" per sh	*8.85*
1.92	1.97	2.07	1.96	2.42	2.55	2.31	2.57	2.94	3.01	2.88	2.11	2.22	2.29	2.87	2.98	*2.25*	*2.50*	Earnings per sh A	*3.45*
1.18	1.22	1.25	1.28	1.32	1.40	1.48	1.54	1.66	1.76	1.84	1.86	1.86	1.86	1.86	1.86	*1.86*	*1.86*	Div'ds Decl'd per sh B	*1.86*
3.12	2.62	3.34	3.12	2.42	2.34	2.87	3.28	3.48	4.18	4.37	4.12	4.32	4.57	4.17	3.77	*4.20*	*4.35*	Cap'l Spending per sh	*4.80*
12.76	13.05	13.26	13.67	14.74	15.43	15.97	16.80	15.56	16.39	16.55	17.13	16.99	18.36	19.43	20.58	*20.75*	*21.35*	Book Value per sh	*25.40*
55.77	53.96	51.54	50.30	49.49	48.22	47.51	46.89	45.49	44.40	44.01	44.04	44.10	44.18	44.90	45.90	*45.00*	*45.00*	Common Shs Outst'g C	*45.00*
11.6	14.1	12.5	13.1	12.5	14.2	17.6	14.6	11.9	12.8	13.1	15.8	15.9	17.3	15.0	15.0	*Bold figures are*		Avg Ann'l P/E Ratio	*16.0*
.70	.83	.82	.88	.78	.82	.92	.83	.77	.66	.72	.90	.84	.92	.81	.80	*Value Line*		Relative P/E Ratio	*1.05*
5.3%	4.4%	4.8%	5.0%	4.4%	3.9%	3.6%	4.1%	4.7%	4.6%	4.9%	5.6%	5.3%	4.7%	4.3%	4.2%	*estimates*		Avg Ann'l Div'd Yield	*3.2%*

CAPITAL STRUCTURE as of 9/30/08
Total Debt $937.0 mill. **Due in 5 Yrs** $544.0 mill.
LT Debt $448.0 mill. **LT Interest** $30.0 mill.
(Total interest coverage: 5.9x)

Pension Assets-12/07 $478.7 mill. **Oblig.** $263.2 mill.

Pfd Stock $.6 mill. **Pfd Div'd** None

Common Stock 45,191,267 shares as of 10/27/08
MARKET CAP: $1.6 billion (Mid Cap)

1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009		11-13
1465.1	1615.2	2298.1	2544.1	1897.4	2662.7	2739.7	3357.8	2960.0	3176.3	*3750*	*3900*	Revenues ($mill)	*4500*
111.1	121.9	136.4	136.3	128.0	93.1	98.1	101.1	128.3	135.2	*100*	*115*	Net Profit ($mill)	*155*
34.4%	34.7%	34.8%	33.5%	31.0%	35.2%	31.8%	28.3%	26.3%	26.6%	*31.0%*	*31.5%*	Income Tax Rate	*33.0%*
7.6%	7.5%	5.9%	5.4%	6.7%	3.5%	3.6%	3.0%	4.3%	4.3%	*2.7%*	*3.0%*	Net Profit Margin	*3.5%*
42.1%	35.5%	32.7%	37.8%	35.1%	39.6%	39.8%	37.4%	36.3%	30.9%	*33.0%*	*32.0%*	Long-Term Debt Ratio	*27.0%*
57.4%	64.0%	66.7%	61.7%	64.5%	60.3%	60.1%	62.5%	63.7%	69.0%	*67.0%*	*68.0%*	Common Equity Ratio	*73.0%*
1322.6	1230.1	1061.2	1180.1	1128.9	1251.5	1246.0	1297.7	1370.7	1368.0	*1400*	*1400*	Total Capital ($mill)	*1575*
1731.8	1735.2	1729.6	1768.6	1796.8	2484.2	2549.8	2659.1	2714.1	2757.3	*2850*	*2950*	Net Plant ($mill)	*3265*
9.9%	10.9%	13.7%	12.3%	12.2%	8.3%	8.8%	9.4%	10.9%	11.2%	*8.5%*	*9.5%*	Return on Total Cap'l	*11.0%*
14.5%	15.4%	19.1%	18.6%	17.5%	12.3%	13.1%	12.5%	14.7%	14.3%	*11.0%*	*11.5%*	Return on Shr. Equity	*13.5%*
14.6%	15.4%	19.2%	18.7%	17.5%	12.3%	13.1%	12.5%	14.7%	14.3%	*11.5%*	*11.5%*	Return on Com Equity	*13.5%*
5.4%	6.2%	8.5%	7.9%	6.5%	1.5%	2.1%	2.3%	5.2%	5.4%	*2.0%*	*3.0%*	Retained to Com Eq	*6.5%*
63%	60%	56%	58%	63%	88%	84%	81%	65%	62%	*83%*	*75%*	All Div'ds to Net Prof	*54%*

CURRENT POSITION ($MILL.)	2006	2007	9/30/08
Cash Assets	67.6	91.9	74.4
Other	843.1	931.9	934.5
Current Assets	910.7	1023.8	1008.9
Accts Payable	564.5	428.2	435.4
Debt Due	350.0	444.0	489.0
Other	227.9	404.2	394.9
Current Liab.	1142.4	1276.4	1319.3
Fix. Chg. Cov.	543%	544%	94%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '05-'07 to '11-'13
Revenues	7.0%	7.0%	*6.0%*
"Cash Flow"	3.5%	1.5%	*5.0%*
Earnings	1.5%	-1.5%	*4.0%*
Dividends	3.5%	1.0%	*Nil*
Book Value	3.0%	4.0%	*4.5%*

Cal-endar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2005	1179.9	484.4	336.0	1357.5	3357.8
2006	1319.4	451.3	351.1	838.2	2960.0
2007	1334.7	556.9	365.2	919.5	3176.3
2008	1595.7	699.8	440.3	*1014.2*	*3750*
2009	*1650*	*715*	*435*	*1100*	*3900*

Cal-endar	EARNINGS PER SHARE A Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2005	.98	.35	d.06	1.02	2.29
2006	.99	.19	.39	1.30	2.87
2007	1.04	.40	.32	1.22	2.98
2008	.91	.64	.03	*.67*	*2.25*
2009	*.90*	*.35*	*.25*	*1.00*	*2.50*

Cal-endar	QUARTERLY DIVIDENDS PAID B ■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2004	.465	.465	.465	.465	1.86
2005	.465	.465	.465	.465	1.86
2006	.465	.465	.465	.465	1.86
2007	.465	.465	.465	.465	1.86
2008	.465	.465	.465	.465	

BUSINESS: Nicor Inc. is a holding company with gas distribution as its primary business. Serves over 2.2 million customers in northern and western Illinois. 2007 gas delivered: 468.3 Bcf, incl. 212.1 Bcf from transportation. 2007 gas sales (256.2 bcf): residential, 79%; commercial, 19%; industrial, 2%. *Principal supplying pipelines:* Natural Gas Pipeline, Horizon Pipeline, and TGPC. Current operations include Tropical Shipping subsidiary and several energy related ventures. Divested oil and gas E&P, 6/93. Has about 3,900 employees. Officers/directors own about 2.2% of common stock (3/08 proxy). Chairman and Chief Executive Officer: Russ Strobel. Incorporated: Illinois. Address: 1844 Ferry Road, Naperville, Illinois 60563. Telephone: 630-305-9500. Internet: www.nicor.com.

Nicor's performance has been unimpressive lately. Most notably, earnings of $0.03 a share fell well short of our $0.20-a-share estimate. Weakness in the gas distribution business was the primary reason for the disappointing performance. The company has faced various challenges over the course of 2008 including high gas prices, rising costs, and tough market conditions in its shipping business.

Management reiterated its outlook for the year. Despite the shortfall in the September interim, Nicor expects earnings to be between $2.20 and $2.40 a share for 2008. This view does not include the potential for volatility in natural gas markets and assumes normal weather for the remainder of the year.

We look for earnings to be on the low end of the company's guidance. Given the weak third-quarter showing, we estimate share net will be $2.25. Nicor will probably continue to face a challenging operating environment, which should pressure results in the December period.

Nicor is still focused on obtaining rate relief. The company filed a case and is awaiting a decision from the Illinois Commerce Commission (ICC). Nicor initially wanted to increase its rate base by $140.3 million in order to recoup rising costs in its market. This case reflected an 11.05% return on equity on a $1.5 billion base. In response to a direct testimony by the ICC, the company filed rebuttal testimony in late September, which revised its proposed rate to $141.6 million and increased its cost of equity to 11.15%. All told, the process is expected to continue into the middle of 2009, and the outcome should be a key factor in GAS' performance over the coming years. Thus, we recommend investors continue to keep a close eye on these proceedings over the coming months.

This stock is ranked 3 (Average) for year-ahead performance. However, risk-averse investors may find these stable shares appealing, given the volatility in the world's financial markets. Nicor's yield is above the industry average, which may interest income-oriented accounts. Still, the company will probably continue to be pressured by a tough operating environment in the foreseeable future. Therefore, most investors should look elsewhere.

Richard Gallagher *December 12, 2008*

(A) Based on primary earnings thru. '96, then diluted. Excl. nonrecurring gains/(loss): '97, 6¢; '98, 11¢; '99, 5¢; '00, ($1.96); '01, 16¢; '03, (27¢); '04, (52¢); '05, 80¢; '06, (17¢); '07 (13¢). Excl. items from discontinued ops.: '93, 4¢; '96, 30¢. Next egs. report due late February. (B) Dividends historically paid mid February, May, August, November. ■ Dividend reinvestment plan available. (C) In millions.

Company's Financial Strength	A
Stock's Price Stability	100
Price Growth Persistence	35
Earnings Predictability	75

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N.W. NAT'L GAS NYSE-NWN

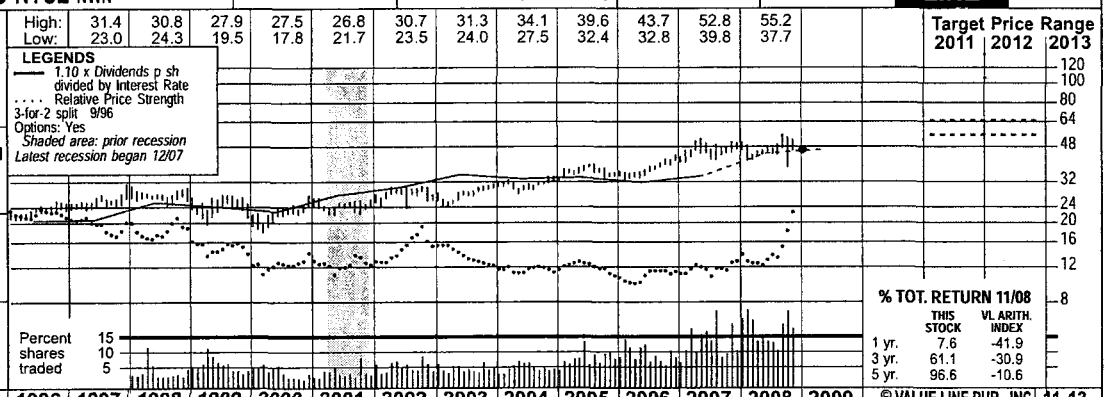
RECENT PRICE 46.38 | P/E RATIO 17.4 (Trailing: 18.0 Median: 16.0) | RELATIVE P/E RATIO 1.71 | DIV'D YLD 3.4% | VALUE LINE

TIMELINESS 3 Raised 8/8/08
SAFETY 1 Raised 3/18/05
TECHNICAL 1 Raised 12/12/08
BETA .60 (1.00 = Market)

High:	31.4	30.8	27.9	27.5	26.8	30.7	31.3	34.1	39.6	43.7	52.8	55.2
Low:	23.0	24.3	19.5	17.8	21.7	23.5	24.0	27.5	32.4	32.8	39.8	37.7

Target Price Range 2011 | 2012 | 2013

LEGENDS
— 1.10 x Dividends p sh divided by Interest Rate
.... Relative Price Strength
3-for-2 split 9/96
Options: Yes
Shaded area: prior recession
Latest recession began 12/07



2011-13 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	65	(+40%)	12%
Low	55	(+20%)	8%

Insider Decisions

	J	F	M	A	M	J	J	A	S
to Buy	0	1	0	0	0	1	0	0	0
Options	0	0	0	0	0	1	0	1	2
to Sell	0	0	0	0	0	1	0	1	2

Institutional Decisions

	1Q2008	2Q2008	3Q2008
to Buy	77	78	65
to Sell	92	71	74
Hld's(000)	16772	16947	16310

Percent shares traded 15 10 5

% TOT. RETURN 11/08

	THIS STOCK	VL ARITH. INDEX
1 yr.	7.6	-41.9
3 yr.	61.1	-30.9
5 yr.	96.6	-10.6

1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	© VALUE LINE PUB., INC.	11-13
14.10	18.15	18.30	16.02	16.86	15.82	16.77	18.17	21.09	25.78	25.07	23.57	25.69	33.01	37.20	39.13	40.55	43.95	Revenues per sh	50.00
3.25	3.74	3.50	3.41	3.86	3.72	3.24	3.72	3.68	3.86	3.65	3.85	3.92	4.34	4.76	5.41	5.40	5.75	"Cash Flow" per sh	6.60
.74	1.74	1.63	1.61	1.97	1.76	1.02	1.70	1.79	1.88	1.62	1.76	1.86	2.11	2.35	2.76	2.55	2.80	Earnings per sh A	3.35
1.15	1.17	1.17	1.18	1.20	1.21	1.22	1.23	1.24	1.25	1.26	1.27	1.30	1.32	1.39	1.44	1.52	1.60	Div'ds Decl'd per sh B■	1.88
3.73	3.61	4.23	3.02	3.70	5.07	4.02	4.78	3.46	3.23	3.11	4.90	5.52	3.48	3.56	4.48	5.45	9.00	Cap'l Spending per sh	4.50
12.41	13.08	13.63	14.55	15.37	16.02	16.59	17.12	17.93	18.56	18.88	19.52	20.64	21.28	22.01	22.52	23.65	23.75	Book Value per sh	26.50
19.46	19.77	20.13	22.24	22.56	22.86	24.85	25.09	25.23	25.23	25.59	25.94	27.55	27.58	27.24	26.41	26.50	26.50	Common Shs Outst'g C	28.00
27.0	12.9	13.0	12.9	11.7	14.4	26.7	14.5	12.4	12.9	17.2	15.8	16.7	17.0	15.9	16.7	Bold figures are		Avg Ann'l P/E Ratio	18.0
1.64	.76	.85	.86	.73	.83	1.39	.83	.81	.66	.94	.90	.88	.91	.86	.88	Value Line		Relative P/E Ratio	1.20
5.7%	5.2%	5.5%	5.7%	5.2%	4.8%	4.5%	5.0%	5.6%	5.1%	4.5%	4.6%	4.2%	3.7%	3.7%	3.1%	estimates		Avg Ann'l Div'd Yield	3.1%

CAPITAL STRUCTURE as of 9/30/08
Total Debt $686.8 mill. **Due in 5 Yrs** $259.8 mill.
LT Debt $512.0 mill. **LT Interest** $37.0 mill.

(Total interest coverage: 4.0x)

Pension Assets-12/07 $241 mill.
Oblig. $260 mill.
Pfd Stock None

Common Stock 26,470,688 shs.
as of 10/31/08
MARKET CAP $1.2 billion (Mid Cap)

1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009		11-13
416.7	455.8	532.1	650.3	641.4	611.3	707.6	910.5	1013.2	1033.2	1000	1025	Revenues ($mill)	1400
27.3	44.9	47.8	50.2	43.8	46.0	50.6	58.1	65.2	74.5	67.5	74.0	Net Profit ($mill)	94.0
31.0%	35.4%	35.9%	35.4%	34.9%	33.7%	34.4%	36.0%	36.3%	37.2%	37.0%	37.0%	Income Tax Rate	37.0%
6.6%	9.9%	9.0%	7.7%	6.8%	7.5%	7.1%	6.4%	6.4%	7.2%	6.8%	6.4%	Net Profit Margin	6.7%
45.0%	46.0%	45.1%	43.0%	47.6%	49.7%	46.0%	47.0%	46.3%	46.3%	47.0%	48.0%	Long-Term Debt Ratio	48.0%
50.6%	49.9%	50.9%	53.2%	51.5%	50.3%	54.0%	53.0%	53.7%	53.7%	53.0%	52.0%	Common Equity Ratio	52.0%
815.6	861.5	887.8	880.5	937.3	1006.6	1052.5	1108.4	1116.5	1106.8	1150	1200	Total Capital ($mill)	1500
894.7	895.9	934.0	965.0	995.6	1205.9	1318.4	1373.4	1425.1	1495.9	1550	1650	Net Plant ($mill)	2000
5.0%	6.8%	6.7%	6.9%	5.9%	5.7%	5.9%	6.5%	7.1%	8.5%	7.5%	7.7%	Return on Total Cap'l	7.0%
6.1%	9.7%	9.8%	10.0%	8.9%	9.1%	8.9%	9.9%	10.9%	12.5%	11.5%	11.5%	Return on Shr. Equity	11.0%
6.0%	9.9%	10.0%	10.2%	8.5%	9.0%	8.9%	9.9%	10.9%	12.5%	11.5%	11.5%	Return on Com Equity	11.0%
NMF	2.8%	3.1%	3.5%	1.9%	2.6%	2.7%	3.7%	4.5%	6.0%	5.0%	5.0%	Retained to Com Eq	5.0%
118%	74%	70%	67%	79%	72%	69%	63%	59%	52%	58%	57%	All Div'ds to Net Prof	56%

CURRENT POSITION ($MILL.)	2006	2007	9/30/08
Cash Assets	5.8	6.1	4.1
Other	303.0	268.8	279.7
Current Assets	308.8	274.9	283.8
Accts Payable	113.6	119.7	53.5
Debt Due	129.6	148.1	174.8
Other	98.3	122.1	184.0
Current Liab.	341.5	389.9	412.3
Fx. Chg. Cov.	349%	408%	NMF

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '05-'07 to '11-'13
Revenues	8.5%	8.5%	6.5%
"Cash Flow"	3.0%	5.5%	5.0%
Earnings	3.0%	6.5%	7.0%
Dividends	1.5%	2.0%	5.5%
Book Value	3.5%	3.5%	3.5%

Cal-endar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2005	308.7	153.7	106.7	341.4	910.5
2006	390.4	171.0	114.9	336.9	1013.2
2007	394.1	183.2	124.2	331.7	1033.2
2008	387.7	191.3	109.7	311.3	1000
2009	380	190	120	335	1025

Cal-endar	EARNINGS PER SHARE A Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2005	1.44	.04	d.31	.94	2.11
2006	1.48	.07	d.35	1.15	2.35
2007	1.77	.10	d.22	1.11	2.76
2008	1.63	.08	d.38	1.22	2.55
2009	1.70	.13	d.30	1.27	2.80

Cal-endar	QUARTERLY DIVIDENDS PAID B■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2004	.325	.325	.325	.325	1.30
2005	.325	.325	.325	.345	1.32
2006	.345	.345	.345	.355	1.39
2007	.355	.355	.355	.375	1.44
2008	.375	.375	.375	.395	

BUSINESS: Northwest Natural Gas Co. distributes natural gas to 90 communities, 657,000 customers, in Oregon (90% of customers) and in southwest Washington state. Principal cities served: Portland and Eugene, OR; Vancouver, WA. Service area population: 2.5 mill. (77% in OR). Company buys gas supply from Canadian and U.S. producers; has transportation rights on Northwest Pipeline system. Owns local underground storage. Rev. breakdown: residential, 55%; commercial, 28%; industrial, gas transportation, and other, 17%. Employs 1,130. Barclays Global owns 6.5% of shares; off./dir., 1.3% (4/08 proxy). CEO Mark S. Dodson; CEO-elect: Gregg S. Kantor. Inc.: Oregon. Address: 220 NW 2nd Ave., Portland, OR 97209. Tel.: 503-226-4211. Internet: www.nwnatural.com.

Northwest Natural's third-quarter results reflected mostly unusual items. In the 2007 period, the company received a state tax refund, and in the 2008 quarter, it lost money from its gas cost-sharing mechanism in Oregon; the two items added up to about $0.12 a share of the higher year-to-year loss. (Gas utilities usually book losses in the summer quarter.) Meanwhile, customer growth, at 2.4% from September 30, 2007, was below the recent 3% pace, but still above the national average.

Lower costs should lead to a good fourth-quarter earnings gain. Despite the higher-than-expected third-quarter loss, Northwest reaffirmed its 2008 earnings-per-share guidance of $2.48-$2.63. In the final frame of 2007, Northwest spent about $3 million over its normal operating expenses, partly in connection with redoing some business practices. The absence of those costs, plus continued customer growth, should produce a good earnings boost.

We look for normal earnings growth in 2009, excluding the effects of gas cost-sharing. In the first nine months of 2008, Northwest lost about $0.17 a share from its gas cost-sharing in Oregon. The state has modified the cost-sharing procedure, so that the company now chooses to receive either 20% or 10% of the difference between actual gas costs and the prices built into rates, with the balance going to its customers. For the next year, starting in November 2008, Northwest has chosen to retain 20% of that difference, believing that it will earn a small profit from the cost-sharing arrangement.

Several projects should contribute considerably to earnings by the end of our 3- to 5-year horizon. Gill Ranch, a gas storage project near Fresno, CA, should receive approval from that state next year and open by 2011. The Palomar pipeline, a joint venture with TransCanada, would connect Portland to a second source of gas. Northwest's investment in the two projects would total about $525 million if both halves of Palomar are built. The two investments would add significantly to our out-year earnings forecast.

These top-quality shares, steady in recent troubled times, should appeal to conservative investors.

Sigourney b. Romaine *December 12, 2008*

(A) Diluted earnings per share. Excludes nonrecurring items: '98, $0.15; '00, $0.11; '06, ($0.06). Next earnings report due early February.
(B) Dividends historically paid in mid-February, mid-May, mid-August, and mid-November.
■ Dividend reinvestment plan available.
(C) In millions, adjusted for stock split.

Company's Financial Strength	A
Stock's Price Stability	100
Price Growth Persistence	70
Earnings Predictability	80

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PIEDMONT NAT'L. GAS NYSE-PNY

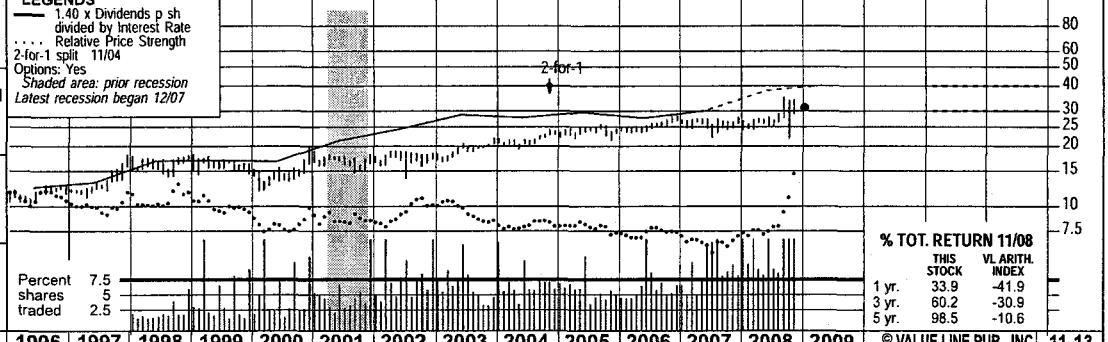
RECENT PRICE	31.23	P/E RATIO	19.8 (Trailing: 19.9 / Median: 17.0)	RELATIVE P/E RATIO	1.94	DIV'D YLD	3.3%	VALUE LINE

TIMELINESS 3 Raised 6/15/07
SAFETY 2 New 7/27/90
TECHNICAL 1 Raised 12/5/08
BETA .70 (1.00 = Market)

High:	18.2	18.1	18.3	19.7	19.0	19.0	22.0	24.3	25.8	28.4	28.0	35.3
Low:	11.0	13.9	14.3	11.8	14.6	13.7	16.6	19.2	21.3	23.2	22.0	21.7

Target Price Range 2011 | 2012 | 2013

LEGENDS
— 1.40 x Dividends p sh divided by Interest Rate
.... Relative Price Strength
2-for-1 split 11/04
Options: Yes
Shaded area: prior recession
Latest recession began 12/07



2011-13 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	40	(+30%)	10%
Low	30	(-5%)	3%

Insider Decisions

	J	F	M	A	M	J	J	A	S
to Buy	0	0	0	0	0	0	0	0	0
Options	0	0	0	0	0	0	0	0	0
to Sell	0	0	2	0	0	0	0	0	0

Institutional Decisions

	1Q2008	2Q2008	3Q2008
to Buy	78	97	82
to Sell	85	77	96
Hld's(000)	36778	36688	35228

% TOT. RETURN 11/08

	THIS STOCK	VL ARITH. INDEX
1 yr.	33.9	-41.9
3 yr.	60.2	-30.9
5 yr.	98.5	-10.6

1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	© VALUE LINE PUB., INC.	11-13
8.91	10.57	10.82	8.76	11.59	12.84	12.45	10.97	13.01	17.06	12.57	18.14	19.95	22.96	25.80	23.37	**28.30**	**29.10**	Revenues per sh A	**32.05**
1.07	1.14	1.13	1.25	1.49	1.62	1.72	1.70	1.77	1.81	1.81	2.04	2.31	2.43	2.51	2.64	**2.80**	**2.85**	"Cash Flow" per sh	**3.30**
.70	.73	.68	.73	.84	.93	.98	.93	1.01	1.01	.95	1.11	1.27	1.32	1.27	1.40	**1.55**	**1.60**	Earnings per sh B	**2.05**
.46	.48	.51	.54	.57	.61	.64	.68	.72	.76	.80	.82	.85	.91	.95	.99	**1.03**	**1.07**	Div'ds Decl'd per sh C■	**1.19**
1.41	1.58	1.95	1.72	1.64	1.52	1.48	1.58	1.65	1.29	1.21	1.16	1.85	2.50	2.74	1.85	**1.95**	**3.40**	Cap'l Spending per sh	**2.25**
5.13	5.45	5.68	6.16	6.53	6.95	7.45	7.86	8.26	8.63	8.91	9.36	11.15	11.53	11.83	11.99	**12.60**	**13.15**	Book Value per sh D	**15.45**
51.59	52.30	53.15	57.67	59.10	60.39	61.48	62.59	63.83	64.93	66.18	67.31	76.67	76.70	74.61	73.23	**73.50**	**73.50**	Common Shs Outst'g E	**73.00**
12.3	15.4	15.7	13.8	13.9	13.6	16.3	17.7	14.3	16.7	18.4	16.7	16.6	17.9	19.2	18.7	*Bold figures are*		Avg Ann'l P/E Ratio	**18.0**
.75	.91	1.03	.92	.87	.78	.85	1.01	.93	.86	1.01	.95	.88	.95	1.04	.98	*Value Line*		Relative P/E Ratio	**1.50**
5.3%	4.3%	4.8%	5.4%	4.9%	4.8%	4.0%	4.1%	5.0%	4.5%	4.6%	4.4%	4.1%	3.8%	3.9%	3.8%	*estimates*		Avg Ann'l Div'd Yield	**3.1%**

CAPITAL STRUCTURE as of 7/31/08
Total Debt $994.0 mill. **Due in 5 Yrs** $150.0 mill.
LT Debt $824.5 mill. **LT Interest** $55.7 mill.
(LT interest earned: 4.0x; total interest coverage: 4.0x)

Pension Assets-10/07 $225.0 mill. **Oblig.** $188.7 mill.

Pfd Stock None

Common Stock 73,278,668 shs. as of 9/2/08
MARKET CAP: $2.3 billion (Mid Cap)

1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009		11-13
765.3	686.5	830.4	1107.9	832.0	1220.8	1529.7	1761.1	1924.7	1711.3	**2080**	**2140**	Revenues ($mill) A	**2340**
60.3	58.2	64.0	65.5	62.2	74.4	95.2	101.3	97.2	104.4	**114**	**118**	Net Profit ($mill)	**150**
39.2%	39.7%	34.7%	34.6%	33.1%	34.8%	35.1%	33.7%	34.2%	33.0%	**35.0%**	**35.0%**	Income Tax Rate	**35.0%**
7.9%	8.5%	7.7%	5.9%	7.5%	6.1%	6.2%	5.8%	5.0%	6.1%	**5.5%**	**5.5%**	Net Profit Margin	**6.4%**
44.7%	46.2%	46.1%	47.6%	43.9%	42.2%	43.6%	41.4%	48.3%	48.4%	**47.5%**	**50.0%**	Long-Term Debt Ratio	**47.0%**
55.3%	53.8%	53.9%	52.4%	56.1%	57.8%	56.4%	58.6%	51.7%	51.6%	**52.5%**	**50.0%**	Common Equity Ratio	**53.0%**
829.3	914.7	978.4	1069.4	1051.6	1090.2	1514.9	1509.2	1707.9	1703.3	**1765**	**1930**	Total Capital ($mill)	**2125**
990.6	1047.0	1072.0	1114.7	1158.5	1812.3	1849.8	1939.1	2075.3	2141.5	**2200**	**2250**	Net Plant ($mill)	**2400**
9.2%	8.1%	8.3%	7.9%	7.8%	8.6%	7.8%	8.2%	7.2%	7.8%	**8.0%**	**7.5%**	Return on Total Cap'l	**8.5%**
13.2%	11.8%	12.1%	11.7%	10.6%	11.8%	11.1%	11.5%	11.0%	11.9%	**12.5%**	**12.5%**	Return on Shr. Equity	**13.5%**
13.2%	11.8%	12.1%	11.7%	10.6%	11.8%	11.1%	11.5%	11.0%	11.9%	**12.5%**	**12.5%**	Return on Com Equity	**13.5%**
4.7%	3.3%	3.5%	3.0%	1.7%	3.1%	3.7%	3.6%	2.8%	3.5%	**4.0%**	**4.0%**	Retained to Com Eq	**5.5%**
65%	72%	71%	75%	83%	74%	66%	68%	74%	70%	**66%**	**67%**	All Div'ds to Net Prof	**58%**

CURRENT POSITION ($MILL.)	2006	2007	7/31/08
Cash Assets	8.9	7.5	4.9
Other	467.1	427.8	429.9
Current Assets	476.0	435.3	434.8
Accts Payable	80.3	97.2	151.8
Debt Due	170.0	195.0	169.5
Other	150.1	132.3	114.2
Current Liab.	400.4	424.5	435.5
Fix. Chg. Cov.	261%	225%	220%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '05-'07 to '11-'13
Revenues	8.0%	11.0%	*5.0%*
"Cash Flow"	5.5%	7.0%	*4.5%*
Earnings	5.0%	6.0%	*7.5%*
Dividends	5.0%	4.5%	*4.0%*
Book Value	6.0%	6.5%	*4.5%*

Fiscal Year Ends	QUARTERLY REVENUES ($ mill.) A Jan.31	Apr.30	Jul.31	Oct.31	Full Fiscal Year
2005	680.6	508.0	232.9	339.6	1761.1
2006	921.4	483.2	237.9	282.2	1924.7
2007	677.2	531.5	224.4	278.2	1711.3
2008	788.5	634.2	354.7	***302.6***	***2080***
2009	***815***	***655***	***360***	***310***	***2140***

Fiscal Year Ends	EARNINGS PER SHARE A B F Jan.31	Apr.30	Jul.31	Oct.31	Full Fiscal Year
2005	.93	.52	d.06	d.07	1.32
2006	.94	.57	d.16	d.08	1.27
2007	.94	.69	d.12	d.11	1.40
2008	1.12	.66	d.10	***d.13***	***1.55***
2009	***1.13***	***.68***	***d.10***	***d.11***	***1.60***

Cal-endar	QUARTERLY DIVIDENDS PAID C■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2004	.208	.215	.215	.215	.85
2005	.215	.23	.23	.23	.91
2006	.23	.24	.24	.24	.95
2007	.24	.25	.25	.25	.99
2008	.25	.26	.26	.26	

BUSINESS: Piedmont Natural Gas Company is primarily a regulated natural gas distributor, serving over 932,097 customers in North Carolina, South Carolina, and Tennessee. 2007 revenue mix: residential (54%), commercial (30%), industrial (14%), other (2%). Principal suppliers: Transco and Tennessee Pipeline. Gas costs: 69.4% of revenues. '07 deprec. rate: 3.4%. Estimated plant age: 8.7 years. Non-regulated operations: sale of gas-powered heating equipment; natural gas brokering; propane sales. Has about 1,876 employees. Officers & directors own less than 1% of common stock (1/08 proxy). *Chairman, CEO, & President: Thomas E. Skains. Inc.:* NC. Addr.: 4720 Piedmont Row Drive, Charlotte, NC 28210. Telephone: 704-364-3120. Internet: www.piedmontng.com.

Piedmont Natural Gas likely posted a larger share loss for the October interim. Its top-line volumes have been growing steadily due to its residential and commercial businesses. Moreover, marketing activities are beginning to bear fruit for its wholesale division. But weaker performance at the sideline Hardy Storage and Southstar Energy Service units ought to detract from other income, resulting in the aforementioned decline in share net. However, due to stronger profitability earlier this year, PNY's 2008 tally likely advanced almost 11%.

Due to the tough operating environment, the top and bottom lines may well advance only 3% in fiscal 2009 (began November 1st). Winter heating costs are expected to remain flat this year. However, some uncertainty stems from the 2008-2009 winter weather. Meanwhile, operating margins should continue to benefit from higher volumes and decreased operating expenses. Thus, profitability ought to improve marginally. Furthermore,

New rate cases and capital projects augur well for the company's prospects. Piedmont recently received approval for a rate increase in North Carolina. This allowed the company to raise its annual rates by $15.7 million, effective November 1st. Meanwhile, the Robeson liquid natural gas storage project, located in NC, is moving along nicely. This facility should allow for extra capacity and profits during peak winter months.

Hardy Storage and Southstar Energy Services contributions to PNY have moderated a bit. This stems from higher operating expenses at Hardy Storage and from the effects of warmer weather on Southstar Energy. Meanwhile, Southstar has been impacted by rising commodity prices and reduced opportunities from the management of storage and transportation assets. Still, the Hardy Storage facility only came on line in April, 2007. There is room to expand, and operations can be tightened up, providing upside. In all,

These neutrally ranked shares may offer modest conservative appeal. They have been more volatile than usual since our September review. However, presently, they are trading almost 13% higher and offer good dividend growth potential.

Bryan Fong *December 12, 2008*

(A) Fiscal year ends October 31st.
(B) Diluted earnings. Excl. extraordinary item: '00, 8¢. Excl. nonrecurring charge: '97, 2¢. Next earnings report due early Feb.
(C) Dividends historically paid mid-January, April, July, October.
■ Div'd reinvest. plan available; 5% discount.
(D) Includes deferred charges. In 2007: $23.9 million, 33¢/share.
(E) In millions, adjusted for stock split.
(F) Quarters may not add to total due to change in shares outstanding.

Company's Financial Strength	B++
Stock's Price Stability	100
Price Growth Persistence	60
Earnings Predictability	85

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SOUTH JERSEY INDS. NYSE-SJI

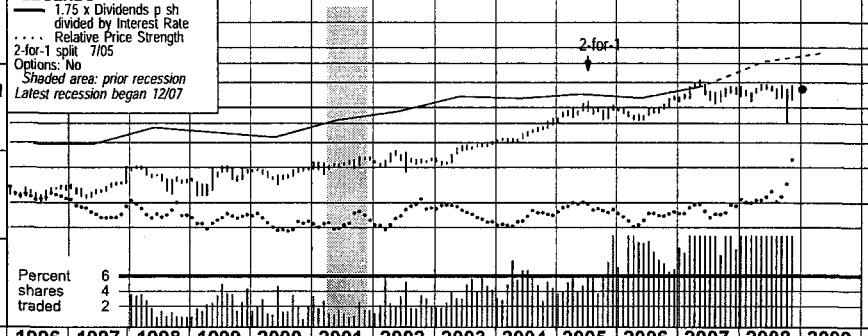
RECENT PRICE **37.07** | P/E RATIO **15.6** (Trailing: 16.5 / Median: 14.0) | RELATIVE P/E RATIO **1.53** | DIV'D YLD **3.2%** | VALUE LINE

TIMELINESS 3 Raised 5/23/08
SAFETY 2 Lowered 1/4/91
TECHNICAL 2 Raised 12/5/08
BETA .75 (1.00 = Market)

High:	15.3	15.4	15.4	15.1	17.0	18.3	20.3	26.5	32.4	34.3	41.3	39.4
Low:	10.5	11.0	10.8	12.3	13.8	14.1	15.3	19.7	24.9	25.6	31.2	25.2

Target Price Range 2011 | 2012 | 2013

LEGENDS
— 1.75 x Dividends p sh divided by Interest Rate
.... Relative Price Strength
2-for-1 split 7/05
Options: No
Shaded area: prior recession
Latest recession began 12/07



2011-13 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	50	(+35%)	10%
Low	35	(-5%)	2%

Insider Decisions

	J	F	M	A	M	J	J	A	S
to Buy	0	0	0	1	0	0	0	0	0
Options	0	0	0	0	0	0	0	0	0
to Sell	0	0	2	0	2	1	0	0	0

Institutional Decisions

	1Q2008	2Q2008	3Q2008
to Buy	57	85	71
to Sell	71	58	59
Hld's(000)	17182	17430	17041

% TOT. RETURN 11/08

	THIS STOCK	VL ARITH. INDEX
1 yr.	8.9	-41.9
3 yr.	48.6	-30.9
5 yr.	132.4	-10.6

1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	© VALUE LINE PUB., INC.	11-13
16.67	17.03	17.45	16.50	16.52	16.18	20.89	17.60	22.43	35.30	20.69	26.34	29.51	31.78	31.76	32.30	*32.00*	*32.25*	Revenues per sh	*35.95*
1.56	1.54	1.35	1.65	1.54	1.60	1.44	1.84	1.95	1.90	2.12	2.24	2.44	2.51	3.51	3.20	*3.30*	*3.60*	"Cash Flow" per sh	*4.20*
.81	.78	.61	.83	.85	.86	.64	1.01	1.08	1.15	1.22	1.37	1.58	1.71	2.46	2.09	*2.30*	*2.50*	Earnings per sh A	*3.00*
.71	.72	.72	.72	.72	.72	.72	.72	.73	.74	.75	.78	.82	.86	.92	1.01	*1.11*	*1.20*	Div'ds Decl'd per sh B ■	*1.30*
1.69	1.87	1.93	2.08	2.01	2.30	3.06	2.19	2.21	2.82	3.47	2.36	2.67	3.21	2.51	1.88	*2.00*	*2.25*	Cap'l Spending per sh	*3.15*
6.95	7.17	7.23	7.34	8.03	6.43	6.23	6.74	7.25	7.81	9.67	11.26	12.41	13.50	15.11	16.25	*17.35*	*17.75*	Book Value per sh C	*19.55*
19.00	19.61	21.43	21.44	21.51	21.54	21.56	22.30	23.00	23.72	24.41	26.46	27.76	28.98	29.33	29.61	*30.00*	*31.00*	Common Shs Outst'g D	*32.00*
13.2	15.8	16.1	12.2	13.3	13.8	21.2	13.3	13.0	13.6	13.5	13.3	14.1	16.6	11.9	17.2	*Bold figures are*		Avg Ann'l P/E Ratio	*14.0*
.80	.93	1.06	.82	.83	.80	1.10	.76	.85	.70	.74	.76	.74	.88	.64	.91	*Value Line*		Relative P/E Ratio	*.95*
6.6%	5.9%	7.4%	7.2%	6.4%	6.1%	5.3%	5.4%	5.2%	4.7%	4.6%	4.3%	3.7%	3.0%	3.2%	2.8%	*estimates*		Avg Ann'l Div'd Yield	*3.1%*

CAPITAL STRUCTURE as of 9/30/08
Total Debt $517.0 mill. **Due in 5 Yrs** $196.8 mill.
LT Debt $357.8 mill. **LT Interest** $17.0 mill.
(Total interest coverage: 5.9x)

Pension Assets-12/07 $120.4 mill. **Oblig.** $133.0 mill.

Pfd Stock none

Common Stock 29,728,697 common shs. as of 11/3/08

MARKET CAP: $1.1 billion (Mid Cap)

1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009		11-13
450.2	392.5	515.9	837.3	505.1	696.8	819.1	921.0	931.4	956.4	*960*	*1000*	Revenues ($mill)	*1150*
13.8	22.0	24.7	26.8	29.4	34.6	43.0	48.6	72.0	61.8	*70.0*	*80.0*	Net Profit ($mill)	*100*
46.2%	42.8%	43.1%	42.2%	41.4%	40.6%	40.9%	41.5%	41.3%	41.9%	*42.0%*	*40.0%*	Income Tax Rate	*40.0%*
3.1%	5.6%	4.8%	3.2%	5.8%	5.0%	5.2%	5.3%	7.7%	6.5%	*7.3%*	*8.0%*	Net Profit Margin	*8.7%*
57.3%	53.8%	54.1%	57.0%	53.6%	50.8%	48.7%	44.9%	44.7%	42.7%	*41.0%*	*40.5%*	Long-Term Debt Ratio	*40.5%*
33.5%	37.0%	37.6%	35.9%	46.1%	49.0%	51.0%	55.1%	55.3%	57.3%	*59.0%*	*59.5%*	Common Equity Ratio	*59.5%*
401.1	405.9	443.5	516.2	512.5	608.4	675.0	710.3	801.1	839.0	*880*	*925*	Total Capital ($mill)	*1050*
504.3	533.3	562.2	607.0	666.6	748.3	799.9	877.3	920.0	948.9	*980*	*1015*	Net Plant ($mill)	*1200*
5.3%	7.4%	7.4%	6.9%	7.6%	7.3%	7.9%	8.3%	10.1%	8.6%	*9.0%*	*9.5%*	Return on Total Cap'l	*10.5%*
8.1%	11.7%	12.1%	12.1%	12.4%	11.5%	12.4%	12.4%	16.3%	12.8%	*13.5%*	*14.5%*	Return on Shr. Equity	*16.0%*
10.3%	14.6%	14.8%	12.8%	12.5%	11.6%	12.5%	12.4%	16.3%	12.8%	*13.5%*	*14.5%*	Return on Com Equity	*16.0%*
NMF	4.2%	4.8%	3.5%	4.7%	5.0%	5.9%	6.2%	10.2%	6.7%	*7.0%*	*8.0%*	Retained to Com Eq	*9.5%*
112%	72%	67%	76%	62%	57%	52%	50%	37%	48%	*48%*	*47%*	All Div'ds to Net Prof	*42%*

CURRENT POSITION ($MILL.)	2006	2007	9/30/08
Cash Assets	7.9	11.7	4.2
Other	363.8	316.6	350.7
Current Assets	371.7	328.3	354.9
Accts Payable	101.6	101.2	88.1
Debt Due	197.0	118.4	159.2
Other	124.2	108.7	131.1
Current Liab.	422.8	328.3	378.4
Fix. Chg. Cov.	527%	476%	581%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '05-'07 to '11-'13
Revenues	7.0%	4.0%	*2.0%*
"Cash Flow"	7.0%	9.0%	*5.5%*
Earnings	9.5%	12.5%	*6.0%*
Dividends	2.5%	4.5%	*5.5%*
Book Value	7.5%	12.5%	*4.5%*

Cal-endar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2005	328.6	154.0	157.0	281.4	921.0
2006	372.6	153.8	154.7	250.3	931.4
2007	368.4	171.7	156.2	260.1	956.4
2008	348.0	135.8	210.4	*265.8*	*960*
2009	*365*	*160*	*200*	*275*	*1000*

Cal-endar	EARNINGS PER SHARE A Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2005	.96	.27	.09	.39	1.71
2006	1.06	.20	.51	.69	2.46
2007	1.30	.21	d.05	.63	2.09
2008	1.32	.26	.04	*.68*	*2.30*
2009	*1.35*	*.30*	*.15*	*.70*	*2.50*

Cal-endar	QUARTERLY DIVIDENDS PAID B ■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2004	--	.202	.202	.415	.82
2005	--	.213	.213	.438	.86
2006	--	.225	.225	.470	.92
2007	--	.245	.245	.515	1.01
2008	--	.270	.270	.568	

BUSINESS: South Jersey Industries, Inc. is a holding company. Its subsidiary, South Jersey Gas Co., distributes natural gas to 335,663 customers in New Jersey's southern counties, which covers 2,500 square miles and includes Atlantic City. Gas revenue mix '07: residential, 46%; commercial, 23%; cogeneration and electric generation, 8%; industrial, 23%. Non-utility operations include: South Jersey Energy, South Jersey Resources Group, Marina Energy, and South Jersey Energy Service Plus. Has 604 employees. Off./dir. control 1.0% of com. shares; Dimensional Fund Advisors, 6.5%; Barclays, 6.1% (3/08 proxy). Chrmn. & CEO: Edward Graham. Incorp.: NJ. Address: 1 South Jersey Plaza, Folsom, NJ 08037. Tel.: 609-561-9000. Internet: www.sjindustries.com.

Shares of South Jersey Industries have held their own in recent months, despite considerable weakness in the broader market. The company reported strong results for the third quarter. Customer growth at South Jersey Gas continued at a decent clip, considering the slowdown in the housing construction market. The utility posted a slightly greater loss in the recent period, though. Losses are common for this business in the third quarter, due to a lack of heating demand. This was more than offset by strength in other areas. Higher cooling demand and the opening of the Borgata's new Water Club tower benefited performance at the on-site energy production business, Marina Energy. The Retail Services and Asset Management & Marketing segments also posted improved results. We anticipate a healthy performance in the fourth quarter, as well. We expect a share-earnings advance of roughly 10% for full-year 2008. Bottom-line growth ought to continue in 2009.

The New Jersey Board of Public Utilities has approved a rate increase for South Jersey Gas. The subsidiary had originally requested an increase in June, citing greater natural gas costs. Its Basic Gas Supply Service rate will now increase by 9.2%, which was somewhat smaller than had been originally requested, reflecting a decline in gas prices in recent months.

The company has announced a 10% dividend hike. The board of directors raised the quarterly dividend from $0.27 to $0.2975, starting with the December payout. The company has established an encouraging track record of dividend increases in recent years. We expect this pattern to continue. In addition, South Jersey has announced a share-repurchase program. Under this program, the company can buy back up to 5% of common stock outstanding over the next four years. This ought to keep a lid on the share count, supporting share net.

This issue is neutrally ranked for year-ahead performance. Looking further out, we anticipate solid bottom-line growth at the company over the pull to 2011-2013. This good-quality stock offers subpar, but reasonably well-defined, total return potential for the coming years.

Michael Napoli, CPA *December 12, 2008*

(A) Based on GAAP EPS through 2006, economic earnings thereafter. GAAP EPS: '07, $2.10. Excl. nonrecur. gain (loss): '01, $0.13; Q2 '08, ($0.70). Excl gain (losses) from discont. ops.: '96, $1.14; '97, ($0.24); '98, ($0.26); '99, ($0.02); '00, ($0.04); '01, ($0.02); '02, ($0.04); '03, ($0.09); '05, ($0.02); '06, ($0.02); '07, $0.01. Next egs. report due late February. (B) Div'ds paid early Apr., Jul., Oct., and late Dec. ■ Div. reinvest. plan avail. (C) Incl. regulatory assets. At 9/30/08: $212.7 mill., $7.15 per shr. (D) In millions, adjusted for split.

Company's Financial Strength	B++
Stock's Price Stability	100
Price Growth Persistence	95
Earnings Predictability	75

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SOUTHWEST GAS NYSE-SWX

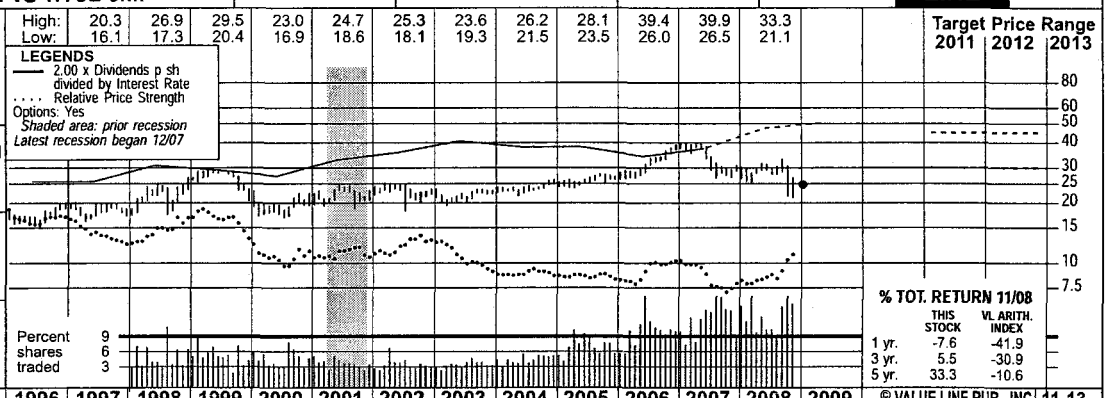
RECENT PRICE	P/E RATIO		RELATIVE P/E RATIO	DIV'D YLD	
24.79	13.6	(Trailing: 14.1 Median: 18.0)	1.33	3.8%	VALUE LINE

TIMELINESS 3 Raised 5/23/08
SAFETY 3 Lowered 1/4/91
TECHNICAL 2 Raised 12/12/08
BETA .75 (1.00 = Market)

High:	20.3	26.9	29.5	23.0	24.7	25.3	23.6	26.2	28.1	39.4	39.9	33.3
Low:	16.1	17.3	20.4	16.9	18.6	18.1	19.3	21.5	23.5	26.0	26.5	21.1

Target Price Range 2011 | 2012 | 2013

LEGENDS
— 2.00 x Dividends p sh divided by Interest Rate
.... Relative Price Strength
Options: Yes
Shaded area: prior recession
Latest recession began 12/07



2011-13 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	45	(+80%)	18%
Low	30	(+20%)	8%

Insider Decisions

	J	F	M	A	M	J	J	A	S
to Buy	0	0	0	0	0	0	0	0	2
Options	0	0	1	0	1	0	0	0	0
to Sell	0	0	2	0	3	0	0	0	2

Institutional Decisions

	1Q2008	2Q2008	3Q2008
to Buy	80	85	69
to Sell	88	65	74
Hld's(000)	34496	34150	33669

Percent shares traded 9 6 3

% TOT. RETURN 11/08

	THIS STOCK	VL ARITH. INDEX
1 yr.	-7.6	-41.9
3 yr.	5.5	-30.9
5 yr.	33.3	-10.6

1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	© VALUE LINE PUB., INC.	11-13
25.93	25.68	28.16	23.03	24.09	26.73	30.17	30.24	32.61	42.98	39.68	35.96	40.14	43.59	48.47	50.27	**48.85**	**50.00**	Revenues per sh A	**58.35**
3.34	3.24	5.09	2.65	3.00	3.85	4.48	4.45	4.57	4.79	5.07	5.11	5.57	5.20	5.97	6.21	**6.00**	**6.45**	"Cash Flow" per sh	**7.00**
.81	.63	1.22	.10	.25	.77	1.65	1.27	1.21	1.15	1.16	1.13	1.66	1.25	1.98	1.95	**1.75**	**2.00**	Earnings per sh A B	**2.50**
.70	.74	.80	.82	.82	.82	.82	.82	.82	.82	.82	.82	.82	.82	.82	.86	**.90**	**.94**	Div'ds Decl'd per sh C■	**1.06**
5.02	5.43	6.64	6.79	8.19	6.19	6.40	7.41	7.04	8.17	8.50	7.03	8.23	7.49	8.27	7.96	**6.80**	**7.50**	Cap'l Spending per sh	**9.90**
15.99	15.96	16.38	14.55	14.20	14.09	15.67	16.31	16.82	17.27	17.91	18.42	19.18	19.10	21.58	22.98	**23.30**	**24.45**	Book Value per sh	**26.55**
20.60	21.00	21.28	24.47	26.73	27.39	30.41	30.99	31.71	32.49	33.29	34.23	36.79	39.33	41.77	42.81	**44.00**	**45.00**	Common Shs Outst'g D	**48.00**
16.6	26.5	14.0	NMF	69.3	24.1	13.2	21.1	16.0	19.0	19.9	19.2	14.3	20.6	15.9	18.4	*Bold figures are*		Avg Ann'l P/E Ratio	**15.0**
1.01	1.57	.92	NMF	4.34	1.39	.69	1.20	1.04	.97	1.09	1.09	.76	1.10	.86	.98	*Value Line*		Relative P/E Ratio	**1.00**
5.2%	4.4%	4.7%	5.4%	4.7%	4.4%	3.8%	3.1%	4.2%	3.8%	3.6%	3.8%	3.5%	3.2%	2.6%	2.4%	*estimates*		Avg Ann'l Div'd Yield	**2.8%**

CAPITAL STRUCTURE as of 9/30/08

Total Debt $1325.6 mill. **Due in 5 Yrs** $615.0 mill.
LT Debt $1313.1 mill. **LT Interest** $90.0 mill.
(Total interest coverage: 2.3x)
Leases, Uncapitalized Annual rentals $7.0 mill.
Pension Assets-12/07 $441.7 mill. **Oblig.** $546.4 mill.
Pfd Stock None

Common Stock 43,914,407 shs. as of 10/31/08

MARKET CAP: $1.1 billion (Mid Cap)

1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009		11-13
917.3	936.9	1034.1	1396.7	1320.9	1231.0	1477.1	1714.3	2024.7	2152.1	**2150**	**2250**	Revenues ($mill) A	**2800**
47.5	39.3	38.3	37.2	38.6	38.5	58.9	48.1	80.5	83.3	**75.0**	**90.0**	Net Profit ($mill)	**120**
43.4%	35.5%	26.2%	34.5%	32.8%	30.5%	34.8%	29.7%	37.3%	36.5%	**39.0%**	**36.0%**	Income Tax Rate	**35.0%**
5.2%	4.2%	3.7%	2.7%	2.9%	3.1%	4.0%	2.8%	4.0%	3.9%	**3.5%**	**4.0%**	Net Profit Margin	**4.3%**
60.2%	60.3%	60.2%	56.2%	62.5%	66.0%	64.2%	63.8%	60.6%	58.1%	**56.0%**	**54.0%**	Long-Term Debt Ratio	**50.5%**
35.3%	35.5%	35.8%	39.6%	34.1%	34.0%	35.8%	36.2%	39.4%	41.9%	**44.0%**	**46.0%**	Common Equity Ratio	**49.5%**
1349.3	1424.7	1489.9	1417.6	1748.3	1851.6	1968.6	2076.0	2287.8	2349.8	**2325**	**2380**	Total Capital ($mill)	**2575**
1459.4	1581.1	1686.1	1825.6	1979.5	2175.7	2336.0	2489.1	2668.1	2845.3	**2960**	**3100**	Net Plant ($mill)	**3600**
5.8%	4.8%	4.6%	5.1%	4.3%	4.2%	5.0%	4.3%	5.5%	5.5%	**5.0%**	**5.5%**	Return on Total Cap'l	**6.5%**
8.9%	7.0%	6.5%	6.0%	5.9%	6.1%	8.3%	6.4%	8.9%	8.5%	**7.5%**	**8.0%**	Return on Shr. Equity	**9.5%**
10.0%	7.8%	7.2%	6.6%	6.5%	6.1%	8.3%	6.4%	8.9%	8.5%	**7.5%**	**8.0%**	Return on Com Equity	**9.5%**
5.0%	2.8%	2.4%	1.9%	1.9%	1.7%	4.3%	2.2%	5.2%	4.8%	**3.5%**	**4.5%**	Retained to Com Eq	**5.5%**
50%	64%	67%	71%	70%	72%	49%	65%	42%	44%	**52%**	**47%**	All Div'ds to Net Prof	**42%**

CURRENT POSITION ($MILL.)	2006	2007	9/30/08
Cash Assets	18.8	32.0	13.2
Other	482.8	470.5	257.2
Current Assets	501.6	502.5	270.4
Accts Payable	265.7	220.7	79.7
Debt Due	27.5	47.1	12.5
Other	202.9	260.1	266.8
Current Liab.	496.1	527.9	359.0
Fix. Chg. Cov.	220%	229%	230%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '05-'07 to '11-'13
Revenues	6.0%	4.5%	*3.5%*
"Cash Flow"	4.5%	4.0%	*3.0%*
Earnings	12.0%	6.0%	*6.5%*
Dividends	--	--	*4.0%*
Book Value	3.0%	3.5%	*4.0%*

Cal-endar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2005	542.9	361.1	313.3	497.0	1714.3
2006	676.9	430.9	351.8	565.1	2024.7
2007	793.7	426.6	371.5	560.3	2152.1
2008	813.6	447.3	374.4	**514.7**	**2150**
2009	**800**	**475**	**415**	**560**	**2250**

Cal-endar	EARNINGS PER SHARE B Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2005	.88	d.07	d.43	.87	1.25
2006	1.11	.02	d.26	1.11	1.98
2007	1.17	d.01	d.22	1.00	1.95
2008	1.14	d.06	d.38	**1.05**	**1.75**
2009	**1.15**	**Nil**	**d.25**	**1.10**	**2.00**

Cal-endar	QUARTERLY DIVIDENDS PAID C■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2004	.205	.205	.205	.205	.82
2005	.205	.205	.205	.205	.82
2006	.205	.205	.205	.205	.82
2007	.205	.215	.215	.215	.85
2008	.215	.225	.225	.225	

BUSINESS: Southwest Gas Corporation is a regulated gas distributor serving approximately 1.8 million customers in sections of Arizona, Nevada, and California. Comprised of two business segments: natural gas operations and construction services. 2007 margin mix: residential and small commercial, 86%; large commercial and industrial, 5%; transportation, 9%. Total throughput: 2.4 billion therms. Sold PriMerit Bank, 7/96. Has 5,073 employees. Off. & Dir. own 1.8% of common stock; T. Rowe Price Associates, Inc., 6.7%; GAMCO Investors, Inc., 5.8% (3/08 Proxy). Chairman: James J. Kropid. Chief Executive Officer: Jeffrey W. Shaw. Inc.: California. Address: 5241 Spring Mountain Road, Las Vegas, Nevada 89193. Telephone: 702-876-7237. Internet: www.swgas.com.

Southwest Gas reported an unimpressive performance for the third quarter. The top line advanced slightly in the recent interim. Operating costs increased at a faster pace, though. Moreover, the company reported a negative return on long-term investments. Overall, Southwest posted a much greater share loss for the period. Customer growth has moderated in recent periods. A slowdown in the new construction market and an increasing inventory of vacant homes in the Southwest hurt performance. Third-quarter losses are common, considering the seasonal nature of the business. Still, the company is operating in a challenging environment, which ought to continue to stymie growth in the near term. We anticipate flat revenues and lower earnings per share at Southwest Gas for full-year 2008. Share earnings may rebound in 2009, assuming success at controlling costs.

The company has two important rate case proceedings nearing conclusion. It is seeking a rate increase of $50.2 million in Arizona, and has included proposed rate design changes to address weather-related volatility. Elsewhere, Southwest is seeking a $9.1 million increase in operating revenues in California. These requests appear reasonable, although it is unclear what pressures the rate boards may face, if any. We expect decisions on these cases by yearend. The company's focus on procuring rate relief and improving rate design is important, as SWX depends upon such approved revenue increases to help it cope with higher expenses and to provide for smoother earnings.

Investors should be aware of several caveats. Warmer-than-normal temperatures during the winter months can hurt profitability at Southwest Gas. Moreover, the company will likely incur higher operating costs as it continues to expand. Furthermore, insufficient, or lagging, rate relief could also hurt profits.

Shares of Southwest Gas, once favored for their growth, are out of sorts now. Nevertheless, we anticipate higher share earnings at the company by early next decade. At the current quotation, this issue features good total return potential for a utility, considering its healthy dividend yield.

Michael Napoli, CPA *December 12, 2008*

(A) Incl. income for PriMerit Bank on the equity basis through 1994. (B) Based on avg. shares outstand. thru. '96, then diluted. Excl. nonrec. gains (losses): '93, 8¢; '97, 16¢; '02, (10¢); '05, (11¢); '06, 7¢. Incl. asset writedown: '93, 44¢. Excl. loss from disc. ops.: '95, 75¢. Totals may not sum due to rounding. Next egs. report due late February. (C) Dividends historically paid early March, June, September, December. ■ Div'd reinvest. plan avail. (D) In millions.

Company's Financial Strength	B
Stock's Price Stability	100
Price Growth Persistence	55
Earnings Predictability	65

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WGL HOLDINGS NYSE-WGL

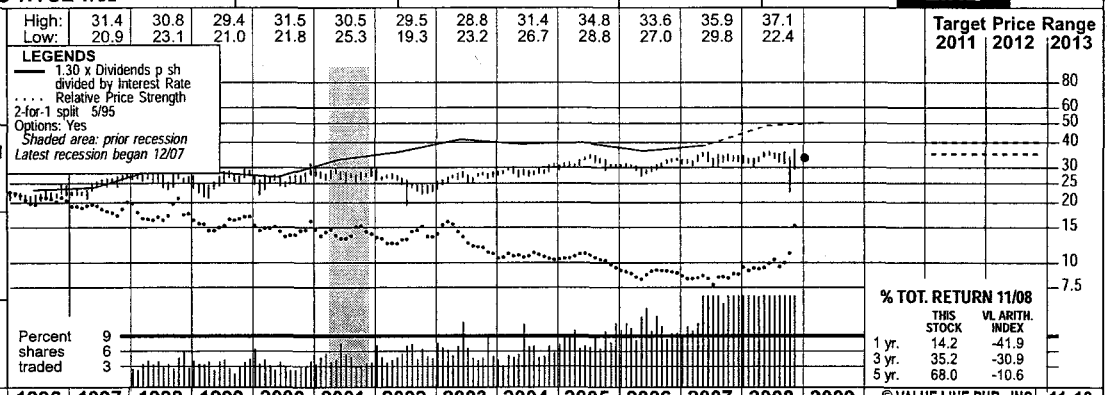
RECENT PRICE	33.52	P/E RATIO	14.1 (Trailing: 8.3 / Median: 15.0)	RELATIVE P/E RATIO	1.38	DIV'D YLD	4.3%	VALUE LINE

TIMELINESS 3 Raised 5/25/07
SAFETY 1 Raised 4/2/93
TECHNICAL 2 Raised 12/12/08
BETA .75 (1.00 = Market)

High:	31.4	30.8	29.4	31.5	30.5	29.5	28.8	31.4	34.8	33.6	35.9	37.1
Low:	20.9	23.1	21.0	21.8	25.3	19.3	23.2	26.7	28.8	27.0	29.8	22.4

Target Price Range 2011 | 2012 | 2013

LEGENDS
— 1.30 x Dividends p sh divided by Interest Rate
.... Relative Price Strength
2-for-1 split 5/95
Options: Yes
Shaded area: prior recession
Latest recession began 12/07



2011-13 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	40	20%	8%
Low	35	5%	5%

Insider Decisions

	J	F	M	A	M	J	J	A	S
to Buy	0	0	0	0	1	0	0	0	0
Options	0	0	0	0	5	1	0	0	2
to Sell	2	0	0	0	7	1	0	0	2

Institutional Decisions

	1Q2008	2Q2008	3Q2008
to Buy	106	95	83
to Sell	89	100	119
Hld's(000)	35559	34195	32939

Percent shares traded 9 6 3

% TOT. RETURN 11/08

	THIS STOCK	VL ARITH. INDEX
1 yr.	14.2	-41.9
3 yr.	35.2	-30.9
5 yr.	68.0	-10.6

1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	© VALUE LINE PUB., INC.	11-13
18.37	21.55	21.69	19.30	22.19	24.16	23.74	20.92	22.19	29.80	32.63	42.45	42.93	44.94	53.96	53.51	52.98	*53.35*	Revenues per sh A	*54.60*
2.17	2.25	2.43	2.51	2.93	3.02	2.79	2.74	3.20	3.24	2.63	4.00	3.87	3.97	3.93	3.89	4.17	*4.30*	"Cash Flow" per sh	*4.55*
1.27	1.31	1.42	1.45	1.85	1.85	1.54	1.47	1.79	1.88	1.14	2.30	1.98	2.11	1.94	2.10	2.33	*2.40*	Earnings per sh B	*2.55*
1.07	1.09	1.11	1.12	1.14	1.17	1.20	1.22	1.24	1.26	1.27	1.28	1.30	1.32	1.34	1.37	1.42	*1.44*	Div'ds Decl'd per sh C■	*1.56*
2.17	2.43	2.84	2.63	2.85	3.20	3.62	3.42	2.67	2.68	3.34	2.65	2.33	2.32	3.27	3.33	3.33	*3.00*	Cap'l Spending per sh	*2.50*
10.66	11.04	11.51	11.95	12.79	13.48	13.86	14.72	15.31	16.24	15.78	16.25	16.95	17.80	18.28	19.83	21.06	*22.00*	Book Value per sh D	*25.00*
40.62	41.50	42.19	42.93	43.70	43.70	43.84	46.47	46.47	48.54	48.56	48.63	48.67	48.65	48.89	49.45	49.61	*49.65*	Common Shs Outst'g E	*50.00*
13.6	15.6	14.0	12.7	11.5	12.7	17.2	17.3	14.6	14.7	23.1	11.1	14.2	14.7	15.5	15.6	14.3		Avg Ann'l P/E Ratio	*15.0*
.82	.92	.92	.85	.72	.73	.89	.99	.95	.75	1.26	.63	.75	.78	.84	.82	.85		Relative P/E Ratio	*1.00*
6.2%	5.3%	5.6%	6.1%	5.4%	5.0%	4.5%	4.8%	4.8%	4.6%	4.8%	5.0%	4.6%	4.2%	4.5%	4.2%	4.3%		Avg Ann'l Div'd Yield	*4.2%*

CAPITAL STRUCTURE as of 9/30/08
Total Debt $950.7 mill. **Due in 5 Yrs** $399.5 mill.
LT Debt $603.7 mill. **LT Interest** $40.1 mill.
(LT interest earned: 6.7x; total interest coverage: 5.7x)
Pension Assets-9/08 $588.2 mill. **Oblig.** $590.5 mill.
Preferred Stock $28.2 mill. **Pfd. Div'd** $1.3 mill.

Common Stock 49,971,614 shs. as of 10/31/08

MARKET CAP: $1.7 billion (Mid Cap)

1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009		11-13
1040.6	972.1	1031.1	1446.5	1584.8	2064.2	2089.6	2186.3	2637.9	2646.0	2628.2	*2650*	Revenues ($mill) A	*2730*
68.6	68.8	84.6	89.9	55.7	112.3	98.0	104.8	95.1	102.9	116.3	*120*	Net Profit ($mill)	*130*
35.6%	36.0%	36.1%	39.6%	34.0%	38.0%	38.2%	37.4%	39.0%	39.1%	38.0%	*38.0%*	Income Tax Rate	*38.0%*
6.6%	7.1%	8.2%	6.2%	3.5%	5.4%	4.7%	4.8%	3.6%	3.9%	4.4%	*4.5%*	Net Profit Margin	*4.8%*
40.3%	41.5%	43.1%	41.7%	45.7%	43.8%	40.9%	39.5%	38.5%	37.9%	36.0%	*35.0%*	Long-Term Debt Ratio	*32.0%*
57.1%	56.1%	54.8%	56.3%	52.4%	54.3%	57.2%	58.6%	61.5%	60.3%	62.3%	*63.5%*	Common Equity Ratio	*66.5%*
1064.8	1218.5	1299.2	1400.8	1462.5	1454.9	1443.6	1478.1	1497.8	1625.4	1677.2	*1720*	Total Capital ($mill)	*1880*
1319.5	1402.7	1460.3	1519.7	1606.8	1874.9	1915.6	1969.7	2067.9	2150.4	2208.3	*2325*	Net Plant ($mill)	*2615*
8.0%	7.1%	7.9%	7.9%	5.3%	9.1%	8.2%	8.5%	7.7%	7.6%	*8.1%*	*8.0%*	Return on Total Cap'l	*8.0%*
10.8%	9.7%	11.4%	11.0%	7.0%	13.7%	11.5%	11.7%	10.3%	10.2%	*11.1%*	*11.0%*	Return on Shr. Equity	*10.0%*
11.1%	9.9%	11.7%	11.2%	7.2%	14.0%	11.7%	12.0%	10.2%	10.4%	*11.6%*	*11.5%*	Return on Com Equity	*10.5%*
2.5%	1.8%	3.7%	3.8%	NMF	6.2%	4.1%	4.6%	3.1%	3.5%	4.3%	*4.5%*	Retained to Com Eq	*4.0%*
78%	82%	69%	67%	112%	56%	65%	62%	70%	66%	61%	*60%*	All Div'ds to Net Prof	*61%*

CURRENT POSITION ($MILL.)	2006	2007	9/30/08
Cash Assets	4.4	4.9	6.2
Other	556.9	568.8	736.1
Current Assets	561.3	573.7	742.3
Accts Payable	208.5	216.9	243.1
Debt Due	238.4	205.4	347.0
Other	113.9	134.8	158.4
Current Liab.	560.8	557.1	748.5
Fix. Chg. Cov.	465%	460%	460%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '05-'07 to '11-'13
Revenues	9.0%	12.5%	*1.0%*
"Cash Flow"	3.5%	5.0%	*2.5%*
Earnings	2.0%	5.0%	*3.5%*
Dividends	1.5%	1.5%	*2.5%*
Book Value	4.0%	3.5%	*5.0%*

Fiscal Year Ends	QUARTERLY REVENUES ($ mill.) A Dec.31	Mar.31	Jun.30	Sep.30	Full Fiscal Year
2005	623.4	929.8	349.0	284.1	2186.3
2006	902.9	1064.5	346.9	323.6	2637.9
2007	732.9	1119.9	467.5	325.7	2646.0
2008	751.6	1020.0	464.7	391.9	2628.2
2009	*760*	*1050*	*480*	*360*	*2650*

Fiscal Year Ends	EARNINGS PER SHARE A B Dec.31	Mar.31	Jun.30	Sep.30	Full Fiscal Year
2005	.88	1.63	d.17	d.23	2.11
2006	.93	1.17	d.01	d.15	1.94
2007	.92	1.27	.22	d.31	2.10
2008	.96	1.66	.06	d.22	2.33
2009	*.97*	*1.50*	*.13*	*d.20*	*2.40*

Cal-endar	QUARTERLY DIVIDENDS PAID C ■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2004	.32	.325	.325	.325	1.30
2005	.325	.333	.333	.333	1.32
2006	.333	.338	.338	.338	1.34
2007	.34	.34	.34	.34	1.36
2008	.34	.36	.36	.36	

BUSINESS: WGL Holdings, Inc. is the parent of Washington Gas Light, a natural gas distributor in Washington, D.C. and adjacent areas of VA and MD to resident'l and comm'l users (1,046,201 meters). Hampshire Gas, a federally regulated sub., operates an underground gas-storage facility in WV. Non-regulated subs.: Wash. Gas Energy Svcs. sells and delivers natural gas and provides energy related products in the D.C. metro area; Wash. Gas Energy Sys. designs/installs comm'l heating, ventilating, and air cond. systems. American Century Inv. own 8.2% of common stock; Off./dir. less than 1% (1/08 proxy). Chrmn. & CEO: J.H. DeGraffenreidt. Inc.: D.C. and VA. Addr.: 1100 H St., N.W., Washington, D.C. 20080. Tel.: 202-624-6410. Internet: www.wglholdings.com.

WGL Holdings performed well in fiscal 2008 (ended September 30th). New rates, higher consumption, and customer growth contributed to the annual top-line increase of almost 18%. Meanwhile, the initiation of regulatory mechanisms like the weather normalization adjustment (WMA) minimized usage volatility. And margins widened due to the successful expansion of the "asset optimization" program. The retail energy segment did not fare as well. This reflects lower margins from electric sales, partially offset by slightly higher margins for natural gas sales. Weakness here stemmed from milder weather and the loss of certain government and large commercial accounts. However, on balance, WGL's earnings per share advanced 11%. Next up,

We look for December-period results to be little changed compared to last year. Aggregate electric and gas customer accounts declined in the most recent quarter, due to the extended run-up in natural gas and electric prices from February through June. That caused WGL to halt its mass market customer acquisition efforts. However, as the company begins fiscal 2009, lower energy prices have allowed it to resume those efforts. It may take some time for these programs to pick up steam, consequently, WGL will likely experience growth in electricity sales, but natural gas volumes will probably continue to decline, as the last of the lost government accounts roll off its books. However,

The company should still register a modest 3% earnings increase for fiscal 2009. The utility segment should benefit from an estimated 9,500 new accounts, as well as higher contributions from its expanded asset management strategy. Meanwhile, the retail energy business may get a boost from stronger gross margins on natural gas sales. Also, rate case approvals and capital projects augur well for WGL's prospects. However, a likely decline in usage compared to last year's unusually high levels could be an offset.

These neutrally ranked shares may appeal to conservative income-oriented accounts. Indeed, this is evident in their good dividend yield, strong Safety rank (1), solid financial strength (A), and top mark for Price Stability (100).

Bryan Fong *December 12, 2008*

(A) Fiscal years end Sept. 30th.
(B) Based on diluted shares. Excludes nonrecurring losses: '01, (13¢); '02, (34¢); '07, (4¢) discontinued operations: '06, (15¢). Qtly egs. may not sum to total, due to change in shares outstanding. Next earnings report due late Jan.
(C) Dividends historically paid early February, May, August, and November. ■ Dividend reinvestment plan available.
(D) Includes deferred charges and intangibles. '07: $322.2 million, $6.51/sh.
(E) In millions, adjusted for stock split.

Company's Financial Strength	A
Stock's Price Stability	100
Price Growth Persistence	50
Earnings Predictability	65

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AMERICAN STS WTR CO (NYSE)

Scottrade

AWR	31.93	▼-0.63	(-1.93%)	Vol. 23,407	11:35 ET

American States is a public utility company engaged principally in thepurchase, production, distribution and sale of water. The company alsodistributes electricity in some communities. In the customer service areas for both water and electric, rates and operations are subject to the jurisdiction of the California Public Utilities Commission.

General Information

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Fax: 909 394-0711
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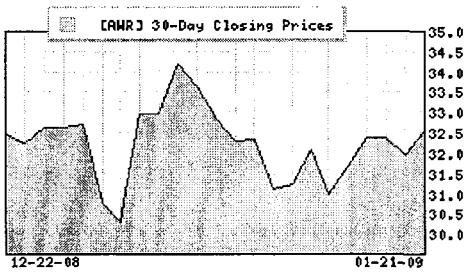
Email: investorinfo@aswater.com

Industry	UTIL-WATER SPLY
Sector:	Utilities
Fiscal Year End	December
Last Reported Quarter	12/31/08
Next EPS Date	03/05/2009

Price and Volume Information

Zacks Rank	
Yesterday's Close	32.56
52 Week High	42.00
52 Week Low	27.00
Beta	0.59
20 Day Moving Average	149,381.09
Target Price Consensus	38.67



% Price Change		% Price Change Relative to S&P 500	
4 Week	0.99	4 Week	3.75
12 Week	8.32	12 Week	21.24
YTD	-1.27	YTD	4.25

Share Information		Dividend Information	
Shares Outstanding (millions)	17.29	Dividend Yield	3.07%
		Annual Dividend	$1.00
Market Capitalization (millions)	562.93	Payout Ratio	0.00
Short Ratio	3.35	Change in Payout Ratio	0.00
Last Split Date	06/10/2002	Last Dividend Payout / Amount	11/07/2008 / $0.25

EPS Information		Consensus Recommendations	
Current Quarter EPS Consensus Estimate	0.41	Current (1=Strong Buy, 5=Strong Sell)	1.50
Current Year EPS Consensus Estimate	1.54	30 Days Ago	1.50
Estimated Long-Term EPS Growth Rate	12.00	60 Days Ago	2.00
Next EPS Report Date	03/05/2009	90 Days Ago	2.00

Fundamental Ratios

P/E		EPS Growth		Sales Growth	
Current FY Estimate:	18.37	vs. Previous Year	-11.36%	vs. Previous Year	12.42%
Trailing 12 Months:	20.61	vs. Previous Quarter	-27.78%	vs. Previous Quarter:	6.16%
PEG Ratio	1.53				

Price Ratios		ROE		ROA	
Price/Book	1.81	12/31/08	-	12/31/08	-

Price/Cash Flow	10.10	09/30/08	8.97	09/30/08	2.77
Price / Sales	-	06/30/08	9.33	06/30/08	2.90
Current Ratio		**Quick Ratio**		**Operating Margin**	
12/31/08	-	12/31/08	-	12/31/08	-
09/30/08	0.57	09/30/08	0.55	09/30/08	8.91
06/30/08	0.59	06/30/08	0.57	06/30/08	9.47
Net Margin		**Pre-Tax Margin**		**Book Value**	
12/31/08	-	12/31/08	-	12/31/08	-
09/30/08	14.27	09/30/08	14.27	09/30/08	18.02
06/30/08	16.35	06/30/08	16.35	06/30/08	17.93
Inventory Turnover		**Debt-to-Equity**		**Debt to Captial**	
12/31/08	-	12/31/08	-	12/31/08	-
09/30/08	59.72	09/30/08	0.86	09/30/08	46.19
06/30/08	59.45	06/30/08	0.86	06/30/08	46.35

Zacks.com Quotes and Research

CALIFORNIA WTR SVC GROUP (NYSE)

Scottrade

CWT	41.44	-0.94	(-2.22%)	Vol. 121,991	11:40 ET

California Water Service Company's business, which is carried on through its operating subsidiaries, consists of the production, purchase, storage, purification, distribution and sale of water for domestic, industrial, public and irrigation uses, and for fire protection. It also provides water related services under agreements with municipalities and other private companies. The nonregulated services include full water system operation, and billing and meter reading services.

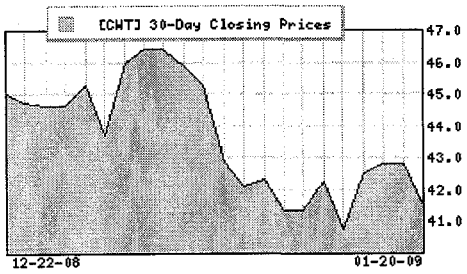
General Information

CALIF WATER SVC
1720 North First Street
San Jose, CA 95112
Phone: 408 367-8200
Fax: 408 437-9185
Web: www.calwatergroup.com
Email: klichtenberg@calwater.com

Industry	UTIL-WATER SPLY
Sector:	Utilities
Fiscal Year End	December
Last Reported Quarter	12/31/08
Next EPS Date	02/25/2009

Price and Volume Information

Zacks Rank	
Yesterday's Close	42.38
52 Week High	48.28
52 Week Low	27.68
Beta	0.63
20 Day Moving Average	289,643.44
Target Price Consensus	44



% Price Change		% Price Change Relative to S&P 500	
4 Week	-5.27	4 Week	-2.69
12 Week	30.68	12 Week	46.28
YTD	-8.72	YTD	-2.06

Share Information		Dividend Information	
Shares Outstanding (millions)	20.72	Dividend Yield	2.76%
		Annual Dividend	$1.17
Market Capitalization (millions)	877.99	Payout Ratio	0.00
Short Ratio	2.22	Change in Payout Ratio	0.00
Last Split Date	01/26/1998	Last Dividend Payout / Amount	10/30/2008 / $0.29

EPS Information		Consensus Recommendations	
Current Quarter EPS Consensus Estimate	0.39	Current (1=Strong Buy, 5=Strong Sell)	2.86
Current Year EPS Consensus Estimate	1.92	30 Days Ago	2.00
Estimated Long-Term EPS Growth Rate	8.40	60 Days Ago	2.00
Next EPS Report Date	02/25/2009	90 Days Ago	1.67

Fundamental Ratios

P/E		EPS Growth		Sales Growth	
Current FY Estimate:	20.61	vs. Previous Year	58.21%	vs. Previous Year	15.68%
Trailing 12 Months:	22.78	vs. Previous Quarter	120.83%	vs. Previous Quarter:	24.74%
PEG Ratio	2.45				

Price Ratios		ROE		ROA	
Price/Book	2.19	12/31/08	-	12/31/08	-
Price/Cash Flow	15.39	09/30/08	9.99	09/30/08	3.14
Price / Sales	-	06/30/08	7.95	06/30/08	2.53
Current Ratio		**Quick Ratio**		**Operating Margin**	
12/31/08	-	12/31/08	-	12/31/08	-
09/30/08	0.57	09/30/08	0.54	09/30/08	9.81
06/30/08	0.61	06/30/08	0.57	06/30/08	8.05
Net Margin		**Pre-Tax Margin**		**Book Value**	
12/31/08	-	12/31/08	-	12/31/08	-
09/30/08	-	09/30/08	-	09/30/08	19.37
06/30/08	-	06/30/08	-	06/30/08	18.60
Inventory Turnover		**Debt-to-Equity**		**Debt to Captial**	
12/31/08	-	12/31/08	-	12/31/08	-
09/30/08	-	09/30/08	0.72	09/30/08	41.83
06/30/08	-	06/30/08	0.75	06/30/08	42.57

Zacks.com Quotes and Research

AQUA AMERICA INC (NYSE)

Scottrade

WTR	19.26	-0.38	(-1.93%)	Vol. 318,219	11:40 ET

Aqua America is the largest publicly-traded U.S.-based water utility serving residents in Pennsylvania, Ohio, Illinois, Texas, New Jersey, Indiana, Virginia, Florida, North Carolina, Maine, Missouri, New York, South Carolina and Kentucky. The company has been committed to the preservation and improvement of the environment throughout its history, which spans more than 100 years.

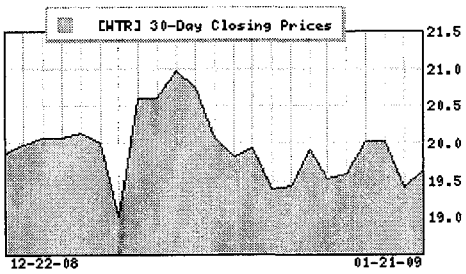
General Information

AQUA AMER INC
762 W Lancaster Avenue
Bryn Mawr, PA 19010-3489
Phone: 610 527-8000
Fax: 610-645-1061
Web: www.suburbanwater.com
Email: ir.aquaamerica.com

Industry	UTIL-WATER SPLY
Sector:	Utilities
Fiscal Year End	December
Last Reported Quarter	12/31/08
Next EPS Date	02/25/2009

Price and Volume Information

Zacks Rank	
Yesterday's Close	19.64
52 Week High	22.00
52 Week Low	12.20
Beta	0.20
20 Day Moving Average	768,482.19
Target Price Consensus	21.92



% Price Change		% Price Change Relative to S&P 500	
4 Week	-1.65	4 Week	1.03
12 Week	18.03	12 Week	32.11
YTD	-4.61	YTD	3.31

Share Information		Dividend Information	
Shares Outstanding (millions)	134.86	Dividend Yield	2.75%
		Annual Dividend	$0.54
Market Capitalization (millions)	2,648.65	Payout Ratio	0.00
Short Ratio	7.22	Change in Payout Ratio	0.00
Last Split Date	12/02/2005	Last Dividend Payout / Amount	11/13/2008 / $0.14

EPS Information		Consensus Recommendations	
Current Quarter EPS Consensus Estimate	0.20	Current (1=Strong Buy, 5=Strong Sell)	2.22
Current Year EPS Consensus Estimate	0.74	30 Days Ago	2.22
Estimated Long-Term EPS Growth Rate	8.00	60 Days Ago	1.78
Next EPS Report Date	02/25/2009	90 Days Ago	1.78

Fundamental Ratios

P/E		EPS Growth		Sales Growth	
Current FY Estimate:	23.24	vs. Previous Year	18.18%	vs. Previous Year	7.01%
Trailing 12 Months:	26.90	vs. Previous Quarter	52.94%	vs. Previous Quarter:	17.48%
PEG Ratio	2.91				

Price Ratios	ROE	ROA

Price/Book	2.58	12/31/08	-	12/31/08	-
Price/Cash Flow	14.30	09/30/08	9.70	09/30/08	2.96
Price / Sales	-	06/30/08	9.26	06/30/08	2.84
Current Ratio		**Quick Ratio**		**Operating Margin**	
12/31/08	-	12/31/08	-	12/31/08	-
09/30/08	0.59	09/30/08	0.54	09/30/08	15.77
06/30/08	0.73	06/30/08	0.67	06/30/08	15.10
Net Margin		**Pre-Tax Margin**		**Book Value**	
12/31/08	-	12/31/08	-	12/31/08	-
09/30/08	25.94	09/30/08	25.94	09/30/08	7.62
06/30/08	24.80	06/30/08	24.80	06/30/08	7.65
Inventory Turnover		**Debt-to-Equity**		**Debt to Captial**	
12/31/08	-	12/31/08	-	12/31/08	-
09/30/08	0.00	09/30/08	1.18	09/30/08	54.14
06/30/08	0.00	06/30/08	1.19	06/30/08	54.30

Zacks.com Quotes and Research

AGL RES INC (NYSE)

Scottrade

ATG	30.47	-0.69	(-2.21%)	Vol. 119,455	12:04 ET

AGL Resources principal business is the distribution of natural gas to customers in central, northwest, northeast and southeast Georgia and the Chattanooga, Tennessee area through its natural gas distribution subsidiary. AGL's major service area is the ten county metropolitan Atlanta area.

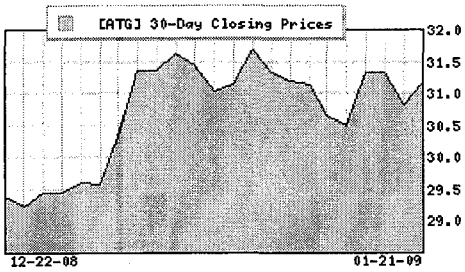
General Information

AGL RESOURCES
Ten Peachtree Place NE
Atlanta, GA 30309
Phone: 404 584-4000
Fax: 404 584-3945
Web: www.aglresources.com
Email: scave@aglresources.com

Industry	UTIL-GAS DISTR
Sector:	Utilities
Fiscal Year End	December
Last Reported Quarter	12/31/08
Next EPS Date	02/05/2009

Price and Volume Information

Zacks Rank	
Yesterday's Close	31.16
52 Week High	39.13
52 Week Low	24.02
Beta	0.32
20 Day Moving Average	353,985.56
Target Price Consensus	36.17



% Price Change		% Price Change Relative to S&P 500	
4 Week	6.60	4 Week	9.51
12 Week	13.52	12 Week	27.06
YTD	-0.61	YTD	6.15

Share Information		Dividend Information	
Shares Outstanding (millions)	76.78	Dividend Yield	5.39%
		Annual Dividend	$1.68
Market Capitalization (millions)	2,392.46	Payout Ratio	0.00
Short Ratio	2.98	Change in Payout Ratio	0.00
Last Split Date	12/04/1995	Last Dividend Payout / Amount	11/12/2008 / $0.42

EPS Information		Consensus Recommendations	
Current Quarter EPS Consensus Estimate	0.97	Current (1=Strong Buy, 5=Strong Sell)	2.17
Current Year EPS Consensus Estimate	2.79	30 Days Ago	2.00
Estimated Long-Term EPS Growth Rate	4.30	60 Days Ago	2.14
Next EPS Report Date	02/05/2009	90 Days Ago	2.14

Fundamental Ratios

P/E		EPS Growth		Sales Growth	
Current FY Estimate:	11.22	vs. Previous Year	64.71%	vs. Previous Year	46.07%
Trailing 12 Months:	11.98	vs. Previous Quarter	-6.67%	vs. Previous Quarter:	21.40%
PEG Ratio	2.64				

Price Ratios		ROE		ROA	
Price/Book	1.39	12/31/08	-	12/31/08	-

Price/Cash Flow	6.72	09/30/08	11.74	09/30/08	3.13
Price / Sales	-	06/30/08	11.42	06/30/08	3.08
Current Ratio		**Quick Ratio**		**Operating Margin**	
12/31/08	-	12/31/08	-	12/31/08	-
09/30/08	1.06	09/30/08	0.62	09/30/08	7.44
06/30/08	1.03	06/30/08	0.67	06/30/08	7.61
Net Margin		**Pre-Tax Margin**		**Book Value**	
12/31/08	-	12/31/08	-	12/31/08	-
09/30/08	12.43	09/30/08	12.43	09/30/08	22.49
06/30/08	9.96	06/30/08	9.96	06/30/08	22.03
Inventory Turnover		**Debt-to-Equity**		**Debt to Captial**	
12/31/08	-	12/31/08	-	12/31/08	-
09/30/08	2.60	09/30/08	0.97	09/30/08	49.71
06/30/08	2.60	06/30/08	0.97	06/30/08	49.78

Zacks.com Quotes and Research

ATMOS ENERGY CORP (NYSE)

Scottrade

ATO	23.48	▼-0.65	(-2.69%)	Vol. 176,045	12:07 ET

Atmos Energy Corporation distributes and sells natural gas to residential, commercial, industrial, agricultural and other customers. Atmos operates through five divisions in cities, towns and communities in service areas located in Colorado, Georgia, Illinois, Iowa, Kansas, Kentucky, Louisiana, Missouri, South Carolina, Tennessee, Texas and Virginia. The Company has entered into an agreement to sell all of its natural gas utility operations in South Carolina. The Company also transports natural gas for others through its distribution system.

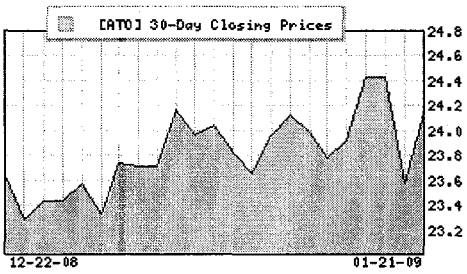
General Information

ATMOS ENERGY CP
Three Lincoln Centre 5430 Lbj Freeway
Suite 1800
Dallas, TX 75240
Phone: 972-934-9227
Fax: 972-855-3040
Web: www.atmosenergy.com
Email: InvestorRelations@atmosenergy.com

Industry	UTIL-GAS DISTR
Sector:	Utilities
Fiscal Year End	September
Last Reported Quarter	12/31/08
Next EPS Date	02/03/2009

Price and Volume Information

Zacks Rank	
Yesterday's Close	24.13
52 Week High	29.29
52 Week Low	19.68
Beta	0.53
20 Day Moving Average	390,904.50
Target Price Consensus	29.33



% Price Change		% Price Change Relative to S&P 500	
4 Week	3.65	4 Week	6.48
12 Week	4.82	12 Week	17.33
YTD	1.81	YTD	9.52

Share Information		Dividend Information	
Shares Outstanding (millions)	91.56	Dividend Yield	5.47%
		Annual Dividend	$1.32
Market Capitalization (millions)	2,209.27	Payout Ratio	0.00
Short Ratio	0.82	Change in Payout Ratio	0.00
Last Split Date	05/17/1994	Last Dividend Payout / Amount	11/21/2008 / $0.33

EPS Information		Consensus Recommendations	
Current Quarter EPS Consensus Estimate	0.80	Current (1=Strong Buy, 5=Strong Sell)	2.50
Current Year EPS Consensus Estimate	2.09	30 Days Ago	2.50
Estimated Long-Term EPS Growth Rate	5.50	60 Days Ago	2.40
Next EPS Report Date	02/03/2009	90 Days Ago	2.40

Fundamental Ratios

P/E		EPS Growth		Sales Growth	
Current FY Estimate:	11.57	vs. Previous Year	150.00%	vs. Previous Year	43.77%
Trailing 12 Months:	12.00	vs. Previous Quarter	128.57%	vs. Previous Quarter:	-12.11%
PEG Ratio	2.10				

Price Ratios		ROE		ROA	
Price/Book	1.07	12/31/08	-	12/31/08	-
Price/Cash Flow	5.74	09/30/08	8.67	09/30/08	2.82
Price / Sales	-	06/30/08	8.50	06/30/08	2.79
Current Ratio		**Quick Ratio**		**Operating Margin**	
12/31/08	-	12/31/08	-	12/31/08	-
09/30/08	1.06	09/30/08	0.59	09/30/08	2.50
06/30/08	1.20	06/30/08	0.71	06/30/08	2.58
Net Margin		**Pre-Tax Margin**		**Book Value**	
12/31/08	-	12/31/08	-	12/31/08	-
09/30/08	4.05	09/30/08	4.05	09/30/08	22.65
06/30/08	3.92	06/30/08	3.92	06/30/08	23.34
Inventory Turnover		**Debt-to-Equity**		**Debt to Captial**	
12/31/08	-	12/31/08	-	12/31/08	-
09/30/08	11.06	09/30/08	1.03	09/30/08	50.81
06/30/08	10.64	06/30/08	1.01	06/30/08	50.17

Zacks.com Quotes and Research

LACLEDE GROUP INC (NYSE)

Scottrade

LG	41.88	▼-0.51	(-1.20%)	Vol. 185,863	13:57 ET

The Laclede Group, Inc. is a public utility engaged in the retail distribution and transportation of natural gas. The Company, which is subject to the jurisdiction of the Missouri Public Service Commission, serves the City of St. Louis, St. Louis County, the City of St. Charles, St. Charles County, the town of Arnold, and parts of Franklin, Jefferson, St. Francois, Ste. Genevieve, Iron, Madison and Butler Counties, all in Missouri.

General Information

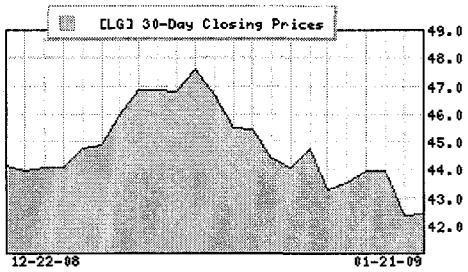
LACLEDE GRP INC
720 Olive Street
St. Louis, MO 63101
Phone: 314-342-0500
Fax: 314-421-1979
Web: www.thelacledegroup.com
Email: mkullman@lacledegas.com

Industry	UTIL-GAS DISTR
Sector:	Utilities

Fiscal Year End	September
Last Reported Quarter	12/31/08
Next EPS Date	01/22/2009

Price and Volume Information

Zacks Rank	
Yesterday's Close	42.39
52 Week High	55.81
52 Week Low	32.50
Beta	0.11
20 Day Moving Average	221,322.80
Target Price Consensus	N/A



% Price Change		% Price Change Relative to S&P 500	
4 Week	-3.59	4 Week	-0.96
12 Week	-12.38	12 Week	-1.93
YTD	-9.50	YTD	-0.33

Share Information		Dividend Information	
Shares Outstanding (millions)	22.13	Dividend Yield	3.63%
		Annual Dividend	$1.54
Market Capitalization (millions)	937.92	Payout Ratio	0.00
Short Ratio	5.20	Change in Payout Ratio	0.00
Last Split Date	03/08/1994	Last Dividend Payout / Amount	12/09/2008 / $0.38

EPS Information		Consensus Recommendations	
Current Quarter EPS Consensus Estimate	1.02	Current (1=Strong Buy, 5=Strong Sell)	3.67
Current Year EPS Consensus Estimate	2.37	30 Days Ago	3.67
Estimated Long-Term EPS Growth Rate	10.00	60 Days Ago	3.67
Next EPS Report Date	01/22/2009	90 Days Ago	3.67

Fundamental Ratios

P/E		EPS Growth		Sales Growth	
Current FY Estimate:	17.89	vs. Previous Year	-566.67%	vs. Previous Year	39.76%
Trailing 12 Months:	16.06	vs. Previous Quarter	-133.33%	vs. Previous Quarter:	-10.62%
PEG Ratio	1.79				

Price Ratios		ROE		ROA	
Price/Book	1.91	12/31/08	-	12/31/08	-

Price/Cash Flow	9.86	09/30/08	12.04	09/30/08	3.35
Price / Sales	-	06/30/08	13.24	06/30/08	3.65
Current Ratio		**Quick Ratio**		**Operating Margin**	
12/31/08	-	12/31/08	-	12/31/08	-
09/30/08	1.17	09/30/08	0.69	09/30/08	2.53
06/30/08	1.32	06/30/08	0.98	06/30/08	2.86
Net Margin		**Pre-Tax Margin**		**Book Value**	
12/31/08	-	12/31/08	-	12/31/08	-
09/30/08	3.79	09/30/08	3.79	09/30/08	22.14
06/30/08	4.21	06/30/08	4.21	06/30/08	22.13
Inventory Turnover		**Debt-to-Equity**		**Debt to Captial**	
12/31/08	-	12/31/08	-	12/31/08	-
09/30/08	5.73	09/30/08	0.80	09/30/08	44.42
06/30/08	14.15	06/30/08	0.64	06/30/08	39.01

Zacks.com Quotes and Research

NEW JERSEY RES (NYSE)

Scottrade

NJR	38.20	▲0.45	(1.19%)	Vol. 251,043	13:59 ET

NJ RESOURCES is an exempt energy svcs holding company providing retail & wholesale natural gas & related energy services to customers from the Gulf Coast to New England. Subsidiaries include: (1) N J Natural Gas Co, a natural gas distribution company that provides regulated energy & appliance services to residential, commercial & industrial customers in central & northern N J. (2) NJR Energy Holdings Corp formerly NJR Energy Svcs Corp & (3) NJR Development Corp, a sub-holding company of NJR, which includes the Company's remaining unregulated operating subsidiaries.

General Information

NJ RESOURCES
1415 Wyckoff Road
Wall, NJ 07719
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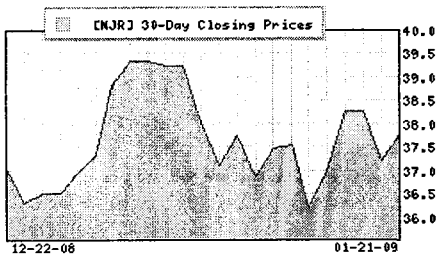
Fax: 732 938-3154
Web: www.njresources.com
Email: investcont@njresources.com

Industry	UTIL-GAS DISTR
Sector:	Utilities
Fiscal Year End	September
Last Reported Quarter	12/31/08
Next EPS Date	02/04/2009

Price and Volume Information

Zacks Rank	
Yesterday's Close	37.75
52 Week High	41.13
52 Week Low	21.90
Beta	0.15
20 Day Moving Average	343,188.75
Target Price Consensus	39.5



% Price Change		% Price Change Relative to S&P 500	
4 Week	3.99	4 Week	6.83
12 Week	11.52	12 Week	24.83
YTD	-4.07	YTD	3.33

Share Information		Dividend Information	
Shares Outstanding (millions)	42.12	Dividend Yield	3.28%
		Annual Dividend	$1.24
Market Capitalization (millions)	1,590.07	Payout Ratio	0.00
Short Ratio	4.51	Change in Payout Ratio	0.00
Last Split Date	03/04/2008	Last Dividend Payout / Amount	12/11/2008 / $0.31

EPS Information		Consensus Recommendations	
Current Quarter EPS Consensus Estimate	0.85	Current (1=Strong Buy, 5=Strong Sell)	1.67
Current Year EPS Consensus Estimate	2.35	30 Days Ago	1.67
Estimated Long-Term EPS Growth Rate	7.70	60 Days Ago	2.33
Next EPS Report Date	02/04/2009	90 Days Ago	2.33

Fundamental Ratios

P/E		EPS Growth		Sales Growth	
Current FY Estimate:	16.08	vs. Previous Year	-6.36%	vs. Previous Year	38.43%
Trailing 12 Months:	16.88	vs. Previous Quarter	-290.00%	vs. Previous Quarter:	-17.33%
PEG Ratio	2.10				

Price Ratios		ROE		ROA	
Price/Book	2.18	12/31/08	-	12/31/08	-
Price/Cash Flow	11.91	09/30/08	13.77	09/30/08	3.74
Price / Sales	-	06/30/08	14.36	06/30/08	3.94
Current Ratio		**Quick Ratio**		**Operating Margin**	
12/31/08	-	12/31/08	-	12/31/08	-
09/30/08	1.24	09/30/08	0.70	09/30/08	2.46
06/30/08	1.15	06/30/08	0.79	06/30/08	2.65
Net Margin		**Pre-Tax Margin**		**Book Value**	
12/31/08	-	12/31/08	-	12/31/08	-
09/30/08	4.72	09/30/08	4.72	09/30/08	17.29
06/30/08	-0.40	06/30/08	-0.40	06/30/08	15.69
Inventory Turnover		**Debt-to-Equity**		**Debt to Captial**	
12/31/08	-	12/31/08	-	12/31/08	-
09/30/08	8.77	09/30/08	0.63	09/30/08	38.50
06/30/08	8.90	06/30/08	0.73	06/30/08	42.27

Zacks.com Quotes and Research

NICOR INC (NYSE)

Scottrade

GAS	33.28	▼-0.03	(-0.09%)	Vol. 349,679	14:00 ET

Nicor Inc. is a holding company and is a member of the Standard & Poor's 500 Index. Its primary business is Nicor Gas, one of the nation's largest natural gas distribution companies. Nicor owns Tropical Shipping, a containerized shipping business serving the Caribbean region and the Bahamas. In addition, the company owns and has an equity interest in several energy-related businesses.

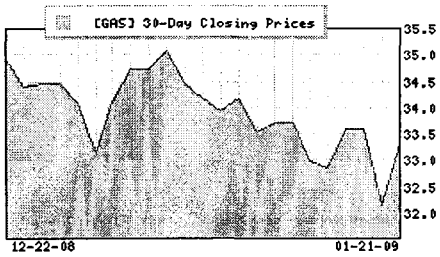
General Information

NICOR INC
1844 Ferry Road
Naperville, IL 60563-9600
Phone: 630-305-9500
Fax: 630-983-9328
Web: www.nicor.com
Email: None

Industry	UTIL-GAS DISTR
Sector:	Utilities
Fiscal Year End	December
Last Reported Quarter	12/31/08
Next EPS Date	02/13/2009

Price and Volume Information

Zacks Rank	
Yesterday's Close	33.31
52 Week High	51.99
52 Week Low	31.95
Beta	0.37
20 Day Moving Average	547,233.25
Target Price Consensus	44



% Price Change		% Price Change Relative to S&P 500	
4 Week	-3.11	4 Week	-0.47
12 Week	-22.91	12 Week	-13.71
YTD	-4.12	YTD	2.76

Share Information		Dividend Information	
Shares Outstanding (millions)	45.19	Dividend Yield	5.58%
		Annual Dividend	$1.86
Market Capitalization (millions)	1,505.31	Payout Ratio	0.00
Short Ratio	5.75	Change in Payout Ratio	0.00
Last Split Date	04/27/1993	Last Dividend Payout / Amount	12/29/2008 / $0.47

EPS Information		Consensus Recommendations	
Current Quarter EPS Consensus Estimate	0.68	Current (1=Strong Buy, 5=Strong Sell)	3.40
Current Year EPS Consensus Estimate	2.26	30 Days Ago	3.40
Estimated Long-Term EPS Growth Rate	6.50	60 Days Ago	3.40
Next EPS Report Date	02/13/2009	90 Days Ago	3.40

Fundamental Ratios

P/E		EPS Growth		Sales Growth	
Current FY Estimate:	13.09	vs. Previous Year	-90.63%	vs. Previous Year	20.56%
Trailing 12 Months:	11.90	vs. Previous Quarter	-95.31%	vs. Previous Quarter:	-37.08%
PEG Ratio	2.01				

Price Ratios		ROE		ROA	
Price/Book	1.58	12/31/08	-	12/31/08	-

Price/Cash Flow	4.77	09/30/08	13.19	09/30/08	2.87
Price / Sales	-	06/30/08	14.73	06/30/08	3.25
Current Ratio		**Quick Ratio**		**Operating Margin**	
12/31/08	-	12/31/08	-	12/31/08	-
09/30/08	0.76	09/30/08	0.56	09/30/08	3.48
06/30/08	0.80	06/30/08	0.75	06/30/08	3.92
Net Margin		**Pre-Tax Margin**		**Book Value**	
12/31/08	-	12/31/08	-	12/31/08	-
09/30/08	4.80	09/30/08	4.80	09/30/08	21.15
06/30/08	5.27	06/30/08	5.27	06/30/08	21.81
Inventory Turnover		**Debt-to-Equity**		**Debt to Captial**	
12/31/08	-	12/31/08	-	12/31/08	-
09/30/08	23.38	09/30/08	0.47	09/30/08	31.92
06/30/08	24.11	06/30/08	0.38	06/30/08	27.46

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NORTHWEST NAT GAS CO (NYSE)

Scottrade

NWN	42.08	▼-0.19	(-0.45%)	Vol. 87,654	14:01 ET

NW Natural is principally engaged in the distribution of natural gas.The Oregon Public Utility Commission (OPUC) has allocated to NW Natural as its exclusive service area a major portion of western Oregon, including the Portland metropolitan area, most of the fertile Willamette Valley and the coastal area from Astoria to Coos Bay. NW Natural also holds certificates from the Washington Utilities and Transportation Commission (WUTC) granting it exclusive rights to serve portions of three Washington counties bordering the Columbia River.

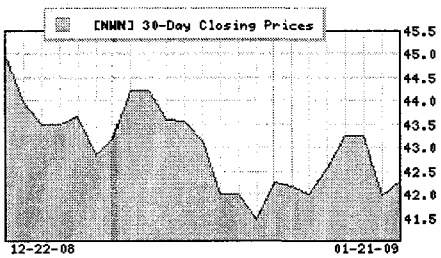
General Information

NORTHWEST NAT G
220 NW Second Avenue
Portland, OR 97209
Phone: 503 226-4211
Fax: 503 273-4824
Web: www.nwnatural.com
Email: Bob.Hess@nwnatural.com

Industry	UTIL-GAS DISTR
Sector:	Utilities
Fiscal Year End	December
Last Reported Quarter	12/31/08
Next EPS Date	02/12/2009

Price and Volume Information

Zacks Rank	
Yesterday's Close	42.27
52 Week High	78.55
52 Week Low	36.61
Beta	0.35
20 Day Moving Average	164,591.00
Target Price Consensus	52.25



% Price Change		% Price Change Relative to S&P 500	
4 Week	-3.84	4 Week	-1.22
12 Week	-14.59	12 Week	-4.40
YTD	-4.43	YTD	3.90

Share Information		Dividend Information	
Shares Outstanding (millions)	26.43	Dividend Yield	3.74%
		Annual Dividend	$1.58
Market Capitalization (millions)	1,117.41	Payout Ratio	0.00
Short Ratio	6.03	Change in Payout Ratio	0.00
Last Split Date	09/09/1996	Last Dividend Payout / Amount	10/29/2008 / $0.40

EPS Information		Consensus Recommendations	
Current Quarter EPS Consensus Estimate	1.21	Current (1=Strong Buy, 5=Strong Sell)	2.00
Current Year EPS Consensus Estimate	2.53	30 Days Ago	2.00
Estimated Long-Term EPS Growth Rate	6.80	60 Days Ago	1.50
Next EPS Report Date	02/12/2009	90 Days Ago	1.80

Fundamental Ratios

P/E		EPS Growth		Sales Growth	
Current FY Estimate:	15.57	vs. Previous Year	-72.73%	vs. Previous Year	-11.71%
Trailing 12 Months:	16.98	vs. Previous Quarter	-416.67%	vs. Previous Quarter:	-42.64%
PEG Ratio	2.31				

Price Ratios	ROE	ROA

Price/Book	1.85	12/31/08	-	12/31/08	-
Price/Cash Flow	7.83	09/30/08	10.77	09/30/08	3.29
Price / Sales	-	06/30/08	11.55	06/30/08	3.56
Current Ratio		**Quick Ratio**		**Operating Margin**	
12/31/08	-	12/31/08	-	12/31/08	-
09/30/08	0.69	09/30/08	0.44	09/30/08	6.47
06/30/08	0.65	06/30/08	0.49	06/30/08	6.79
Net Margin		**Pre-Tax Margin**		**Book Value**	
12/31/08	-	12/31/08	-	12/31/08	-
09/30/08	10.30	09/30/08	10.30	09/30/08	22.88
06/30/08	10.81	06/30/08	10.81	06/30/08	23.64
Inventory Turnover		**Debt-to-Equity**		**Debt to Captial**	
12/31/08	-	12/31/08	-	12/31/08	-
09/30/08	9.67	09/30/08	0.85	09/30/08	45.84
06/30/08	10.39	06/30/08	0.82	06/30/08	45.05

Zacks.com Quotes and Research

PIEDMONT NAT GAS INC (NYSE)

Scottrade

PNY	25.86	▲0.12	(0.47%)	Vol. 309,938	14:01 ET

Piedmont Natural Gas Co, Inc., is an energy and services company engaged in the transportation and sale of natural gas and the sale of propane to residential, commercial and industrial customers in North Carolina, South Carolina and Tennessee. The Company is the second-largest natural gas utility in the southeast. The Company and its non-utility subsidiaries and divisions are also engaged in acquiring, marketing and arranging for the transportation and storage of natural gas for large-volume purchasers, and in the sale of propane to customers in the Company's three-state service area.

General Information

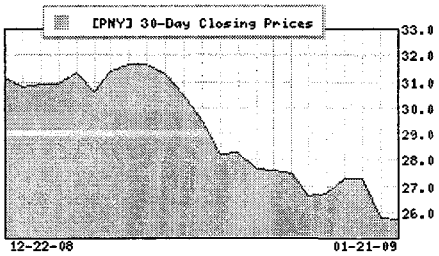
PIEDMONT NAT GA
4720 Piedmont Row Drive
Charlotte, NC 28210
Phone: 704 364-3120
Fax: 704-365-3849
Web: www.piedmontng.com
Email: investorrelations@piedmontng.com

Industry	UTIL-GAS DISTR
Sector:	Utilities

Fiscal Year End	October
Last Reported Quarter	10/31/08
Next EPS Date	03/10/2009

Price and Volume Information

Zacks Rank	
Yesterday's Close	25.74
52 Week High	35.29
52 Week Low	20.52
Beta	0.05
20 Day Moving Average	443,612.56
Target Price Consensus	31.67



% Price Change		% Price Change Relative to S&P 500	
4 Week	-16.40	4 Week	-14.12
12 Week	-19.59	12 Week	-9.99
YTD	-18.72	YTD	-8.55

Share Information		Dividend Information	
Shares Outstanding (millions)	73.35	Dividend Yield	4.04%
		Annual Dividend	$1.04
Market Capitalization (millions)	1,888.13	Payout Ratio	0.00
Short Ratio	6.78	Change in Payout Ratio	0.00
Last Split Date	11/01/2004	Last Dividend Payout / Amount	12/23/2008 / $0.26

EPS Information		Consensus Recommendations	
Current Quarter EPS Consensus Estimate	1.12	Current (1=Strong Buy, 5=Strong Sell)	2.67
Current Year EPS Consensus Estimate	1.62	30 Days Ago	2.67
Estimated Long-Term EPS Growth Rate	25.90	60 Days Ago	2.60
Next EPS Report Date	03/10/2009	90 Days Ago	2.60

Fundamental Ratios

P/E		EPS Growth		Sales Growth	
Current FY Estimate:	15.86	vs. Previous Year	16.67%	vs. Previous Year	12.13%
Trailing 12 Months:	16.39	vs. Previous Quarter	-115.15%	vs. Previous Quarter:	-12.11%
PEG Ratio	0.61				

Price Ratios		ROE		ROA	
Price/Book	2.13	10/31/08	11.95	10/31/08	3.67
Price/Cash Flow	9.08	07/31/08	12.52	07/31/08	3.93
Price / Sales	0.90	04/30/08	12.43	04/30/08	3.94
Current Ratio		**Quick Ratio**		**Operating Margin**	
10/31/08	0.88	10/31/08	0.59	10/31/08	5.27
07/31/08	1.00	07/31/08	0.60	07/31/08	5.59
04/30/08	1.19	04/30/08	0.86	04/30/08	5.89
Net Margin		**Pre-Tax Margin**		**Book Value**	
10/31/08	8.78	10/31/08	8.78	10/31/08	12.11
07/31/08	7.23	07/31/08	7.23	07/31/08	12.56
04/30/08	8.04	04/30/08	8.04	04/30/08	12.96
Inventory Turnover		**Debt-to-Equity**		**Debt to Captial**	
10/31/08	9.83	10/31/08	0.90	10/31/08	47.24
07/31/08	10.43	07/31/08	0.89	07/31/08	47.21
04/30/08	10.03	04/30/08	0.87	04/30/08	46.44

Zacks.com Quotes and Research

SOUTH JERSEY INDS INC (NYSE)

Scottrade

SJI	36.81	▼-0.02	(-0.05%)	Vol. 100,708	14:03 ET

South Jersey Inds Inc. is engaged in the business of operating, through subsidiaries, various business enterprises. The company's most significant subsidiary is South Jersey Gas Company (SJG). SJG is a public utility company engaged in the purchase, transmission and sale of natural gas for residential, commercial and industrial use. SJG also makes off-system sales of natural gas on a wholesale basis to various customers on the interstate pipeline system and transports natural gas.

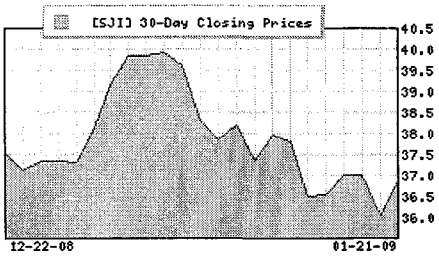
General Information

SOUTH JERSEY IN
1 South Jersey Plaza
Folsom, NJ 08037
Phone: 609 561-9000
Fax: 609 561-8225
Web: www.sjindustries.com
Email: investorrelations@sjindustries.com

Industry	UTIL-GAS DISTR
Sector:	Utilities
Fiscal Year End	December
Last Reported Quarter	12/31/08
Next EPS Date	02/19/2009

Price and Volume Information

Zacks Rank	
Yesterday's Close	36.83
52 Week High	40.78
52 Week Low	25.19
Beta	0.30
20 Day Moving Average	238,659.00
Target Price Consensus	41.5



% Price Change		% Price Change Relative to S&P 500	
4 Week	-0.75	4 Week	1.95
12 Week	14.02	12 Week	27.63
YTD	-7.58	YTD	-1.35

Share Information		Dividend Information	
Shares Outstanding (millions)	29.73	Dividend Yield	3.23%
		Annual Dividend	$1.19
Market Capitalization (millions)	1,094.92	Payout Ratio	0.00
Short Ratio	4.91	Change in Payout Ratio	0.00
Last Split Date	07/01/2005	Last Dividend Payout / Amount	12/08/2008 / $0.30

EPS Information		Consensus Recommendations	
Current Quarter EPS Consensus Estimate	0.66	Current (1=Strong Buy, 5=Strong Sell)	2.60
Current Year EPS Consensus Estimate	2.30	30 Days Ago	2.60
Estimated Long-Term EPS Growth Rate	8.00	60 Days Ago	2.60
Next EPS Report Date	02/19/2009	90 Days Ago	2.60

Fundamental Ratios

P/E		EPS Growth		Sales Growth	
Current FY Estimate:	15.33	vs. Previous Year	180.00%	vs. Previous Year	34.68%
Trailing 12 Months:	16.37	vs. Previous Quarter	-84.62%	vs. Previous Quarter:	54.90%
PEG Ratio	1.92				

Price Ratios	ROE	ROA

Price/Book	2.13	12/31/08	-	12/31/08	-
Price/Cash Flow	11.51	09/30/08	13.53	09/30/08	4.25
Price / Sales	-	06/30/08	13.31	06/30/08	4.16
Current Ratio		**Quick Ratio**		**Operating Margin**	
12/31/08	-	12/31/08	-	12/31/08	-
09/30/08	0.94	09/30/08	0.45	09/30/08	6.99
06/30/08	0.92	06/30/08	0.61	06/30/08	7.13
Net Margin		**Pre-Tax Margin**		**Book Value**	
12/31/08	-	12/31/08	-	12/31/08	-
09/30/08	12.52	09/30/08	12.52	09/30/08	17.32
06/30/08	6.62	06/30/08	6.62	06/30/08	16.13
Inventory Turnover		**Debt-to-Equity**		**Debt to Captial**	
12/31/08	-	12/31/08	-	12/31/08	-
09/30/08	6.50	09/30/08	0.69	09/30/08	41.08
06/30/08	7.05	06/30/08	0.69	06/30/08	41.06

Zacks.com Quotes and Research

SOUTHWEST GAS CORP (NYSE)

Scottrade

SWX	24.66	-0.19	(-0.76%)	Vol. 119,277	14:03 ET

SOUTHWEST GAS CORP. is principally engaged in the business of purchasing,transporting, and distributing natural gas in portions of Arizona, Nevada,and California. The Company also engaged in financial services activities,through PriMerit Bank, Federal Savings Bank (PriMerit or the Bank), a wholly owned subsidiary.

General Information

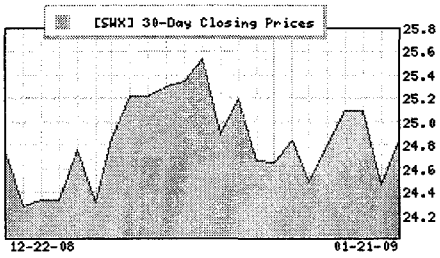
SOUTHWEST GAS
5241 Spring Mountain Road
P.O. Box 98510
Las Vegas, NV 89193-8510
Phone: 702 876-7237
Fax: 702-876-7037
Web: www.swgas.com
Email: None

Industry	UTIL-GAS DISTR
Sector:	Utilities

Fiscal Year End	December
Last Reported Quarter	12/31/08
Next EPS Date	02/25/2009

Price and Volume Information

Zacks Rank	
Yesterday's Close	24.85
52 Week High	33.29
52 Week Low	21.11
Beta	0.67
20 Day Moving Average	209,097.75
Target Price Consensus	33.88



% Price Change		% Price Change Relative to S&P 500	
4 Week	2.35	4 Week	5.14
12 Week	-1.82	12 Week	9.90
YTD	-1.47	YTD	5.70

Share Information		Dividend Information	
Shares Outstanding (millions)	43.91	Dividend Yield	3.62%
		Annual Dividend	$0.90
Market Capitalization (millions)	1,091.26	Payout Ratio	0.00
Short Ratio	3.06	Change in Payout Ratio	0.00
Last Split Date	N/A	Last Dividend Payout / Amount	11/13/2008 / $0.22

EPS Information		Consensus Recommendations	
Current Quarter EPS Consensus Estimate	1.06	Current (1=Strong Buy, 5=Strong Sell)	2.60
Current Year EPS Consensus Estimate	1.92	30 Days Ago	2.60
Estimated Long-Term EPS Growth Rate	8.00	60 Days Ago	2.60
Next EPS Report Date	02/25/2009	90 Days Ago	2.50

Fundamental Ratios

P/E		EPS Growth		Sales Growth	
Current FY Estimate:	11.48	vs. Previous Year	-72.73%	vs. Previous Year	0.78%
Trailing 12 Months:	14.62	vs. Previous Quarter	-533.33%	vs. Previous Quarter:	-16.29%
PEG Ratio	1.43				

Price Ratios		ROE		ROA	
Price/Book	1.07	12/31/08	-	12/31/08	-

Price/Cash Flow	3.99	09/30/08	7.18	09/30/08	2.04
Price / Sales	-	06/30/08	8.05	06/30/08	2.27
Current Ratio		**Quick Ratio**		**Operating Margin**	
12/31/08	-	12/31/08	-	12/31/08	-
09/30/08	0.75	09/30/08	0.75	09/30/08	3.32
06/30/08	0.70	06/30/08	0.70	06/30/08	3.66
Net Margin		**Pre-Tax Margin**		**Book Value**	
12/31/08	-	12/31/08	-	12/31/08	-
09/30/08	5.37	09/30/08	5.37	09/30/08	23.22
06/30/08	5.80	06/30/08	5.80	06/30/08	23.80
Inventory Turnover		**Debt-to-Equity**		**Debt to Captial**	
12/31/08	-	12/31/08	-	12/31/08	-
09/30/08	-	09/30/08	1.30	09/30/08	56.50
06/30/08	-	06/30/08	1.23	06/30/08	55.19

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WGL HLDGS INC (NYSE)

Scottrade

WGL	31.68	▼-0.07	(-0.22%)	Vol. 397,995	14:04 ET

WASHINGTON GAS LIGHT CO is a public utility that delivers and sells natural gas to metropolitan Washington, D.C. and adjoining areas in Maryland and Virginia. A distribution subsidiary serves portions of Virginia and West Virginia. The Company has four wholly-owned active subsidiaries that include: Shenandoah Gas Company (Shenandoah) is engaged in the delivery and sale of natural gas at retail in the Shenandoah Valley, including Winchester, Middletown, Strasburg, Stephens City and New Market, Virginia, and Martinsburg, West Virginia.

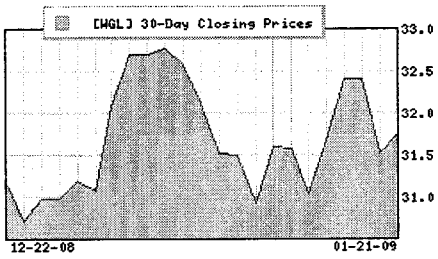
General Information

WGL HLDGS INC
101 Constitution Avenue NW
Washington, DC 20080
Phone: 703 750-2000
Fax: 703 750-4828
Web: www.wglholdings.com
Email: madams@washgas.com

Industry	UTIL-GAS DISTR
Sector:	Utilities
Fiscal Year End	September
Last Reported Quarter	12/31/08
Next EPS Date	02/09/2009

Price and Volume Information

Zacks Rank	
Yesterday's Close	31.75
52 Week High	37.08
52 Week Low	22.40
Beta	0.23
20 Day Moving Average	437,843.69
Target Price Consensus	33



% Price Change		% Price Change Relative to S&P 500	
4 Week	3.39	4 Week	6.21
12 Week	5.55	12 Week	18.15
YTD	-2.88	YTD	5.34

Share Information		Dividend Information	
Shares Outstanding (millions)	49.97	Dividend Yield	4.47%
		Annual Dividend	$1.42
Market Capitalization (millions)	1,586.61	Payout Ratio	0.00
Short Ratio	4.15	Change in Payout Ratio	0.00
Last Split Date	05/02/1995	Last Dividend Payout / Amount	01/07/2009 / $0.35

EPS Information		Consensus Recommendations	
Current Quarter EPS Consensus Estimate	0.97	Current (1=Strong Buy, 5=Strong Sell)	2.75
Current Year EPS Consensus Estimate	2.34	30 Days Ago	2.75
Estimated Long-Term EPS Growth Rate	7.50	60 Days Ago	2.50
Next EPS Report Date	02/09/2009	90 Days Ago	2.25

Fundamental Ratios

P/E		EPS Growth		Sales Growth	
Current FY Estimate:	13.59	vs. Previous Year	29.03%	vs. Previous Year	-50.38%
Trailing 12 Months:	12.91	vs. Previous Quarter	-466.67%	vs. Previous Quarter:	-65.22%
PEG Ratio	1.81				

Price Ratios	ROE	ROA

Price/Book	1.51	12/31/08	-	12/31/08	-
Price/Cash Flow	7.37	09/30/08	11.60	09/30/08	3.72
Price / Sales	-	06/30/08	11.37	06/30/08	3.64
Current Ratio		**Quick Ratio**		**Operating Margin**	
12/31/08	-	12/31/08	-	12/31/08	-
09/30/08	0.99	09/30/08	0.42	09/30/08	5.09
06/30/08	1.15	06/30/08	0.71	06/30/08	4.60
Net Margin		**Pre-Tax Margin**		**Book Value**	
12/31/08	-	12/31/08	-	12/31/08	-
09/30/08	7.08	09/30/08	7.08	09/30/08	20.99
06/30/08	7.32	06/30/08	7.32	06/30/08	21.72
Inventory Turnover		**Debt-to-Equity**		**Debt to Captial**	
12/31/08	-	12/31/08	-	12/31/08	-
09/30/08	7.07	09/30/08	0.58	09/30/08	35.95
06/30/08	7.63	06/30/08	0.56	06/30/08	35.26

ATTACHMENT D

Infrastructure costs in the Water Utility Industry will continue to rise over the long term. Larger companies will acquire smaller ones in an effort to achieve economies of scale.

Foreign companies had been buying a number of U.S. water utilities, but that trend appears to be waning.

Water utility stocks are ranked to underperform the market over the coming 12 months; however, conservative investors can find attractive risk-adjusted choices here.

The Need For Consolidation

Long-term trends in the Water Utility Industry indicate that infrastructure costs will steadily rise. Many of the facilities and pipes that now purify and transport drinking water were built about 100 years ago. Ongoing upgrading and replacement are necessary for these old systems to remain in compliance with rules laid out by the Environmental Protection Agency (EPA). The cost of fixing and upgrading these systems is significantly higher than in the past (even adjusting for inflation) because more-expensive materials need to be used for modern construction. Moreover, transportation costs are much higher and should continue to rise, as nearby sources of water are depleted and farther-away bodies of water must be used. Water is quite difficult and expensive to move because it is heavy and cannot be compressed. Also adding to industry costs is the ongoing issuance of guidelines from the EPA that typically require water utilities to comply with more-stringent water-purity standards. Industry sources estimate that about $140 billion will be needed over the next 20 years to fund necessary water-system infrastructure improvements.

Small and mid-sized water companies usually welcome large-scale suitors. Smaller utilities generally lack the funds needed for long-term structural improvements, and might risk being out of compliance with local and federal laws at some point down the road. In an effort to prevent this unpleasant scenario from happening, many of these smaller companies welcome larger utilities that have the capital resources to remain in compliance with the law. The larger company gains greater geographic diversity from its acquisitions, which helps lessen its susceptibility to weather fluctuations that might cause volatility in earnings. Acquirers also benefit from economies of scale in which costs are

INDUSTRY TIMELINESS: 81 (of 92)

generally reduced. Too, the regulatory-intensive nature of the Water Utility Industry means that some specific local governments might be more uncooperative with the utilities than other comparable local officials. A larger territory lessens the impact of a particularly onerous regulatory atmosphere.

Acquisition Update

Foreign companies have purchased a large number of domestic water utilities over the past year. These global water companies are attracted to this country's relatively safe political climate and its trend towards the privatization of municipal water and wastewater systems. Currently, there is concern among investors that the large premiums paid for U.S. takeover targets, which approached three times book value, will become more infrequent. British utilities are having regulatory difficulties at home that stand to weaken their designs on the U.S. market. Consequently, there appear to be fewer bidders in the market.

SDWA Regulations

The Safe Drinking Water Act (SDWA) of 1974 (amended in 1996) authorized the EPA to work with state and local governments to test for five potential impurities in drinking water every five years. The EPA mandates what levels of a certain contaminant is acceptable per a specified amount of water. Water utilities typically spend about 15% to 50% of their annual capital outlays in efforts to comply with SDWA guidelines. These companies must also stay in compliance with the Clean Water Act, and numerous state and local laws. At present, the EPA is considering lowering the allowable level of arsenic in drinking water from 50 parts per billion (ppb) to 5 ppb. This measure would be controversial because it would be lower than the standard of the World Health Organization (10 ppb) and would potentially cost domestic water companies billions of dollars.

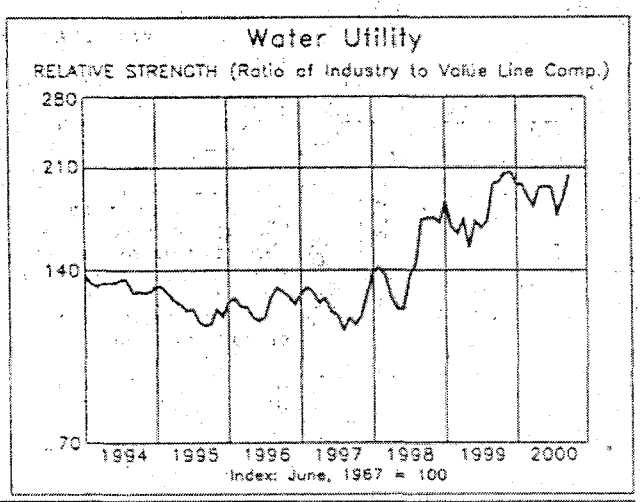
Investment Advice

Most of the water utility stocks that are covered in this review are not timely for the coming six to 12 months. Nonetheless, favorable Safety ranks among the group make some of these issues appealing for risk-averse investors seeking decent dividend yields.

Joseph Espaillat

Composite Statistics: Water Utility Industry

1996	1997	1998	1999	2000	2001		03-05
1793.9	1924.7	1994.2	2422.6	*2550*	*2750*	Revenues ($mill)	*3500*
214.4	239.2	265.6	295.3	*315*	*335*	Net Profit ($mill)	*415*
39.2%	37.8%	37.0%	38.2%	*39.0%*	*39.0%*	Income Tax Rate	*39.0%*
7.0%	6.3%	7.5%	8.7%	*6.0%*	*6.0%*	AFUDC % to Net Profit	*6.0%*
55.7%	56.6%	56.9%	55.9%	*53.0%*	*52.0%*	Long-Term Debt Ratio	*50.0%*
40.0%	39.6%	39.7%	42.0%	*45.0%*	*46.0%*	Common Equity Ratio	*48.0%*
5271.8	5703.3	6188.6	7223.7	*7300*	*7900*	Total Capital ($mill)	*9300*
6377.2	6785.5	7361.9	8961.3	*8700*	*9300*	Net Plant ($mill)	*9700*
6.0%	6.2%	6.2%	6.0%	*6.5%*	*7.0%*	Return on Total Cap'l	*7.5%*
9.2%	9.7%	10.0%	9.3%	*10.5%*	*10.5%*	Return on Shr. Equity	*11.5%*
9.7%	10.2%	10.4%	9.5%	*11.0%*	*11.0%*	Return on Com Equity	*12.0%*
3.0%	3.6%	3.9%	3.2%	*3.5%*	*3.5%*	Retained to Com Eq	*4.5%*
68%	66%	64%	67%	*70%*	*70%*	All Div'ds to Net Prof	*60%*
14.5	15.8	18.3	20.2	*Bold figures are Value Line estimates*		Avg Ann'l P/E Ratio	*13.0*
.91	.91	.96	1.15			Relative P/E Ratio	*.85*
4.5%	4.1%	3.4%	3.3%			Avg Ann'l Div'd Yield	*5.0%*



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The events of September 11th have altered many priorities in the Water Utility Industry.

Long-term trends in the industry indicate that the cost of maintaining and upgrading water/wastewater systems will rise. The industry is consolidating, with larger companies acquiring smaller operators to achieve economies of scale.

Water Utility stocks are ranked to underperform the year-ahead market, though some of these issues offer conservative investors appealing risk-adjusted, total-return potential.

INDUSTRY TIMELINESS: 85 (of 97)

Security Issues

In response to the events of September 11th, the need to secure water systems against terrorism has become a top priority for regulators and water utilities alike, pushing many other legislative issues to the side. The FBI has stated that water companies should be on alert for potential threats in the months ahead. Many water companies are already heeding this warning, and incurring additional costs in the process that may limit near-term bottom-line growth. Also, the industry and regulators are working together to provide approximately $5 billion in federal funds for immediate infrastructure improvements as part of the pending economic stimulus legislation.

Industry Consolidation

Infrastructure costs in the Water Utility Industry will likely rise dramatically over the next 20 years. These companies have to maintain and upgrade their systems continually in order to remain in compliance with increasingly stringent rules issued by the Environmental Protection Agency (EPA) and local regulators. Many of the facilities and pipes that now treat and transport drinking water were built about a century ago. The costs of replacing those systems are significantly higher these days, even adjusting for inflation. Adding to the cost is the fact that nearby bodies of water tend to get depleted and expensive to use, so more-distant sources of water must be brought in to keep up with increasing demand for purified water. Water is difficult and costly to transport, since it is heavy and incompressible. All in all, industry sources estimate that over $140 billion will be needed to upgrade the nation's water-distribution system over the next 20 years.

The costs of staying in compliance with drinking water laws are especially onerous for smaller regional operators, since they have a limited base of customers over which to spread these costs. Small and mid-sized utilities generally welcome takeover offers from larger acquirers because of their superior capital resources. The acquiring utility attempts to achieve economies of scale through the transactions. Also, it gains greater geographic diversity, and that can reduce its susceptibility to unfavorable weather patterns and potentially burdensome local regulators.

Large-scale foreign acquirers have been very interested in purchasing domestic water utilities over the past few years, and the latest evidence is the generous takeover offer RWE AG made for *American Water Works*, the nation's largest public water company. RWE, a Germany-based firm, stands to gain cost synergies in the deal, along with geographic diversity in a politically stable country. Foreign utilities have been fascinated with the risk-adjusted earnings potential of U.S. water companies, and they are likely to continuing their buying spree over the next few years. As such, the number of investor-owned water providers with large territories is steadily dwindling. This development gives additional hope to those U.S. water utilities and investors looking for substantial buyout offers.

SDWA Regulations

The Safe Drinking Water Act (SDWA) of 1974 (amended in 1996) authorizes the EPA to work with state and local governments to test for five potential impurities in drinking water every five years. The EPA mandates what levels of a certain contaminant is acceptable per a specified amount of water. Water utilities usually spend a significant portion of their annual capital budgets on efforts to stay in compliance with SDWA guidelines. These companies must also comply with the Clean Water Act, and numerous state and local laws.

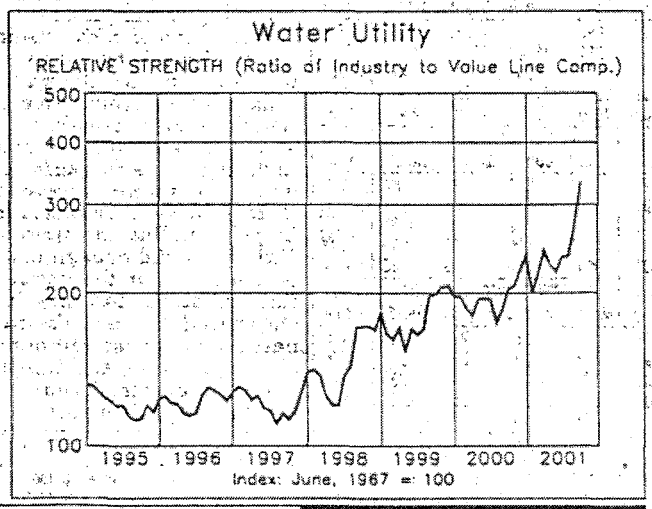
Investment Advice

The Water Utility stocks in this review are not timely for investment over the next six to 12 months. Nonetheless, a few of these issues possess favorable Safety ranks and solid dividend-growth prospects that may appeal to conservative investors.

Joseph Espailiat

Composite Statistics: Water Utility Industry

1997	1998	1999	2000	2001	2002		04-06
1439.5	1503.1	1898.0	2054.9	*2210*	*2315*	Revenues ($mill)	*2895*
183.2	192.9	232.8	254.2	*270*	*295*	Net Profit ($mill)	*410*
38.4%	39.1%	39.7%	40.1%	*40.0%*	*40.0%*	Income Tax Rate	*40.0%*
6.4%	7.9%	9.8%	5.5%	*6.5%*	*6.5%*	AFUDC % to Net Profit	*7.5%*
57.3%	58.0%	56.2%	54.9%	*54.5%*	*54.0%*	Long-Term Debt Ratio	*53.0%*
40.0%	39.7%	41.9%	44.0%	*44.5%*	*45.0%*	Common Equity Ratio	*48.0%*
4113.2	4524.8	5566.3	5654.5	*6055*	*6335*	Total Capital ($mill)	*7495*
5069.2	5544.7	7039.7	7545.4	*7975*	*8425*	Net Plant ($mill)	*9935*
6.5%	6.3%	6.2%	6.6%	*6.0%*	*6.0%*	Return on Total Cap'l	*6.5%*
10.4%	10.2%	9.6%	9.8%	*10.5%*	*11.0%*	Return on Shr. Equity	*11.5%*
10.9%	10.5%	9.8%	9.9%	*10.5%*	*11.0%*	Return on Com Equity	*11.5%*
4.7%	4.4%	4.1%	4.0%	*4.5%*	*4.5%*	Retained to Com Eq	*5.0%*
57%	59%	59%	61%	*60%*	*59%*	All Div'ds to Net Prof	*52%*
15.2	19.4	19.2	16.3	*Bold figures are Value Line estimates*		Avg Ann'l P/E Ratio	*13.5*
.88	1.01	1.09	1.08			Relative P/E Ratio	*.90*
3.7%	3.0%	3.0%	3.7%			Avg Ann'l Div'd Yield	*3.0%*



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Infrastructure costs in the Water Utility Industry will rise considerably over the coming 20 years. Consequently, larger companies are buying smaller ones in an attempt to achieve economies of scale.

Water utility stocks are ranked to perform in the middle of the pack over the coming 12 months. Nonetheless, conservative investors can find above-average Safety ranks and attractive dividends in the group.

INDUSTRY TIMELINESS: 54 (of 98)

Industry Consolidation

Infrastructure costs in the water utility industry will likely soar over the next two decades. These companies must constantly repair and upgrade their existing water/wastewater systems in order to comply with increasingly strict rules issued by the Environmental Protection Agency (EPA) and local regulators. Many of the facilities and pipes that transport water were constructed over 100 years ago. The costs of replacing these systems is considerably higher now than it was in the past, even adjusting for inflation. Too, the ongoing depletion of nearby sources of water forces many water utilities to obtain water from more-distant, more-expensive sources. Water is difficult and costly to transport because it is heavy and incompressible. Nonetheless, utilities must continue to keep pace with rising demand for drinking water from growing residential and industrial customers. Recent estimates are that it will cost hundreds of billions of dollars to replace and upgrade failing water infrastructures over the next 20 years. This amounts to more than the entire current assets of the water industry in America. Much of these costs will likely be financed by federal spending and higher water rates. Nevertheless, water utilities are going to have to ante up much higher capital investments over the coming years.

The costs of staying in compliance with drinking water laws are especially onerous for smaller regional companies because they have fewer customers over which to spread their costs. Small and mid-sized water utilities tend to welcome takeover offers from larger, better-capitalized companies so that they can utilize the bigger firm's superior resources. For instance, the EPA's new rules on the allowable levels of arsenic in drinking water (10 parts per billion by January, 2006) is compelling some smaller utilities to merge with larger ones in an effort to remain in compliance with the new standards. By purchasing these smaller entities, large utilities seek to achieve economies of scale. Also, a bigger company gains greater geographic diversity that can reduce its susceptibility to unfavorable weather patterns and potentially burdensome local regulators. For example, the regulatory climate in California has been extra costly for utilities in the past couple of years, so companies, such as *California Water*, have been actively looking for acquisition targets outside of the state. On a positive note, the passage of a new law in California will allow water utilities to charge higher rates to customers (subject to refund) if regulators do not render decisions on rate cases within established processing periods. This ought to improve revenues for three out of four companies in this review.

Recent Challenges

The events of September 11, 2001 have introduced a whole new set of challenges for the industry. Companies have been spending a lot of time, energy, and money on making sure that their water systems are reasonably secure from potential terrorist attacks. Utilities have turned to local and federal regulators for reimbursement and additional funding, but the amount and timing of future funds is uncertain. Also, insurance costs have soared in the past year, as insurers are now more reluctant to cover companies, like water utilities, that can potentially have catastrophic losses.

SDWA Regulations

The Safe Drinking Water Act (SDWA) of 1974 (amended in 1996) authorizes the EPA to work with state and local governments to test for potential impurities in drinking water. The EPA mandates what particular level of a certain contaminant is acceptable per a specified amount of water. Water utilities routinely spend large portions of their annual capital expenditures on efforts to remain in compliance with SDWA guidelines. These companies must also comply with the 1972 Clean Water Act, and numerous other state and local laws, another costly endeavor.

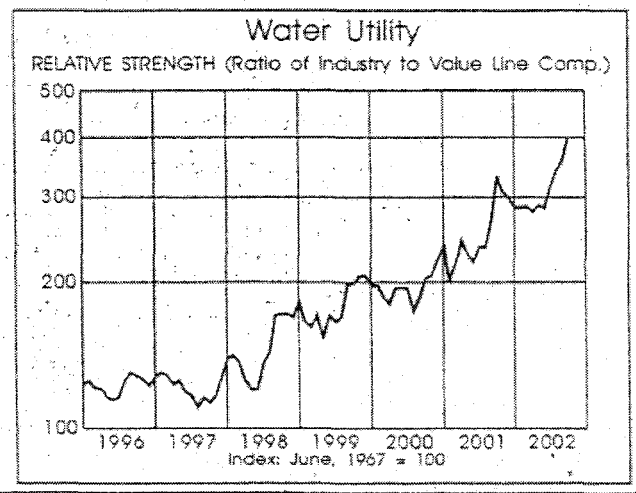
Decent Grounds For Conservative Investors

The water-utility stocks in this review are unlikely to outperform the year-ahead market. Nonetheless, they offer above-average Safety ranks, attractive dividend yields, and decent risk-adjusted total-return potential.

Joseph Espaillat

Composite Statistics: Water Utility Industry

1998	1999	2000	2001	2002	2003		05-07
1503.1	1898.0	2054.9	2190.5	**2495**	**2710**	Revenues ($mill)	**3360**
192.9	232.8	249.7	261.8	**275**	**315**	Net Profit ($mill)	**465**
39.1%	39.7%	40.1%	39.5%	**41.5%**	**40.0%**	Income Tax Rate	**40.0%**
7.3%	9.6%	5.5%	3.4%	**2.0%**	**2.0%**	AFUDC % to Net Profit	**3.0%**
58.0%	56.2%	54.9%	56.7%	**57.0%**	**56.0%**	Long-Term Debt Ratio	**52.5%**
39.6%	41.9%	44.0%	42.4%	**42.0%**	**43.0%**	Common Equity Ratio	**47.0%**
4524.6	5566.3	5654.6	6198.1	**7005**	**7085**	Total Capital ($mill)	**8780**
5544.7	7039.7	7545.4	7991.2	**8210**	**9940**	Net Plant ($mill)	**12085**
6.3%	6.2%	6.6%	6.3%	**6.0%**	**6.5%**	Return on Total Cap'l	**7.0%**
10.2%	9.5%	9.8%	9.8%	**10.0%**	**10.5%**	Return on Shr. Equity	**11.5%**
10.5%	9.8%	9.9%	9.9%	**10.0%**	**10.5%**	Return on Com Equity	**11.5%**
4.4%	4.1%	4.0%	3.9%	**3.0%**	**4.5%**	Retained to Com Eq	**6.0%**
59%	59%	60%	61%	**61%**	**58%**	All Div'ds to Net Prof	**47%**
19.4	19.2	16.3	20.9	Bold figures are Value Line estimates		Avg Ann'l P/E Ratio	**13.5**
1.01	1.09	1.06	1.07			Relative P/E Ratio	**.90**
3.0%	3.0%	3.7%	2.9%			Avg Ann'l Div'd Yield	**3.0%**



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The Water Utility Industry's consolidation continues to gain momentum, as industry leaders look for opportunities to buy out smaller companies that are struggling to keep up with escalating infrastructure costs and heightened regulatory requirements.

Water Utility stocks are unlikely to outperform the broad market for the year ahead. With that said, however, some of these issues offer conservative investors attractive risk-adjusted, total-return potential.

INDUSTRY TIMELINESS: 97 (of 98)

Government Regulations

In order to keep water supplies safe, national purification standards have been established that the water industry is required to meet. Amended in 1996, the Safe Drinking Water Act (SDWA) of 1974 authorizes the Environmental Protection Agency (EPA) to work with state and local governments to periodically test for impurities in drinking water and regulate the levels of contaminants that are acceptable per a specified amount of water. These standards take into account the health effects of chemicals, measurement capabilities, and technical feasibility. One of the most significant contaminants that the industry screens for is arsenic, a naturally occurring substance. However, the EPA is in the process of lowering the tolerated amount of arsenic to 10 parts per billion from 20 parts currently. The change is expected to be in effect by January, 2006. Large chunks of water utilities' annual capital budgets are already spent on infrastructure maintenance and improvements in order to stay in compliance with the SDWA, the Clean Water Act, and numerous state and local laws. This percentage is likely to climb even higher, as fears of terrorism have prompted officials to further tighten regulation requirements.

Rising Infrastructure Costs

Along with the necessity to remain in compliance with increasingly strict water purity standards, water companies are also being pressured to continually upgrade aging facilities. Many of the water/wastewater systems that are presently in use were built over 100 years ago and are growing outdated. The costs associated with replacing these systems are dramatically higher now than when they initially were put in place. The EPA and other industry sources indicate that hundreds of billions of dollars over the next 20 years will be needed to repair the nation's entire water system. The Water Infrastructure Network believes that there will be a $12 billion annual shortfall for wastewater infrastructure over that period, and long-term help from the federal government is needed to solve the problem. Water companies will most likely foot the majority of the bill, though, as budget deficits at state and local levels will limit funds dedicated to the industry.

Industry Consolidation

With the costs of meeting safe drinking water guidelines on the rise, many smaller companies lack the funds to commit to long-term structural improvements. As such, these smaller water companies have been increasingly willing to accept takeover offers from larger suitors with significantly greater capital resources. The larger utilities benefit from economies of scale, which enables them to reduce overhead. In addition, the acquisitions usually enhance geographic diversity, reducing a company's vulnerability to weather fluctuations. Then, too, a multistate territory helps to alleviate a company's exposure to especially onerous regulatory atmospheres. Large foreign utilities have been particularly active in recent years, swallowing up domestic water companies in an effort to gain exposure to the United States' steady population growth.

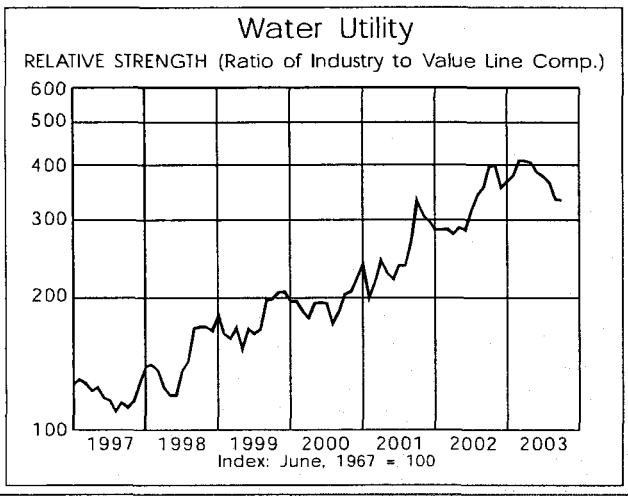
Investment Advice

None of the stocks under review are timely at this juncture, as poor weather conditions have resulted in inconsistent earnings patterns. Although *Philadelphia Suburban, California Water Services Group, and American States Water* all have below-average total-return potential out to 2006-2008, income-oriented investors might may find one of these stocks attractive, given their favorable risk profile. Income-bearing stocks have gained some additional popularity of late, because of the recent federal tax bill that reduced the top rate investors pay on dividend income to 15%. As usual, though, we recommend that potential investors careful review individual reports before making any new commitments.

Andre J. Costanza

Composite Statistics: Water Utility Industry

1999	2000	2001	2002	2003	2004		06-08
637.2	704.3	751.8	794.4	*845*	*950*	Revenues ($mill)	*1185*
72.4	90.9	95.4	106.6	*105*	*130*	Net Profit ($mill)	*190*
40.0%	41.2%	40.2%	38.8%	*39.0%*	*39.5%*	Income Tax Rate	*40.0%*
--	--	--	--	*Nil*	*.5%*	AFUDC % to Net Profit	*.5%*
51.1%	50.3%	52.4%	53.9%	*53.0%*	*51.5%*	Long-Term Debt Ratio	*51.0%*
48.3%	49.3%	47.2%	45.9%	*46.5%*	*48.5%*	Common Equity Ratio	*49.0%*
1444.7	1661.0	1840.7	1973.6	*2250*	*2425*	Total Capital ($mill)	*3050*
2100.3	2342.5	2532.3	2751.1	*3025*	*3225*	Net Plant ($mill)	*3950*
7.4%	7.0%	6.8%	7.0%	*6.5%*	*7.0%*	Return on Total Cap'l	*7.5%*
11.5%	10.7%	10.6%	11.2%	*10.0%*	*10.5%*	Return on Shr. Equity	*12.0%*
11.5%	10.8%	10.7%	11.2%	*10.0%*	*11.0%*	Return on Com Equity	*12.0%*
3.8%	3.6%	3.3%	3.9%	*3.0%*	*4.0%*	Retained to Com Eq	*5.5%*
68%	67%	69%	66%	*75%*	*65%*	All Div'ds to Net Prof	*54%*
19.5	18.6	22.6	21.5	*Bold figures are Value Line estimates*		Avg Ann'l P/E Ratio	*13.5*
1.11	1.21	1.16	1.17			Relative P/E Ratio	*.90*
3.5%	3.6%	3.1%	3.1%			Avg Ann'l Div'd Yield	*3.0%*



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The Water Utility industry continues to rank near the bottom of the *Value Line* investment universe. Infrastructure costs will limit earnings for at least the near future, as the high expenses associated with maintaining and improving the country's water-distribution systems continue to rise.

However, it appears that relief is on the way for some companies. Favorable regulatory rate case rulings have been handed down across the country and look as though they might become the norm.

Meanwhile, consolidation remains the name of the game. Although many of the industry's smaller players lack the capital requirements to meet growing government regulations, larger companies are using the consolidation as way to boost profitability via growing its customer base.

INDUSTRY TIMELINESS: 94 (of 98)

Infrastructure Costs

Infrastructure costs continue to climb higher as water utility companies, with little help from strapped government branches, are forced to deal with maintaining and upgrading existing facilities. Costs are becoming an even greater concern as time passes because a number of the functioning systems currently in place are over 100 years old and in need of significant repair. That said, we believe that it will take hundreds of billions of dollars to renovate existing pipelines over the next few decades. To make matters worse, the costs of staying in compliance with regulatory laws are growing even more difficult, due to fears of terrorist activities against the country's drinking supplies. Although the Safe Drinking Water Act (SDWA) of 1974 remains the authority for the safety and purity of drinking water, recent amendments are making compliance even more demanding. In 1996, an amendment authorized the Environmental Protection Agency (EPA) to step up local compliance levels. And, governing law-makers now insist that the EPA work with local and state governments to test for impurities in drinking water and to regulate the levels of contaminants that are acceptable.

A Buying Opportunity

The growing regulations and costs associated with staying in compliance with government standards related to the quality and purification of drinking water is forcing many of the smaller water companies to look to larger suitors. Bigger companies with the market scale to withstand the current onslaught of costs are clearly taking advantage of this situation. Indeed, these firms are growing their businesses at relatively low costs as well as diversifying their operations into less regulated and more-rapidly developing areas of the U.S. *Aqua America* is a perfect example, making nearly 20 acquisitions since the close of last year. *Aqua* recently purchased a number of Pennsylvania-based companies in order to help drive top-line growth. We anticipate that the current consolidation theme will persist, as we expect restructuring costs to continue to rise.

Regulatory Assistance

Although water utility company's have been forced to deal with lethargic case rulings in the past couple of years, some governing bodies are picking up the pace. In California, for example, the California Public Utilities Commission (CPUC) has handed down a number of favorable rate-relief rulings in recent months, and more are expected. With the California electric crisis seemingly in the rearview mirror, the current administration seems intent on delivering more timely assessments. *American States Water Company* and *California Water Service Group* have both seen profits benefit from recent case rulings over the past quarter.

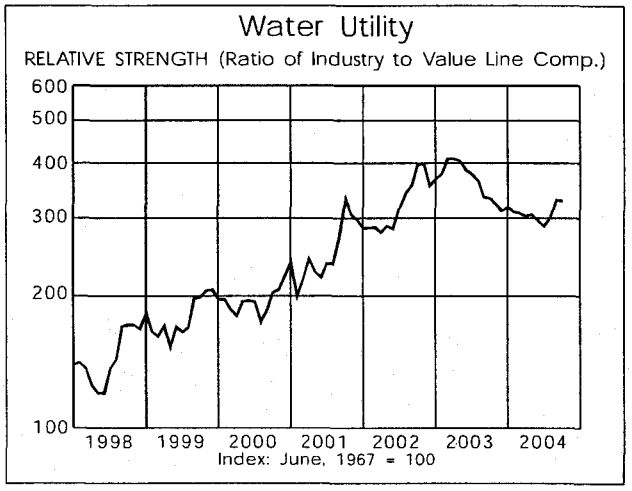
Investment Advice

Most investors will want to take a pass on the stocks covered in the next few pages, as they offer uninspiring returns out to decade's end. In addition, not one of the stocks in this edition is ranked to outperform the market in the next six to 12 months. Nonetheless, income-oriented investors may like the industry's solid dividend yields. *California Water* may have some added appeal for the risk-averse, given its above average Safety rank. Still, we advise that potential investors carefully review the individual reports in the ensuing pages before making a commitment to any of the stocks mentioned above.

Andre J. Costanza

Composite Statistics: Water Utility Industry

2000	2001	2002	2003	2004	2005		07-09
704.3	751.8	794.4	857.0	*990*	*1075*	Revenues ($mill)	*1345*
90.9	95.4	106.6	98.6	*130*	*150*	Net Profit ($mill)	*205*
41.2%	40.2%	38.8%	40.0%	*40.0%*	*40.0%*	Income Tax Rate	*40.0%*
-	--	--	--	*Nil*	*Nil*	AFUDC % to Net Profit	*Nil*
50.3%	52.4%	53.9%	51.2%	*51.0%*	*51.0%*	Long-Term Debt Ratio	*50.0%*
49.3%	47.2%	45.9%	48.6%	*49.0%*	*49.0%*	Common Equity Ratio	*50.0%*
1661.0	1840.7	1973.6	2296.4	*2615*	*2870*	Total Capital ($mill)	*3550*
2342.5	2532.2	2751.1	3186.1	*3400*	*3605*	Net Plant ($mill)	*4150*
7.0%	6.8%	7.0%	5.9%	*6.5%*	*7.0%*	Return on Total Cap'l	*7.0%*
10.7%	10.6%	11.2%	8.8%	*9.5%*	*9.5%*	Return on Shr. Equity	*10.0%*
10.8%	10.7%	11.2%	8.8%	*9.5%*	*9.5%*	Return on Com Equity	*10.0%*
3.6%	3.3%	3.8%	2.5%	*3.5%*	*4.0%*	Retained to Com Eq	*4.5%*
67%	69%	66%	72%	*62%*	*58%*	All Div'ds to Net Prof	*52%*
18.6	22.6	21.5	26.0	*Bold figures are Value Line estimates*		Avg Ann'l P/E Ratio	*18.0*
1.21	1.16	1.17	1.49			Relative P/E Ratio	*1.20*
3.6%	3.1%	3.1%	2.8%			Avg Ann'l Div'd Yield	*3.5%*



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After showing some brief signs of a turnaround last year, the Water Utility Industry appears to have reverted back to its old ways. Feeling the effects of uncooperating weather conditions and high infrastructure costs, the stocks in this industry have had trouble meeting earnings expectations and, as a result, have sorely underperformed the broader market in recent months. In fact, none of the water utility stocks that are covered in the next few pages are ranked better than 3 (Average) for Timeliness, based on our momentum based ranking system. As a whole, the industry ranks near the bottom of the Value Line investment universe.

And the future does not look much brighter. Although a more favorable regulatory landscape and normalized weather conditions ought to provide a better landscape, we are concerned that rapidly growing infrastructure costs will continue to undermine this group's earnings out to late decade.

Easing Tensions

Although designed to keep a balance of power between consumers and providers, regulatory authorities, have long been a thorn in the side of water utility companies. Rate relief case decisions had often been unfavorable and untimely, with some rulings being pushed off for as long as two years. But, it finally looks as though things are taking a turn for the better, especially in the state of California. The California Public Utilities Commission (CPUC), which is responsible for ruling on general rate case requests in the Golden State, has been handing down more-favorable and timely decisions in recent months, thanks, in part, to the efforts of Governor Schwarzenegger. He has replaced members thought to be antagonists of rate relief with more-business-friendly members, and additional moves may be in the works. The recent changes makes for a favorable backdrop for water utility companies operating in California, such as *American States Water Co.* and *California Water Service Group.*

Costs

But, while regulators are easing their stance on rate case decisions, this does not look to be the case for infrastructure demands. Many of the current infrastructures are upwards of 100 years old and are in severe need of maintenance and, in some cases, massive renovations and rebuilding. And, given the geopolitical volatility worldwide and the heightened threat of bioterrorism on U.S. water pipelines and reservoirs, these costs are likely to continue to only rise, as companies strive to comply with EPA water purification standards. Infrastructure repair costs are expected to climb in the hundreds of millions of dollars over the next two decades, putting many smaller water companies at a distinct disadvantage. With a dearth of resources to fund these improvements, many such companies are being forced to sell. But, given the current landscape, larger companies with the flexibility and capital to deal with the higher costs are utilizing the weakness to add additional legs of growth to their businesses. *Aqua America*, the largest water utility in our survey, for example, has made more than 90 acquisitions in the past five years, doubling its revenue base during that time. The company does not seem to be slowing its aggressive spending ways and has the highest return on equity of any of the stocks that we cover here.

INDUSTRY TIMELINESS: 93 (of 98)

Investment Advice

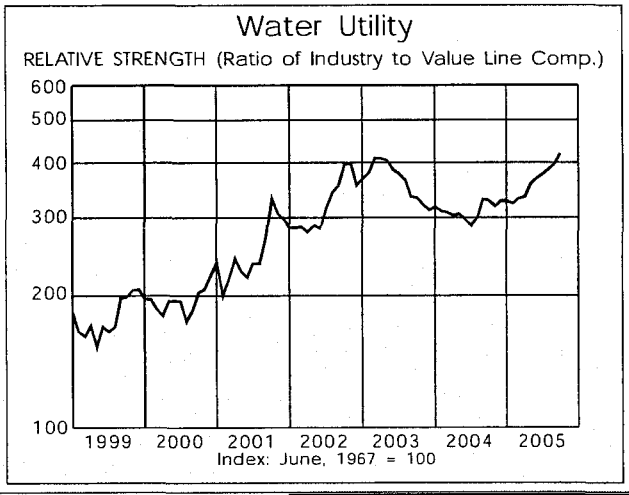
Most investors will probably want to take a pass on the stocks in this industry. Typically market laggards, not one of the issues covered in the next few pages stands out for near-term or long-term capital gains potential. The limited financial resources of most of these companies, along with the capital-intensive nature of the industry, will probably limit any substantial growth out to late decade.

Those seeking to add an income component to their portfolio may find an attractive option here, though. Each of the stocks in this industry carries an above-average dividend yield, with *American States Water* and *California Water* offering the highest percentages. *California Water* offers some additional appeal, as it has a 2 (Above Average) Safety rank. As is always the case, we recommend that all potential investors take a more in depth look at the individual reports on the following pages before considering making any future financial commitments.

Andre J. Costanza

Composite Statistics: Water Utility Industry

2001	2002	2003	2004	2005	2006		08-10
751.8	794.4	857.0	985.6	*1250*	*1350*	Revenues ($mill)	*1725*
95.4	106.6	98.6	122.4	*155*	*170*	Net Profit ($mill)	*235*
40.2%	38.8%	40.0%	39.4%	*39.5%*	*39.5%*	Income Tax Rate	*39.5%*
--	--	--	--	*Nil*	*Nil*	AFUDC % to Net Profit	*Nil*
52.4%	53.9%	51.2%	50.0%	*52.0%*	*51.0%*	Long-Term Debt Ratio	*48.0%*
47.2%	45.9%	48.6%	50.0%	*48.0%*	*49.0%*	Common Equity Ratio	*52.0%*
1840.7	1973.6	2296.4	2543.6	*3000*	*3400*	Total Capital ($mill)	*4100*
2532.2	2751.1	3186.1	3532.5	*4050*	*4250*	Net Plant ($mill)	*5000*
6.8%	7.0%	5.9%	6.7%	*7.0%*	*7.5%*	Return on Total Cap'l	*7.0%*
10.6%	11.2%	8.8%	10.7%	*11.0%*	*11.0%*	Return on Shr. Equity	*11.5%*
10.7%	11.2%	8.8%	10.7%	*11.0%*	*11.0%*	Return on Com Equity	*11.5%*
3.3%	3.8%	2.5%	4.6%	*5.0%*	*5.0%*	Retained to Com Eq	*3.0%*
69%	66%	72%	57%	*60%*	*55%*	All Div'ds to Net Prof	*45%*
22.6	21.5	26.0	25.5	*Bold figures are Value Line estimates*		Avg Ann'l P/E Ratio	*18.0*
1.16	1.17	1.48	1.36			Relative P/E Ratio	*1.20*
3.1%	3.1%	2.8%	2.2%			Avg Ann'l Div'd Yield	*3.4%*



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Despite better regulatory backing, most of the water utility companies covered in the next few pages have continued to struggle in recent months. Unseasonably wet weather conditions and escalating infrastructure costs remain at the heart of the problem, pressuring margins and limiting bottom-line growth. As a result, these perennial market laggards continue to rank at the bottom of the *Value Line* investment universe for Timeliness. Although we suspect that more-normal weather conditions will eventually resume, the growing need for infrastructure renovations remains a major concern going forward. Higher spending poses a threat to the industry's long-term prospects, especially given the capital constraints that most companies are facing. As a result, none of the issues in this industry hold worthwhile 3- to 5-year appreciation potential at this time. Meanwhile, dividend yields have lost some appeal, as well.

INDUSTRY TIMELINESS: 96 (of 97)

Regulatory Landscape

Regulatory authorities, designed to keep a balance of power between consumers and providers, have long been a nemesis to water utility companies. Rate case decisions have been unfavorable and untimely, sometimes taking as long as two years to complete. However, the tide appears to have turned more recently, particularly in California, where a few of the utilities in this *Survey* generate a fair portion of their revenues. The California Public Utilities Commission, for example, behind the efforts of Governor Schwarzenegger, has been handing down more-favorable and timely decisions. He has replaced members thought to be adversaries of rate relief with more-lenient constituents. The changes provide a healthy backdrop for utility companies that request a step-up in rates each year.

Drowning In Expenses

Although regulators appear to be more business-friendly with case decisions, they are becoming increasingly more stringent with infrastructure demands. Many of the current infrastructures are more than 100 years old, and in need of serious upkeep and even complete renovation in some cases. Meanwhile, the Environmental Protection Agency (EPA) continues to increase its water purification standards, given the geopolitical volatility worldwide and the threat of bio-terrorist actions on U.S. water systems. In all, infrastructure repair costs are expected to climb into the hundreds of millions of dollars over the next two decades. However, these increasing costs will make it very difficult for water utility companies to maintain the earnings momentum that we the expect the improved regulatory landscape to produce this year out to late decade.

Opportunity???

With limited resources to fund rising capital expenditures, many smaller companies in this industry are being forced to shop their businesses, presenting an opportunity for larger suitors with the resources to foot the bill. No company exemplifies this better than *Aqua America*, the largest water utility in our *Survey*. It has made well over 100 acquisitions in the past five years, using the aforementioned weakness of smaller players to improve their operations and increase their presence. It has drastically increased its customer base and clearly improved its longer-term prospects, and therefore holds the best 3- to 5-year appreciation potential of all the stocks in this industry. We expect that the consolidation trend will continue as water standards continue to climb.

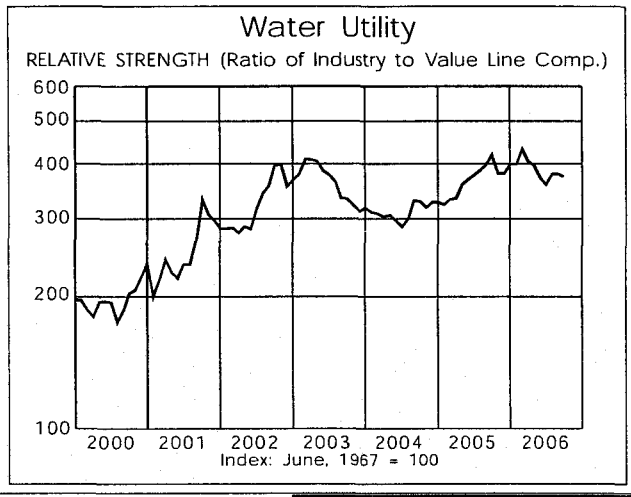
Investment Advice

This is not an industry that most investors will want to emphasize. Not one of the stocks here stand out for Timeliness or 3- to 5-year appreciation potential. Making matters worse, higher interest rates have increased the income-producing appeal of alternative investments, making the yields found in this industry modestly attractive at best. Thus, most will want to avoid this untimely industry for now. However, *California Water* is ranked 2 for Safety. This, along with its historically steady stream of income, may appeal to more-conservative investors. As always, though, we recommend that investors study the individual reports of each company in the next few pages before making any financial commitments.

Andre J. Costanza

Composite Statistics: Water Utility Industry

2002	2003	2004	2005	2006	2007		09-11
925.2	1030.0	1173.6	1256.9	*1350*	*1485*	Revenues ($mill)	*2025*
107.8	112.6	105.7	148.3	*150*	*185*	Net Profit ($mill)	*265*
38.6%	39.7%	39.1%	40.5%	*39.0%*	*39.0%*	Income Tax Rate	*39.0%*
.2%	1.9%	1.0%	1.1%	*1.0%*	*1.0%*	AFUDC % to Net Profit	*1.0%*
54.1%	51.0%	49.1%	50.4%	*50.0%*	*50.0%*	Long-Term Debt Ratio	*50.0%*
45.7%	48.8%	50.7%	49.5%	*50.0%*	*50.0%*	Common Equity Ratio	*50.0%*
2116.4	2449.1	2785.6	3057.5	*3300*	*3600*	Total Capital ($mill)	*4565*
2995.1	3405.6	3836.9	4194.7	*4475*	*4750*	Net Plant ($mill)	*5650*
6.9%	5.9%	6.0%	6.3%	*7.5%*	*8.0%*	Return on Total Cap'l	*9.0%*
11.1%	8.8%	9.0%	9.8%	*9.5%*	*10.5%*	Return on Shr. Equity	*11.5%*
11.1%	8.8%	9.0%	9.8%	*9.5%*	*10.5%*	Return on Com Equity	*11.5%*
4.0%	2.7%	3.1%	3.7%	*4.0%*	*4.5%*	Retained to Com Eq	*5.0%*
64%	70%	66%	62%	*60%*	*55%*	All Div'ds to Net Prof	*55%*
21.6	25.6	25.4	29.4	*Bold figures are Value Line estimates*		Avg Ann'l P/E Ratio	*18.0*
1.18	1.46	1.34	1.57			Relative P/E Ratio	*1.20*
3.0%	2.7%	2.6%	2.1%			Avg Ann'l Div'd Yield	*2.5%*



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Many of the stock's in the Water Utility industry have continued to benefit from more favorable regulatory backing since our October review. Nevertheless, as usual, the industry, as a whole, ranks at the very bottom of the *Value Line* investment universe for Timeliness. Elevated well and waterway maintenance costs are responsible for most of the blame and will likely continue to dampen profits for years to come. Indeed, the growing need for infrastructure renovations poses a significant threat to the industry's long-term prospects, especially given the capital constraints that most companies are facing. As a result, many investors are going to want to steer clear of the issues in this industry.

INDUSTRY TIMELINESS: 96 (of 96)

Regulatory Winds at its Back

Regulatory authorities, designed to keep a balance of power between utility providers and consumers, have been extremely tough on utility companies in years past. However, current administrations have taken a much more business-friendly approach in recent months in handing down timely and generally favorable rulings. This has not been more glaringly evident than in California, where the California Public Utilities Commission's board has undergone a major facelift with adversaries being replaced with business supporters. Recent rulings set a good tone for utility providers doing business in the Golden State, which typically request a step-up in rates every year. This augurs particularly well for *California Water Service Group* and *American States Water*, which both derive a significant amount of business from California.

But Choppy Waters Lie Ahead

Even still, the same cannot be said for infrastructure costs. Although regulators are softening their stance on rate case decisions, infrastructure demands are growing more stringent. Many of the current infrastructures are more than 100 years old and in need of serious upkeep, or even complete replacement in some cases. Water companies are being forced to pony up significant cash in order to get their systems up to par. Making matters worse, the Environmental Protection Agency (EPA) continues to increase its water purification standards, given the geopolitical volatility worldwide and the threat of bio-terrorist actions on U.S. water systems. In all, infrastructure repair costs are expected to climb into the hundreds of millions of dollars over the next two decades. These extra costs will make it very difficult for most water utility companies to sustain the earnings momentum that we think the improved regulatory landscape will produce this year.

Many of the smaller companies in the industry do not have the resources to meet the capital expenditures that they are being saddled with. Some are deciding to merge with larger, more financially sound enterprises. As a result, some of the biggest water utility companies are growing bigger, faster than ever. *Aqua America*, for example, has made well over 100 acquisitions in the past five years (28 coming in 2006), based on the aforementioned weakness of smaller players, improved operations and increased their lines. This has drastically increased its customer base and clearly improved its long-term prospects. We expect *Aqua* to continue growing its business via acquisitions as rising water standards spark further consolidation.

Investment Advice

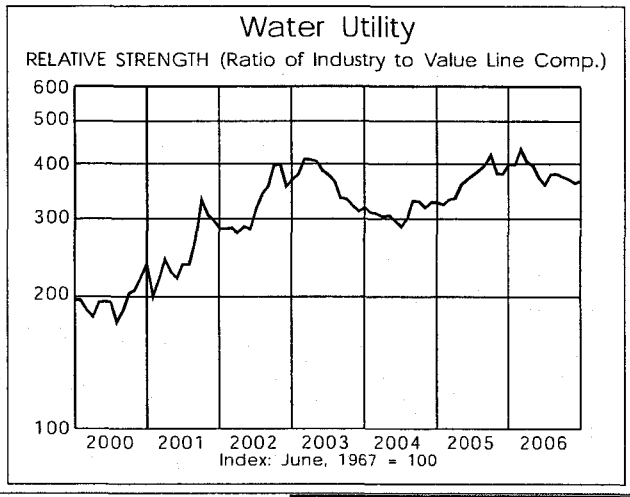
Most investors will want to steer clear of the stocks in the Water Utility Industry. Each of the issues in the coming pages hold below average appreciation potential, whether it be for the coming six to 12 months or out to 2009-2011. In fact, each is ranked either 4 or 5 for Timeliness. The growing infrastructure costs and capital constraints mentioned above are likely to continue pressuring bottom lines of water utility companies for years to come.

Meanwhile, most look to have lost their income appeal as well. Higher interest rates have increased the income-producing appeal of alternative investments, making the yields found in this industry modestly attractive at best. That said, more conservative investors looking for a steady stream of income may want to take a peek at *California Water*, which is ranked 2 (Above Average) for Safety. Its yield is still above the *Value Line* average. Nevertheless, we advise all potential investors to carefully look over the individual reports of each company in the next few pages before making any decisions.

Andre J. Costanza

Composite Statistics: Water Utility Industry

2002	2003	2004	2005	2006	2007		09-11
925.2	1030.0	1173.6	1256.9	*1350*	*1450*	Revenues ($mill)	*1825*
107.8	112.6	105.7	148.3	*155*	*180*	Net Profit ($mill)	*240*
38.6%	39.7%	39.1%	40.5%	*39.0%*	*39.0%*	Income Tax Rate	*39.0%*
.2%	1.9%	1.0%	1.1%	*1.0%*	*1.0%*	AFUDC % to Net Profit	*1.0%*
54.1%	51.0%	49.1%	50.4%	*50.0%*	*50.0%*	Long-Term Debt Ratio	*50.0%*
45.7%	48.8%	50.7%	49.5%	*50.0%*	*50.0%*	Common Equity Ratio	*50.0%*
2116.4	2449.1	2785.6	3057.5	*3360*	*3650*	Total Capital ($mill)	*4500*
2995.1	3405.6	3836.9	4194.7	*5350*	*5750*	Net Plant ($mill)	*6800*
6.9%	5.9%	6.0%	6.3%	*7.0%*	*8.0%*	Return on Total Cap'l	*9.0%*
11.1%	8.8%	9.0%	9.8%	*9.0%*	*10.0%*	Return on Shr. Equity	*10.5%*
11.1%	8.8%	9.0%	9.8%	*9.0%*	*10.0%*	Return on Com Equity	*10.5%*
4.0%	2.7%	3.1%	3.7%	*3.0%*	*3.5%*	Retained to Com Eq	*2.5%*
64%	70%	66%	62%	*68%*	*65%*	All Div'ds to Net Prof	*62%*
21.6	25.6	25.4	29.4	*Bold figures are Value Line estimates*		Avg Ann'l P/E Ratio	*18.0*
1.18	1.46	1.34	1.57			Relative P/E Ratio	*1.20*
3.0%	2.7%	2.6%	2.1%			Avg Ann'l Div'd Yield	*2.5%*



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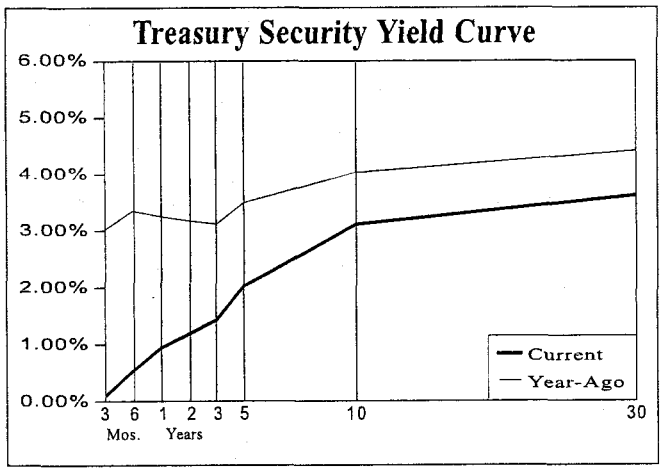
ATTACHMENT E

Selected Yields

	Recent (11/25/08)	3 Months Ago (8/27/08)	Year Ago (11/28/07)
TAXABLE			
Market Rates			
Discount Rate	1.25	2.25	5.00
Federal Funds	1.00	2.00	4.50
Prime Rate	4.00	5.00	7.50
30-day CP (A1/P1)	1.95	2.84	4.65
3-month LIBOR	2.20	2.81	5.08
Bank CDs			
6-month	1.59	1.60	2.82
1-year	1.95	2.26	3.54
5-year	3.32	4.15	3.88
U.S. Treasury Securities			
3-month	0.10	1.67	3.03
6-month	0.54	1.94	3.36
1-year	0.94	2.15	3.26
5-year	2.03	3.01	3.50
10-year	3.11	3.76	4.04
10-year (inflation-protected)	3.64	1.51	1.70
30-year	3.62	4.38	4.42
30-year Zero	3.52	4.44	4.45

	Recent (11/25/08)	3 Months Ago (8/27/08)	Year Ago (11/28/07)
Mortgage-Backed Securities			
GNMA 6.5%	5.66	5.62	5.39
FHLMC 6.5% (Gold)	5.46	5.66	5.61
FNMA 6.5%	5.33	5.56	5.41
FNMA ARM	3.90	4.02	5.87
Corporate Bonds			
Financial (10-year) A	8.59	6.60	5.94
Industrial (25/30-year) A	7.17	6.18	5.87
Utility (25/30-year) A	7.20	6.15	6.03
Utility (25/30-year) Baa/BBB	7.95	6.57	6.11
Foreign Bonds (10-Year)			
Canada	3.40	3.53	4.06
Germany	3.35	4.17	4.11
Japan	1.41	1.45	1.49
United Kingdom	3.87	4.51	4.68
Preferred Stocks			
Utility A	7.06	6.16	6.31
Financial A	8.58	7.08	7.84
Financial Adjustable A	5.52	5.53	5.53



	Recent (11/25/08)	3 Months Ago (8/27/08)	Year Ago (11/28/07)
TAX-EXEMPT			
Bond Buyer Indexes			
20-Bond Index (GOs)	5.13	4.64	4.45
25-Bond Index (Revs)	5.98	5.15	4.80
General Obligation Bonds (GOs)			
1-year Aaa	1.05	1.56	3.25
1-year A	1.15	1.66	3.35
5-year Aaa	2.92	2.79	3.27
5-year A	2.97	2.89	3.37
10-year Aaa	4.00	3.60	3.64
10-year A	4.20	3.80	3.94
25/30-year Aaa	5.36	4.71	4.38
25/30-year A	5.74	4.95	4.58
Revenue Bonds (Revs) (25/30-Year)			
Education AA	5.55	5.05	4.65
Electric AA	5.50	5.10	4.75
Housing AA	6.15	5.25	4.85
Hospital AA	6.20	5.30	4.85
Toll Road Aaa	5.55	5.10	4.75

Federal Reserve Data

BANK RESERVES

(Two-Week Period; in Millions, Not Seasonally Adjusted)

	Recent Levels			Average Levels Over the Last...		
	11/19/08	11/5/08	Change	12 Wks.	26 Wks.	52 Wks.
Excess Reserves	604726	363637	241089	208454	105291	55539
Borrowed Reserves	725177	675272	49905	462868	314996	194280
Net Free/Borrowed Reserves	-120451	-311635	191184	-254414	-209705	-138741

MONEY SUPPLY

(One-Week Period; in Billions, Seasonally Adjusted)

	Recent Levels			Growth Rates Over the Last...		
	11/10/08	11/3/08	Change	3 Mos.	6 Mos.	12 Mos.
M1 (Currency+demand deposits)	1510.6	1531.7	-21.1	35.9%	22.8%	10.6%
M2 (M1+savings+small time deposits)	7907.1	7877.5	29.6	12.2%	7.3%	7.5%

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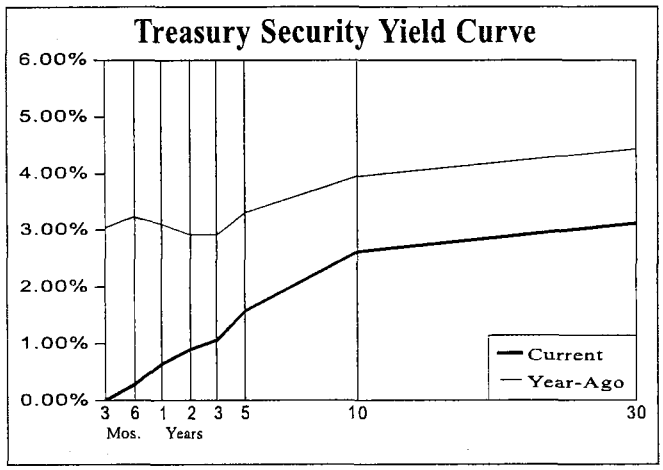
Selected Yields

	Recent (12/03/08)	3 Months Ago (9/03/08)	Year Ago (12/05/07)
TAXABLE			
Market Rates			
Discount Rate	1.25	2.25	5.00
Federal Funds	1.00	2.00	4.50
Prime Rate	4.00	5.00	7.50
30-day CP (A1/P1)	1.50	2.88	5.23
3-month LIBOR	2.20	2.81	5.15
Bank CDs			
6-month	1.57	1.60	2.82
1-year	1.95	2.26	3.45
5-year	3.32	4.15	3.80
U.S. Treasury Securities			
3-month	0.01	1.68	3.05
6-month	0.28	1.90	3.24
1-year	0.64	2.07	3.11
5-year	1.58	2.95	3.32
10-year	2.62	3.70	3.96
10-year (inflation-protected)	2.91	1.64	1.70
30-year	3.12	4.32	4.44
30-year Zero	3.02	4.37	4.49

	Recent (12/03/08)	3 Months Ago (9/03/08)	Year Ago (12/05/07)
Mortgage-Backed Securities			
GNMA 6.5%	5.66	5.60	5.25
FHLMC 6.5% (Gold)	5.46	5.67	5.42
FNMA 6.5%	5.26	5.48	5.25
FNMA ARM	4.24	3.89	5.44
Corporate Bonds			
Financial (10-year) A	8.09	6.69	5.92
Industrial (25/30-year) A	6.70	6.11	5.96
Utility (25/30-year) A	6.83	6.13	6.07
Utility (25/30-year) Baa/BBB	7.58	6.54	6.22
Foreign Bonds (10-Year)			
Canada	3.16	3.48	3.93
Germany	3.04	4.14	4.03
Japan	1.39	1.47	1.50
United Kingdom	3.43	4.50	4.49
Preferred Stocks			
Utility A	6.75	6.16	6.25
Financial A	7.75	6.97	7.73
Financial Adjustable A	5.53	5.53	5.53



	Recent (12/03/08)	3 Months Ago (9/03/08)	Year Ago (12/05/07)
TAX-EXEMPT			
Bond Buyer Indexes			
20-Bond Index (GOs)	5.39	4.68	4.39
25-Bond Index (Revs)	6.06	5.17	4.77
General Obligation Bonds (GOs)			
1-year Aaa	1.05	1.58	3.00
1-year A	1.15	1.68	3.04
5-year Aaa	2.95	2.74	3.18
5-year A	3.05	2.84	3.48
10-year Aaa	4.09	3.55	3.57
10-year A	4.29	3.75	3.86
25/30-year Aaa	5.48	4.69	4.29
25/30-year A	5.88	5.07	4.40
Revenue Bonds (Revs) (25/30-Year)			
Education AA	6.05	4.85	4.45
Electric AA	6.10	4.80	4.45
Housing AA	6.25	5.15	4.70
Hospital AA	6.20	5.25	4.65
Toll Road Aaa	6.15	4.80	4.65

Federal Reserve Data

BANK RESERVES

(Two-Week Period; in Millions, Not Seasonally Adjusted)

	Recent Levels			Average Levels Over the Last...		
	11/19/08	11/5/08	Change	12 Wks.	26 Wks.	52 Wks.
Excess Reserves	604737	363643	241094	208456	105292	55540
Borrowed Reserves	725177	675272	49905	462868	314996	194280
Net Free/Borrowed Reserves	-120440	-311629	191189	-254412	-209704	-138740

MONEY SUPPLY

(One-Week Period; in Billions, Seasonally Adjusted)

	Recent Levels			Growth Rates Over the Last...		
	11/17/08	11/10/08	Change	3 Mos.	6 Mos.	12 Mos.
M1 (Currency+demand deposits)	1507.5	1510.5	-3.0	41.2%	23.2%	11.0%
M2 (M1+savings+small time deposits)	7929.4	7906.9	22.5	14.1%	7.5%	7.6%

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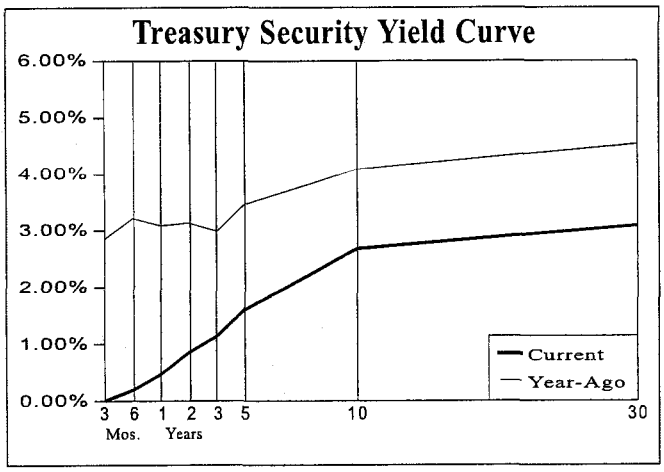
Selected Yields

	Recent (12/03/08)	3 Months Ago (9/10/08)	Year Ago (12/12/07)
TAXABLE			
Market Rates			
Discount Rate	1.25	2.25	4.75
Federal Funds	1.00	2.00	4.25
Prime Rate	4.00	5.00	7.25
30-day CP (A1/P1)	0.86	3.00	5.10
3-month LIBOR	2.10	2.82	5.06
Bank CDs			
6-month	1.57	1.60	2.82
1-year	1.95	2.26	3.45
5-year	3.32	4.15	3.74
U.S. Treasury Securities			
3-month	0.01	1.64	2.86
6-month	0.20	1.86	3.22
1-year	0.47	2.04	3.09
5-year	1.61	2.90	3.47
10-year	2.68	3.63	4.09
10-year (inflation-protected)	3.11	1.61	1.78
30-year	3.09	4.23	4.54
30-year Zero	2.90	4.27	4.58

	Recent (12/03/08)	3 Months Ago (9/10/08)	Year Ago (12/12/07)
Mortgage-Backed Securities			
GNMA 6.5%	5.17	5.31	5.54
FHLMC 6.5% (Gold)	4.92	5.36	5.67
FNMA 6.5%	4.75	5.20	5.53
FNMA ARM	4.24	3.86	5.46
Corporate Bonds			
Financial (10-year) A	8.29	6.51	6.26
Industrial (25/30-year) A	6.63	6.08	6.15
Utility (25/30-year) A	6.79	6.04	6.25
Utility (25/30-year) Baa/BBB	7.55	6.49	6.35
Foreign Bonds (10-Year)			
Canada	3.09	3.46	4.03
Germany	3.21	4.07	4.31
Japan	1.42	1.52	1.52
United Kingdom	3.57	4.46	4.80
Preferred Stocks			
Utility A	6.47	6.12	6.35
Financial A	7.38	7.33	7.80
Financial Adjustable A	5.46	5.46	5.46



	Recent (12/03/08)	3 Months Ago (9/10/08)	Year Ago (12/12/07)
TAX-EXEMPT			
Bond Buyer Indexes			
20-Bond Index (GOs)	5.58	4.62	4.38
25-Bond Index (Revs)	6.17	5.15	4.74
General Obligation Bonds (GOs)			
1-year Aaa	0.95	1.58	2.90
1-year A	1.05	1.68	3.00
5-year Aaa	2.95	2.69	3.19
5-year A	3.00	2.79	3.29
10-year Aaa	4.20	3.48	3.63
10-year A	4.40	3.68	3.93
25/30-year Aaa	5.79	4.53	4.37
25/30-year A	6.17	4.77	4.57
Revenue Bonds (Revs) (25/30-Year)			
Education AA	6.00	4.87	4.65
Electric AA	5.95	4.92	4.70
Housing AA	6.75	5.13	4.80
Hospital AA	6.65	5.15	4.85
Toll Road Aaa	6.10	4.95	4.70

Federal Reserve Data

BANK RESERVES

(Two-Week Period; in Millions, Not Seasonally Adjusted)

	Recent Levels			Average Levels Over the Last...		
	12/3/08	11/19/08	Change	12 Wks.	26 Wks.	52 Wks.
Excess Reserves	589707	604746	-15039	292410	147272	77325
Borrowed Reserves	675885	725177	-49292	535410	352243	219293
Net Free/Borrowed Reserves	-86178	-120431	34253	-243000	-204971	-141968

MONEY SUPPLY

(One-Week Period; in Billions, Seasonally Adjusted)

	Recent Levels			Growth Rates Over the Last...		
	11/24/08	11/17/08	Change	3 Mos.	6 Mos.	12 Mos.
M1 (Currency+demand deposits)	1531.5	1507.5	24.0	48.0%	25.0%	12.5%
M2 (M1+savings+small time deposits)	7945.7	7929.4	16.3	15.0%	7.6%	7.4%

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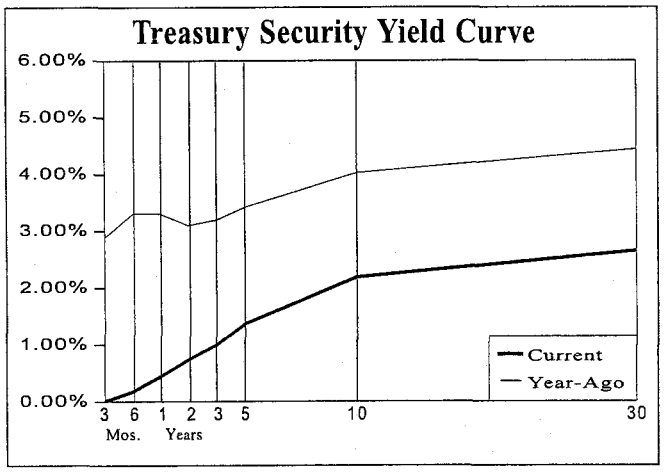
Selected Yields

	Recent (12/10/08)	3 Months Ago (9/17/08)	Year Ago (12/19/07)
TAXABLE			
Market Rates			
Discount Rate	0.50	2.25	4.75
Federal Funds	0.00-0.25	2.00	4.25
Prime Rate	3.25	5.00	7.25
30-day CP (A1/P1)	0.27	2.50	5.59
3-month LIBOR	1.58	3.06	4.91
Bank CDs			
6-month	1.46	1.61	2.82
1-year	1.89	2.26	3.45
5-year	2.96	4.10	3.74
U.S. Treasury Securities			
3-month	0.01	0.04	2.89
6-month	0.18	0.81	3.31
1-year	0.45	1.44	3.31
5-year	1.37	2.52	3.43
10-year	2.19	3.41	4.03
10-year (inflation-protected)	2.39	1.74	1.71
30-year	2.65	4.07	4.45
30-year Zero	2.69	4.11	4.47

	Recent (12/10/08)	3 Months Ago (9/17/08)	Year Ago (12/19/07)
Mortgage-Backed Securities			
GNMA 6.5%	4.40	5.43	5.42
FHLMC 6.5% (Gold)	4.40	5.33	5.62
FNMA 6.5%	4.04	5.24	5.41
FNMA ARM	4.23	3.86	5.46
Corporate Bonds			
Financial (10-year) A	7.50	6.79	6.01
Industrial (25/30-year) A	6.18	6.08	5.99
Utility (25/30-year) A	6.26	5.94	6.14
Utility (25/30-year) Baa/BBB	7.09	6.51	6.24
Foreign Bonds (10-Year)			
Canada	2.87	3.44	3.99
Germany	2.99	4.02	4.28
Japan	1.30	1.50	1.49
United Kingdom	3.23	4.41	4.68
Preferred Stocks			
Utility A	6.50	6.56	6.33
Financial A	8.23	8.77	8.18
Financial Adjustable A	5.47	5.47	5.47



	Recent (12/10/08)	3 Months Ago (9/17/08)	Year Ago (12/19/07)
TAX-EXEMPT			
Bond Buyer Indexes			
20-Bond Index (GOs)	5.85	4.54	4.46
25-Bond Index (Revs)	6.39	5.09	4.79
General Obligation Bonds (GOs)			
1-year Aaa	0.95	1.73	2.85
1-year A	1.05	1.83	2.90
5-year Aaa	2.86	2.79	3.19
5-year A	2.96	2.84	3.49
10-year Aaa	4.03	3.59	3.62
10-year A	4.23	3.79	3.91
25/30-year Aaa	5.51	4.94	4.33
25/30-year A	5.91	5.32	4.44
***Revenue Bonds* (Revs) (25/30-Year)**			
Education AA	6.10	5.05	4.50
Electric AA	6.15	5.00	4.50
Housing AA	6.30	5.40	4.80
Hospital AA	6.25	5.45	4.75
Toll Road Aaa	6.20	5.00	4.60

Federal Reserve Data

BANK RESERVES

(Two-Week Period; in Millions, Not Seasonally Adjusted)

	Recent Levels			Average Levels Over the Last...		
	12/3/08	11/19/08	Change	12 Wks.	26 Wks.	52 Wks.
Excess Reserves	589711	604749	-15038	292411	147273	77325
Borrowed Reserves	675885	725177	-49292	535410	352243	219293
Net Free/Borrowed Reserves	-86174	-120428	34254	-243000	-204971	-141968

MONEY SUPPLY

(One-Week Period; in Billions, Seasonally Adjusted)

	Recent Levels			Growth Rates Over the Last...		
	12/1/08	11/24/08	Change	3 Mos.	6 Mos.	12 Mos.
M1 (Currency+demand deposits)	1539.1	1531.7	7.4	44.7%	22.9%	12.1%
M2 (M1+savings+small time deposits)	7985.9	7948.9	37.0	17.6%	9.0%	8.1%

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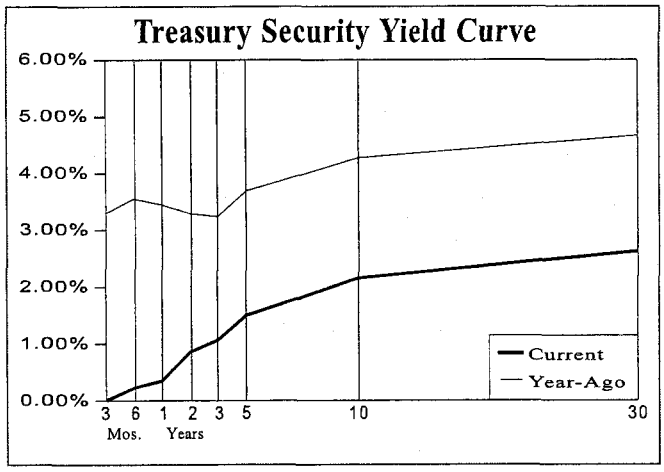
Selected Yields

	Recent (12/23/08)	3 Months Ago (9/24/08)	Year Ago (12/26/07)
TAXABLE			
Market Rates			
Discount Rate	0.50	2.25	4.75
Federal Funds	0.00-0.25	2.00	4.25
Prime Rate	3.25	5.00	7.25
30-day CP (A1/P1)	0.10	2.85	4.90
3-month LIBOR	1.47	3.48	4.83
Bank CDs			
6-month	1.17	1.61	2.82
1-year	1.56	2.14	3.44
5-year	2.72	3.77	3.73
U.S. Treasury Securities			
3-month	0.01	0.46	3.31
6-month	0.23	1.43	3.56
1-year	0.35	1.89	3.46
5-year	1.50	2.91	3.70
10-year	2.16	3.81	4.28
10-year (inflation-protected)	2.36	1.99	1.90
30-year	2.63	4.41	4.67
30-year Zero	2.67	4.39	4.70

	Recent (12/23/08)	3 Months Ago (9/24/08)	Year Ago (12/26/07)
Mortgage-Backed Securities			
GNMA 6.5%	4.43	5.56	5.52
FHLMC 6.5% (Gold)	4.38	5.43	5.70
FNMA 6.5%	4.16	5.34	5.52
FNMA ARM	4.23	3.86	5.47
Corporate Bonds			
Financial (10-year) A	7.08	7.14	6.27
Industrial (25/30-year) A	6.02	6.53	6.22
Utility (25/30-year) A	5.90	6.50	6.28
Utility (25/30-year) Baa/BBB	7.07	6.74	6.42
Foreign Bonds (10-Year)			
Canada	2.80	3.66	4.09
Germany	2.95	4.16	4.31
Japan	1.22	1.49	1.57
United Kingdom	3.12	4.57	4.60
Preferred Stocks			
Utility A	6.25	6.85	6.19
Financial A	11.45	8.04	8.15
Financial Adjustable A	5.47	5.47	5.47



	Recent (12/23/08)	3 Months Ago (9/24/08)	Year Ago (12/26/07)
TAX-EXEMPT			
Bond Buyer Indexes			
20-Bond Index (GOs)	5.46	5.03	4.39
25-Bond Index (Revs)	6.22	5.44	4.76
General Obligation Bonds (GOs)			
1-year Aaa	0.85	2.15	2.90
1-year A	0.95	2.25	3.00
5-year Aaa	2.57	3.10	3.22
5-year A	2.87	3.20	3.32
10-year Aaa	3.70	4.02	3.65
10-year A	4.20	4.22	3.95
25/30-year Aaa	5.17	5.13	4.35
25/30-year A	6.15	5.45	4.55
Revenue Bonds (Revs) (25/30-Year)			
Education AA	6.15	5.55	4.65
Electric AA	6.20	5.60	4.70
Housing AA	6.50	5.90	4.80
Hospital AA	6.55	5.95	4.85
Toll Road Aaa	6.25	5.65	4.70

Federal Reserve Data

BANK RESERVES

(Two-Week Period; in Millions, Not Seasonally Adjusted)

	Recent Levels			Average Levels Over the Last...		
	12/17/08	12/3/08	Change	12 Wks.	26 Wks.	52 Wks.
Excess Reserves	774432	589720	184712	402723	202422	105940
Borrowed Reserves	674517	675885	-1368	607558	387830	244268
Net Free/Borrowed Reserves	99915	-86165	186080	-204836	-185409	-138328

MONEY SUPPLY

(One-Week Period; in Billions, Seasonally Adjusted)

	Recent Levels			Growth Rates Over the Last...		
	12/8/08	12/1/08	Change	3 Mos.	6 Mos.	12 Mos.
M1 (Currency+demand deposits)	1585.5	1538.6	46.9	64.1%	31.3%	15.7%
M2 (M1+savings+small time deposits)	8062.4	7988.5	73.9	22.2%	11.2%	9.0%

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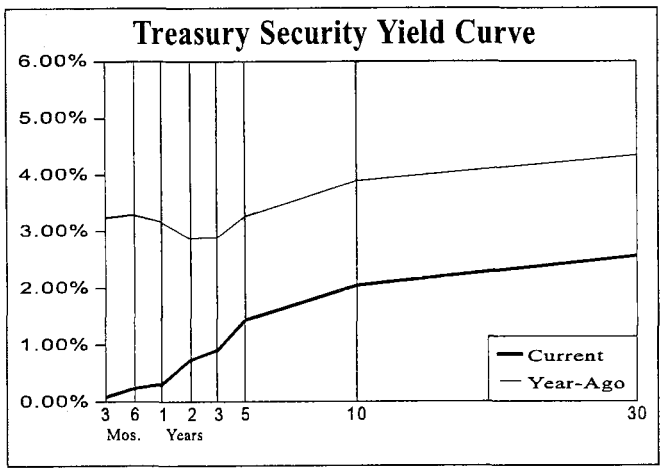
Selected Yields

	Recent (12/30/08)	3 Months Ago (10/01/08)	Year Ago (1/02/08)
TAXABLE			
Market Rates			
Discount Rate	0.50	2.25	4.75
Federal Funds	0.00-0.25	2.00	4.25
Prime Rate	3.25	5.00	7.25
30-day CP (A1/P1)	0.06	3.05	4.40
3-month LIBOR	1.44	4.15	4.68
Bank CDs			
6-month	1.16	1.61	2.81
1-year	1.43	2.14	3.43
5-year	2.51	3.77	3.73
U.S. Treasury Securities			
3-month	0.09	0.80	3.25
6-month	0.24	1.45	3.30
1-year	0.31	1.66	3.17
5-year	1.44	2.86	3.28
10-year	2.05	3.74	3.90
10-year (inflation-protected)	2.33	2.25	1.56
30-year	2.56	4.22	4.35
30-year Zero	2.42	4.22	4.38

	Recent (12/30/08)	3 Months Ago (10/01/08)	Year Ago (1/02/08)
Mortgage-Backed Securities			
GNMA 6.5%	4.11	5.64	5.36
FHLMC 6.5% (Gold)	4.03	5.63	5.44
FNMA 6.5%	3.89	5.54	5.37
FNMA ARM	4.22	3.88	5.38
Corporate Bonds			
Financial (10-year) A	7.08	7.25	5.86
Industrial (25/30-year) A	5.90	6.52	5.92
Utility (25/30-year) A	5.85	6.46	5.94
Utility (25/30-year) Baa/BBB	6.58	6.61	6.11
Foreign Bonds (10-Year)			
Canada	2.66	3.71	3.91
Germany	2.95	4.00	4.21
Japan	1.17	1.51	1.51
United Kingdom	3.09	4.43	4.44
Preferred Stocks			
Utility A	6.00	6.53	6.31
Financial A	7.89	7.78	8.12
Financial Adjustable A	5.48	5.48	5.48



	Recent (12/30/08)	3 Months Ago (10/01/08)	Year Ago (1/02/08)
TAX-EXEMPT			
Bond Buyer Indexes			
20-Bond Index (GOs)	5.46	5.23	4.44
25-Bond Index (Revs)	6.22	5.56	4.80
General Obligation Bonds (GOs)			
1-year Aaa	0.85	2.10	2.88
1-year A	0.95	2.20	2.92
5-year Aaa	2.57	3.32	3.19
5-year A	2.87	3.37	3.49
10-year Aaa	3.70	4.23	3.61
10-year A	4.20	4.43	3.90
25/30-year Aaa	5.17	5.29	4.26
25/30-year A	6.15	5.67	4.37
Revenue Bonds (Revs) (25/30-Year)			
Education AA	6.15	5.45	4.40
Electric AA	6.20	5.40	4.40
Housing AA	6.50	5.90	4.65
Hospital AA	6.55	5.95	4.65
Toll Road Aaa	6.25	5.40	4.50

Federal Reserve Data

BANK RESERVES

(Two-Week Period; in Millions, Not Seasonally Adjusted)

	Recent Levels			Average Levels Over the Last...		
	12/17/08	12/3/08	Change	12 Wks.	26 Wks.	52 Wks.
Excess Reserves	774437	589715	184722	402723	202422	105940
Borrowed Reserves	674517	675885	-1368	607558	387830	244268
Net Free/Borrowed Reserves	99920	-86170	186090	-204836	-185409	-138328

MONEY SUPPLY

(One-Week Period; in Billions, Seasonally Adjusted)

	Recent Levels			Growth Rates Over the Last...		
	12/15/08	12/8/08	Change	3 Mos.	6 Mos.	12 Mos.
M1 (Currency+demand deposits)	1606.9	1583.2	23.7	69.4%	35.0%	17.9%
M2 (M1+savings+small time deposits)	8104.2	8060.1	44.1	23.9%	12.3%	9.5%

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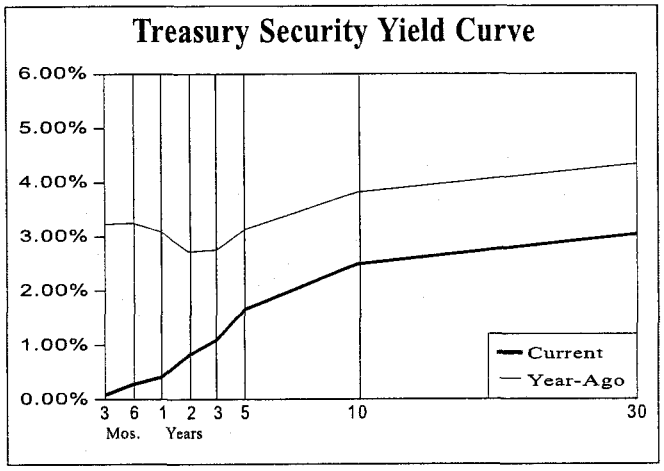
Selected Yields

	Recent (1/07/09)	3 Months Ago (10/08/08)	Year Ago (1/09/08)
TAXABLE			
Market Rates			
Discount Rate	0.50	1.75	4.75
Federal Funds	0.00-0.25	1.50	4.25
Prime Rate	3.25	4.50	7.25
30-day CP (A1/P1)	0.65	4.55	4.28
3-month LIBOR	1.40	4.52	4.44
Bank CDs			
6-month	1.10	1.73	2.77
1-year	1.41	2.27	3.38
5-year	2.38	3.48	3.73
U.S. Treasury Securities			
3-month	0.09	0.61	3.23
6-month	0.28	1.05	3.25
1-year	0.41	1.26	3.09
5-year	1.66	2.63	3.13
10-year	2.49	3.64	3.82
10-year (inflation-protected)	2.44	2.66	1.53
30-year	3.04	4.05	4.34
30-year Zero	2.87	3.97	4.39

	Recent (1/07/09)	3 Months Ago (10/08/08)	Year Ago (1/09/08)
Mortgage-Backed Securities			
GNMA 6.5%	4.30	5.82	5.04
FHLMC 6.5% (Gold)	3.95	5.70	5.28
FNMA 6.5%	3.75	5.62	5.18
FNMA ARM	4.26	3.84	5.36
Corporate Bonds			
Financial (10-year) A	7.56	7.34	5.79
Industrial (25/30-year) A	6.26	6.66	5.98
Utility (25/30-year) A	6.07	6.58	5.99
Utility (25/30-year) Baa/BBB	6.72	6.93	6.17
Foreign Bonds (10-Year)			
Canada	2.93	3.59	3.87
Germany	3.20	3.80	4.09
Japan	1.26	1.39	1.48
United Kingdom	3.29	4.30	4.40
Preferred Stocks			
Utility A	6.11	6.99	6.00
Financial A	7.28	8.54	7.61
Financial Adjustable A	5.48	5.48	5.48



	Recent (1/07/09)	3 Months Ago (10/08/08)	Year Ago (1/09/08)
TAX-EXEMPT			
Bond Buyer Indexes			
20-Bond Index (GOs)	5.24	5.36	4.32
25-Bond Index (Revs)	6.00	5.69	4.72
General Obligation Bonds (GOs)			
1-year Aaa	0.85	2.18	2.70
1-year A	0.95	2.25	2.80
5-year Aaa	2.48	3.34	2.97
5-year A	2.77	3.44	3.07
10-year Aaa	3.53	4.31	3.43
10-year A	4.03	4.51	3.73
25/30-year Aaa	5.04	5.35	4.14
25/30-year A	6.04	5.70	4.34
Revenue Bonds (Revs) (25/30-Year)			
Education AA	6.10	5.80	4.45
Electric AA	6.25	5.90	4.50
Housing AA	6.55	6.00	4.60
Hospital AA	6.50	6.10	4.65
Toll Road Aaa	6.25	5.95	4.50

Federal Reserve Data

BANK RESERVES

(Two-Week Period; in Millions, Not Seasonally Adjusted)

	Recent Levels			Average Levels Over the Last...		
	12/31/08	12/17/08	Change	12 Wks.	26 Wks.	52 Wks.
Excess Reserves	798453	774439	24014	506964	259327	135468
Borrowed Reserves	627832	674517	-46685	658983	420394	267237
Net Free/Borrowed Reserves	170621	99922	70699	-152019	-161066	-131769

MONEY SUPPLY

(One-Week Period; in Billions, Seasonally Adjusted)

	Recent Levels			Growth Rates Over the Last...		
	12/22/08	12/15/08	Change	3 Mos.	6 Mos.	12 Mos.
M1 (Currency+demand deposits)	1591.5	1606.8	-15.3	34.1%	32.9%	16.5%
M2 (M1+savings+small time deposits)	8117.8	8104.2	13.6	13.6%	12.6%	9.6%

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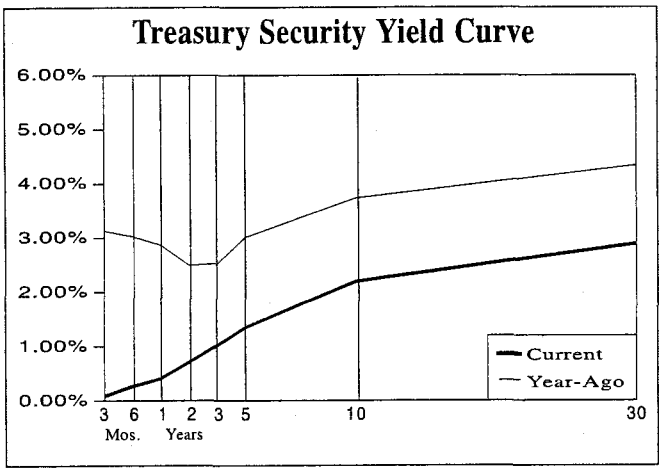
Selected Yields

	Recent (1/14/09)	3 Months Ago (10/15/08)	Year Ago (1/16/08)
TAXABLE			
Market Rates			
Discount Rate	0.50	1.75	4.75
Federal Funds	0.00-0.25	1.50	4.25
Prime Rate	3.25	4.50	7.25
30-day CP (A1/P1)	0.49	4.47	3.99
3-month LIBOR	1.08	4.55	3.95
Bank CDs			
6-month	1.03	1.73	2.80
1-year	1.34	2.27	3.22
5-year	2.38	3.48	3.58
U.S. Treasury Securities			
3-month	0.09	0.21	3.13
6-month	0.27	0.88	3.03
1-year	0.41	1.07	2.87
5-year	1.35	2.82	3.01
10-year	2.20	3.95	3.74
10-year (inflation-protected)	1.73	3.07	1.45
30-year	2.89	4.19	4.34
30-year Zero	2.75	4.04	4.42

	Recent (1/14/09)	3 Months Ago (10/15/08)	Year Ago (1/16/08)
Mortgage-Backed Securities			
GNMA 6.5%	3.93	6.06	4.69
FHLMC 6.5% (Gold)	3.25	5.96	5.10
FNMA 6.5%	3.30	5.91	4.75
FNMA ARM	4.26	3.87	5.34
Corporate Bonds			
Financial (10-year) A	7.15	8.19	5.79
Industrial (25/30-year) A	5.84	7.03	6.03
Utility (25/30-year) A	5.88	6.67	6.07
Utility (25/30-year) Baa/BBB	6.60	7.03	6.22
Foreign Bonds (10-Year)			
Canada	2.56	3.76	3.82
Germany	2.93	4.12	3.98
Japan	1.27	1.59	1.39
United Kingdom	3.12	4.71	4.38
Preferred Stocks			
Utility A	6.05	6.57	5.96
Financial A	7.76	7.33	7.39
Financial Adjustable A	5.49	5.49	5.49



	Recent (1/14/09)	3 Months Ago (10/15/08)	Year Ago (1/16/08)
TAX-EXEMPT			
Bond Buyer Indexes			
20-Bond Index (GOs)	5.02	5.47	4.21
25-Bond Index (Revs)	5.90	5.97	4.66
General Obligation Bonds (GOs)			
1-year Aaa	0.48	2.15	2.60
1-year A	0.58	2.25	2.65
5-year Aaa	1.76	3.70	2.88
5-year A	2.06	3.75	3.18
10-year Aaa	2.82	4.86	3.36
10-year A	3.32	5.06	3.65
25/30-year Aaa	4.75	5.99	4.12
25/30-year A	5.75	6.37	4.25
Revenue Bonds (Revs) (25/30-Year)			
Education AA	5.75	6.17	4.25
Electric AA	5.80	6.12	4.25
Housing AA	6.10	6.60	4.50
Hospital AA	6.15	6.65	4.55
Toll Road Aaa	5.85	6.15	4.30

Federal Reserve Data

BANK RESERVES
(Two-Week Period; in Millions, Not Seasonally Adjusted)

	Recent Levels			Average Levels Over the Last...		
	12/31/08	12/17/08	Change	12 Wks.	26 Wks.	52 Wks.
Excess Reserves	798469	774439	24030	506967	259328	135469
Borrowed Reserves	627832	674517	-46685	658983	420394	267237
Net Free/Borrowed Reserves	170637	99922	70715	-152016	-161065	-131768

MONEY SUPPLY
(One-Week Period; in Billions, Seasonally Adjusted)

	Recent Levels			Growth Rates Over the Last...		
	12/29/08	12/22/08	Change	3 Mos.	6 Mos.	12 Mos.
M1 (Currency+demand deposits)	1605.6	1591.6	14.0	27.8%	31.6%	17.7%
M2 (M1+savings+small time deposits)	8123.5	8118.2	5.3	14.1%	13.5%	9.5%

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ATTACHMENT F

JMM 1-54

PROMISSORY NOTE

$772,000.00

Phoenix, Arizona
December 31, 1999

FOR VALUE RECEIVED, the undersigned promises to pay to the order of GEORGE AND JANA JOHNSON, or to such other persons or places as may be designated from time to time by notice to the undersigned, the sum of Seven Hundred Seventy-Two Thousand and 00/100 Dollars ($772,000.00), together with interest on the unpaid principal balance of said indebtedness at the rate eight percent (8%) per annum (computed on a 365 day year) from the date hereof, payable in lawful money of the United States of America, as follows:

(a) Quarterly payments of interest only commencing on March 31, 2000 and each quarter thereafter for a ten (10) year period, and

(b) The full principal amount, plus any accrued interest thereon, on December 31, 2009, if not paid in full before such date.

The undersigned shall have the right from time to time to prepay the whole or any part of the principal sum hereof together with accrued interest to the date of prepayment.

The whole of the principal sum and interest shall become immediately due and payable at the option of the holder, without notice to the undersigned, upon default in the payment of any principal hereof or interest hereon. The undersigned shall pay all costs and reasonable attorneys' fees incurred by the holder hereof in collecting or enforcing payment hereof. The whole of the principal sum and accrued interest, together with costs and attorneys' fees shall bear interest at the rate of eighteen percent (18%) per annum, from and after maturity, whether or not resulting from acceleration. The payment and acceptance of any sums at any time, or the failure to exercise any rights herein given the holder, shall not constitute a waiver of holder's rights in the event of any subsequent default.

Should any installment of principal or interest become ten (10) days late, a late charge of 5% of such installment shall be paid to the holder by the maker.

As to this note and any deed of trust or any other instruments securing the indebtedness, the undersigned, any endorsers and any guarantors severally waive all applicable exemption rights, whether under the state constitution, homestead laws or otherwise, and also severally waive valuation and appraisement, presentment, protest and demand, notice of protest, demand and dishonor and nonpayment of this note, and expressly agree that the maturity of this note, or any payment hereunder, may be extended from time to time without in any way affecting the liability of the undersigned or said endorsers and guarantors.

Should this note be signed by more than one maker, the singular shall include the plural and all the obligations herein contained shall be the joint and several obligations of each signer hereof.

This note is to be construed according to the laws of the State of Arizona.

No provision of this note or any instrument securing this note shall be deemed to require the payment or permit the collection of interest in excess of the maximum permitted by law over the term of this note. If any excess of interest in such respect is herein provided for, or shall be adjudicated to be so provided for herein, for whatever reason, the interest required to be paid hereunder shall be automatically reduced to the maximum legally enforceable and any excess paid over such maximum enforceable amount shall be automatically credited against any other indebtedness of the undersigned to the holder hereof, and thereafter, any remaining amount refunded to the undersigned in cash.

JOHNSON UTILITIES L.L.C. dba
JHONSON UTILITIES COMPANY

By _____
George Johnson, Managing Member

51030-00000.214

JOHNSON UTILITIES, L.L.C.
WATER AND WASTEWATER DIVISIONS
DOCKET NO. WS-02987A-08-0180
TABLE OF CONTENTS TO SCHEDULES WAR

SCHEDULE #	
WAR - 1	COST OF CAPITAL SUMMARY
WAR - 2	DCF COST OF EQUITY CAPITAL
WAR - 3	DIVIDEND YIELD CALCULATION
WAR - 4	DIVIDEND GROWTH RATE CALCULATION
WAR - 5	DIVIDEND GROWTH COMPONENTS
WAR - 6	GROWTH RATE COMPARISON
WAR - 7	CAPM COST OF EQUITY CAPITAL
WAR - 8	ECONOMIC INDICATORS - 1990 TO PRESENT
WAR - 9	CAPITAL STRUCTURES OF SAMPLE COMPANIES

JOHNSON UTILITIES, L.L.C.
WATER AND WASTEWATER DIVISIONS
TEST YEAR ENDED DECEMBER 31, 2007
COST OF CAPITAL SUMMARY

WEIGHTED COST OF CAPITAL - WATER DIVISION

LINE NO.	DESCRIPTION	(A) CAPITAL RATIO	(B) COST	(C) WEIGHTED COST
1	LONG-TERM DEBT	40.00%	8.00%	3.20%
2	COMMON EQUITY	60.00%	8.31%	4.98%
3	TOTAL CAPITALIZATION	100.00%		
4	**WEIGHTED AVERAGE COST OF CAPITAL**			**8.18%**

WEIGHTED COST OF CAPITAL - WASTEWATER DIVISION

LINE NO.	DESCRIPTION	(A) CAPITAL RATIO	(B) COST	(C) WEIGHTED COST
1	LONG-TERM DEBT	40.00%	8.00%	3.20%
2	COMMON EQUITY	60.00%	8.31%	4.98%
3	TOTAL CAPITALIZATION	100.00%		
4	**WEIGHTED AVERAGE COST OF CAPITAL**			**8.18%**

REFERENCES:
COLUMN (A): TESTIMONY, WAR
COLUMN (B): TESTIMONY, WAR - SCHEDULE WAR-1, PAGE 2
COLUMN (C): COLUMN (A) x COLUMN (B)

JOHNSON UTILITIES, L.L.C.
WATER AND WASTEWATER DIVISIONS
TEST YEAR ENDED DECEMBER 31, 2007
COST OF CAPITAL SUMMARY

COST OF COMMON EQUITY CALCULATION

LINE NO.			
1	**DCF METHODOLOGY**		
2	DCF - WATER COMPANY SINGLE-STAGE CONSTANT GROWTH MODEL ESTIMATE	9.39%	SCHEDULE WAR-2, COLUMN (C), LINE 5
3	DCF - NATURAL GAS LDC SINGLE-STAGE CONSTANT GROWTH MODEL ESTIMATE	10.72%	SCHEDULE WAR-2, COLUMN (C), LINE 13
4	**AVERAGE OF DCF ESTIMATES**	**10.05%**	(LINE 2 + LINE 3) ÷ 2
5	**CAPM METHODOLOGY**		
6	CAPM - WATER COMPANY GEOMETRIC MEAN ESTIMATE	6.53%	SCHEDULE WAR-7 PAGE 1, COLUMN (B), LINE 5
7	CAPM - NATURAL GAS LDC GEOMETRIC MEAN ESTIMATE	5.17%	SCHEDULE WAR-7 PAGE 1, COLUMN (B), LINE 13
8	CAPM - WATER COMPANY ARITHMETIC MEAN ESTIMATE	8.17%	SCHEDULE WAR-7 PAGE 2, COLUMN (B), LINE 5
9	CAPM - NATURAL GAS LDC ARITHMETIC MEAN ESTIMATE	6.36%	SCHEDULE WAR-7 PAGE 2, COLUMN (B), LINE 13
10	**AVERAGE OF CAPM ESTIMATES**	**6.56%**	(SUM OF LINES 6 THRU 9) ÷ 4
11	**AVERAGE OF DCF AND CAPM ESTIMATES**	**8.31%**	(LINE 4 + LINE 10) ÷ 2

JOHNSON UTILITIES, L.L.C.
WATER AND WASTEWATER DIVISIONS
TEST YEAR ENDED DECEMBER 31, 2007
DCF COST OF EQUITY CAPITAL

DOCKET NO. WS-02987A-08-0180
SCHEDULE WAR - 2

LINE NO.	STOCK SYMBOL	COMPANY	(A) DIVIDEND YIELD	+	(B) GROWTH RATE (g)	=	(C) DCF COST OF EQUITY CAPITAL
1	AWR	AMERICAN STATES WATER CO.	3.15%	+	7.48%	=	10.62%
2	CWT	CALIFORNIA WATER SERVICE GROUP	2.76%	+	7.25%	=	10.01%
3	WTR	AQUA AMERICA, INC.	2.72%	+	4.81%	=	7.53%
4	**WATER COMPANY AVERAGE**						**9.39%**
6	ATG	AGL RESOURCES, INC.	5.60%	+	5.41%	=	11.01%
7	ATO	ATMOS ENERGY CORP.	5.60%	+	8.99%	=	14.59%
8	LG	LACLEDE GROUP, INC.	3.38%	+	6.09%	=	9.47%
9	NJR	NEW JERSEY RESOURCES CORPORATION	2.97%	+	6.84%	=	9.81%
10	GAS	NICOR, INC.	5.37%	+	6.02%	=	11.40%
11	NWN	NORTHWEST NATURAL GAS CO.	3.61%	+	5.17%	=	8.79%
12	PNY	PIEDMONT NATURAL GAS COMPANY	3.50%	+	5.01%	=	8.51%
13	SJI	SOUTH JERSEY INDUSTIES, INC.	6.13%	+	10.00%	=	16.12%
14	SWX	SOUTHWEST GAS CORPORATION	3.66%	+	5.32%	=	8.98%
15	WGL	WGL HOLDINGS, INC.	4.50%	+	4.05%	=	8.55%
16	**NATURAL GAS LDC AVERAGE**						**10.72%**

REFERENCES:
COLUMN (A): SCHEDULE WAR - 3, COLUMN C
COLUMN (B): SCHEDULE WAR - 4, PAGE 1, COLUMN C
COLUMN (C): COLUMN (A) + COLUMN (B)

JOHNSON UTILITIES, L.L.C.
WATER AND WASTEWATER DIVISIONS
TEST YEAR ENDED DECEMBER 31, 2007
DIVIDEND YIELD CALCULATION

DOCKET NO. WS-02987A-08-0180
SCHEDULE WAR - 3

LINE NO.	STOCK SYMBOL	COMPANY	(A) ESTIMATED DIVIDEND (PER SHARE)	÷	(B) AVERAGE STOCK PRICE (PER SHARE)	=	(C) DIVIDEND YIELD
1	AWR	AMERICAN STATES WATER CO.	$1.00	÷	$31.77	=	3.15%
2	CWT	CALIFORNIA WATER SERVICE GROUP	1.17	÷	42.48	=	2.76%
3	WTR	AQUA AMERICA, INC.	0.54	÷	19.85	=	2.72%
4	**WATER COMPANY AVERAGE**						**2.88%**
6	ATG	AGL RESOURCES, INC.	$1.68	÷	$30.00	=	5.60%
7	ATO	ATMOS ENERGY CORP.	1.32	÷	23.55	=	5.60%
8	LG	LACLEDE GROUP, INC.	1.54	÷	45.57	=	3.38%
9	NJR	NEW JERSEY RESOURCES CORPORATION	1.12	÷	37.67	=	2.97%
10	GAS	NICOR, INC.	1.86	÷	34.61	=	5.37%
11	NWN	NORTHWEST NATURAL GAS CO.	1.58	÷	43.74	=	3.61%
12	PNY	PIEDMONT NATURAL GAS COMPANY	1.04	÷	29.70	=	3.50%
13	SJI	SOUTH JERSEY INDUSTIES, INC.	2.27	÷	37.08	=	6.13%
14	SWX	SOUTHWEST GAS CORPORATION	0.90	÷	24.59	=	3.66%
15	WGL	WGL HOLDINGS, INC.	1.44	÷	31.98	=	4.50%
16	**NATURAL GAS LDC AVERAGE**						**4.43%**

REFERENCES:
COLUMN (A): ESTIMATED 12 MONTH DIVIDEND REPORTED IN VALUE LINE INVESTMENT SURVEY - RATINGS & REPORTS DATED 01/23/2009 (WATER COMPANIES) AND 12/12/2008 (NATURAL GAS LDC's).
COLUMN (B): EIGHT WEEK AVERAGE OF CLOSING PRICES FROM 12/01/2008 TO 01/23/2009 STOCK QUOTES OBTAINED THROUGH BIG CHARTS WEB SITE - HISTORICAL QUOTES (www.bigcharts.com).
COLUMN (C): COLUMN (A) ÷ COLUMN (B)

JOHNSON UTILITIES, L.L.C.
WATER AND WASTEWATER DIVISIONS
TEST YEAR ENDED DECEMBER 31, 2007
DIVIDEND GROWTH RATE CALCULATION

LINE NO.	STOCK SYMBOL	COMPANY	(A) INTERNAL GROWTH (br)	+	(B) EXTERNAL GROWTH (sv)	=	(C) DIVIDEND GROWTH (g)
1	AWR	AMERICAN STATES WATER CO.	5.75%	+	1.73%	=	7.48%
2	CWT	CALIFORNIA WATER SERVICE GROUP	6.00%	+	1.25%	=	7.25%
3	WTR	AQUA AMERICA, INC.	4.00%	+	0.81%	=	4.81%
4	**WATER COMPANY AVERAGE**						**6.51%**
6	ATG	AGL RESOURCES, INC.	5.25%	+	0.16%	=	5.41%
7	ATO	ATMOS ENERGY CORP.	4.00%	+	4.99%	=	8.99%
8	LG	LACLEDE GROUP, INC.	4.50%	+	1.59%	=	6.09%
9	NJR	NEW JERSEY RESOURCES CORPORATION	6.25%	+	0.59%	=	6.84%
10	GAS	NICOR, INC.	6.00%	+	0.02%	=	6.02%
11	NWN	NORTHWEST NATURAL GAS CO.	4.75%	+	0.42%	=	5.17%
12	PNY	PIEDMONT NATURAL GAS COMPANY	5.00%	+	0.01%	=	5.01%
13	SJI	SOUTH JERSEY INDUSTIES, INC.	9.00%	+	1.00%	=	10.00%
14	SWX	SOUTHWEST GAS CORPORATION	5.25%	+	0.07%	=	5.32%
15	WGL	WGL HOLDINGS, INC.	4.00%	+	0.05%	=	4.05%
16	**NATURAL GAS LDC AVERAGE**						**6.29%**

REFERENCES:
COLUMN (A): TESTIMONY, WAR
COLUMN (B): SCHEDULE WAR - 4, PAGE 2, COLUMN C
COLUMN (C): COLUMN (A) + COLUMN (B)

JOHNSON UTILITIES, L.L.C.
WATER AND WASTEWATER DIVISIONS
TEST YEAR ENDED DECEMBER 31, 2007
DIVIDEND GROWTH RATE CALCULATION

DOCKET NO. WS-02987A-08-0180
SCHEDULE WAR - 4, PAGE 2 OF 2

LINE NO.	STOCK SYMBOL	COMPANY	(A) SHARE GROWTH	x	{ [((M + B) + 1) ÷ 2] - 1 }	=	(C) EXTERNAL GROWTH (sv)
1	AWR	AMERICAN STATES WATER CO.	4.75%	x	{ [((1.73) + 1) ÷ 2] - 1 }	=	1.73%
2	CWT	CALIFORNIA WATER SERVICE GROUP	2.00%	x	{ [((2.25) + 1) ÷ 2] - 1 }	=	1.25%
3	WTR	AQUA AMERICA, INC.	1.00%	x	{ [((2.61) + 1) ÷ 2] - 1 }	=	0.81%
4	**WATER COMPANY AVERAGE**						**1.26%**
6	ATG	AGL RESOURCES, INC.	1.00%	x	{ [((1.33) + 1) ÷ 2] - 1 }	=	0.16%
7	ATO	ATMOS ENERGY CORP.	5.00%	x	{ [((1.00) + 1) ÷ 2] - 0 }	=	4.99%
8	LG	LACLEDE GROUP, INC.	3.00%	x	{ [((2.06) + 1) ÷ 2] - 1 }	=	1.59%
9	NJR	NEW JERSEY RESOURCES CORPORATION	1.00%	x	{ [((2.17) + 1) ÷ 2] - 1 }	=	0.59%
10	GAS	NICOR, INC.	0.07%	x	{ [((1.67) + 1) ÷ 2] - 1 }	=	0.02%
11	NWN	NORTHWEST NATURAL GAS CO.	1.00%	x	{ [((1.85) + 1) ÷ 2] - 1 }	=	0.42%
12	PNY	PIEDMONT NATURAL GAS COMPANY	0.01%	x	{ [((2.36) + 1) ÷ 2] - 1 }	=	0.01%
13	SJI	SOUTH JERSEY INDUSTIES, INC.	1.75%	x	{ [((2.14) + 1) ÷ 2] - 1 }	=	1.00%
14	SWX	SOUTHWEST GAS CORPORATION	2.50%	x	{ [((1.06) + 1) ÷ 2] - 1 }	=	0.07%
15	WGL	WGL HOLDINGS, INC.	0.20%	x	{ [((1.52) + 1) ÷ 2] - 1 }	=	0.05%
16	**NATURAL GAS LDC AVERAGE**						**0.89%**

REFERENCES:
COLUMN (A): TESTIMONY, WAR
COLUMN (B): VALUE LINE INVESTMENT SURVEY
- RATINGS & REPORTS DATED 01/23/2009 (WATER COMPANIES) AND 12/12/2008 (NATURAL GAS LDC's)
COLUMN (C): COLUMN (A) x COLUMN (B)

JOHNSON UTILITIES, L.L.C.
WATER AND WASTEWATER DIVISIONS
TEST YEAR ENDED DECEMBER 31, 2007
DIVIDEND GROWTH COMPONENTS

LINE NO.	STOCK SYMBOL	WATER COMPANY NAME	OPERATING PERIOD	(A) RETENTION RATIO (b)	x	(B) RETURN ON BOOK EQUITY (r)	=	(C) DIVIDEND GROWTH (g)	(D) BOOK VALUE ($/SHARE)	(E) SHARES OUTST. (MILLIONS)	(F) SHARE GROWTH
1	AWR	AMERICAN STATES WATER CO.	2003	-0.1282		5.60%		NMF	13.97	15.21	
2			2004	0.1524		6.60%		1.01%	15.01	16.75	
3			2005	0.3182		8.50%		2.70%	15.72	16.80	
4			2006	0.3158		8.10%		2.56%	16.64	17.05	
5			2007	0.4074		9.30%		3.79%	17.53	17.23	
6			GROWTH 2003 - 2007					2.51%	4.50%		3.17%
7			2008	0.3197		8.00%		2.56%		18.25	5.92%
8			2009	0.3829		9.00%		3.45%		19.00	5.01%
9			2011-13	0.5040		12.50%		6.30%	2.50%	21.00	4.04%
10											
11	CWT	CALIFORNIA WATER SERVICE GROUP	2003	0.0744		7.90%		0.59%	14.44	16.93	
12			2004	0.2260		9.00%		2.03%	15.66	18.37	
13			2005	0.2245		9.30%		2.09%	15.79	18.39	
14			2006	0.1418		6.80%		0.96%	18.15	20.66	
15			2007	0.2267		8.10%		1.84%	18.50	20.67	
16			GROWTH 2003 - 2007					1.50%	6.00%		5.12%
17			2008	0.4121		10.00%		4.12%		21.00	1.60%
18			2009	0.4512		11.00%		4.96%		21.50	1.99%
19			2011-13	0.5094		12.50%		6.37%	3.00%	23.00	2.16%
20											
21	WTR	AQUA AMERICA, INC.	2003	0.3860		10.20%		3.94%	5.34	123.45	
22			2004	0.4219		10.70%		4.51%	5.89	127.18	
23			2005	0.4366		11.20%		4.89%	6.30	128.97	
24			2006	0.3714		10.00%		3.71%	6.96	132.33	
25			2007	0.3239		9.70%		3.14%	7.32	133.40	
26			GROWTH 2003 - 2007					4.04%	10.50%		1.96%
27			2008	0.3377		10.00%		3.38%		135.25	1.39%
28			2009	0.3647		11.00%		4.01%		136.00	0.97%
29			2011-13	0.4000		11.00%		4.40%	5.00%	139.00	0.83%

REFERENCES:
COLUMNS (A) & (B): VALUE LINE INVESTMENT SURVEY
- RATINGS & REPORTS DATED 01/23/2009
COLUMN (C): COLUMN (A) x COLUMN (B)
COLUMN (C): LINES 6, 16 & 26, SIMPLE AVERAGE GROWTH, 2003 - 2007

COLUMN (D): VALUE LINE INVESTMENT SURVEY
COLUMN (D): LINES 6, 16 & 26, COMPOUND GROWTH RATE
COLUMN (E): VALUE LINE INVESTMENT SURVEY
COLUMN (F): COMPOUND GROWTH RATES OF DATES SHOWN

JOHNSON UTILITIES, L.L.C.
WATER AND WASTEWATER DIVISIONS
TEST YEAR ENDED DECEMBER 31, 2007
DIVIDEND GROWTH COMPONENTS

LINE NO.	STOCK SYMBOL	NATURAL GAS LDC NAME	OPERATING PERIOD	(A) RETENTION RATIO (b)	x	(B) RETURN ON BOOK EQUITY (r)	=	(C) DIVIDEND GROWTH (g)	(D) BOOK VALUE ($/SHARE)	(E) SHARES OUTST. (MILLIONS)	(F) SHARE GROWTH
1	ATG	AGL RESOURCES, INC.	2003	0.4663		14.00%		6.53%	14.66	64.50	
2			2004	0.4956		11.00%		5.45%	18.06	76.70	
3			2005	0.4758		12.90%		6.14%	19.29	77.70	
4			2006	0.4559		13.20%		6.02%	20.71	77.70	
5			2007	0.3971		12.70%		5.04%	21.74	76.40	
6			GROWTH 2003 - 2007					5.84%	10.50%		4.32%
7			2008	0.3778		12.00%		4.53%		77.00	0.79%
8			2009	0.3857		12.50%		4.82%		78.00	1.04%
9			2011-13	0.4159		13.50%		5.61%	2.00%	80.00	0.93%
10											
11	ATO	ATMOS ENERGY CORP.	2003	0.2982		9.30%		2.77%	16.66	51.48	
12			2004	0.2278		7.60%		1.73%	18.05	62.80	
13			2005	0.2791		8.50%		2.37%	19.90	80.54	
14			2006	0.3700		9.80%		3.63%	20.16	81.74	
15			2007	0.3402		8.70%		2.96%	22.01	89.33	
16			GROWTH 2003 - 2007					2.69%	9.00%		14.77%
17			2008	0.3500		9.00%		3.15%		91.00	1.87%
18			2009	0.3714		9.00%		3.34%		92.00	1.48%
19			2011-13	0.4286		9.50%		4.07%	3.50%	115.00	5.18%
20											
21	LG	LACLEDE GROUP, INC.	2003	0.2637		11.60%		3.06%	15.65	19.11	
22			2004	0.2582		10.10%		2.61%	16.96	20.98	
23			2005	0.2789		10.90%		3.04%	17.31	21.17	
24			2006	0.4093		12.50%		5.12%	18.85	21.36	
25			2007	0.3723		11.60%		4.32%	19.79	21.65	
26			GROWTH 2003 - 2007					3.63%	4.50%		3.17%
27			2008	0.4356		12.00%		5.23%		22.00	1.62%
28			2009	0.3880		11.50%		4.46%		22.50	1.94%
29			2011-13	0.4211		11.50%		4.84%	5.50%	25.50	3.33%
30											
31	NJR	NEW JERSEY RESOURCES CORPORATION	2003	0.4780		15.60%		7.46%	10.26	40.85	
32			2004	0.4882		15.30%		7.47%	11.25	41.61	
33			2005	0.4859		17.00%		8.26%	10.60	41.32	
34			2006	0.4866		12.60%		6.13%	15.00	41.44	
35			2007	0.3484		10.10%		3.52%	15.50	41.61	
36			GROWTH 2003 - 2007					6.57%	10.00%		0.46%
37			2008	0.5889		15.70%		9.25%		41.88	0.65%
38			2009	0.5571		14.50%		8.08%		42.50	1.06%
39			2011-13	0.5467		11.50%		6.29%	11.00%	44.00	1.12%

REFERENCES:
COLUMNS (A) & (B): VALUE LINE INVESTMENT SURVEY
- RATINGS & REPORTS DATED 12/12/2008
COLUMN (C): COLUMN (A) x COLUMN (B)
COLUMN (C): LINES 6, 16, 26 & 36, SIMPLE AVERAGE GROWTH, 2003 - 2007

COLUMN (D): VALUE LINE INVESTMENT SURVEY
COLUMN (D): LINES 6, 16, 26 & 36, COMPOUND GROWTH RATE
COLUMN (E): VALUE LINE INVESTMENT SURVEY
COLUMN (F): COMPOUND GROWTH RATES OF DATES SHOWN

JOHNSON UTILITIES, L.L.C.
WATER AND WASTEWATER DIVISIONS
TEST YEAR ENDED DECEMBER 31, 2007
DIVIDEND GROWTH COMPONENTS

LINE NO.	STOCK SYMBOL	NATURAL GAS LDC NAME	OPERATING PERIOD	(A) RETENTION RATIO (b)	x	(B) RETURN ON BOOK EQUITY (r)	=	(C) DIVIDEND GROWTH (g)	(D) BOOK VALUE ($/SHARE)	(E) SHARES OUTST. (MILLIONS)	(F) SHARE GROWTH
1	GAS	NICOR, INC.	2003	0.1185		12.30%		1.46%	17.13	44.04	
2			2004	0.1622		13.10%		2.12%	16.99	44.10	
3			2005	0.1878		12.50%		2.35%	18.36	44.18	
4			2006	0.3519		14.70%		5.17%	19.43	44.90	
5			2007	0.3758		14.30%		5.37%	20.58	45.90	
6			GROWTH 2003 - 2007					3.30%	4.00%		1.04%
7			2008	0.1733		11.50%		1.99%		45.00	-1.96%
8			2009	0.2560		11.50%		2.94%		45.00	-0.99%
9			2011-13	0.4609		13.50%		6.22%	4.50%	45.00	-0.40%
10											
11	NWN	NORTHWEST NATURAL GAS CO.	2003	0.2784		9.00%		2.51%	19.52	25.94	
12			2004	0.3011		8.90%		2.68%	20.64	27.55	
13			2005	0.3744		9.90%		3.71%	21.28	27.58	
14			2006	0.4085		10.90%		4.45%	22.01	27.24	
15			2007	0.4783		12.50%		5.98%	22.52	26.41	
16			GROWTH 2003 - 2007					3.86%	3.50%		0.45%
17			2008	0.4039		11.50%		4.65%		26.50	0.34%
18			2009	0.4286		11.50%		4.93%		26.50	0.17%
19			2011-13	0.4388		11.00%		4.83%	3.50%	28.00	1.18%
20											
21	PNY	PIEDMONT NATURAL GAS COMPANY	2003	0.2613		11.80%		3.08%	9.36	67.31	
22			2004	0.3307		11.10%		3.67%	11.15	76.67	
23			2005	0.3106		11.50%		3.57%	11.53	76.70	
24			2006	0.2520		11.00%		2.77%	11.83	74.61	
25			2007	0.2929		11.90%		3.49%	11.99	73.23	
26			GROWTH 2003 - 2007					3.32%	6.50%		2.13%
27			2008	0.3355		12.50%		4.19%		73.50	0.37%
28			2009	0.3313		12.50%		4.14%		73.50	0.18%
29			2011-13	0.4195		13.50%		5.66%	4.50%	73.00	-0.06%
30											
31	SJI	SOUTH JERSEY INDUSTIES, INC.	2003	0.4307		11.60%		5.00%	11.26	26.46	
32			2004	0.4810		12.50%		6.01%	12.41	27.76	
33			2005	0.4971		12.40%		6.16%	13.50	28.98	
34			2006	0.6260		16.30%		10.20%	15.11	29.33	
35			2007	0.5167		12.80%		6.61%	16.25	29.61	
36			GROWTH 2003 - 2007					6.80%	12.50%		2.85%
37			2008	0.5174		13.50%		6.98%		30.00	1.32%
38			2009	0.5200		14.50%		7.54%		31.00	2.32%
39			2011-13	0.5667		16.00%		9.07%	4.50%	32.00	1.56%

REFERENCES:
COLUMNS (A) & (B): VALUE LINE INVESTMENT SURVEY
- RATINGS & REPORTS DATED 12/12/2008
COLUMN (C): COLUMN (A) x COLUMN (B)
COLUMN (C): LINES 6, 16, 26 & 36, SIMPLE AVERAGE GROWTH, 2003 - 2007

COLUMN (D): VALUE LINE INVESTMENT SURVEY
COLUMN (D): LINES 6, 16, 26 & 36, COMPOUND GROWTH RATE
COLUMN (E): VALUE LINE INVESTMENT SURVEY
COLUMN (F): COMPOUND GROWTH RATES OF DATES SHOWN

JOHNSON UTILITIES, L.L.C.
WATER AND WASTEWATER DIVISIONS
TEST YEAR ENDED DECEMBER 31, 2007
DIVIDEND GROWTH COMPONENTS

LINE NO.	STOCK SYMBOL	NATURAL GAS LDC NAME	OPERATING PERIOD	(A) RETENTION RATIO (b)	x	(B) RETURN ON BOOK EQUITY (r)	=	(C) DIVIDEND GROWTH (g)	(D) BOOK VALUE ($/SHARE)	(E) SHARES OUTST. (MILLIONS)	(F) SHARE GROWTH
1	SWX	SOUTHWEST GAS CORPORATION	2003	0.2743		6.10%		1.67%	18.42	34.23	
2			2004	0.5060		8.30%		4.20%	19.18	36.79	
3			2005	0.3440		6.40%		2.20%	19.10	39.33	
4			2006	0.5859		8.90%		5.21%	21.58	41.77	
5			2007	0.5590		8.50%		4.75%	22.98	42.81	
6			GROWTH 2003 - 2007					3.61%	3.50%		5.75%
7			2008	0.4857		7.50%		3.64%		44.00	2.78%
8			2009	0.5300		8.00%		4.24%		45.00	2.53%
9			2011-13	0.5760		9.50%		5.47%	4.00%	48.00	2.31%
10											
11	WGL	WGL HOLDINGS, INC.	2003	0.4435		14.00%		6.21%	16.25	48.63	
12			2004	0.3434		14.00%		4.81%	16.95	48.67	
13			2005	0.3744		12.00%		4.49%	17.80	48.65	
14			2006	0.3093		10.20%		3.15%	18.28	48.89	
15			2007	0.3476		10.40%		3.62%	19.83	49.45	
16			GROWTH 2003 - 2007					4.46%	3.50%		0.42%
17			2008	0.3906		11.60%		4.53%		49.61	0.32%
18			2009	0.4000		11.50%		4.60%		49.65	0.20%
19			2011-13	0.3882		10.50%		4.08%	5.00%	50.00	0.22%

REFERENCES:
COLUMNS (A) & (B): VALUE LINE INVESTMENT SURVEY
- RATINGS & REPORTS DATED 12/12/2008
COLUMN (C): COLUMN (A) x COLUMN (B)
COLUMN (C): LINES 6 & 16, SIMPLE AVERAGE GROWTH, 2003 - 2007

COLUMN (D): VALUE LINE INVESTMENT SURVEY
COLUMN (D): LINES 6 & 16, COMPOUND GROWTH RATE
COLUMN (E): VALUE LINE INVESTMENT SURVEY
COLUMN (F): COMPOUND GROWTH RATES OF DATES SHOWN

JOHNSON UTILITIES, L.L.C.
WATER AND WASTEWATER DIVISIONS
TEST YEAR ENDED DECEMBER 31, 2007
GROWTH RATE COMPARISON

DOCKET NO. WS-02987A-08-0180
SCHEDULE WAR - 6

WATER COMPANY SAMPLE:

LINE NO.	STOCK SYMBOL	(A) (br) + (sv)	(B) ZACKS EPS	EPS	(C) VALUE LINE PROJECTED DPS	BVPS	EPS	(D) VALUE LINE HISTORIC DPS	BVPS	(E) VALUE LINE & ZACKS AVGS.	EPS	(F) 5 - YEAR COMPOUND HISTORY DPS	BVPS
1	AWR	7.48%	12.00%	11.00%	5.00%	2.50%	1.50%	1.50%	4.50%	5.43%	20.05%	2.20%	5.84%
2	CWT	7.25%	8.40%	4.75%	2.00%	3.50%	4.50%	0.50%	6.00%	4.24%	5.52%	0.88%	6.39%
3	WTR	4.81%	8.00%	6.00%	5.50%	5.00%	7.00%	7.50%	10.50%	7.07%	5.64%	8.22%	8.20%
4				7.25%	4.17%	3.67%	4.33%	3.17%	7.00%		10.40%	3.77%	6.81%
5	AVERAGES	6.51%	9.47%		5.03%			4.83%		5.58%		6.99%	

NATURAL GAS LDC SAMPLE:

LINE NO.	STOCK SYMBOL	(A) (br) + (sv)	(B) ZACKS EPS	EPS	(C) VALUE LINE PROJECTED DPS	BVPS	EPS	(D) VALUE LINE HISTORIC DPS	BVPS	(E) VALUE LINE & ZACKS AVGS.	EPS	(F) 5 - YEAR COMPOUND HISTORY DPS	BVPS
1	ATG	5.41%	4.30%	3.00%	4.00%	2.00%	15.00%	4.00%	10.50%	6.11%	6.94%	10.25%	10.35%
2	ATO	8.99%	5.50%	4.50%	2.00%	3.50%	7.50%	1.50%	9.00%	4.79%	3.21%	1.63%	7.21%
3	LG	6.09%	10.00%	4.50%	2.50%	5.50%	9.50%	1.00%	4.50%	5.36%	6.14%	1.99%	6.04%
4	NJR	6.84%	7.70%	9.50%	6.00%	11.00%	6.00%	4.00%	10.00%	7.74%	-0.63%	5.03%	10.87%
5	GAS	6.02%	6.50%	4.00%	-	4.50%	-1.50%	1.00%	4.00%	3.08%	9.01%	0.00%	4.69%
6	NWN	5.17%	6.80%	7.00%	5.50%	3.50%	6.50%	2.00%	3.50%	4.97%	11.90%	3.19%	3.64%
7	PNY	5.01%	25.90%	7.50%	4.00%	4.50%	6.00%	4.50%	6.50%	8.41%	5.97%	4.82%	6.39%
8	SJI	10.00%	8.00%	6.00%	5.50%	4.50%	12.50%	4.50%	12.50%	7.64%	11.14%	6.67%	9.60%
9	SWX	5.32%	8.00%	6.50%	4.00%	4.00%	6.00%	-	3.50%	5.33%	14.61%	1.20%	5.69%
10	WGL	4.05%	7.50%	3.50%	2.50%	5.00%	5.00%	1.50%	3.50%	4.07%	-2.25%	1.71%	5.10%
11				5.60%	4.00%	4.80%	7.25%	2.67%	6.75%		6.60%	3.65%	6.96%
12	AVERAGES	6.29%	9.02%		4.80%			5.56%		5.75%		5.74%	

REFERENCES:
COLUMN (A): SCHEDULE WAR - 4, PAGE 1, COLUMN C
COLUMN (B): ZACKS INVESTMENT RESEARCH (www.zacks.com)
COLUMN (C): VALUE LINE INVESTMENT SURVEY - RATINGS & REPORTS DATED 01/23/2009 (WATER COMPANIES) AND 12/12/2008 (NATURAL GAS LDC's)
COLUMN (D): VALUE LINE INVESTMENT SURVEY - RATINGS & REPORTS DATED 01/23/2009 (WATER COMPANIES) AND 12/12/2008 (NATURAL GAS LDC's)
COLUMN (E): SIMPLE AVERAGE OF COLUMNS (B) THRU (D) LINES 1 THRU 3 (WATER) AND 1 THRU 10 (NATURAL GAS)
COLUMN (F): 5-YEAR ANNUAL GROWTH RATE CALCULATED WITH DATA COMPILED FROM VALUE LINE INVESTMENT SURVEY
- RATINGS & REPORTS DATED 01/23/2009 (WATER COMPANIES) AND 12/12/2008 (NATURAL GAS LDC's)

BASED ON A GEOMETRIC MEAN:

LINE NO.	STOCK SYMBOL	k	=	r_f	+ [	(A) ß	x	(	r_m	-	r_f	)]	=	(B) EXPECTED RETURN
1	AWR	k	=	1.60%	+ [	0.95	x	(	10.40%	-	5.30%	)]	=	6.45%
2	CWT	k	=	1.60%	+ [	1.05	x	(	10.40%	-	5.30%	)]	=	6.96%
3	WTR	k	=	1.60%	+ [	0.90	x	(	10.40%	-	5.30%	)]	=	6.19%
4	**WATER COMPANY AVERAGE**					**0.97**								**6.53%**
6	ATG	k	=	1.60%	+ [	0.75	x	(	10.40%	-	5.30%	)]	=	5.43%
7	ATO	k	=	1.60%	+ [	0.65	x	(	10.40%	-	5.30%	)]	=	4.92%
8	LG	k	=	1.60%	+ [	0.65	x	(	10.40%	-	5.30%	)]	=	4.92%
9	NJR	k	=	1.60%	+ [	0.70	x	(	10.40%	-	5.30%	)]	=	5.17%
10	GAS	k	=	1.60%	+ [	0.70	x	(	10.40%	-	5.30%	)]	=	5.17%
11	NWN	k	=	1.60%	+ [	0.60	x	(	10.40%	-	5.30%	)]	=	4.66%
12	PNY	k	=	1.60%	+ [	0.70	x	(	10.40%	-	5.30%	)]	=	5.17%
13	SJI	k	=	1.60%	+ [	0.75	x	(	10.40%	-	5.30%	)]	=	5.43%
14	SWX	k	=	1.60%	+ [	0.75	x	(	10.40%	-	5.30%	)]	=	5.43%
15	WGL	k	=	1.60%	+ [	0.75	x	(	10.40%	-	5.30%	)]	=	5.43%
16	**NATURAL GAS LDC AVERAGE**					**0.70**								**5.17%**

REFERENCES:
COLUMN (A): SHARPE LITNER CAPITAL ASSET PRICING MODEL ("CAPM") FORMULA

$$k = r_f + [ß (r_m - r_f)]$$

WHERE: k = THE EXPECTED RETURN ON A GIVEN SECURITY
r_f = RATE OF RETURN ON A RISK FREE ASSET PROXY (a)
ß = THE BETA COEFFICIENT OF A GIVEN SECURITY
r_m = PROXY FOR THE MARKET RATE OF RETURN (b)

COLUMN (B): EXPECTED RATE OF RETURN USING THE CAPM FORMULA

NOTES

(a) AN 8-WEEK AVERAGE OF THE 5-YEAR U.S. TREASURY CONSTANT MATURITY RATE (r_f) THAT APPEARED IN VALUE LINE INVESTMENT SURVEY'S SELECTION & OPINION PUBLICATION DATED 12/05/2008 THROUGH 01/23/2009 WAS USED AS A RISK FREE RATE OF RETURN.

(b) THE BETA COEFFICIENTS (ß) WERE OBTAINED FROM THE VALUE LINE INVESTMENT SURVEY DATED 01/23/2009 (WATER COMPANIES) AND 12/12/2008 (NATURAL GAS LDC's).

(c) THE MARKET RISK PREMIUM (r_m - r_f) IS THE GEOMETRIC MEAN FOR TOTAL S&P 500 AND INTERMEDIATE U.S. TREASURY RETURNS OVER THE 1926 - 2007 PERIOD. DATA OBTAINED FROM MORNINGSTAR'S STOCKS, BONDS, BILLS AND INFLATION: 2008 YEARBOOK.

JOHNSON UTILITIES, L.L.C.
WATER AND WASTEWATER DIVISIONS
TEST YEAR ENDED DECEMBER 31, 2007
CAPM COST OF EQUITY CAPITAL

DOCKET NO. WS-02987A-08-0180
SCHEDULE WAR - 7, PAGE 2 OF 2

BASED ON AN ARITHMETIC MEAN:

LINE NO.	STOCK SYMBOL	k	=	r_f	+ [	(A) ß	x	(	r_m	-	r_f	)]	=	(B) EXPECTED RETURN
1	AWR	k	=	1.60%	+ [	0.95	x	(	12.30%	-	5.50%	)]	=	8.06%
2	CWT	k	=	1.60%	+ [	1.05	x	(	12.30%	-	5.50%	)]	=	8.74%
3	WTR	k	=	1.60%	+ [	0.90	x	(	12.30%	-	5.50%	)]	=	7.72%
4	WATER COMPANY AVERAGE					0.97								8.17%
6	ATG	k	=	1.60%	+ [	0.75	x	(	12.30%	-	5.50%	)]	=	6.70%
7	ATO	k	=	1.60%	+ [	0.65	x	(	12.30%	-	5.50%	)]	=	6.02%
8	LG	k	=	1.60%	+ [	0.65	x	(	12.30%	-	5.50%	)]	=	6.02%
9	NJR	k	=	1.60%	+ [	0.70	x	(	12.30%	-	5.50%	)]	=	6.36%
10	GAS	k	=	1.60%	+ [	0.70	x	(	12.30%	-	5.50%	)]	=	6.36%
11	NWN	k	=	1.60%	+ [	0.60	x	(	12.30%	-	5.50%	)]	=	5.68%
12	PNY	k	=	1.60%	+ [	0.70	x	(	12.30%	-	5.50%	)]	=	6.36%
13	SJI	k	=	1.60%	+ [	0.75	x	(	12.30%	-	5.50%	)]	=	6.70%
14	SWX	k	=	1.60%	+ [	0.75	x	(	12.30%	-	5.50%	)]	=	6.70%
15	WGL	k	=	1.60%	+ [	0.75	x	(	12.30%	-	5.50%	)]	=	6.70%
16	NATURAL GAS LDC AVERAGE					0.70								6.36%

REFERENCES:
COLUMN (A): SHARPE LITNER CAPITAL ASSET PRICING MODEL ("CAPM") FORMULA

$$k = r_f + [\beta (r_m - r_f)]$$

WHERE: k = THE EXPECTED RETURN ON A GIVEN SECURITY
r_f = RATE OF RETURN ON A RISK FREE ASSET PROXY (a)
ß = THE BETA COEFFICIENT OF A GIVEN SECURITY
r_m = PROXY FOR THE MARKET RATE OF RETURN (b)

COLUMN (B): EXPECTED RATE OF RETURN USING THE CAPM FORMULA

NOTES

(a) AN 8-WEEK AVERAGE OF THE 5-YEAR U.S. TREASURY CONSTANT MATURITY RATE (r_f) THAT APPEARED IN VALUE LINE INVESTMENT SURVEY'S SELECTION & OPINION PUBLICATION DATED 12/05/2008 THROUGH 01/23/2009 WAS USED AS A RISK FREE RATE OF RETURN.

(b) THE BETA COEFFICIENTS (ß) WERE OBTAINED FROM THE VALUE LINE INVESTMENT SURVEY DATED 01/23/2009 (WATER COMPANIES) AND 12/12/2008 (NATURAL GAS LDC's).

(c) THE MARKET RISK PREMIUM (r_m - r_f) IS THE ARITHMETIC MEAN FOR TOTAL S&P 500 AND INTERMEDIATE U.S. TREASURY RETURNS OVER THE 1926 - 2007 PERIOD. DATA OBTAINED FROM MORNINGSTAR'S STOCKS, BONDS, BILLS AND INFLATION: 2008 YEARBOOK.

JOHNSON UTILITIES, L.L.C.
WATER AND WASTEWATER DIVISIONS
TEST YEAR ENDED DECEMBER 31, 2007
ECONOMIC INDICATORS - 1990 TO PRESENT

DOCKET NO. WS-02987A-08-0180
SCHEDULE WAR - 8

LINE NO.	YEAR	(A) CHANGE IN CPI	(B) CHANGE IN GDP (1996 $)	(C) PRIME RATE	(D) FED. DISC. RATE	(E) FED. FUNDS RATE	(F) 91-DAY T-BILLS	(G) 30-YR T-BONDS	(H) A-RATED UTIL. BOND YIELD	(I) Baa-RATED UTIL. BOND YIELD
1	1990	5.39%	1.90%	10.01%	6.98%	8.10%	7.50%	7.49%	9.86%	10.06%
2	1991	4.25%	-0.20%	8.46%	5.45%	5.69%	5.38%	5.38%	9.36%	9.55%
3	1992	3.03%	3.30%	6.25%	3.25%	3.52%	3.43%	3.43%	8.69%	8.86%
4	1993	2.96%	2.70%	6.00%	3.00%	3.02%	3.00%	3.00%	7.59%	7.91%
5	1994	2.61%	4.00%	7.14%	3.60%	4.21%	4.25%	4.25%	8.31%	8.63%
6	1995	2.81%	2.50%	8.83%	5.21%	5.83%	5.49%	5.49%	7.89%	8.29%
7	1996	2.93%	3.70%	8.27%	5.02%	5.30%	5.01%	5.01%	7.75%	8.17%
8	1997	2.34%	4.50%	8.44%	5.00%	5.46%	5.06%	5.06%	7.60%	8.12%
9	1998	1.55%	4.20%	8.35%	4.92%	5.35%	4.78%	4.78%	7.04%	7.27%
10	1999	2.19%	4.50%	7.99%	4.62%	4.97%	4.64%	4.64%	7.62%	7.88%
11	2000	3.38%	3.70%	9.23%	5.73%	6.24%	5.82%	5.82%	8.24%	8.36%
12	2001	2.83%	0.80%	6.92%	3.41%	3.88%	3.40%	5.95%	7.59%	8.02%
13	2002	1.59%	1.60%	4.67%	1.17%	1.67%	1.61%	5.38%	7.41%	7.98%
14	2003	2.27%	2.50%	4.12%	2.03%	1.13%	1.01%	4.92%	6.18%	6.64%
15	2004	2.68%	3.60%	4.34%	2.34%	1.35%	1.37%	5.03%	5.77%	6.20%
16	2005	3.39%	2.90%	6.16%	4.19%	3.22%	3.15%	4.57%	5.38%	5.78%
17	2006	3.24%	2.80%	7.97%	5.96%	4.97%	4.73%	4.91%	5.94%	6.30%
18	2007	2.85%	2.00%	8.05%	5.86%	5.02%	4.36%	4.84%	6.07%	6.24%
19	2008	3.58%	1.30%	5.09%	2.39%	1.92%	1.37%	4.28%	6.34%	6.64%
20	CURRENT	0.09%	-3.80%	3.25%	0.50%	0.00% - 0.25%	0.01%	2.63%	5.90%	7.07%

REFERENCES:
COLUMN (A): 1990 - CURRENT, U.S. DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS WEB SITE
COLUMN (B): 1990 - CURRENT, U.S. DEPARTMENT OF COMMERCE, BUREAU OF ECONOMIC ANALYSIS WEB SITE
COLUMN (C) THROUGH (G): 1990 - 2003, FEDERAL RESERVE BANK OF ST. LOUIS WEB SITE
COLUMN (C) THROUGH (D): CURRENT, THE VALUE LINE INVESTMENT SURVEY, DATED 01/23/2009
COLUMN (F) THROUGH (I): CURRENT, THE VALUE LINE INVESTMENT SURVEY, DATED 01/23/2009
COLUMN (H) THROUGH (I): 1990 - 2000, MOODY'S PUBLIC UTILITY REPORTS
COLUMN (H) THROUGH (I): 2001, MERGENT 2002 PUBLIC UTILITY MANUAL
COLUMN (H) THROUGH (I): 2003 MERGENT NEWS REPORTS

JOHNSON UTILITIES, L.L.C.
WATER AND WASTEWATER DIVISIONS
TEST YEAR ENDED DECEMBER 31, 2007
CAPITAL STRUCTURES OF SAMPLE COMPANIES

DOCKET NO. WS-02987A-08-0180
SCHEDULE WAR - 9

AVERAGE CAPITAL STRUCTURES OF SAMPLE WATER COMPANIES

LINE NO.		AWR	PCT.	CWT	PCT.	SWWC	PCT.	WTR	PCT.	WATER COMPANY AVERAGE	PCT.
1	DEBT	$ 267.2	46.9%	$ 289.2	42.6%	$ 66.8	29.6%	$ 1,215.0	55.4%	$ 459.6	50.2%
2											
3	PREFERRED STOCK	0.0	0.0%	3.5	0.5%	0.5	0.2%	0.0	0.0%	1.0	0.1%
4											
5	COMMON EQUITY	302.1	53.1%	385.7	56.9%	158.7	70.2%	976.3	44.6%	455.7	49.7%
6											
7	TOTALS	$ 569.3	100%	$ 678.4	100%	$ 226.0	100%	$ 2,191.3	100%	$ 916.2	100%

AVERAGE CAPITAL STRUCTURES OF SAMPLE NATURAL GAS COMPANIES

LINE NO.		ATG	PCT.	ATO	PCT.	LG	PCT.	NJR	PCT.	GAS	PCT.
1											
2											
3	DEBT	$ 1,674.0	50.2%	$ 1,602.4	42.3%	$ 355.5	45.3%	$ 383.1	37.3%	$ 502.2	34.7%
4											
5	PREFERRED STOCK	0.0	0.0%	0.0	0.0%	0.6	0.1%	0.0	0.0%	0.6	0.0%
6											
7	COMMON EQUITY	1,661.0	49.8%	2,183.1	57.7%	428.4	54.6%	644.8	62.7%	945.2	65.3%
8											
9	TOTALS	$ 3,335.0	100%	$ 3,785.5	100%	$ 784.5	100%	$ 1,027.9	100%	$ 1,448.0	100%
10											
11											
12		NWN	PCT.	PNY	PCT.	SJI	PCT.	SWX	PCT.	WGL	PCT.
13											
14	DEBT	$ 517.0	46.5%	$ 1,020.4	53.7%	$ 358.0	42.7%	$ 1,275.1	54.1%	$ 637.3	38.7%
15											
16	PREFERRED STOCK	0.0	0.0%	0.0	0.0%	0.0	0.0%	100.0	4.2%	28.2	1.7%
17											
18	COMMON EQUITY	594.8	53.5%	878.4	46.3%	481.0	57.3%	983.7	41.7%	980.8	59.6%
19											
20	TOTALS	$ 1,111.8	100%	$ 1,898.8	100%	$ 839.0	100%	$ 2,358.8	100%	$1,646.3	100%
21											
22											

		NATURAL GAS LDC AVERAGE	PCT.	WATER & LDC AVERAGE	PCT.
23					
24					
25					
26	DEBT	$ 832.5	45.7%	$ 646.0	47.2%
27					
28	PREFERRED STOCK	12.9	0.7%	6.5	0.5%
29					
30	COMMON EQUITY	978.1	53.6%	716.9	52.4%
31					
32	TOTALS	$ 1,823.6	100%	$ 1,369.4	100%

REFERENCE:
MOST RECENT SEC 10-K FILINGS OR ANNUAL REPORTS

EXHIBIT
R-9
admitted

JOHNSON UTILITIES, L.L.C.

DOCKET NO. WS-02987A-08-0180

SURREBUTTAL TESTIMONY
ON COST OF CAPITAL

OF

WILLIAM A. RIGSBY

ON BEHALF OF

THE

RESIDENTIAL UTILITY CONSUMER OFFICE

MARCH 31, 2009

TABLE OF CONTENTS

INTRODUCTION 1

SUMMARY OF JOHNSON UTILITIES' REBUTTAL TESTIMONY 2

CAPITAL STRUCTURE 3

COST OF DEBT 4

COST OF EQUITY CAPITAL 4

ATTACHMENT A

ATTACHMENT B

ATTACHMENT C

INTRODUCTION

Q. Please state your name, occupation, and business address.

A. My name is William A. Rigsby. I am a Public Utilities Analyst V employed by the Residential Utility Consumer Office ("RUCO") located at 1110 W. Washington, Suite 220, Phoenix, Arizona 85007.

Q. Please state the purpose of your surrebuttal testimony.

A. The purpose of my testimony is to respond to Johnson Utilities, LLC's ("Johnson Utilities" or "Company") rebuttal testimony on RUCO's recommended rate of return on invested capital (which includes RUCO's recommended capital structure, cost of long-term debt and cost of common equity) for the Company's water and wastewater operations in Pinal County, Arizona.

Q. Have you filed any prior testimony in this case on behalf of RUCO?

A. Yes, on February 4, 2009, I filed direct testimony with the Arizona Corporation Commission ("ACC" or "Commission") on the cost of capital issues associated with this case.

Q. How is your surrebuttal testimony on cost of capital organized?

A. My surrebuttal testimony contains five parts: the introduction that I have just presented; a summary of Johnson Utilities' rebuttal testimony; a

section on capital structure; a section on the cost of debt; and, a section on the cost of equity capital.

SUMMARY OF JOHNSON UTILITIES' REBUTTAL TESTIMONY

Q. Have you reviewed Johnson Utilities' rebuttal testimony?

A. Yes. I have reviewed the rebuttal testimony of Company witness Thomas J. Bourassa, filed on March 9, 2009, which addresses the cost of capital issues in this case.

Q. Please summarize Mr. Bourassa's rebuttal testimony.

A. In his rebuttal testimony, Mr. Bourassa argues that my cost of equity figure should not be adopted by the Commission. Mr. Bourassa is critical of both the discounted cash flow ("DCF") and CAPM analyses that I conducted in order to arrive at my recommended cost of common equity for Johnson Utilities in this case. Mr. Bourassa takes issue with the growth estimate of my DCF model, my reliance on geometric means, and various inputs that I used in my CAPM model. He also takes issue with my recommended hypothetical capital structure.

CAPITAL STRUCTURE

Q. Briefly summarize the positions of the parties to the case regarding capital structure.

A. A comparison of the Company and RUCO's capital structures are as follows:

	Company	RUCO
Long-Term Debt	2.79%	40.00%
Common Equity	97.21%	60.00%

Because ACC Staff witness Jeffery M. Michlik is recommending negative rate bases for both the Company's Water and Wastewater Divisions, Mr. Michlik is recommending that a 10.0 percent operating margin be adopted by the Commission. I have not made any changes to my recommended hypothetical capital structure comprised of 40.0 percent long-term debt and 60.0 percent equity for the Company's Wastewater Division. In regard to Johnson Utilities' Water Division, RUCO witness Rodney L. Moore is also recommending a negative rate base. Consequently, like ACC Staff, I am recommending that the Commission adopt an operating margin for the Company's Water Division. However, my recommendation is for an 8.18 percent operating margin.

COST OF DEBT

Q. Please compare the costs of debt being recommended by the Company and RUCO for Johnson Utilities' Water Division.

A. The Company and RUCO are in agreement on Johnson Utilities' cost of long-term debt and continue to recommend the following:

Johnson Utilities	8.00%
RUCO	8.00%

COST OF EQUITY CAPITAL

Q. What costs of equity capital are the parties to the case recommending?

A. The costs of common equity presently being recommended by the Company and RUCO are as follows:

Johnson Utilities	12.00%
RUCO	8.31%

Q. What are the weighted costs of capital presently recommended by the Company and RUCO?

A. The weighted costs of capital presently recommended by the Company and RUCO are as follows:

Johnson Utilities	11.89%
RUCO	8.18%

As can be seen above, there is presently a 371 basis point difference between the Company-proposed 11.89 percent weighted cost of capital and RUCO's recommended weighted cost of capital of 8.18 percent.

Q. Has there been any recent activity in regard to interest rates?

A. Yes. On March 18, 2009, the Federal Reserve decided not to increase or decrease the federal funds rate and kept it between zero and 0.25 percent. According to an article[1] that appeared in The Wall Street Journal on March 19, 2009, the Fed's intent to purchase $300 billion in longer-term Treasury securities over the next six months is an effort to improve the conditions in the private credit markets. According to the Fed's statement that was released after the decision was made to sit still on rates, all of the members of the Federal Open Market Committee believed that the continued deterioration of the U.S. economy warranted that no change be made in the key interest rate. The Fed also stated that it intended to keep the federal funds rate low for an extended period.

...

[1] Levine, Deborah, "Treasurys surge on Fed move," The Wall Street Journal, March 19, 2009.

Q. Have you made any changes to the 8.31 percent cost of common equity that you recommended in your direct testimony?

A. No.

Q. Has Mr. Bourassa made any changes to his recommended cost of equity capital?

A. Yes. Mr. Bourassa has increased his original recommended return on common equity from 10.50 percent to 12.00 percent despite the fact that interest rates have declined since his original testimony was filed during the first quarter of 2008.

Q. Please address Mr. Bourassa's position that your method of averaging your DCF and CAPM estimates for both your water utility and LDC sample companies has produced a depressed cost of equity capital.

A. The mean averaging method that I have used to arrive at my final cost of equity estimate has been adopted by the Commission in a number of rate case proceedings. It is identical to the mean averaging method that has been used by ACC Staff to arrive at final cost of equity estimates. This being the case, I see no reason to change or modify my recommended cost of equity that was derived by averaging the results of my DCF and CAPM results.

Q. Do you still believe that your use of a sample of natural gas LDC's is appropriate despite Mr. Bourassa's arguments to the contrary?

Y. Yes.

Q. Have other analysts used natural gas LDC's as proxies in water utility rate case proceedings before the ACC?

A. Yes, in the Arizona-American Water Company (Arizona-American) rate case that is now pending before the Commission, the cost of capital witness for Arizona-American also relied on a sample group of natural gas LDCs.

Q. Please explain why you believe it is appropriate to use a sample group of natural gas LDC's to estimate the cost of equity capital in a water utility rate case proceeding.

A. For the most part, natural gas LDC's have very similar operating characteristics with water companies such as Johnson Utilitiess and are therefore a good proxy for water and wastewater utility cost of capital studies. Their inclusion also provides a larger sample to obtain an estimate from. In the recent Arizona-American Water Company ("Arizona-American") Sun City West Wastewater District Case, Arizona-American's cost of capital consultant also used a sample of LDC's to arrive at her final cost of equity estimate. In fact, in its initial closing brief in that case, Arizona-American criticized RUCO for relying on its water utility sample

DCF results, and for failing to give more weight to the results of RUCO's LDC sample results[2]. Arizona-American stated the following:

> "Mr. Rigsby's base calculation is also flawed. His DCF recommendation equally weighted his DCF evaluations for his water utility samples and his gas utility samples.[152] Unfortunately, his water utility sample only contained four companies.[153] Mr. Rigsby conceded that he "would like to see a broader sample.[154] However, he went ahead and weighted this sample equally with his gas utility sample, which contained 10 companies.[155]
>
> Mr. Rigsby should have excluded the results of his DCF analysis for water utilities. Four companies are just not enough, as he admits. Unusual events at just one company can unduly affect the entire sample, a risk that is smoothed when a larger sample is used. If we just exclude the DCF results for the water-utility sample, Mr. Rigsby's ROE estimate would increase significantly....."

Q. Do you believe that an upward adjustment is needed for your recommended cost of equity given your use of a sample group of LDC's that have a lower average beta than the one calculated for your sample group of water utilities?

A. No. Given the current state of the economy (an issue which Mr. Bourassa also believes justifies higher rates of return) I believe that my recommended 8.31 percent cost of equity is actually generous.

Q. Please explain why you believe that your recommended 8.31 percent cost of equity is actually generous.

A. It is no secret that since the current downturn in the economy has occurred there has been a "flight to quality" by investors who have pulled their funds out of the equity markets and have put them into U.S. Treasury

[2] Initial Closing Brief of Arizona-American Water Company, Docket No. WS-01303A-06-0491

instruments, which are yielding next to nothing, in order to avoid any further loss of capital. If investors are willing to accept lower yields on Treasury instruments that are ranging from 0.20 percent, on a 91-day T-bill, to 3.53 percent, on a long-term 30-year Treasury bond (Attachment A), then Mr. Bourassa's proposed 12.00 percent cost of equity figure is clearly excessive given that water utilities and natural gas LDC's are currently being viewed as safe investments.

Q. Can you back up your statement that water utilities and natural gas LDC's are currently being viewed as safe investments

A. Yes. In the most recent Value Line update on the water utility industry, dated January 23, 2009, Value Line analyst Andre J. Costanza had this to say:

> "Not much has changed in the Water Utility Industry since our October report. Stocks here have held their ground for the most part, whereas the broader market continued to struggle with ongoing economic uncertainty. Although an improving regulatory environment has played a hand, the industry is really benefiting from the its perceived safety, stemming from the necessity of water itself as well as the steady stream of income that the stocks here generate. The group as a whole ranks near the top of the Value Line Investment Survey for Timeliness and should continue to do well over the next six to 12 months, as investors look for a place to ride out the economic turbulence that is likely to persist."

Mr. Costanza further stated:

> "Now more than ever we believe that initiating a position in the Water Utility industry may be prudent. Although the 3- to 5-year prospects of these stocks pale in comparison to the *Value Line* median, projections for many outside the industry are counting on an economic recovery. However, there is no turnaround in sight and a timeline for such a scenario continues to elude Wall Street. That said, water utility stocks are likely to continue to do well regardless of the economic backdrop because water is and will always be a

> necessity. Even still, it is important to remember that the individual reports of each stock should be carefully reviewed before making a financial commitment. On that note, however, we believe that *California Water Services* is an interesting candidate, given its Above Average (2) ranking for Timeliness. *American Water Works* continues to intrigue us, too, but its short trading history makes it a speculative play. Meanwhile, *Aqua America's* M&A strategy gives it the most upside in our opinion, despite adding more risk."

Q. What is Value Line's view on natural gas LDC's?

A. Value Line analyst Richard Gallagher had this to say in the March 13, natural gas utility update:

> "The global economy continues to struggle. Tight credit and a slumping real estate market are among the main factors contributing to the recessionary environment. Furthermore, these conditions continue to weigh on results in this sector. Indeed, usage continues to decline as customers have become more cost conscious. Moreover, bill collection has become increasingly difficult as unemployment and foreclosures continue to rise. Despite the aforementioned conditions, investors should note that this group is an interesting defensive play. While these factors will likely continue to impact the utilities, this industry should perform well compared to the rest of the market in the months ahead. Natural Gas Utilities generally have solid balance sheets and predictable cash flows, which is appealing given the weakness in the economy."

Mr. Gallagher went on to state:

> "The Natural Gas Utility sector has climbed near the top of our industry spectrum in recent months. Indeed, it features numerous timely stocks. In fact, UGI holds our highest rank (1) for Timeliness. However, various other companies are ranked to outperform the market over the coming six to 12 months. What's more, the majority of the equities in this industry offer above-average yields. Most notably, Nicor, AGL Resources and Atmos Energy all offer attractive payouts supported by steady cash flows. Therefore, investors looking for a good play in the year ahead should consider some of the names in this group."

...

Q. Are there other reasons you can cite as to why you think that a higher return is not needed to attract investors?

A. Yes. One has to take into consideration that the investment community at large is well aware of the fact that regulated utilities, such as Arizona-American, are indeed different from non-regulated entities in terms of how they recover their costs. This information is taken into account when institutions and individual investors make their decisions on where to place their funds. The best example of this can be seen in an MSN Money/CNBC article[3] authored by Jon D. Markman, a weekly columnist for CNBC (Attachment B). In his article, Mr. Markman pitched his suggestions for investing in what some believe to be a coming global water shortage. In regard to domestic utilities, Markman had this to say:

> "Virtually all of the U.S. water utility stocks are regulated by states and counties, which makes them pretty dull. Governmental entities typically give utilities a monopoly in a geographic region, then set their profit margin a smidge above costs. Just about the only distinguishing factor among them are the growth rates of their regions and their ability to efficiently manage their underground pipe and pumping infrastructure."

Q. Is Mr. Bourassa correct in his assertion that you did not use the appropriate inputs to calculate a market risk premium in your CAPM model?

A. No. Despite Mr. Bourassa's assertion, I have used an appropriate Treasury instrument to calculate the risk premium in my CAPM model.

[3] Markman, Jon D, "Invest in the Coming Global Water Shortage," MSN.com, January 12, 2005, http://moneycentral.msn.com/content/P102152.asp.

The risk premium that I have calculated has also been calculated in the same manner by both ACC Staff and other cost of capital witnesses whose cost of capital recommendations have been adopted by the Commission.

Q. Please respond to Mr. Bourassa's criticism of your reliance on geometric means in the CAPM model.

A. As I stated in my direct testimony there is an on-going debate over which is the better average to rely on. However, it is important to recognize that the information on both means, published by Morningstar, is widely available to the investment community. For this reason alone I believe that the use of both means in a CAPM analysis is appropriate.

The best argument in favor of the geometric mean is that it provides a truer picture of the effects of compounding on the value of an investment when return variability exists. This is particularly relevant in the case of the return on the stock market, which has had its share of ups and downs over the 1926 to 2007 observation period used in my CAPM analysis.

Q. Can you provide an example to illustrate the differences between the two averages?

A. Yes. The following example may help. Suppose you invest $100 and realize a 20.0 percent return over the course of a year. So at the end of year 1, your original $100 investment is now worth $120. Now let's say

that over the course of a second year you are not as fortunate and the value of your investment falls by 20.0 percent. As a result of this, the $120 value of your original $100 investment falls to $96. An arithmetic mean of the return on your investment over the two-year period is zero percent calculated as follows:

$$(\text{year 1 return} + \text{year 2 return}) \div \text{number of periods} =$$

$$(20.0\% + -20.0\%) \div 2 =$$

$$(0.0\%) \div 2 = \underline{\underline{0.0\%}}$$

The arithmetic mean calculated above would lead you to believe that you didn't gain or lose anything over the two-year investment period and that your original $100 investment is still worth $100. But in reality, your original $100 investment is only worth $96. A geometric mean on the other hand calculates a compound return of negative 2.02 percent as follows:

$$(\text{year 2 value} \div \text{original value})^{1/\text{number of periods}} - 1 =$$

$$(\$96 \div \$100)^{1/2} - 1 =$$

$$(0.96)^{1/2} - 1 =$$

$$(0.9798) - 1 =$$

$$-0.0202 = \underline{\underline{-2.02\%}}$$

The geometric mean calculation illustrated above provides a truer picture of what happened to your original $100 over the two-year investment period.

As can be seen in the preceding example, in a situation where return variability exists, a geometric mean will always be lower than an arithmetic mean, which probably explains why utility consultants typically put up a strenuous argument against the use of a geometric mean.

Q. Can you cite any other evidence that supports your use of both a geometric and an arithmetic mean?

A. Yes. In the third edition of their book, Valuation: Measuring and Managing the Value of Companies, authors Tom Copeland, Tim Koller and Jack Murrin ("CKM") make the point that, while the arithmetic mean has been regarded as being more forward-looking in determining market risk premiums, a true market risk premium may lie somewhere between the arithmetic and geometric averages published in Morningstar's SBBI yearbook.

Q. Please explain.

A. In order to believe that the results produced by the arithmetic mean are appropriate, you have to believe that each return possibility included in the calculation is an independent draw. However, research conducted by CKM demonstrates that year-to-year returns are not independent and are

actually auto correlated (i.e. a relationship that exists between two or more returns, such that when one return changes, the other, or others, also change), meaning that the arithmetic mean has less credence. CKM also explains two other factors that would make the Morningstar arithmetic mean too high. The first factor deals with the holding period. The arithmetic mean depends on the length of the holding period and there is no "law" that says that holding periods of one year are the "correct" measure. When longer periods (e.g. 2 years, 3 years etc.) are observed, the arithmetic mean drops about 100 basis points. The second factor deals with a situation known as survivor bias. According to CKM, this is a well-documented problem with the Morningstar historical return series in that it only measures the returns of successful firms. That is, those firms that are listed on stock exchanges. The Morningstar historical return series does not measure the failures, of which there are many. Therefore, the return expectations in the future are likely to be lower than the Morningstar historical averages. After conducting their analysis, CKM conclude that 4.0 percent to 5.5 percent is a reasonable forward-looking market risk premium. Adding my 1.60 percent risk free yield on a 5-year Treasury instrument to these two estimates indicate a cost of equity of 5.60 percent to 7.10 percent which is 271 to 121 basis points less than my recommended cost of equity of 8.31 percent. Given the fact that utilities generally exhibit less risk than industrials, a return in the low end of this range could be considered reasonable.

Q. Can you name any other sources that support CKM's conclusion that 4.0 percent to 5.5 percent is a reasonable market risk premium on a forward-looking basis?

A. Yes. During the 39th annual Financial Forum of the Society of Utility and Regulatory Financial Analysts, which was held at Georgetown University in Washington D.C. on April 19 and 20, 2007, I had the opportunity to hear the views of Aswarth Damodaran, Ph. D. and Felicia C. Marston, Ph. D., professors of finance from New York University and the University of Virginia respectively, who have conducted empirical research on this subject. Dr. Damodaran and Dr. Marston supported CKM's 4.0 to 5.5 percent estimates during a panel discussion that provided both professors with the opportunity to explain their research on the equity risk premium and to answer questions from other financial analysts in attendance. Each of the panelists[4] stated that they believed that a reasonable market risk premium fell between 4.0 percent and 5.0 percent when asked to provide estimates based on their research.

...

[4] Other analysts taking part in the panel discussion included Stephen G. Hill, CRRA, Principal, Hill Associates and moderator Farris M. Maddox, Principal Financial Analyst, Virginia State Corporation Commission.

Q. If market risk premiums of 4.0 percent to 5.0 percent were used in your CAPM model what would the results be?

A. Using market risk premiums (r_m - r_f) of 4.0 percent to 5.0 percent in my CAPM model, using a proxy of water companies, produces the following expected returns (k):

<u>Water Company Sample using 4.0 percent</u>

$$k = r_f + [\ ß\ (r_m - r_f)\ ]$$

$$k = 1.60\% + [\ 0.97\ (4.0\%)\ ]$$

$$k = 5.48\%$$

<u>Water Company Sample using 5.0 percent</u>

$$k = r_f + [\ ß\ (r_m - r_f)\ ]$$

$$k = 1.60\% + [\ 0.97\ (5.0\%)\ ]$$

$$k = 6.45\%$$

As can be seen above, my CAPM model, using a water company sample average beta (ß) of 0.97 and the yield on a 5-year Treasury instrument of 1.60 percent for the risk free rate of return (r_f), produces an expected return (k) of 5.48 percent to 6.45 percent. My LDC sample, using an average beta of 0.70, produces expected returns of 4.40 percent to 5.10 percent. All of which makes my revised recommended 8.31 percent cost of common equity appear to be more than generous.

Q. Please address Mr. Bourassa's statements regarding your method of calculating an internal growth (br) estimate for the growth component (g) of your DCF model.

A. My direct testimony contained a full explanation as to how I arrived at both the internal and external growth estimates that comprise the g component of my DCF model. Mr. Bourassa was also provided with my work papers which described how I arrived at each of the estimates for all of the water utilities and LDC's that were used in my sample groups. Mr. Bourassa has been involved in a number of rate proceedings that I have provided testimony on and in all of those cases my method for calculating the growth component in the DCF model has never changed.

Q. Do you still believe that your average DCF growth rate estimate of 6.40 percent, based on your respective water and natural gas average DCF growth estimates of 6.51 percent and 6.29, percent is reasonable?

A. Yes. In his rebuttal testimony, Mr. Bourassa cites Dr. Roger Morin's text New Regulatory Finance to support his geometric mean arguments. On page 308 of his text, Dr. Morin provides a DCF growth rate check (Attachment C). The reasonableness test offered by Dr. Morin is expressed as follows:

Dividend Growth = Risk Free Return + Risk Premium – Dividend Yield

Under the above formula the dividend yield element of the DCF ("D_1/P_0") is subtracted from results of a CAPM calculation ("r_f + [ß (r_m - r_f)]").

Q. How do your DCF growth estimates compare to the results obtained from the reasonableness test offered by Dr. Morin?

A Using the CAPM results presented above using my CAPM inputs, with the higher arithmetic mean, and the average 2.88 percent (for Water) and 4.43 percent (for natural gas) DCF dividend yield estimates presented in my direct testimony, the following growth rate check results are obtained:

<u>Water using an Arithmetic Mean</u>

$$g = r_f + [\,ß\,(r_m - r_f)\,] - (D_1/P_0)$$

$$g = 1.60\% + [\,0.97\,(6.80\%)\,] - 2.88\%$$

$$g = 1.60\% + 6.60\% - 2.88\%$$

$$g = \underline{5.32\%}$$

<u>Gas using an Arithmetic Mean</u>

$$g = r_f + [\,ß\,(r_m - r_f)\,] - (D_1/P_0)$$

$$g = 1.60\% + [\,0.70\,(6.80\%)\,] - 4.43\%$$

$$g = 1.60\% + 4.76\% - 4.43\%$$

$$g = \underline{1.93\%}$$

As can be seen above, the growth rate check results, obtained from Dr. Morin's reasonableness test, range from 1.93 percent for the LDC's to

5.32 percent for the water utilities or an average of 3.63 percent which is 277 basis points lower than my average DCF growth estimate of 6.40 percent DCF growth rate estimate.

Q. Has the Commission ever adopted a cost of capital recommendation that was derived from the same method that you have used in this case?

A. Yes. As I stated in my direct testimony, the Commission adopted the recommendations of ACC Staff cost of capital witness Stephen Hill in a prior Southwest Gas Corporation rate case[5]. Mr. Hill used the same methods that I have used in arriving at the inputs for the DCF model.

Q. Do you agree with Mr. Bourassa's use of the Hamada Adjustment in response to your hypothetical capital structure?

A. No, I do not. There is no need for the use of the Hamada adjustment because my recommended hypothetical capital structure provides the Company with an appropriate rate of return.

...

[5] Decision No. 68487, dated February 23, 2006 (Docket No. G-01551A-04-0876)

Q. Has the Commission ever adopted a weighted cost of capital that was derived from a similar hypothetical capital structure that you recommended?

A. Yes. In the Gold Canyon Sewer[6] rehearing proceeding, the Commission adopted my recommended weighted average cost of capital of 8.54 percent (which was derived from market data prior to the current economic downturn). In that case the Commission rejected the use of the Hamada methodology in favor of RUCO's recommended hypothetical capital structure of 40.0 percent debt and 60.0 percent equity. This is the same capital structure that I am recommending in this case.

Q. Please address Mr. Bourassa's position that your recommended cost of equity is too low based on the yields of investment grade Baa bonds.

A. Mr. Bourassa's analysis fails to take into consideration the most recent yields on utility bond yields. As can be seen in the Selected Yields section of Value Line's Selection & Opinion publication dated March 27, 2009, the yields of A-rated and Baa/BBB-rated utility bonds are currently at 5.90 percent and 7.51 percent respectively. My recommended 8.31 percent cost of common equity is a full 80 to 241 basis points higher than the aforementioned yields.

[6] Decision No. 70662, dated December 23, 2008 (Docket No. SW-02519A-06-0015)

Q. Does your silence on any of the issues or positions addressed in the rebuttal testimony of the Mr. Bourassa or any of the Company's other witnesses constitute acceptance?

A. No, it does not.

Q. Does this conclude your surrebuttal testimony on Johnson Utilities?

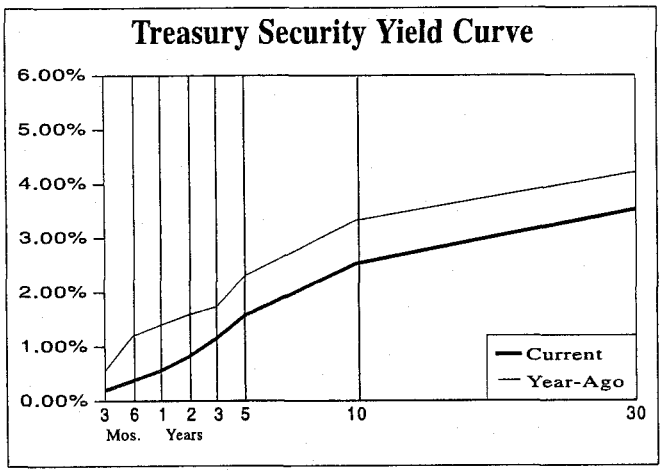
A. Yes, it does.

ATTACHMENT A

Selected Yields

	Recent (3/18/09)	3 Months Ago (12/17/08)	Year Ago (3/19/08)
TAXABLE			
Market Rates			
Discount Rate	0.50	0.50	2.50
Federal Funds	0.00-0.25	0.00-0.25	2.25
Prime Rate	3.25	3.25	5.25
30-day CP (A1/P1)	0.49	0.27	2.65
3-month LIBOR	1.29	1.58	2.60
Bank CDs			
6-month	0.84	1.46	2.15
1-year	1.05	1.89	2.16
5-year	2.07	2.96	3.12
U.S. Treasury Securities			
3-month	0.20	0.01	0.56
6-month	0.38	0.18	1.20
1-year	0.56	0.45	1.40
5-year	1.57	1.37	2.30
10-year	2.53	2.19	3.33
10-year (inflation-protected)	1.31	2.39	0.90
30-year	3.53	2.65	4.21
30-year Zero	3.54	2.69	4.35

	Recent (3/18/09)	3 Months Ago (12/17/08)	Year Ago (3/19/08)
Mortgage-Backed Securities			
GNMA 6.5%	3.59	4.40	4.70
FHLMC 6.5% (Gold)	3.15	4.40	4.96
FNMA 6.5%	3.28	4.04	4.62
FNMA ARM	3.60	4.23	5.07
Corporate Bonds			
Financial (10-year) A	7.52	7.50	5.89
Industrial (25/30-year) A	6.07	6.18	5.87
Utility (25/30-year) A	5.90	6.26	5.96
Utility (25/30-year) Baa/BBB	7.51	7.09	6.14
Foreign Bonds (10-Year)			
Canada	2.70	2.87	3.45
Germany	3.22	2.99	3.76
Japan	1.31	1.30	1.28
United Kingdom	3.11	3.23	4.31
Preferred Stocks			
Utility A	6.25	6.50	6.34
Financial A	9.76	8.23	7.91
Financial Adjustable A	5.47	5.47	5.47



	Recent (3/18/09)	3 Months Ago (12/17/08)	Year Ago (3/19/08)
TAX-EXEMPT			
Bond Buyer Indexes			
20-Bond Index (GOs)	5.03	5.85	4.94
25-Bond Index (Revs)	5.83	6.39	5.15
General Obligation Bonds (GOs)			
1-year Aaa	0.57	0.95	1.80
1-year A	0.67	1.05	1.90
5-year Aaa	2.39	2.86	2.87
5-year A	2.99	2.96	3.17
10-year Aaa	3.45	4.03	3.73
10-year A	3.95	4.23	4.02
25/30-year Aaa	4.98	5.51	4.92
25/30-year A	5.98	5.91	5.05
Revenue Bonds (Revs) (25/30-Year)			
Education AA	6.00	6.10	5.10
Electric AA	6.10	6.15	5.10
Housing AA	6.35	6.30	5.40
Hospital AA	6.30	6.25	5.50
Toll Road Aaa	6.15	6.20	5.10

Federal Reserve Data

BANK RESERVES

(Two-Week Period; in Millions, Not Seasonally Adjusted)

	Recent Levels			Average Levels Over the Last...		
	3/11/09	2/25/09	Change	12 Wks.	26 Wks.	52 Wks.
Excess Reserves	621517	673431	-51914	730878	511645	266367
Borrowed Reserves	630177	588910	41267	601461	568436	365508
Net Free/Borrowed Reserves	-8660	84521	-93181	129418	-56791	-99141

MONEY SUPPLY

(One-Week Period; in Billions, Seasonally Adjusted)

	Recent Levels			Growth Rates Over the Last...		
	3/2/09	2/23/09	Change	3 Mos.	6 Mos.	12 Mos.
M1 (Currency+demand deposits)	1562.3	1544.8	17.5	8.2%	26.0%	12.6%
M2 (M1+savings+small time deposits)	8304.0	8274.2	29.8	13.6%	16.3%	9.8%

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ATTACHMENT B

Jon Markman

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Posted 1/12/2005

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SuperModels

Invest in the coming global water shortage

Fresh water's getting scarce, and it has no substitutes. For investors in companies that can supply our increasingly thirsty planet, that spells opportunity.

By Jon D. Markman

Ten years ago next Monday, a massive earthquake rolled under the Japanese city of Kobe at dawn, toppling 140,000 buildings, causing 300 major fires, killing more than 5,000 people and leaving 300,000 homeless.

To help cover the story for the L.A. Times, I left my wife to care for our 10-day-old daughter and 2-year-old son and flew into the city with a small team of Los Angeles-based trauma doctors and nurses. We found a surreal, smoking ruin of a city with roads twisted like coils of rope, high-rises tilted at Dr. Seuss angles and thousands of middle-class families jammed into dingy, ice-cold rooms in the few public buildings left standing.

Just as in the tsunami zone of South Asia this month, the immediate health danger, besides a possible outbreak of disease, was a lack of fresh water. More than 75% of the city's water supply was destroyed when underground pipes fractured. As much as they desired pallets of drugs, food, blankets and tents sent from throughout Japan and abroad, the Kobe survivors coveted -- and needed -- clean, bottled water for cooking, drinking and bathing.

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Both incidents are a stark reminder that water is our most precious resource. Because it is seemingly ubiquitous in the United States, it is taken for granted. Massive snowstorms in California this month have loaded up the snowpack that provides water there, and rains in the Southeast are filling reservoirs in that part of the country.

The rest of the world, however, is not so fortunate.

Not making any more water

There is no more fresh water on Earth today than there was a million years ago. Yet today, 6 billion people share it. Since 1950, the world population has doubled, but water use has tripled, notes John Dickerson, an analyst and fund manager based in San Diego. Unlike petroleum, he adds, no technological innovation can ever replace water.

China, which is undergoing a vast rural-to-urban population migration, is emblematic of the places where water has become scarce. It has about as much

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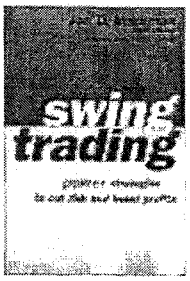

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water as Canada but 100 times more people. Per-capita water reserves are only about a fourth the global average, according to experts. Of its 669 cities, 440 regularly suffer moderate to critical water shortages.

Although not widely appreciated, water has been recognized by conservative investors as an investment opportunity -- and it has rewarded them. Over the past 10 years, the Media General water utilities index is up 133%, double the return of the **Dow Jones Utilities Index** ($UTIL). Over the past five years, water utilities are up 32% -- clobbering the flat returns of both the Dow Jones Utilities and the **Dow Industrials** ($INDU). One of water's key long-term value drivers as an investment, according to Dickerson: Demand is not affected by inflation, recession, interest rates or changing tastes.

Virtually all of the U.S. water utility stocks are regulated by states and counties, which makes them pretty dull. Governmental entities typically give utilities a monopoly in a geographic region, then set their profit margin a smidge above costs. Just about the only distinguishing factor among them are the growth rates of their regions and their ability to efficiently manage their underground pipe and pumping infrastructure. Among the best are **Aqua America** (WTR, news, msgs) of Philadelphia, **Southwest Water** (SWWC, news, msgs) of Los Angeles; **California Water Service Group** (CWT, news, msgs), based in San Jose, Calif.; and **American States Water** (AWR, news, msgs) of San Dimas, Calif.

In a moment, I'll offer a couple of potentially more impactful ways to invest in water, but first let's look a little more broadly at world demand.

Aquifers in India are being sucked dry

The tsunami has focused attention on water demand in South Asia -- and it's a good thing, as it was already reaching critical status in rural areas. Several decades ago, farmers in the Indian state of Gujarat used oxen to haul water in buckets from a few feet below the surface. Now they pump it from 1,000 feet below the surface. That may sound good, but they have been drawing water from the earth to feed a mushrooming population at such a terrific rate that ancient aquifers have been sucked dry -- turning once-fertile fields slowly into sand.

According to New Scientist magazine, farmers using crude oilfield technology in India have drilled 21 million "tube wells" into the strata beneath the fields, and every year millions more wells throughout the region -- all the way to Vietnam -- are being dug to service water-needy crops like rice and sugar cane. The magazine quoted research from the annual Stockholm Water Symposium that the pumps that transformed Indian farming are drawing 200 cubic kilometers of water to the surface each year, while only a fraction is replaced by monsoon

rains. At this rate, the research suggested, groundwater supplies in some areas will be exhausted in five to 10 years, and millions of Indians will see their farmland turned to desert.

In China, the magazine reported, 30 cubic kilometers more water is being pumped to the surface each year than is replaced by rain -- one of the reasons that the country has become dependent on grain imports from the West. This is not just an issue for agriculture. Earlier this year, the Indian state of Kerala ordered the **PepsiCo** (PEP, news, msgs) and **Coca-Cola** (KO, news, msgs) bottling plants closed due to water shortages, costing the companies millions of dollars.

In this country, shareholder activists already are lobbying companies to share water-dependency concerns worldwide with their stakeholders in their financial statements.

Water, water everywhere, but . . .

The central problem is that less than 2% of the world's ample store of water is fresh. And that amount is bombarded by industrial pollution, disease and cyclical shifts in rain patterns. Its increasing scarcity has impelled private companies and countries to attempt to lock up rights to key sources. In an article last month, the Christian Science Monitor suggested that the next decade may see a cartel of water-exporting countries rivaling the Organization of Petroleum Exporting Countries for dominance in the world economy.

"Water is blue gold; it's terribly precious," Maude Barlow, chair of the Council of Canadians, told the Monitor. "Not too far in the future, we're going to see a move to surround and commodify the world's fresh water. Just as they've divvied up the world's oil, in the coming century, there's going to be a grab."

Besides the domestic water utilities listed above -- and similarly plodding foreign utilities such as **United Utilities** (UU, news, msgs) of the United Kingdom, which sports a 6.9% dividend yield, and **Suez** (SZE, news, msgs) of France -- investors interested in the sector can consider a number of variant plays. None are extremely exciting, but my guess is that, over the next few years, some more interesting purification technologies will emerge, along with, perhaps, a vibrant attempt at worldwide industry consolidation.

One current idea is Tennessee-based copper pipe and valve maker **Mueller Industries** (MLI, news, msgs), a $1 billion business with a trailing price/earnings multiple of 15 that is still not expensive despite a 47% run-up in the past year. Its leading outside investor is **Berkshire Hathaway** (BRK.A, news, msgs), the

investment vehicle of legendary investor Warren Buffett.

Another is flow-control products maker **Watts Water Technologies** (WTS, news, msgs), which is a little richer at a $975 million market cap and a trailing P/E multiple of 19, but is still owned by several leading value managers, including Mario Gabelli.

And possibly the most interesting is **Consolidated Water** (CWCO, news, msgs), a $160 million company based in the Cayman Islands that specializes in developing and operating ocean-water desalinization plants and water-distribution systems in areas where natural supplies of drinking water are scarce, such as the Caribbean and South America. It currently supplies water to Belize, Barbados, the British Virgin Islands and the Bahamas, and it has expansion plans. It is the most expensive, but it may also have the greatest growth prospects. Of all of these, it is up the most over the past five years, a relatively steady 355%.

Of course, there is one other benefit to water investing: When these companies say they're going to do a dilutive deal, it's not something to worry about.

Fine Print

Dickerson runs a hedge fund in San Diego strictly focused on water investing, the Summit Water Equity Fund. . . To learn more about Southwest Water, click here. . . . To learn more about California Water Service Group, which runs systems in New Mexico, Hawaii and Washington State, as well as California, click here. . . . To learn more about American States Water, click here. . . To learn more about Mueller, click here, and, for Consolidated Water, click here. . . . Seems like talk is cheap. Since mid-December, the value of the company radio personality Howard Stern is leaving, **Viacom** (VIA.B, news, msgs), has risen 9% while the value of the company he's headed to, **Sirius Satellite Radio** (SIRI, news, msgs), is down 13.5%. . . . For background on the Kobe earthquake, approaching its 10th anniversary, click here and here.

Jon D. Markman is publisher of StockTactics Advisor, an independent weekly investment newsletter, as well as senior strategist and portfolio manager at Pinnacle Investment Advisors. While he cannot provide personalized investment advice or recommendations, he welcomes column critiques and comments at jon.markman@gmail.com; put COMMENT in the subject line. At the time of publication he held positions in the following stocks mentioned in this column: Coca-Cola.

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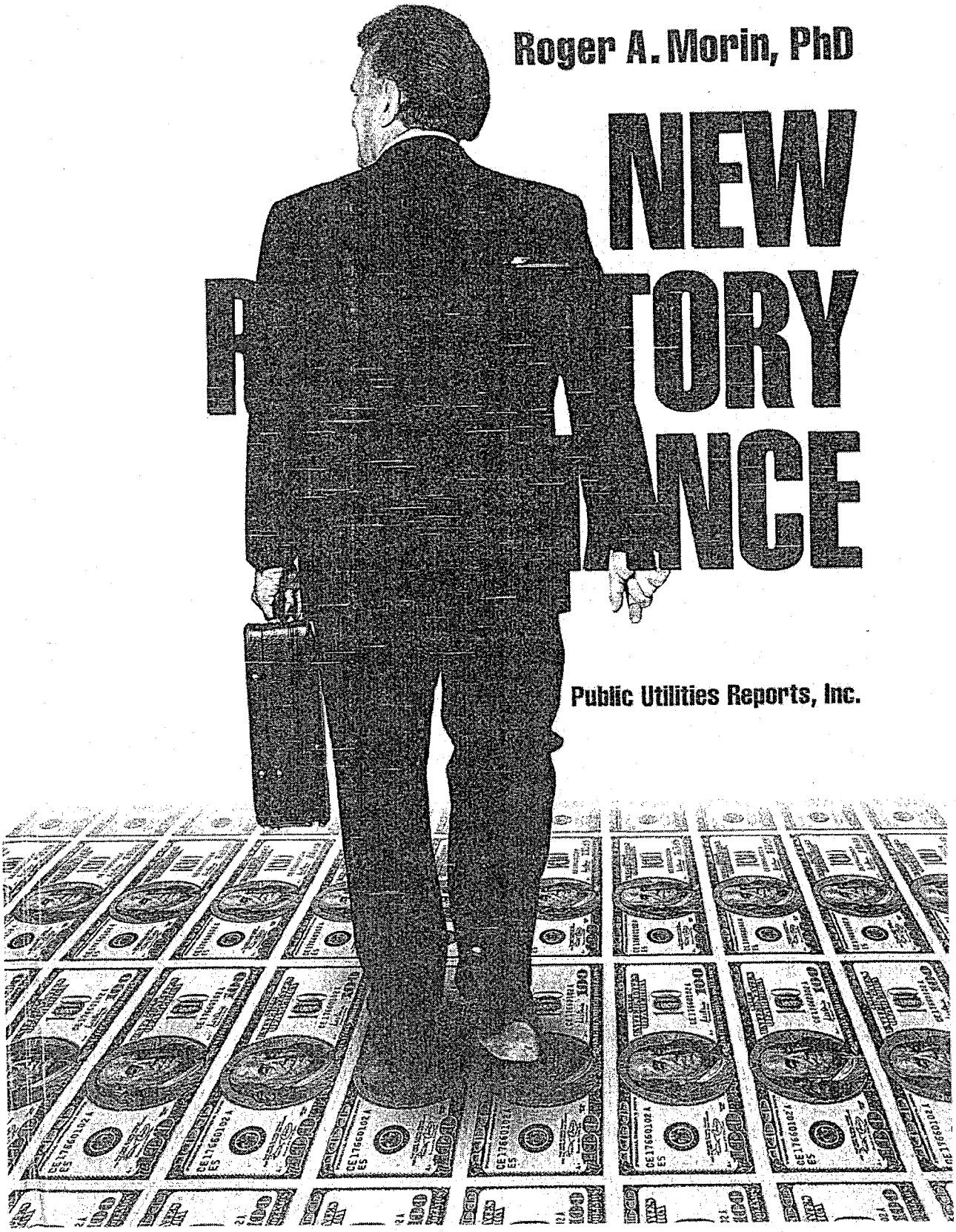
by Microsoft of any specific security or trading strategy. An investor's best course of action must be based on individual circumstances.

ATTACHMENT C

Roger A. Morin, PhD

NEW REGULATORY FINANCE

Public Utilities Reports, Inc.



DCF Growth Rate Check

As a reasonableness check on the DCF growth rate, the growth rate in dividends can be verified using the following relationship:[16]

Dividend Growth = Risk-free Return + Risk Premium − Dividend Yield

For example, let us say that the yield on Treasury bonds as a proxy for the risk-free return is 5%, the utility risk premium is 5.5% derived from a Capital Asset Pricing Model (CAPM) analysis discussed in earlier chapters, and the expected dividend yield for the utility industry is 4.5%. Substituting these values in the above relationship, we obtain a dividend growth expectation of 6.0% as follows:

Dividend Growth = 5.0% + 5.5% − 4.5% = 6.0%

9.6 Growth in the Non-Constant DCF Model

Although the constant growth DCF model does have a long history, analysts, practitioners, and academics have come to recognize that it is not applicable in many situations. A multiple-stage DCF model that better mirrors the pattern of future dividend growth is preferable. There is a growing consensus and ample empirical support that the best place to start is with security analysts' forecasts, that is, assume that dividend policy is relatively constant and use analyst forecasts of earnings growth as a proxy for dividend forecasts. The problem is that from the standpoint of the DCF model that extends into perpetuity, analysts' horizons are too short, typically five years. It is often unrealistic for such growth to continue into perpetuity. A transition must occur between the first stage of growth forecast by analysts for the first five years and the company's long-term sustainable growth rate. Accordingly, multiple-stage DCF models of this transition are available and were described in Chapter 8. It is useful to remember that eventually all company growth rates, especially utility services growth rates, converge to a level consistent with the growth rate of the aggregate economy.

A reasonable alternative to the constant growth DCF model is to use a multiple-stage DCF model that more appropriately captures the path of future dividend

[16] Equating the expected return from the standard DCF equation and the required return from the CAPM equation:

$$K = D_1/P + g = R_f + \text{Risk Premium}$$
$$K = D_1/P + g = R_f + \beta(R_m - R_f) \text{ from the CAPM}$$

Solving for g:

$$g = R_f + \beta(R_m - R_f) - D_1/P$$

ADJ # 5

EXHIBIT
tabbies
RUCO-10
ADMITTED

Johnson Utilities - Water Division
Test Year Ended December 31, 2007
Income Statement

Exhibit
Schedu
Page 1
Witness: Bourassa

Line No.		Test Year Book Results	Label	Adjustment	Test Year Adjusted Results	Proposed Rate Increase	Adjusted with Rate Increase
1	**Revenues**						
2	Metered Water Revenues	$ 12,127,186	6	$ 717,979	$ 12,845,165	$ (2,233,479)	$ 10,611,685
3	Unmetered Water Revenues	-			-		-
4	Other Water Revenues	329,295			329,295		329,295
5		$ 12,456,481		$ 717,979	$ 13,174,459	$ (2,233,479)	$ 10,940,980
6	**Operating Expenses**						
7	Salaries and Wages	$ -			$ -		$ -
8	Purchased Water	1,630,813	5	(1,295,865)	334,948		334,948
9	Purchased Power	734,361	8/9/10	94,544	828,905		828,905
10	Chemicals	16,189			16,189		16,189
11	Repairs and Maintenance	14,333			14,333		14,333
12	Office Supplies and Expense	1,119			1,119		1,119
13	Outside Services	5,528,266	3	349,325	5,877,591		5,877,591
14	Water Testing	55,007			55,007		55,007
15	Rents	53,444			53,444		53,444
16	Transportation Expenses	-			-		-
17	Insurance - General Liability	21,565			21,565		21,565
18	Insurance - health and Life	-			-		-
19	Reg. Commission Exp. - Rate Case	27,387	4	5,947	33,333		33,333
20	Miscellaneous Expense	286,747			286,747		286,747
21	Depreciation Expense	1,312,201	1	236,314	1,548,515		1,548,515
22	Taxes Other Than Income	-			-		-
23	Property Taxes	384,115	2	413,353	797,468		797,468
24	Income Tax	-	12	1,186,292	1,186,292	(803,674)	382,618
25	**Total Operating Expenses**	$ 10,065,546		$ 989,911	$ 11,055,456	$ (803,674)	$ 10,251,782
26	**Operating Income**	$ 2,390,935		$ (271,932)	$ 2,119,003	$ (1,429,805)	$ 689,198
27	**Other Income (Expense)**						
28	Interest Income	350,524	7a	(350,524)	-		-
29	Other income (loss)	-	7b	-	-		-
30	Interest Expense	(42,934)	11	28,196	(14,738)		(14,738)
31	Other Expense	-	7c	-	-		-
32		-			-		-
33	**Total Other Income (Expense)**	$ 307,591		$ (322,328)	$ (14,738)	$ -	$ (14,738)
34	**Net Profit (Loss)**	$ 2,698,526		$ (594,260)	$ 2,104,265	$ (1,429,805)	$ 674,460
35							
36	SUPPORTING SCHEDULES:					RECAP SCHEDULES:	
37	C-2					A-1	
38	E-2						

Johnson Utilities - Water Division
Test Year Ended December 31, 2007
Adjustment to Revenues and Expenses
Adjustment Number 5

Exhibit
Schedule C-2
Page 6
Witness: Bourassa

Line No.		
1	Purchased Water - Remove CAGRD Tax to be revocered as a pass-through expense	
2		
3		
4	Remove CAGRD Tax Recorded During Test Year From Expense	$ 1,295,865
5		
6		
7		
8	Adjustment to Revenue and/or Expense	$ (1,295,865)
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		

STATEMENT ADJUSTMENTS.

A. Adjustment 3 annualizes management fees and is based on the annualization of revenues in Adjustment 6.

Adjustment 4 shows the rate case expense. The Company is proposing $100,000 of rate case expense to be amortized over three years.

Q. HOW DID YOU DETERMINE THE AMOUNT OF RATE CASE EXPENSE?

A. The $100,000 is an estimate based on my experience and I believe it is an appropriate starting point in this case. My adjustment for rate case expense will have to be revisited periodically as the rate case progresses.

Q. THANK YOU. PLEASE CONTINUE WITH YOUR DISCUSSION OF THE INCOME STATEMENT.

A. Adjustment 5 removes purchased water expenses from Test Year operating expenses for groundwater replenishment fees assessed by the Central Arizona Ground Water Replenishment District ("CAGRD"). The Company proposes that these fees be recovered as a pass-through to customers similar to sales tax.

Q. PLEASE CONTINUE.

A. Adjustment 6 annualizes revenues to the year-end number of customers for each meter size. This adjustment is intended to increase revenues on the basis that the number of customers at year-end were receiving service during the entire 12 months of the test year. The annualization for most meter sizes was based on the number of customers at the end of the test year, compared to the actual number of customers on each size meter during each month of the test year. Average revenues by month were computed for the test year for each meter size. The average revenues were then multiplied by the increase (or decrease) in number of

EXHIBIT

C-11

ADMITTED

AMER. STATES WATER NYSE-AWR

RECENT PRICE 35.93 | P/E RATIO 21.1 (Trailing: 24.0 Median: 22.0) | RELATIVE P/E RATIO 1.40 | DIV'D YLD 2.8% | VALUE LINE

TIMELINESS 3 Lowered 6/5/09

SAFETY 3 New 2/4/00

TECHNICAL 3 Raised 7/10/09

BETA .80 (1.00 = Market)

High:	19.5	26.5	25.3	26.4	29.0	29.0	26.8	34.6	43.8	46.1	42.0	38.8					
Low:	14.1	14.8	16.7	19.0	20.3	21.6	20.8	24.3	30.3	33.6	27.0	29.8					

Target Price Range 2012 | 2013 | 2014

2012-14 PROJECTIONS

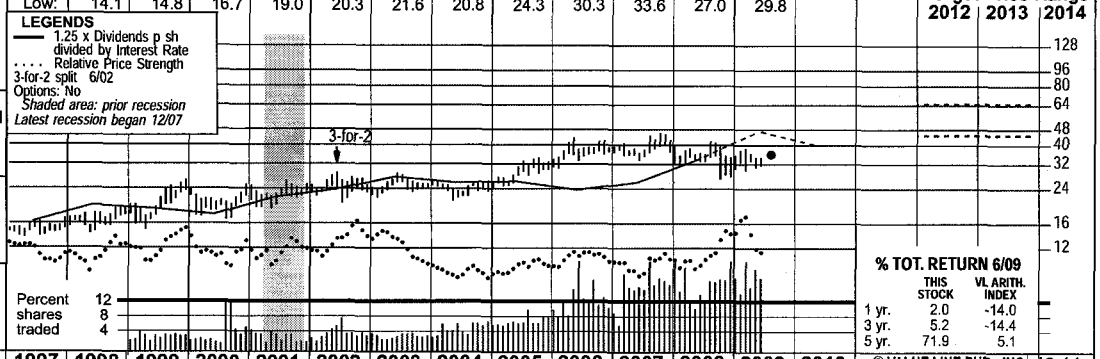
	Price	Gain	Ann'l Total Return
High	65	(+80%)	18%
Low	45	(+25%)	9%

Insider Decisions

	A	S	O	N	D	J	F	M	A
to Buy	0	0	0	0	0	0	0	0	0
Options	3	0	0	0	0	0	0	0	0
to Sell	3	0	0	1	2	0	0	1	0

Institutional Decisions

	3Q2008	4Q2008	1Q2009
to Buy	48	64	55
to Sell	54	52	66
Hld's(000)	9411	8980	9283



% TOT. RETURN 6/09

	THIS STOCK	VL ARITH. INDEX
1 yr.	2.0	-14.0
3 yr.	5.2	-14.4
5 yr.	71.9	5.1

1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	© VALUE LINE PUB., INC.	12-14
9.27	10.43	11.03	11.37	11.44	11.02	12.91	12.17	13.06	13.78	13.98	13.61	14.06	15.76	17.49	18.42	*18.65*	*19.20*	Revenues per sh	*21.75*
1.67	1.68	1.75	1.75	1.85	2.04	2.26	2.20	2.53	2.54	2.08	2.23	2.64	2.89	3.31	3.37	*3.50*	*3.75*	"Cash Flow" per sh	*4.65*
1.11	.95	1.03	1.13	1.04	1.08	1.19	1.28	1.35	1.34	.78	1.05	1.32	1.33	1.62	1.55	*1.70*	*1.90*	Earnings per sh A	*2.60*
.79	.80	.81	.82	.83	.84	.85	.86	.87	.87	.88	.89	.90	.91	.96	1.00	*1.04*	*1.10*	Div'd Decl'd per sh B■	*1.28*
1.90	2.43	2.19	2.40	2.58	3.11	4.30	3.03	3.18	2.68	3.76	5.03	4.24	3.91	2.89	4.45	*4.25*	*4.30*	Cap'l Spending per sh	*4.50*
9.95	10.07	10.29	11.01	11.24	11.48	11.82	12.74	13.22	14.05	13.97	15.01	15.72	16.64	17.53	17.95	*18.80*	*18.95*	Book Value per sh	*22.00*
11.71	11.77	11.77	13.33	13.44	13.44	13.44	15.12	15.12	15.18	15.21	16.75	16.80	17.05	17.23	17.30	*18.50*	*18.75*	Common Shs Outst'g C	*20.00*
13.4	12.8	11.6	12.6	14.5	15.5	17.1	15.9	16.7	18.3	31.9	23.2	21.9	27.7	24.0	22.6	*Bold figures are*		Avg Ann'l P/E Ratio	*21.0*
.79	.84	.78	.79	.84	.81	.97	1.03	.86	1.00	1.82	1.23	1.17	1.50	1.27	1.37	*Value Line*		Relative P/E Ratio	*1.40*
5.3%	6.6%	6.7%	5.8%	5.5%	5.0%	4.2%	4.2%	3.9%	3.6%	3.5%	3.6%	3.1%	2.5%	2.5%	2.9%	*estimates*		Avg Ann'l Div'd Yield	*2.2%*

CAPITAL STRUCTURE as of 3/31/09
Total Debt $361.5 mill. **Due in 5 Yrs** $33.0 mill.
LT Debt $306.5 mill. **LT Interest** $21.0 mill.
(LT interest earned: 3.6x: total interest coverage: 3.4x) (50% of Cap'l)

Leases, Uncapitalized: Annual rentals $2.9 mill.
Pension Assets-12/08 $54.2 mill.
Oblig. $94.5 mill.
Pfd Stock None.

Common Stock 17,326,742 shs.
MARKET CAP: $625 million (Small Cap)

1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010		12-14
173.4	184.0	197.5	209.2	212.7	228.0	236.2	268.6	301.4	318.7	*345*	*360*	Revenues ($mill)	*435*
16.1	18.0	20.4	20.3	11.9	16.5	22.5	23.1	28.0	26.8	*32.0*	*36.0*	Net Profit ($mill)	*53.0*
46.0%	45.7%	43.0%	38.9%	43.5%	37.4%	47.0%	40.5%	42.6%	37.8%	*35.0%*	*37.5%*	Income Tax Rate	*40.0%*
--	--	--	--	--	--	--	12.2%	8.5%	6.9%	*5.0%*	*5.0%*	AFUDC % to Net Profit	*5.0%*
51.0%	47.5%	54.9%	52.0%	52.0%	47.7%	50.4%	48.6%	46.9%	46.2%	*46.5%*	*47.5%*	Long-Term Debt Ratio	*46.5%*
48.4%	51.9%	44.7%	48.0%	48.0%	52.3%	49.6%	51.4%	53.1%	53.8%	*53.5%*	*52.5%*	Common Equity Ratio	*53.5%*
328.2	371.1	447.6	444.4	442.3	480.4	532.5	551.6	569.4	577.0	*650*	*680*	Total Capital ($mill)	*825*
449.6	509.1	539.8	563.3	602.3	664.2	713.2	750.6	776.4	825.3	*870*	*915*	Net Plant ($mill)	*1025*
6.6%	6.4%	6.1%	6.5%	4.6%	5.2%	5.4%	6.0%	6.7%	6.4%	*6.5%*	*7.5%*	Return on Total Cap'l	*8.5%*
10.0%	9.2%	10.1%	9.5%	5.6%	6.6%	8.5%	8.1%	9.3%	8.6%	*9.0%*	*10.0%*	Return on Shr. Equity	*12.0%*
10.1%	9.3%	10.1%	9.5%	5.6%	6.6%	8.5%	8.1%	9.3%	8.6%	*9.0%*	*10.0%*	Return on Com Equity	*12.0%*
2.9%	3.0%	3.6%	3.3%	NMF	1.0%	2.8%	2.7%	3.9%	3.1%	*3.5%*	*4.5%*	Retained to Com Eq	*6.0%*
72%	68%	65%	65%	113%	84%	67%	67%	58%	64%	*60%*	*57%*	All Div'ds to Net Prof	*48%*

CURRENT POSITION ($MILL.)	2007	2008	3/31/09
Cash Assets	1.7	7.3	24.9
Receivables	16.1	14.3	13.6
Inventory (Avg Cst)	1.6	2.1	1.9
Other	43.7	66.9	66.9
Current Assets	63.1	90.6	107.3
Accts Payable	29.1	36.6	36.0
Debt Due	37.8	75.3	55.0
Other	27.4	25.5	40.3
Current Liab.	94.3	137.4	131.3
Fix. Chg. Cov.	314%	293%	

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '06-'08 to '12-'14
Revenues	4.5%	5.0%	*4.0%*
"Cash Flow"	5.5%	6.0%	*6.5%*
Earnings	3.5%	5.5%	*9.5%*
Dividends	1.5%	2.0%	*5.0%*
Book Value	4.5%	5.0%	*4.0%*

Cal-endar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun. 30	Sep. 30	Dec. 31	Full Year
2006	64.3	63.0	75.0	66.3	268.6
2007	72.3	79.3	75.8	74.0	301.4
2008	68.9	80.3	85.3	84.2	318.7
2009	79.6	*86.4*	*90.0*	*89.0*	*345*
2010	*82.0*	*89.0*	*95.0*	*94.0*	*360*

Cal-endar	EARNINGS PER SHARE A Mar.31	Jun. 30	Sep. 30	Dec. 31	Full Year
2006	.35	.36	.32	.30	1.33
2007	.40	.42	.44	.35	1.62
2008	.30	.53	.26	.43	1.55
2009	.28	*.46*	*.50*	*.46*	*1.70*
2010	*.30*	*.50*	*.65*	*.45*	*1.90*

Cal-endar	QUARTERLY DIVIDENDS PAID B■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2005	.225	.225	.225	.225	.90
2006	.225	.225	.225	.235	.91
2007	.235	.235	.235	.250	.96
2008	.250	.250	.250	.250	1.00
2009	.250	.250			

BUSINESS: American States Water Co. operates as a holding company. Through its principal subsidiary, Golden State Water Company, it supplies water to more than 250,000 customers in 75 communities in 10 counties. Service areas include the greater metropolitan areas of Los Angeles and Orange Counties. The company also provides electric utility services to nearly 23,250 customers in the city of Big Bear Lake and in areas of San Bernardino County. Acquired Chaparral City Water of Arizona (10/00). Has roughly 675 employees. Officers & directors own 2.5% of common stock (4/09 Proxy). Chairman: Lloyd Ross. President & CEO: Floyd Wicks. Inc: CA. Addr.: 630 East Foothill Boulevard, San Dimas, CA 91773. Tele.: 909-394-3600. Internet: www.aswater.com.

American States Water has received some favorable backing from California's regulatory board. The water utility provider posted a 15% top-line gain in the first quarter, benefiting from the California Public Utilities Commission's (CPUC) November decision to implement the water revenue adjustment mechanism, modified cost balancing accounting methodology, and tiered rates laid out in the Water Action Plan. The use of these mechanisms is expected to produce smoother and more predictable growth, while stabilizing costs via removing outside influences, such as weather, on demand.

Nevertheless, the benefits were not enough. The water utility provider reported earnings of $0.28 a share, a couple of pennies off last year's mark. Despite the top-line improvement and a tax benefit, which added roughly $0.08 to the bottom line, the company was unable to offset higher operating costs specifically those associated with the expansion of its nonregulated business. Construction projects at Fort Bliss and military bases in Virginia cost American $0.05 a share.

We've trimmed our full-year earnings estimate by a dime, to $1.70 a share . . . Operating costs are expected to continue mounting in the months ahead, as aging infrastructure requires heavier investment in order to meet increasingly stringent FDA codes.

. . . and our 2010 figure by a nickel, to $1.90. With infrastructures growing older, higher expenses are not a passing fad. The cash-strapped company will have to seek help to make many of the needed improvements, opening up its bottom line to dilution, whether by higher share counts or increased interest rate costs. American recently made a stock offering of 1.15 million shares, netting nearly $35 million. Even still, similar financing activity will probably be required based on our forecasts.

These shares do not stand out for appreciation potential. Infrastructure costs limit their six- to 12- month allure as well as their 3- to 5-year appeal. **Nevertheless, the stock may well interest risk-averse investors looking to add a steady stream of income to their portfolios.**

Andre J. Costanza *July 24, 2009*

(A) Primary earnings. Excludes nonrecurring gains/(losses): '04, 14¢; '05, 25¢; '06, 6¢; '08, (27¢). Next earnings report due early Aug. May not add due to rounding.

(B) Dividends historically paid in early March, June, September, and December. ■ Div'd reinvestment plan available.
(C) In millions, adjusted for splits.

Company's Financial Strength	B++
Stock's Price Stability	80
Price Growth Persistence	75
Earnings Predictability	65

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CALIFORNIA WATER NYSE-CWT

RECENT PRICE 36.27 | P/E RATIO 17.3 (Trailing: 18.0 Median: 22.0) | RELATIVE P/E RATIO 1.15 | DIV'D YLD 3.3% | VALUE LINE

TIMELINESS 3 Lowered 7/3/09
SAFETY 3 Lowered 7/27/07
TECHNICAL 4 Raised 7/10/09
BETA .80 (1.00 = Market)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
High:	33.8	32.0	31.4	28.6	26.9	31.4	37.9	42.1	45.8	45.4	46.6	48.3
Low:	20.8	22.6	21.5	22.9	20.5	23.7	26.1	31.2	32.8	34.2	27.7	33.5

2012-14 PROJECTIONS

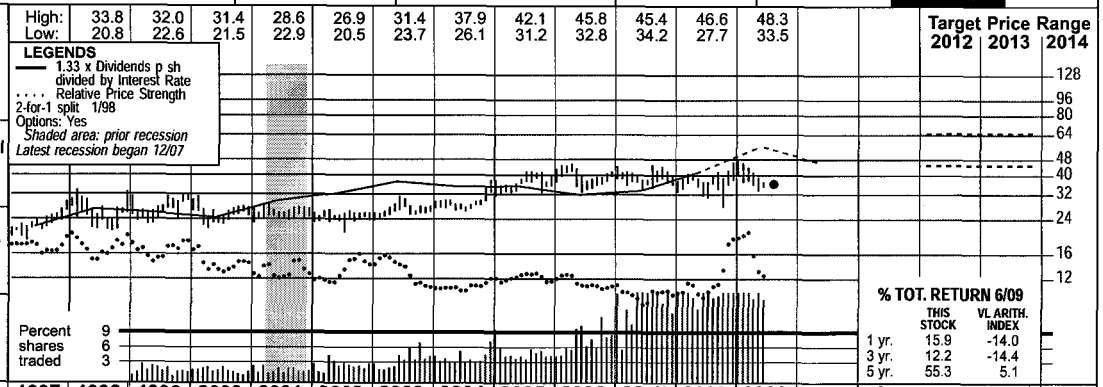
	Price	Gain	Ann'l Total Return
High	65	(+80%)	18%
Low	45	(+25%)	9%

Insider Decisions

	A	S	O	N	D	J	F	M	A
to Buy	0	0	0	0	0	0	0	0	0
Options	0	0	0	0	0	0	0	0	0
to Sell	0	0	0	1	0	0	0	0	0

Institutional Decisions

	3Q2008	4Q2008	1Q2009
to Buy	49	107	83
to Sell	58	46	81
Hld's(000)	9891	9799	10000



% TOT. RETURN 6/09

	THIS STOCK	VL ARITH. INDEX
1 yr.	15.9	-14.0
3 yr.	12.2	-14.4
5 yr.	55.3	5.1

1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	© VALUE LINE PUB., INC.	12-14
13.34	12.59	13.17	14.48	15.48	14.76	15.96	16.16	16.26	17.33	16.37	17.18	17.44	16.20	17.76	19.80	*21.45*	*22.10*	Revenues per sh	*24.45*
2.25	2.02	2.07	2.50	2.92	2.60	2.75	2.52	2.20	2.65	2.51	2.83	3.03	2.71	3.12	3.72	*4.15*	*4.35*	"Cash Flow" per sh	*4.65*
1.35	1.22	1.17	1.51	1.83	1.45	1.53	1.31	.94	1.25	1.21	1.46	1.47	1.34	1.50	1.90	*2.10*	*2.20*	Earnings per sh A	*2.65*
.96	.99	1.02	1.04	1.06	1.07	1.09	1.10	1.12	1.12	1.12	1.13	1.14	1.15	1.16	1.17	*1.18*	*1.19*	Div'd Decl'd per sh B ■	*1.34*
2.53	2.26	2.17	2.83	2.61	2.74	3.44	2.45	4.09	5.82	4.39	3.73	4.01	4.28	3.68	4.82	*4.75*	*4.80*	Cap'l Spending per sh	*5.00*
10.90	11.56	11.72	12.22	13.00	13.38	13.43	12.90	12.95	13.12	14.44	15.66	15.79	18.15	18.50	19.44	*19.95*	*20.60*	Book Value per sh C	*22.20*
11.38	12.49	12.54	12.62	12.62	12.62	12.94	15.15	15.18	15.18	16.93	18.37	18.39	20.66	20.67	20.72	*21.00*	*21.25*	Common Shs Outst'g D	*22.50*
13.6	14.1	13.7	11.9	12.6	17.8	17.8	19.6	27.1	19.8	22.1	20.1	24.9	29.2	26.1	19.8	*Bold figures are*		Avg Ann'l P/E Ratio	*21.0*
.80	.92	.92	.75	.73	.93	1.01	1.27	1.39	1.08	1.26	1.06	1.33	1.58	1.39	1.20	*Value Line*		Relative P/E Ratio	*1.40*
5.2%	5.8%	6.4%	5.8%	4.6%	4.2%	4.0%	4.3%	4.4%	4.5%	4.2%	3.9%	3.1%	2.9%	3.0%	3.1%	*estimates*		Avg Ann'l Div'd Yield	*2.4%*

CAPITAL STRUCTURE as of 3/31/09
Total Debt $342.1 mill. **Due in 5 Yrs** $80.0 mill.
LT Debt $287.2 mill. **LT Interest** $21.0 mill.

(LT interest earned: 4.6x; total int. cov.: 4.4x)

Pension Assets-12/08 $66.9 mill.
Oblig. $192.9 mill.

Pfd Stock None

Common Stock 20,744,952 shs.
as of 5/1/09

MARKET CAP: $750 million (Small Cap)

1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010		12-14
206.4	244.8	246.8	263.2	277.1	315.6	320.7	334.7	367.1	410.3	*450*	*470*	Revenues ($mill) E	*550*
19.9	20.0	14.4	19.1	19.4	26.0	27.2	25.6	31.2	39.8	*45.0*	*47.0*	Net Profit ($mill)	*60.0*
37.9%	42.3%	39.4%	39.7%	39.9%	39.6%	42.4%	37.4%	39.9%	37.7%	*37.5%*	*38.0%*	Income Tax Rate	*39.0%*
--	--	--	--	10.3%	3.2%	3.3%	10.6%	8.3%	8.6%	*8.5%*	*8.5%*	AFUDC % to Net Profit	*8.5%*
46.9%	48.9%	50.3%	55.3%	50.2%	48.6%	48.3%	43.5%	42.9%	41.6%	*48.0%*	*47.5%*	Long-Term Debt Ratio	*45.0%*
52.0%	50.2%	48.8%	44.0%	49.1%	50.8%	51.1%	55.9%	56.6%	58.4%	*52.0%*	*52.5%*	Common Equity Ratio	*55.0%*
333.8	388.8	402.7	453.1	498.4	565.9	568.1	670.1	674.9	690.4	*805*	*835*	Total Capital ($mill)	*950*
515.4	582.0	624.3	697.0	759.5	800.3	862.7	941.5	1010.2	1112.4	*1175*	*1235*	Net Plant ($mill)	*1425*
7.8%	6.8%	5.3%	5.9%	5.6%	6.1%	6.3%	5.2%	5.9%	7.1%	*7.0%*	*7.0%*	Return on Total Cap'l	*8.0%*
11.2%	10.0%	7.2%	9.4%	7.8%	8.9%	9.3%	6.8%	8.1%	9.9%	*10.5%*	*10.5%*	Return on Shr. Equity	*12.0%*
11.4%	10.1%	7.2%	9.5%	7.9%	9.0%	9.3%	6.8%	8.1%	9.9%	*10.5%*	*10.5%*	Return on Com Equity	*12.0%*
3.5%	1.8%	NMF	1.0%	.7%	2.1%	2.1%	1.0%	1.8%	3.8%	*5.0%*	*5.0%*	Retained to Com Eq	*6.0%*
70%	82%	119%	90%	91%	77%	78%	86%	77%	61%	*55%*	*54%*	All Div'ds to Net Prof	*50%*

CURRENT POSITION ($MILL.)	2007	2008	3/31/09
Cash Assets	6.7	13.9	5.3
Other	53.3	65.9	67.0
Current Assets	60.0	79.8	72.3
Accts Payable	36.7	41.8	38.0
Debt Due	2.7	42.8	54.9
Other	30.3	35.8	37.2
Current Liab.	69.7	123.2	130.1
Fix. Chg. Cov.	333%	398%	482%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '06-'08 to '12-'14
Revenues	2.0%	1.5%	5.5%
"Cash Flow"	2.0%	5.5%	6.5%
Earnings	--	7.0%	9.0%
Dividends	1.0%	0.5%	2.5%
Book Value	4.0%	6.5%	3.0%

Cal-endar	QUARTERLY REVENUES ($ mill.)E Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2006	65.2	81.1	107.8	80.6	334.7
2007	71.6	95.8	113.8	85.9	367.1
2008	72.9	105.6	131.7	100.1	410.3
2009	86.7	*115.3*	*140*	*108*	*450*
2010	*90.0*	*120*	*145*	*115*	*470*

Cal-endar	EARNINGS PER SHARE A Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2006	.04	.31	.68	.31	1.34
2007	.07	.37	.67	.39	1.50
2008	.01	.48	1.06	.35	1.90
2009	.12	*.54*	*1.05*	*.39*	*2.10*
2010	*.13*	*.56*	*1.09*	*.42*	*2.20*

Cal-endar	QUARTERLY DIVIDENDS PAID B ■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2005	.285	.285	.285	.285	1.14
2006	.2875	.2875	.2875	.2875	1.15
2007	.290	.290	.290	.290	1.16
2008	.293	.293	.293	.293	1.17
2009	.295	.295			

BUSINESS: California Water Service Group provides regulated and nonregulated water service to roughly 463,600 customers in 83 communities in California, Washington, New Mexico, and Hawaii. Main service areas: San Francisco Bay area, Sacramento Valley, Salinas Valley, San Joaquin Valley & parts of Los Angeles. Acquired Rio Grande Corp; West Hawaii Utilities (9/08). Revenue breakdown, '08: residential, 69%; business, 18%; public authorities, 5%; industrial, 5%; other, 3%. '08 reported depreciation rate: 2.4%. Has roughly 929 employees. Chairman: Robert W. Foy. President & CEO: Peter C. Nelson (4/09 Proxy). Inc.: Delaware. Address: 1720 North First Street, San Jose, California 95112-4598. Telephone: 408-367-8200. Internet: www.calwatergroup.com.

Recent changes on the regulatory front are already benefiting California Water Service Group. Late last year, the California Public Utilities Commission (CPUC), which oversees the actions of utilities in the Golden State to ensure fair business practices, implemented some guidelines proposed in the Water Action Plan that essentially create a more business-friendly landscape. The board established a water revenue adjustment mechanism (WRAM), implemented a modified cost-balancing account (MCBA) methodology, and introduced tiered rates. These moves ought to streamline the review process of general rate cases and remove many unexpected costs of doing business due to outside factors, such as weather, beyond the companies' control such. In its first full quarter with such initiatives in place, CWT posted earnings of $0.12 a share, far better than the penny earned last year. Revenues rose roughly 19% to $86.6 million, with 83% of the increase coming from rate increases.

Growth is likely to slow in the months ahead, however. Despite the more favorable regulatory climate, operating expenses are likely to continue escalating as deteriorating infrastructures and increasingly stringent EPA requirements result in higher maintenance costs. Meanwhile, the debt-riddled company is light on cash, and will probably need to look to outside financiers to make some of the necessary improvements. Thus, the increased interest expense and higher share count are likely to thwart earnings growth heading forward.

The stock has lost some appeal since our April review. It has slipped a notch for Timeliness and is now pegged to mirror the broad market for the coming six to 12 months. Its longer-term lure, meanwhile, remains below average, as the aforementioned financing costs are likely to limit shareholder gains out to 2012-2014.

It may pique the interest of conservative investors with a penchant for income, though. The company has a long-standing history of delivering steady dividend growth, which is an attractive attribute in times of economic volatility. WRAM and MCBA ought to make for more predictable earnings growth too.

Andre J. Costanza *July 24, 2009*

(A) Basic EPS. Excl. nonrecurring gain (loss): '00, (7¢); '01, 4¢; '02, 8¢. Next earnings report due early Aug.
(B) Dividends historically paid in mid-Feb., May, Aug., and Nov. ■ Div'd reinvestment plan available.
(C) Incl. deferred charges. In '08: $3.9 mill., $.19/sh.
(D) In millions, adjusted for split.
(E) Excludes non-reg. rev.

Company's Financial Strength	B++
Stock's Price Stability	80
Price Growth Persistence	70
Earnings Predictability	75

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AQUA AMERICA NYSE-WTR

RECENT PRICE **17.47** | P/E RATIO **20.6** (Trailing: 23.9 / Median: 25.0) | RELATIVE P/E RATIO **1.36** | DIV'D YLD **3.1%** | VALUE LINE

TIMELINESS 3 Lowered 6/26/09
SAFETY 3 Lowered 8/1/03
TECHNICAL 4 Raised 7/10/09
BETA .65 (1.00 = Market)

High:	11.5	11.5	12.0	14.8	15.0	16.8	18.5	29.2	29.8	26.6	22.0	21.5
Low:	7.2	7.6	6.3	9.4	9.6	11.8	14.2	17.5	20.1	18.9	12.2	16.1

Target Price Range 2012 | 2013 | 2014

2012-14 PROJECTIONS

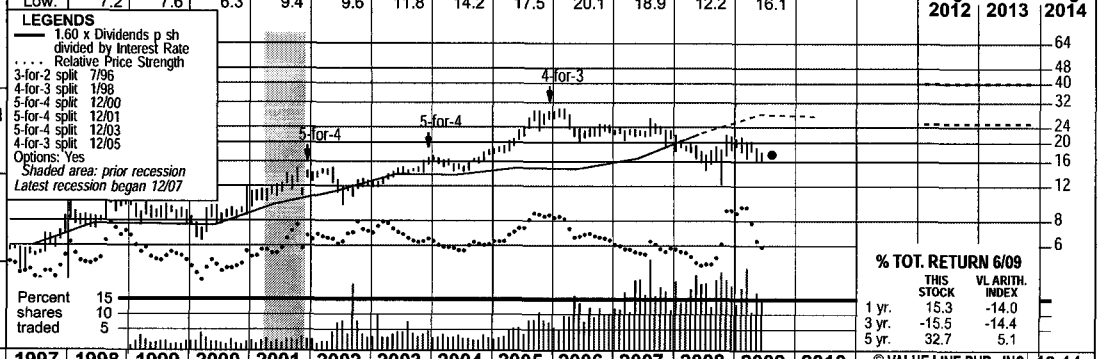
	Price	Gain	Ann'l Total Return
High	40	(+130%)	26%
Low	25	(+45%)	13%

Insider Decisions

	A	S	O	N	D	J	F	M	A
to Buy	0	0	0	0	0	0	0	0	0
Options	0	0	0	0	1	0	1	0	0
to Sell	0	0	0	0	1	0	0	0	0

Institutional Decisions

	3Q2008	4Q2008	1Q2009
to Buy	103	131	130
to Sell	108	131	134
Hld's(000)	62150	60996	63551



% TOT. RETURN 6/09

	THIS STOCK	VL ARITH. INDEX
1 yr.	15.3	-14.0
3 yr.	-15.5	-14.4
5 yr.	32.7	5.1

1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	© VALUE LINE PUB., INC.	12-14
1.70	1.82	1.84	1.86	2.02	2.09	2.41	2.46	2.70	2.85	2.97	3.48	3.85	4.03	4.52	4.63	5.00	5.30	Revenues per sh	6.50
.42	.42	.47	.50	.56	.61	.72	.76	.86	.94	.96	1.09	1.21	1.26	1.37	1.42	1.55	1.65	"Cash Flow" per sh	2.10
.24	.26	.29	.30	.34	.40	.42	.47	.51	.54	.57	.64	.71	.70	.71	.73	.85	.90	Earnings per sh A	1.25
.21	.21	.22	.23	.24	.26	.27	.28	.30	.32	.35	.37	.40	.44	.48	.51	.54	.56	Div'd Decl'd per sh B■	.65
.47	.46	.52	.48	.58	.82	.90	1.16	1.09	1.20	1.32	1.54	1.84	2.05	1.79	1.98	2.10	2.20	Cap'l Spending per sh	2.75
2.29	2.41	2.46	2.69	2.84	3.21	3.42	3.85	4.15	4.36	5.34	5.89	6.30	6.96	7.32	7.82	8.05	8.35	Book Value per sh	10.60
59.40	59.77	63.74	65.75	67.47	72.20	106.80	111.82	113.97	113.19	123.45	127.18	128.97	132.33	133.40	135.37	136.00	136.50	Common Shs Outst'g C	138.00
14.4	13.5	12.0	15.6	17.8	22.5	21.2	18.2	23.6	23.6	24.5	25.1	31.8	34.7	32.0	24.9	Bold figures are		Avg Ann'l P/E Ratio	25.0
.85	.89	.80	.98	1.03	1.17	1.21	1.18	1.21	1.29	1.40	1.33	1.69	1.87	1.70	1.50	Value Line		Relative P/E Ratio	1.65
5.9%	6.0%	6.2%	4.9%	3.9%	2.9%	3.0%	3.3%	2.5%	2.5%	2.5%	2.3%	1.8%	1.8%	2.1%	2.8%	estimates		Avg Ann'l Div'd Yield	2.0%

1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010		12-14
257.3	275.5	307.3	322.0	367.2	442.0	496.8	533.5	602.5	627.0	680	725	Revenues ($mill)	900
45.0	50.7	58.5	62.7	67.3	80.0	91.2	92.0	95.0	97.9	115	125	Net Profit ($mill)	170
38.4%	38.9%	39.3%	38.5%	39.3%	39.4%	38.4%	39.6%	38.9%	39.7%	39.0%	39.0%	Income Tax Rate	39.0%
--	--	--	--	--	--	--	--	2.9%	3.1%	3.5%	3.2%	AFUDC % to Net Profit	2.5%
52.9%	52.0%	52.2%	54.2%	51.4%	50.0%	52.0%	51.6%	55.4%	54.1%	54.0%	54.0%	Long-Term Debt Ratio	49.0%
46.7%	47.8%	47.7%	45.8%	48.6%	50.0%	48.0%	48.4%	44.6%	45.9%	46.0%	46.0%	Common Equity Ratio	51.0%
782.7	901.1	990.4	1076.2	1355.7	1497.3	1690.4	1904.4	2191.4	2306.6	2385	2470	Total Capital ($mill)	2865
1135.4	1251.4	1368.1	1490.8	1824.3	2069.8	2280.0	2506.0	2792.8	2997.4	3150	3300	Net Plant ($mill)	3600
7.6%	7.4%	7.8%	7.6%	6.4%	6.7%	6.9%	6.4%	5.9%	5.7%	6.5%	6.5%	Return on Total Cap'l	6.5%
12.2%	11.7%	12.3%	12.7%	10.2%	10.7%	11.2%	10.0%	9.7%	9.3%	10.5%	11.0%	Return on Shr. Equity	11.5%
12.3%	11.7%	12.4%	12.7%	10.2%	10.7%	11.2%	10.0%	9.7%	9.3%	10.5%	11.0%	Return on Com Equity	11.5%
4.3%	4.7%	5.1%	5.2%	4.2%	4.6%	4.9%	3.7%	3.2%	2.8%	4.0%	4.5%	Retained to Com Eq D	5.5%
65%	60%	59%	59%	59%	57%	56%	63%	67%	70%	64%	61%	All Div'ds to Net Prof	53%

CAPITAL STRUCTURE as of 3/31/09
Total Debt $1338.1 mill. **Due in 5 Yrs** $243.9 mill.
LT Debt $1226.2 mill. **LT Interest** $65.0 mill.
(LT interest earned: 3.4x; total interest coverage: 3.4x) (54% of Cap'l)

Pension Assets-12/08 $112.2 mill. **Oblig.** $204.7 mill.

Pfd Stock None
Common Stock 135,649,486 shares as of 4/24/09

MARKET CAP: $2.4 billion (Mid Cap)

CURRENT POSITION ($MILL.)	2007	2008	3/31/09
Cash Assets	14.5	14.9	16.7
Receivables	82.9	84.5	77.3
Inventory (AvgCst)	8.8	9.8	9.4
Other	9.3	11.8	11.3
Current Assets	115.5	121.0	114.7
Accts Payable	45.8	50.0	27.2
Debt Due	80.8	87.9	111.9
Other	56.6	55.3	52.9
Current Liab.	183.2	193.2	192.0
Fix. Chg. Cov.	323%	329%	325%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '06-'08 to '12-'14
Revenues	8.0%	9.0%	6.5%
"Cash Flow"	9.5%	8.0%	7.5%
Earnings	7.5%	5.5%	10.0%
Dividends	7.0%	8.0%	4.5%
Book Value	9.5%	10.0%	6.5%

Cal-endar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2006	117.9	131.7	147.0	136.9	533.5
2007	137.3	150.6	165.5	149.1	602.5
2008	139.3	151.0	177.1	159.6	627.0
2009	154.5	167	185	173.5	680
2010	168	181	195	181	725

Cal-endar	EARNINGS PER SHARE A Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2006	.13	.17	.21	.19	.70
2007	.13	.17	.22	.19	.71
2008	.11	.17	.26	.19	.73
2009	.14	.20	.28	.23	.85
2010	.15	.22	.30	.23	.90

Cal-endar	QUARTERLY DIVIDENDS PAID B■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2005	.098	.098	.098	.107	.40
2006	.107	.107	.115	.115	.44
2007	.115	.115	.125	.125	.48
2008	.125	.125	.125	.135	.51
2009	.135	.135			

BUSINESS: Aqua America, Inc. is the holding company for water and wastewater utilities that serve approximately three million residents in Pennsylvania, Ohio, North Carolina, Illinois, Texas, New Jersey, Florida, Indiana, and five other states. Divested three of four non-water businesses in '91; telemarketing group in '93; and others. Acquired AquaSource, 7/03; Consumers Water, 4/99; and others. Water supply revenues '08: residential, 60%; commercial, 14%; industrial & other, 26%. Officers and directors own 1.3% of the common stock (4/09 Proxy). Chairman & Chief Executive Officer: Nicholas DeBenedictis. Incorporated: Pennsylvania. Address: 762 West Lancaster Avenue, Bryn Mawr, Pennsylvania 19010. Telephone: 610-525-1400. Internet: www.aquaamerica.com.

Aqua America has posted good results thus far in 2009. That can be attributed partly to the completion of key rate cases over the past year. An expanded customer base, made possible by acquisitions, has also helped the water provider (although the slowdown in the housing industry and the sale of two operations in 2008 have provided a bit of an offset). At this juncture, share net stands to climb around 16%, to $0.85, this year. Further expansion in operating margins ought to enable the bottom line to advance another 6%, to $0.90 a share, in 2010.

The company remains an active participant in the ongoing consolidation within the water-service industry. The cost and technical expertise required for compliance with quality standards for drinking water have risen to the point where a number of the many small water suppliers in the United States have been struggling financially. This has resulted in a buyer's market whereby a well-capitalized company, like Aqua America, can enlarge its customer base at relatively low cost. The latest additions to its portfolio include Clarendon Water Company, serving 1,200 residents in Warren County, Pennsylvania; the water and wastewater assets of W.P. Water Company and W.P. Sanitary Company, which serve roughly 550 customers, combined, in Wyoming County and Luzerne County, Pennsylvania; and the Kratzerville Municipal Authority water system, serving roughly 400 residents in Snyder County, Pennsylvania. Even excluding future acquisitions (because of the many uncertainties associated with that strategy), we think Aqua America is capable of registering healthy, annual bottom-line gains over the 2012-2014 horizon.

The stock's risk-adjusted, total return possibilities are decent, reflecting the steady (albeit unspectacular) dividend growth we envision for the company going forward. Note, also, the high Price Stability rating and lower-than-market Beta coefficient. Conservative investors may want to take a look here.

But for the coming six to 12 months, these shares are ranked to perform only in line with the broader market averages.

Frederick L. Harris, III *July 24, 2009*

(A) Primary shares outstanding through '96; diluted thereafter. Excl. nonrec. gains (losses): '99, (11¢); '00, 2¢; '01, 2¢; '02, 5¢; '03, 4¢. Excl. gain from disc. operations: '96, 2¢. Next earnings report due early Aug. (B) Dividends historically paid in early March, June, Sept. & Dec. ■ Div'd. reinvestment plan available (5% discount). (C) In millions, adjusted for stock splits.

Company's Financial Strength	B+
Stock's Price Stability	95
Price Growth Persistence	75
Earnings Predictability	100

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CONN. WATER SERVICES NDQ--CTWS

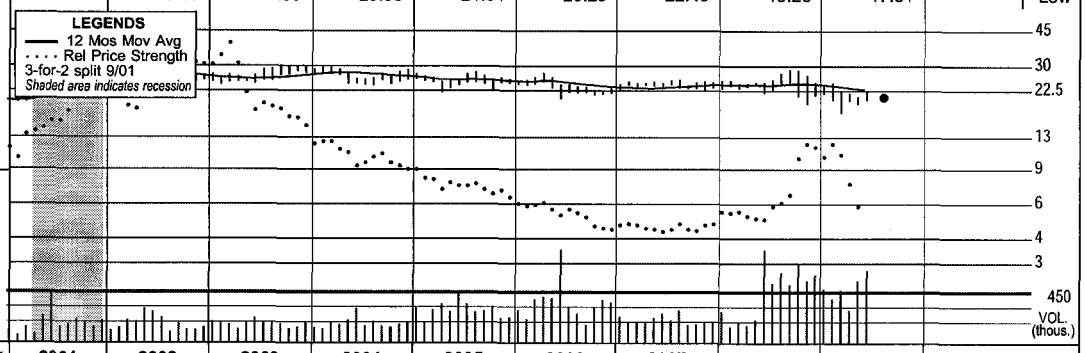
RECENT PRICE	TRAILING P/E RATIO	RELATIVE P/E RATIO	DIV'D YLD	
20.87	20.1	1.46	4.3%	VALUE LINE

RANKS

PERFORMANCE	3	Average
Technical	3	Average
SAFETY	2	Above Average
BETA .85	(1.00 = Market)	

Financial Strength	B+
Price Stability	90
Price Growth Persistence	35
Earnings Predictability	80

	2001	2002	2003	2004	2005	2006	2007	2008	2009
High	32.21	31.09	30.41	29.76	28.17	27.71	25.61	28.95	24.76
Low	19.50	20.35	24.00	23.83	21.91	20.29	22.40	19.26	17.31



© VALUE LINE PUBLISHING, INC.	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010/2011
SALES PER SH	5.93	5.77	5.91	6.04	5.81	5.68	7.05	7.24	--	
"CASH FLOW" PER SH	1.78	1.78	1.89	1.91	1.62	1.52	1.90	1.95	--	
EARNINGS PER SH	1.13	1.12	1.15	1.16	.88	.81	1.05	1.11	***1.06*** [A,B]	***1.11*** [C]***/NA***
DIV'DS DECL'D PER SH	.80	.81	.83	.84	.85	.86	.87	.88	--	
CAP'L SPENDING PER SH	1.86	1.98	1.49	1.58	1.96	1.96	2.24	2.44	--	
BOOK VALUE PER SH	9.25	10.06	10.46	10.94	11.52	11.60	11.95	12.23	--	
COMMON SHS OUTST'G (MILL)	7.65	7.94	7.97	8.04	8.17	8.27	8.38	8.46	--	
AVG ANN'L P/E RATIO	21.5	24.3	23.5	22.9	28.6	29.0	23.0	22.2	***19.7***	***18.8/NA***
RELATIVE P/E RATIO	1.10	1.33	1.34	1.21	1.51	1.57	1.22	1.34	--	
AVG ANN'L DIV'D YIELD	3.3%	3.0%	3.0%	3.1%	3.4%	3.6%	3.6%	3.6%	--	
SALES ($MILL)	45.4	45.8	47.1	48.5	47.5	46.9	59.0	61.3	--	***Bold figures are consensus earnings estimates and, using the recent prices, P/E ratios.***
OPERATING MARGIN	56.1%	57.7%	52.1%	51.0%	48.3%	43.7%	40.8%	49.0%	--	
DEPRECIATION ($MILL)	5.0	5.4	5.9	6.0	6.1	5.9	7.2	7.1	--	
NET PROFIT ($MILL)	8.7	8.8	9.2	9.4	7.2	6.7	8.8	9.4	--	
INCOME TAX RATE	36.1%	33.8%	17.9%	22.9%	--	23.5%	32.4%	27.2%	--	
NET PROFIT MARGIN	19.1%	19.2%	19.5%	19.4%	15.1%	14.3%	14.9%	15.4%	--	
WORKING CAP'L ($MILL)	d3.3	d5.1	d3.9	d.7	13.0	1.2	8.1	d3.3	--	
LONG-TERM DEBT ($MILL)	64.0	64.8	64.8	66.4	77.4	77.3	92.3	92.2	--	
SHR. EQUITY ($MILL)	71.6	80.7	84.2	88.7	94.9	96.7	100.9	104.2	--	
RETURN ON TOTAL CAP'L	7.9%	7.4%	7.5%	7.0%	5.0%	4.9%	5.5%	5.9%	--	
RETURN ON SHR. EQUITY	12.1%	10.9%	10.9%	10.6%	7.5%	6.9%	8.7%	9.0%	--	
RETAINED TO COM EQ	3.6%	3.1%	3.2%	3.1%	.3%	NMF	1.6%	1.9%	--	
ALL DIV'DS TO NET PROF	71%	72%	71%	71%	95%	105%	82%	79%	--	

[A]*No. of analysts changing earn. est. in last 11 days: 0 up, 0 down, consensus 5-year earnings growth not available.* [B]*Based upon 2 analysts' estimates.* [C]*Based upon 2 analysts' estimates.*

ANNUAL RATES

of change (per share)	5 Yrs.	1 Yr.
Sales	2.5%	2.5%
"Cash Flow"	-0.5%	2.5%
Earnings	-2.5%	5.5%
Dividends	1.5%	1.0%
Book Value	3.5%	2.5%

Fiscal Year	QUARTERLY SALES ($mill.) 1Q	2Q	3Q	4Q	Full Year
12/31/07	13.2	14.4	17.0	14.4	59.0
12/31/08	13.6	16.0	17.0	14.7	61.3
12/31/09	13.4				
12/31/10					

Fiscal Year	EARNINGS PER SHARE 1Q	2Q	3Q	4Q	Full Year
12/31/06	.21	.12	.45	.03	.81
12/31/07	.18	.22	.46	.19	1.05
12/31/08	.20	.35	.34	.22	1.11
12/31/09	.13	***.29***	***.43***	***.21***	
12/31/10					

Cal-endar	QUARTERLY DIVIDENDS PAID 1Q	2Q	3Q	4Q	Full Year
2006	.213	.213	.215	.215	.86
2007	.215	.215	.218	.218	.87
2008	.218	.218	.222	.222	.88
2009	.222	.222			

INSTITUTIONAL DECISIONS

	3Q'08	4Q'08	1Q'09
to Buy	38	28	31
to Sell	17	27	24
Hld's(000)	2880	2677	2678

ASSETS ($mill.)	2007	2008	3/31/09
Cash Assets	8.6	.7	.8
Receivables	11.1	12.0	10.9
Inventory (Avg cost)	1.0	1.1	1.2
Other	2.3	2.0	3.7
Current Assets	23.0	15.8	16.6
Property, Plant & Equip, at cost	392.5	418.1	--
Accum Depreciation	108.2	115.8	--
Net Property	284.3	302.3	310.2
Other	53.5	54.3	51.2
Total Assets	360.8	372.4	378.0
LIABILITIES ($mill.)			
Accts Payable	6.0	5.7	5.3
Debt Due	6.5	12.1	16.2
Other	2.4	1.3	1.2
Current Liab	14.9	19.1	22.7

LONG-TERM DEBT AND EQUITY as of 3/31/09

Total Debt $108.4 mill. **Due in 5 Yrs.** NA
LT Debt $92.2 mill.
Including Cap. Leases NA (47% of Cap'l)

Leases, Uncapitalized Annual rentals NA

Pension Liability $16.7 mill. in '08 vs. None in '07

Pfd Stock $.8 mill. **Pfd Div'd Paid** NMF

Common Stock 8,505,395 shares (53% of Cap'l)

INDUSTRY: Water Utility

BUSINESS: Connecticut Water Service, Inc. primarily operates as a water utility company in Connecticut. It operates through three segments: Water Activities, Real Estate Transactions, and Services and Rentals. The Water Activities segment supplies public drinking water to its customers. The Real Estate Transactions segment involves in the sale of its limited excess real estate holdings. The Services and Rentals segment provides contracted services to water and wastewater utilities and other clients, as well as leases certain of its properties to third parties. This segment's services include contract operations of water and wastewater facilities; Linebacker, its service line protection plan for public drinking water customers; and provision of bulk deliveries of emergency drinking water to businesses and residences via tanker truck. As of July 8, it provided water to to more than 88,000 customers, or about 300,000 people, in 54 towns throughout Connecticut. Has 226 employees. Chairman, C.E.O. & President: Eric W. Thornburg. Inc.: CT. Address: 93 West Main Street, Clinton, CT 06413. Tel.: (860) 669-8636. Internet: http://www.ctwater.com. *M.W.*

July 24, 2009

TOTAL SHAREHOLDER RETURN

Dividends plus appreciation as of 6/30/2009

3 Mos.	6 Mos.	1 Yr.	3 Yrs.	5 Yrs.
8.12%	-6.12%	0.69%	3.52%	0.33%

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MIDDLESEX WATER NDQ--MSEX

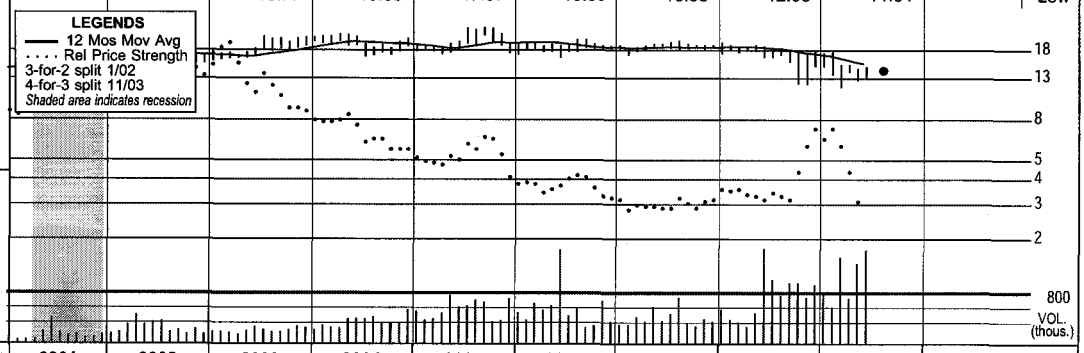
RECENT PRICE	TRAILING P/E RATIO	RELATIVE P/E RATIO	DIV'D YLD	
14.24	17.0	1.23	5.0%	VALUE LINE

RANKS

PERFORMANCE	3	Average
Technical	3	Average
SAFETY	2	Above Average
BETA .80	(1.00 = Market)	

Financial Strength	B+
Price Stability	95
Price Growth Persistence	45
Earnings Predictability	90

	2001	2002	2003	2004	2005	2006	2007	2008	2009
High	18.73	20.04	21.23	21.81	23.47	20.50	20.24	19.83	17.71
Low	14.69	13.73	15.77	16.65	17.07	16.50	16.93	12.05	11.64



© VALUE LINE PUBLISHING, INC.	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010/2011
SALES PER SH	5.87	5.98	6.12	6.25	6.44	6.16	6.50	6.79	--	
"CASH FLOW" PER SH	1.18	1.20	1.15	1.28	1.33	1.33	1.49	1.53	--	
EARNINGS PER SH	.66	.73	.61	.73	.71	.82	.87	.89	*.76* A,B	*.78* C/NA
DIV'DS DECL'D PER SH	.62	.63	.65	.66	.67	.68	.69	.70	--	
CAP'L SPENDING PER SH	1.25	1.59	1.87	2.54	2.18	2.31	1.66	2.12	--	
BOOK VALUE PER SH	7.11	7.39	7.60	8.38	8.60	9.82	10.05	10.28	--	
COMMON SHS OUTST'G (MILL)	10.17	10.36	10.48	11.36	11.58	13.17	13.25	13.40	--	
AVG ANN'L P/E RATIO	24.6	23.5	30.0	26.4	27.4	22.7	21.6	19.8	*18.7*	*18.3/NA*
RELATIVE P/E RATIO	1.26	1.28	1.71	1.39	1.45	1.23	1.15	1.19	--	
AVG ANN'L DIV'D YIELD	3.8%	3.7%	3.5%	3.4%	3.5%	3.7%	3.7%	4.0%	--	
SALES ($MILL)	59.6	61.9	64.1	71.0	74.6	81.1	86.1	91.0	--	*Bold figures are consensus earnings estimates and, using the recent prices, P/E ratios.*
OPERATING MARGIN	47.2%	47.1%	44.0%	44.4%	44.4%	47.4%	47.0%	46.9%	--	
DEPRECIATION ($MILL)	5.3	5.0	5.6	6.4	7.2	7.8	8.2	8.5	--	
NET PROFIT ($MILL)	7.0	7.8	6.6	8.4	8.5	10.0	11.8	12.2	--	
INCOME TAX RATE	34.8%	33.3%	32.8%	31.1%	27.6%	33.4%	32.6%	33.2%	--	
NET PROFIT MARGIN	11.7%	12.5%	10.3%	11.9%	11.4%	12.4%	13.8%	13.4%	--	
WORKING CAP'L ($MILL)	d.9	d9.3	d13.3	d11.8	d4.5	2.8	d9.6	d40.9	--	
LONG-TERM DEBT ($MILL)	88.1	87.5	97.4	115.3	128.2	130.7	131.6	118.2	--	
SHR. EQUITY ($MILL)	76.4	80.6	83.7	99.2	103.6	133.3	137.1	141.2	--	
RETURN ON TOTAL CAP'L	5.6%	6.0%	5.0%	5.1%	5.0%	5.1%	5.6%	5.8%	--	
RETURN ON SHR. EQUITY	9.1%	9.6%	7.9%	8.5%	8.2%	7.5%	8.6%	8.6%	--	
RETAINED TO COM EQ	.5%	1.3%	NMF	.9%	.5%	1.2%	1.8%	1.9%	--	
ALL DIV'DS TO NET PROF	94%	87%	106%	90%	94%	84%	79%	78%	--	

[A]No. of analysts changing earn. est. in last 11 days: 0 up, 0 down, consensus 5-year earnings growth 7.0% per year. [B]Based upon 2 analysts' estimates. [C]Based upon 2 analysts' estimates.

ANNUAL RATES

of change (per share)	5 Yrs.	1 Yr.
Sales	1.5%	4.5%
"Cash Flow"	4.5%	2.5%
Earnings	5.5%	2.5%
Dividends	2.0%	1.5%
Book Value	6.5%	2.5%

Fiscal Year	QUARTERLY SALES ($mill.) 1Q	2Q	3Q	4Q	Full Year
12/31/07	19.0	21.8	24.1	21.2	86.1
12/31/08	20.8	23.0	25.7	21.5	91.0
12/31/09	20.6				
12/31/10					

Fiscal Year	EARNINGS PER SHARE 1Q	2Q	3Q	4Q	Full Year
12/31/06	.15	.25	.28	.14	.82
12/31/07	.13	.24	.31	.19	.87
12/31/08	.15	.26	.35	.13	.89
12/31/09	.10	*.24*	*.31*	*.12*	
12/31/10					

Cal-endar	QUARTERLY DIVIDENDS PAID 1Q	2Q	3Q	4Q	Full Year
2006	.17	.17	.17	.173	.68
2007	.173	.173	.173	.175	.69
2008	.175	.175	.175	.178	.70
2009	.178	.178			

INSTITUTIONAL DECISIONS

	3Q'08	4Q'08	1Q'09
to Buy	36	35	41
to Sell	30	24	27
Hld's(000)	5083	4997	4505

ASSETS ($mill.)	2007	2008	3/31/09
Cash Assets	2.0	3.3	3.2
Receivables	12.8	14.3	13.3
Inventory (Avg cost)	1.2	1.5	1.5
Other	1.4	1.5	1.0
Current Assets	17.4	20.6	19.0
Property, Plant & Equip, at cost	398.6	436.8	--
Accum Depreciation	64.7	70.5	--
Net Property	333.9	366.3	371.5
Other	41.4	53.1	52.9
Total Assets	392.7	440.0	443.4
LIABILITIES ($mill.)			
Accts Payable	6.5	5.7	5.0
Debt Due	9.0	43.9	40.3
Other	11.5	11.9	12.7
Current Liab	27.0	61.5	58.0

LONG-TERM DEBT AND EQUITY as of 3/31/09

Total Debt $164.7 mill. **Due in 5 Yrs.** NA
LT Debt $124.4 mill.
Including Cap. Leases NA (47% of Cap'l)

Leases, Uncapitalized Annual rentals NA

Pension Liability $25.5 mill. in '08 vs. $13.3 mill. in '07

Pfd Stock None **Pfd Div'd Paid** None

Common Stock 13,425,000 shares (53% of Cap'l)

INDUSTRY: Water Utility

BUSINESS: Middlesex Water Company engages in the ownership and operation of regulated water utility systems in New Jersey (NJ) and Delaware, and a regulated wastewater utility in NJ. It offers contract operations services and a service line maintenance program through its nonregulated subsidiary, Utility Service Affiliates, Inc. Its water utility system treats, stores, and distributes water for residential, commercial, industrial, and fire prevention purposes. It also provides water treatment and pumping services to the Township of East Brunswick. Its other NJ subsidiaries offer water and wastewater services to residents in Southampton Township. Its Delaware subsidiaries provide water services to retail customers in New Castle, Kent, and Sussex counties. In July, it was approved to implement a Purchased Water Adjustment Clause, which is a pass-through charge that enables the company to recover the increased unit cost of raw or finished water purchased from external sources. Has 269 employees. Chairman: J. Richard Tompkins. Address: 1500 Ronson Rd, P.O. BOX 1500, Iselin, NJ 08830. Tel.: 732-634-1500. Internet: http://www.middlesexwater.com. *M.W.*

July 24, 2009

TOTAL SHAREHOLDER RETURN

Dividends plus appreciation as of 6/30/2009

3 Mos.	6 Mos.	1 Yr.	3 Yrs.	5 Yrs.
1.69%	-14.10%	-8.88%	-14.84%	-10.85%

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SJW CORP. NYSE--SJW

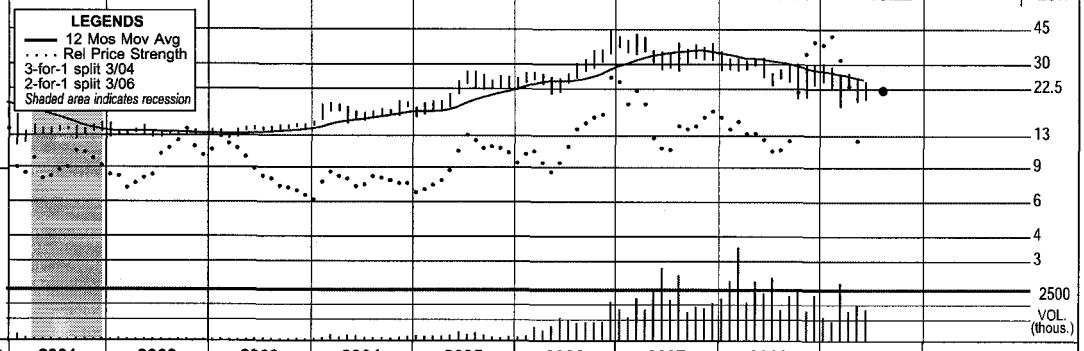
RECENT PRICE	TRAILING P/E RATIO	RELATIVE P/E RATIO	DIV'D YLD	
22.12	24.0	1.75	3.0%	VALUE LINE

RANKS

PERFORMANCE	4	Below Average
Technical	4	Below Average
SAFETY	3	Average
BETA 1.00		(1.00 = Market)

Financial Strength	B+
Price Stability	65
Price Growth Persistence	75
Earnings Predictability	90

17.83	15.07	14.95	19.64	27.80	45.33	43.00	35.11	30.44	High
11.58	12.67	12.57	14.60	16.07	21.16	27.65	20.05	18.22	Low



© VALUE LINE PUBLISHING, INC.	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010/2011
SALES PER SH	7.45	7.97	8.20	9.14	9.86	10.35	11.25	12.12	--	
"CASH FLOW" PER SH	1.49	1.55	1.75	1.89	2.21	2.38	2.30	2.44	--	
EARNINGS PER SH	.77	.78	.91	.87	1.12	1.19	1.04	1.08	*.99* A,B	*1.31* C/NA
DIV'DS DECL'D PER SH	.43	.46	.49	.51	.53	.57	.61	.65	--	
CAP'L SPENDING PER SH	2.63	2.06	3.41	2.31	2.83	3.87	6.62	3.79	--	
BOOK VALUE PER SH	8.17	8.40	9.11	10.11	10.72	12.48	12.90	13.99	--	
COMMON SHS OUTST'G (MILL)	18.27	18.27	18.27	18.27	18.27	18.28	18.36	18.18	--	
AVG ANN'L P/E RATIO	18.5	17.3	15.4	19.6	19.7	23.5	33.4	26.2	*22.3*	*16.9/NA*
RELATIVE P/E RATIO	.95	.94	.88	1.04	1.04	1.27	1.77	1.58	--	
AVG ANN'L DIV'D YIELD	3.0%	3.4%	3.5%	3.0%	2.4%	2.0%	1.7%	2.3%	--	
SALES ($MILL)	136.1	145.7	149.7	166.9	180.1	189.2	206.6	220.3	--	*Bold figures are consensus earnings estimates and, using the recent prices, P/E ratios.*
OPERATING MARGIN	64.4%	63.7%	56.0%	56.4%	55.9%	57.0%	41.8%	42.4%	--	
DEPRECIATION ($MILL)	13.2	14.0	15.2	18.5	19.7	21.3	22.9	24.0	--	
NET PROFIT ($MILL)	14.0	14.2	16.7	16.0	20.7	22.2	19.3	20.2	--	
INCOME TAX RATE	34.5%	40.4%	36.2%	42.1%	41.6%	40.8%	39.4%	39.5%	--	
NET PROFIT MARGIN	10.3%	9.8%	11.2%	9.6%	11.5%	11.7%	9.4%	9.2%	--	
WORKING CAP'L ($MILL)	d3.8	d4.9	12.0	13.0	10.8	22.2	d1.4	d11.3	--	
LONG-TERM DEBT ($MILL)	110.0	110.0	139.6	143.6	145.3	163.6	216.3	216.6	--	
SHR. EQUITY ($MILL)	149.4	153.5	166.4	184.7	195.9	228.2	236.9	254.3	--	
RETURN ON TOTAL CAP'L	6.7%	6.9%	6.9%	6.5%	7.6%	7.0%	5.7%	5.8%	--	
RETURN ON SHR. EQUITY	9.4%	9.3%	10.0%	8.7%	10.6%	9.7%	8.2%	8.0%	--	
RETAINED TO COM EQ	4.1%	3.8%	4.7%	3.6%	5.6%	5.2%	3.5%	3.3%	--	
ALL DIV'DS TO NET PROF	56%	59%	53%	58%	47%	46%	57%	59%	--	

A No. of analysts changing earn. est. in last 11 days: 0 up, 0 down, consensus 5-year earnings growth 10.0% per year. B Based upon 2 analysts' estimates. C Based upon 2 analysts' estimates.

ANNUAL RATES

of change (per share)	5 Yrs.	1 Yr.
Sales	7.5%	7.5%
"Cash Flow"	8.5%	6.0%
Earnings	6.0%	4.0%
Dividends	5.5%	6.5%
Book Value	9.0%	8.5%

Fiscal Year	QUARTERLY SALES ($mill.) 1Q	2Q	3Q	4Q	Full Year
12/31/07	39.0	55.1	64.9	47.6	206.6
12/31/08	41.3	60.0	69.5	49.5	220.3
12/31/09	40.0				
12/31/10					

Fiscal Year	EARNINGS PER SHARE 1Q	2Q	3Q	4Q	Full Year
12/31/06	.14	.35	.48	.22	1.19
12/31/07	.12	.29	.43	.20	1.04
12/31/08	.15	.34	.44	.15	1.08
12/31/09	d.01	*.36*	*.44*	*.18*	
12/31/10					

Cal-endar	QUARTERLY DIVIDENDS PAID 1Q	2Q	3Q	4Q	Full Year
2006	.141	.141	.141	.141	.56
2007	.151	.151	.151	.151	.60
2008	.161	.161	.161	.161	.64
2009	.165	.165			

INSTITUTIONAL DECISIONS

	3Q'08	4Q'08	1Q'09
to Buy	35	34	45
to Sell	36	39	32
Hld's(000)	8399	8286	8505

ASSETS ($mill.)	2007	2008	3/31/09
Cash Assets	2.4	3.4	2.4
Receivables	23.0	24.5	21.7
Inventory	.8	.9	1.0
Other	5.4	3.2	4.3
Current Assets	31.6	32.0	29.4
Property, Plant & Equip, at cost	904.3	958.7	--
Accum Depreciation	258.8	274.5	--
Net Property	645.5	684.2	699.6
Other	90.2	134.7	125.4
Total Assets	767.3	850.9	854.4
LIABILITIES ($mill.)			
Accts Payable	9.3	5.8	7.7
Debt Due	5.6	19.1	17.4
Other	18.1	18.4	15.6
Current Liab	33.0	43.3	40.7

LONG-TERM DEBT AND EQUITY as of 3/31/09

Total Debt $243.8 mill. **Due in 5 Yrs.** NA
LT Debt $226.4 mill.
Including Cap. Leases NA (48% of Cap'l)
Leases, Uncapitalized Annual rentals NA

Pension Liability $42.3 mill. in '08 vs. $23.4 mill. in '07

Pfd Stock None **Pfd Div'd Paid** None

Common Stock 18,475,597 shares (52% of Cap'l)

INDUSTRY: Water Utility

BUSINESS: SJW Corporation, through its subsidiaries, engages in the production, purchase, storage, purification, distribution, and retail sale of water. The company offers nonregulated water-related services, including water system operations, cash remittances, and maintenance contract services. SJW also owns undeveloped land; a 70% limited partnership interest in 444 West Santa Clara Street, L.P.; and operates commercial buildings in Arizona, California, Connecticut, Florida, Tennessee, and Texas. As of December 31, 2008, SJW provided water service to approximately 226,000 connections that served a population of approximately one million people in the San Jose area. It also provides water service to approximately 8,700 connections that serve approximately 36,000 residents in a service area in the region between San Antonio and Austin, Texas. Has 379 employees. Chairman: Charles J. Toeniskoetter. Inc.: CA. Address: 110 W. Taylor Street, San Jose, CA 95110. Tel.: (408) 279-7800. Internet: http://www.sjwater.com.

M.W.

July 24, 2009

TOTAL SHAREHOLDER RETURN

Dividends plus appreciation as of 6/30/2009

3 Mos.	6 Mos.	1 Yr.	3 Yrs.	5 Yrs.
-10.04%	-23.14%	-11.75%	-4.83%	50.09%

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EXHIBIT
R-12
ADMITTED

Johnson Utilities
Market Betas

Exhibit
Schedule D-4.11
Witness: Bourassa

Line No.		Company	
1		Company	
2	1.	American States	1.00
3	2.	Aqua America	0.95
4	3.	California Water	1.10
5	4.	Connecticut Water	0.80
6	5.	Middlesex	0.90
7	6.	SJW Corp.	1.10
8		Average	**0.98**
9			
10	Source:		
11	Value Line Investment Analyzer Data for February 2008		
12			
13			
14			
15			
16			

RUCO
Updated Market Betas

Line No.		Company	
1		Company	
2	1.	American States	0.80
3	2.	Aqua America	0.65
4	3.	California Water	0.80
5	4.	Connecticut Water	0.85
6	5.	Middlesex	0.80
7	6.	SJW Corp.	1.00
8		Average	**0.82**
9			
10	Source:		
11	Value Line Investment Analyzer Data for July 24, 2009		
12			
13			
14			
15			
16			

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10

Estimating the Cost of Capital

To value a company using enterprise DCF, we discount free cash flow by the weighted average cost of capital (WACC). The weighted average cost of capital represents the opportunity cost that investors face for investing their funds in one particular business instead of others with similar risk.

The most important principle underlying successful implementation of the cost of capital is consistency between the components of WACC and free cash flow. Since free cash flow is the cash flow available to all financial investors (debt, equity, and hybrid securities), the company's WACC must include the required return for each investor. In addition, the duration and risk of the financial securities used to estimate the WACC must match that of the free cash flow being discounted. To assure consistency, the cost of capital must meet several criteria:

- It must include the opportunity costs from *all* sources of capital—debt, equity, and so on—since free cash flow is available to all investors, who expect compensation for the risks they take.
- It must weight each security's required return by its target market-based weight, not by its historical book value.
- It must be computed after corporate taxes (since free cash flow is calculated in after-tax terms). Any financing-related tax shields not included in free cash flow must be incorporated into the cost of capital or valued separately (as done in the adjusted present value).
- It must be denominated in the same currency as free cash flow.
- It must be denominated in nominal terms when cash flows are stated in nominal terms.

For most companies, discounting free cash flow at the WACC is a simple, accurate, and robust method of corporate valuation. If, however, the

company's target capital structure is expected to change significantly, for instance in a leveraged buyout (LBO), a constant WACC can overstate (or understate) the impact of interest tax shields. In this situation, discount free cash flow at the unlevered cost of equity, described later in this chapter, and value tax shields and other financing effects separately (as described in Chapter 5).

To determine the weighted average cost of capital, calculate its three components: the cost of equity, the after-tax cost of debt, and the company's target capital structure. Since *none* of the variables are directly observable, we employ various models, assumptions, and approximations to estimate each component.

In this chapter, we begin by defining the components of WACC and introducing the assumptions underlying these metrics. The next three sections detail how to estimate the cost of equity, cost of debt, and target capital structure, respectively. The chapter concludes with a discussion of WACC estimation when the company employs a complex capital structure, using hybrid securities such as convertible debt.

WEIGHTED AVERAGE COST OF CAPITAL

In its simplest form, the weighted average cost of capital is the market-based weighted average of the after-tax cost of debt and cost of equity:

$$\text{WACC} = \frac{D}{V} k_d (1 - T_m) + \frac{E}{V} k_e$$

where D/V = Target level of debt to enterprise value using market-based (not book) values

E/V = Target level of equity to enterprise value using market-based values

k_d = Cost of debt

k_e = Cost of equity

T_m = Company's marginal income tax rate

For companies with other securities, such as preferred stock, additional terms must be added to the cost of capital, representing each security's expected rate of return and percentage of total enterprise value.

The cost of capital does not include expected returns of operating liabilities, such as accounts payable. Required compensation for funds from customers, suppliers, and employees is included in operating expenses, such as cost of goods sold, so it is already incorporated in free cash flow. Including operating liabilities in the WACC would incorrectly double-count their cost of financing.

Exhibit 10.1 Home Depot: Weighted Average Cost of Capital

percent

Source of capital	Proportion of total capital	Cost of capital	Marginal tax rate	After-tax opportunity cost	Contribution to weighted average
Debt	8.3	4.7	38.2	2.9	0.2
Equity	91.7	9.9		9.9	9.1
WACC	100.0				9.3

To determine the cost of equity, we rely on the capital asset pricing model (CAPM), one of many theoretical models that convert a stock's risk into expected return.[1] The CAPM uses three variables to determine a stock's expected return: the risk-free rate, the market risk premium (i.e., the expected return of the market over risk-free bonds), and the stock's beta. In the CAPM, beta measures a stock's co-movement with the market and represents the stock's ability to further diversity the market portfolio. Stocks with high betas must have excess returns that exceed the market risk premium; the converse is true for low-beta stocks.

To approximate the cost of debt for an investment-grade firm, use the company's yield to maturity on its long-term debt. For companies with publicly traded debt, calculate yield to maturity directly from the bond's price and promised cash flows. For companies with illiquid debt, use the company's debt rating to estimate the yield to maturity. Since free cash flow is measured without interest tax shields, measure the cost of debt on an after-tax basis.

Finally, the after-tax cost of debt and cost of equity should be weighted using target levels of debt to value and equity to value. For mature companies, the target capital structure is often approximated by the company's current debt-to-value ratio, using market values of debt and equity. As will be explained later, you should not use book values.

In Exhibit 10.1, we present the WACC calculation for Home Depot. The company's cost of equity was determined using the CAPM, which led to a required equity return of 9.9 percent. To apply the CAPM, we used the December 2003 10-year U.S. government bond rate of 4.3 percent, a market risk premium of 4.5 percent, and a relevered industry beta of 1.23. As a

[1] Depending on the context, we use the terms *expected return, required return,* and *opportunity cost* interchangeably. Expected return refers to an investor's expected return on a security, given its level of risk. Financial managers refer to a "required return" because the return on an internal project must exceed the expected return on comparable investments. Otherwise, the investor would generate better returns outside the company. This is why the term *opportunity cost* also is quite common.

proxy for Home Depot's pretax cost of debt, we used the yield to maturity on AA-rated debt (4.7 percent). In Chapter 7, we estimated Home Depot's marginal tax rate at 38.2 percent, so its after-tax cost of debt equals 2.9 percent. Finally, we assume Home Depot will maintain a current debt-to-value ratio of 8.3 percent going forward.[2] Adding the weighted contributions from debt and equity, we arrive at a WACC equal to 9.3 percent.

We discuss each component of the weighted average cost of capital next.

ESTIMATING THE COST OF EQUITY

To estimate the cost of equity, we must determine the expected rate of return of the company's stock. Since expected rates of return are unobservable, we rely on asset-pricing models that translate risk into expected return.

The most common asset-pricing model is the capital asset pricing model (CAPM). Other models include the Fama-French three-factor model and the arbitrage pricing theory (APT). The three models differ primarily in how they define risk. The CAPM defines a stock's risk as its sensitivity to the stock market,[3] whereas the Fama-French three-factor model defines risk as a stock's sensitivity to three portfolios: the stock market, a portfolio based on firm size, and a portfolio based on book-to-market ratios. The CAPM is the most common method for estimating expected returns, so we begin our analysis with that model.

Capital Asset Pricing Model

Because the CAPM is discussed at length in modern finance textbooks,[4] we will not delve into the theory here. Instead, we focus on best practices for implementation.

The CAPM postulates that the expected rate of return on any security equals the risk-free rate plus the security's beta times the market risk premium:

$$E(R_i) = r_f + \beta_i\,[E(R_m) - r_f]$$

[2] Net debt equals reported debt plus the present value of operating leases, less excess cash. Although net debt to value at 8.3 percent is probably overly conservative, there is no evidence that Home Depot plans to increase its debt-to-value ratio.

[3] In theory, the market portfolio represents the value-weighted portfolio of all assets, both traded (such as stocks) and untraded (such as a person's skill set). Throughout this chapter, we use a well-diversified stock portfolio, such as the S&P 500 or the Morgan Stanley Capital International World Index, as a proxy for the market portfolio.

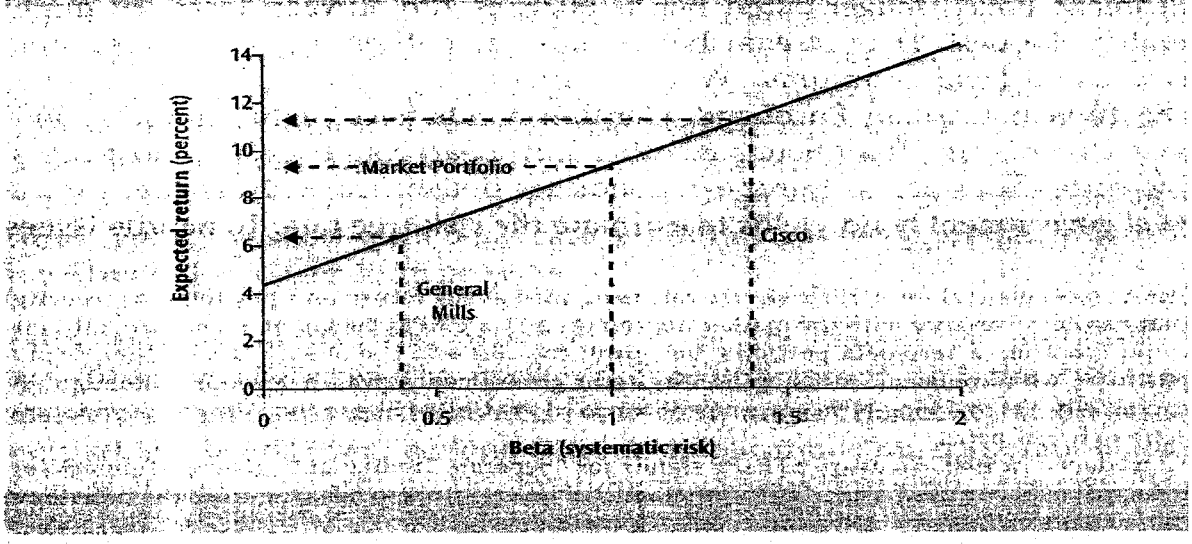
[4] For example, Richard Brealey and Stewart Myers, *Principles of Corporate Finance* (New York: McGraw-Hill, 2002); and Thomas Copeland, Fred Weston, and Kuldeep Shastri, *Financial Theory and Corporate Policy* (Boston: Addison-Wesley, 2005).

where $E(R_i)$ = Security i's expected return
r_f = Risk-free rate
βi = Stock's sensitivity to the market
$E(R_m)$ = Expected return of the market

In the CAPM, the risk-free rate and market risk premium (defined as the difference between $E(R_m)$ and r_f) are common to all companies; only beta varies across companies. Beta represents a stock's incremental risk to a diversified investor, where risk is defined by how much the stock covaries with the aggregate stock market. Consider General Mills, a cereal manufacturer, and Cisco, a maker of network routers. Consumer cereal purchases are relatively independent of the stock market's value, so the beta for General Mills is low; we estimated it at 0.4. Based on a risk-free rate of 4.3 percent and a market risk premium of 5 percent, the cost of equity for General Mills is estimated at 6.3 percent (see Exhibit 10.2). In contrast, technology companies tend to have high betas. When the economy struggles, the stock market drops, and companies stop purchasing new technology. Thus, Cisco's value is highly correlated with the market's value, and its beta is high. Based on a beta of 1.4, Cisco's expected rate of return is 11.3 percent. Since General Mills offers greater protection against market downturns than Cisco, investors are willing to pay a premium for the stock, driving down expected returns. Conversely, since Cisco offers little diversification to the market portfolio, the company must earn higher returns to entice investors.

Although the CAPM is based on solid theory (the 1990 Nobel Prize in Economics was awarded to the model's primary author, William Sharpe),

Exhibit 10.2 The Capital Assets Pricing Model (CAPM)



the model provides little guidance for implementation. For instance, when valuing a company, which risk-free rate should you use? How do you estimate the market risk premium and beta? In the following section, we address these issues. Our general conclusions are as follows:

- To estimate the risk-free rate in developed economies, use highly liquid, long-term government securities, such as the 10-year zero-coupon strip.
- Based on historical averages and forward-looking estimates, the appropriate market risk premium is currently between 4.5 and 5.5 percent.
- To estimate a company's beta, use an industry-derived unlevered beta levered to the company's target capital structure.

Estimating the risk-free rate To estimate the risk-free rate, we look to government default-free bonds.[5] Government bonds come in many maturities. For instance, the U.S. Treasury issues bonds with maturities ranging from one month to 20 years. Since different maturities can generate different yields to maturity, which maturity should you use?

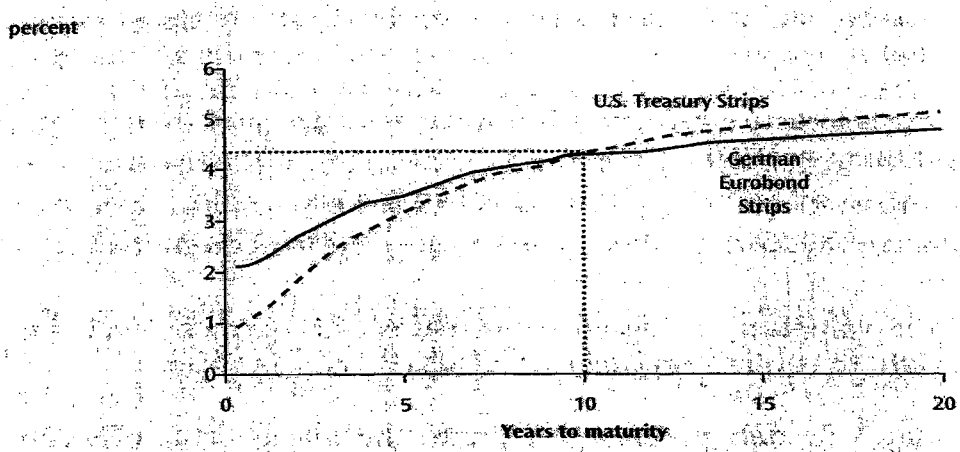
Ideally, each cash flow should be discounted using a government bond with a similar maturity. For instance, a cash flow generated 10 years from today should be discounted by a cost of capital derived from a 10-year zero-coupon government bond. We prefer zero-coupon government strips because long-term government bonds make interim interest payments,[6] causing their effective maturity to be shorter than their stated maturity.

In practice, few people discount each cash flow using a matched maturity. For simplicity, most choose a single yield to maturity from one government bond that best matches the entire cash flow stream being valued. For U.S.-based corporate valuation, the most common proxy is the 10-year government bond (longer-dated bonds such as the 30-year Treasury might match the cash flow stream better, but their illiquidity can cause stale prices and yield premiums). When valuing European companies, we prefer the 10-year German Eurobond. German bonds have higher liquidity and lower credit risk than bonds of other European countries. (In most cases, the differences across European bonds are insignificant.) Note that we use *local* government bond yields to estimate the risk-free rate. To handle issues

[5] In its most general form, the risk-free rate is defined as the return on a portfolio (or security) that has no covariance with the market (represented by a CAPM beta of 0). Hypothetically, one could construct a zero-beta portfolio, but given the cost and complexity of designing such a portfolio, we recommend focusing on long-term government *default-free* bonds. Although not necessarily *risk free*, long-term government bonds in the United States and Western Europe have extremely low betas.

[6] Introduced in 1985, Treasury STRIPS stands for "Separate Trading of Registered Interest and Principal of Securities." The STRIPS program enables investors to hold and trade the individual components of Treasury notes and bonds as separate securities.

Exhibit 10.3 Government Strip Yields, December 2003



Source: Bloomberg.

like inflation consistently, we must ensure that cash flows and the cost of capital are denominated in the same currency.

In Exhibit 10.3, we plot the yield to maturity for various U.S. and German zero-coupon strips versus their years to maturity (a relation commonly known as the yield curve or term structure of interest rates). As of December 2003, the 10-year U.S. and German treasury strips were both trading at 4.3 percent.

If you are valuing a company or long-term project, do *not* use a short-term Treasury bill to determine the risk-free rate. When finance textbooks calculate the CAPM, they typically use a short-term Treasury rate because they are estimating expected returns for the next *month*. As can be seen in Exhibit 10.3, short-term Treasury bills (near the y-axis) traded well below 10-year bonds (0.9 percent versus 4.3 percent) in December 2003. Investors typically demand higher interest rates from long-term bonds when they believe short-term interest rates will rise over time. Using the yield from a short-term bond as the risk-free rate in a valuation fails to recognize that a bondholder must reinvest at higher rates when the short-term bond matures. Thus, the short-term bond rate misestimates the opportunity cost of investment for longer-term projects.

Estimating the market risk premium Sizing the market risk premium—the difference between the market's expected return and the risk-free rate—is arguably the most debated issue in finance. The ability of stocks to outperform bonds over the long run has implications for corporate valuation, portfolio composition, and retirement savings. But similar to a stock's expected return, the expected return on the market is unobservable. And

since no single model for estimating the market risk premium has gained universal acceptance, we present the results of various models.

Methods to estimate the market risk premium fall in three general categories:

1. Estimating the future risk premium by measuring and extrapolating historical excess returns.
2. Using regression analysis to link current market variables, such as the aggregate dividend-to-price ratio, to project the expected market risk premium.
3. Using DCF valuation, along with estimates of return on investment and growth, to reverse engineer the market's cost of capital.

None of today's models precisely estimate the market risk premium. Still, based on evidence from each of these models, we believe the market risk premium as of year-end 2003 was just under 5 percent.

Historical market risk premium Investors, being risk-averse, demand a premium for holding stocks rather than bonds. If the level of risk aversion hasn't changed over the last 75 years, then historical excess returns are a reasonable proxy for future premiums (assuming measurement issues, such as survivorship bias, aren't overly problematic). To best measure the risk premium using historical data, follow these guidelines:

- Calculate the premium relative to long-term government bonds.
- Use the longest period possible.
- Use an arithmetic average of longer-dated intervals (such as five years).
- Adjust the result for econometric issues, such as survivorship bias.

Use long-term government bonds When calculating the market risk premium, compare historical market returns with the return on 10-year government bonds. As discussed in the previous section, long-term government bonds better match the duration of a company's cash flows than do short-term bonds.

Use the longest period possible When using historical observations to predict future results, the issue is what length of history to examine. If the market risk premium is stable, a longer history will reduce estimation error. Alternatively, if the premium changes and estimation error is small, a shorter period is better. To determine the appropriate historical period, we consider any trends in the market risk premium compared with the noise associated with short-term estimates.

To test for the presence of a long-term trend, we regress the U.S. market risk premium versus time. Over the last 100 years, no statistically significant trend is observable.[7] Based on regression results, the average excess return has fallen by 3.3 basis points a year, but this result is well below its standard error (leading to a low t-statistic). In addition, premiums calculated over subperiods, even as long as 10 years, are extremely noisy. For instance, U.S. stocks outperformed bonds by 18 percent in the 1950s but offered no premium in the 1970s. Given the lack of any discernible trend and the significant volatility of shorter periods, you should use the longest time series possible.

Use arithmetic average of longer-dated intervals When reporting market risk premiums, most data providers report an annual number, such as 6.2 percent per year. But how do they convert a century of data into an annual number? And is an annualized number even important?

Annual returns can be calculated using either an arithmetic average or a geometric average. An arithmetic (simple) average sums each year's observed premium and divides by the number of observations:

$$\text{Arithmetic Average} = \frac{1}{T}\sum_{t=1}^{T}\frac{1+R_m(t)}{1+r_f(t)} - 1$$

A geometric average compounds each year's excess return and takes the root of the resulting product:

$$\text{Geometric Average} = \left(\prod_{t=1}^{T}\frac{1+R_m(t)}{1+r_f(t)}\right)^{1/T} - 1$$

The choice of averaging methodology will affect the results. For instance, between 1903 and 2002, U.S. stocks outperformed long-term government bonds by 6.2 percent per year when averaged arithmetically. Using a geometric average, the number drops to 4.4 percent. This difference is not random; arithmetic averages always exceed geometric averages when returns are volatile.

So which averaging method on historical data best estimates the *expected* future rate of return? To estimate the mean (expectation) for any random variable, well-accepted statistical principles dictate that the arithmetic average is the best unbiased estimator. Therefore, to determine a security's

[7] Some authors, such as Lewellen, argue that the market risk premium does change over time—and can be measured using financial ratios, such as the dividend yield. We address these models separately. J. Lewellen, "Predicting Returns with Financial Ratios," *Journal of Financial Economics*, 74(2) (2004): 209–235.

expected return for one period, the best unbiased predictor is the arithmetic average of many one-period returns. A one-period risk premium, however, can't value a company with many years of cash flow. Instead, long-dated cash flows must be discounted using a compounded rate of return. But when compounded, the arithmetic average will be *biased* upward (too high).

This bias is caused by estimation error and autocorrelation in returns. Let's examine the effect of estimation error first. To estimate the mean of a distribution, statistical theory instructs you to average the observations. In a finite sample, the sample average (R_A) will equal the true mean (μ) plus an error term (ε):

$$R_A = \mu + \varepsilon$$

Sometimes the error term is positive, so the sample average overestimates the true mean, and at other times, the error term is negative. But the average error term equals 0, so the sample average is an unbiased estimator of the true mean.

To value a cash flow *beyond* one period, we must determine the discount factor by raising R_A to a given power. For instance, to estimate a two-period discount rate, we calculate R_A squared. Squaring R_A leads to the following equation:

$$R_A = (\mu + \varepsilon)^2 = \mu^2 + \varepsilon^2 + 2\mu\varepsilon$$

Since the true mean, μ, is a constant and the expectation of ε is 0, the expectation of $2\mu\varepsilon$ equals 0. The expectation of ε^2, however, is not 0, but a positive number (the square of any nonzero number is greater than zero). Therefore, $R_A{}^2$ will be greater than μ^2 (the true mean squared), and a compounded sample average will be too high.

The compounded arithmetic average will also be biased upward when returns are negatively autocorrelated (meaning low returns follow high returns and high returns follow low returns). Although there is disagreement in the academic community, the general consensus is that the aggregate stock market exhibits negative autocorrelation.[8] In this case, the arithmetic mean is biased upward.

[8] Empirical evidence presented by James Poterba, Lawrence Summers, and others indicates that a significant long-term negative autocorrelation exists in stock returns. See J. Poterba and L. Summers, "Mean Reversion in Stock Prices," *Journal of Financial Economics* (October 1988): 27–60. However, subsequent studies by Matthew Richardson and others challenge the statistical significance of earlier studies. See M. Richardson, "Temporary Components of Stock Prices: A Skeptic's View," *Journal of Business and Economic Statistics*, 11 (1993): 199–207.

Exhibit 10.4 Expected Value When Returns Exhibit Negative Autocorrelation

Potential return	Unconditional probability
20%	50%
(10%)	50%

Scenario	Current value	Return in period one	Return in period two	Future value	Expected value when returns are independent		Expected value when returns are negatively autocorrelated	
1	100	1.2	1.2	144	25%	36.0	15%	21.6
2	100	1.2	0.9	108	25%	27.0	35%	37.8
3	100	0.9	1.2	108	25%	27.0	35%	37.8
4	100	0.9	0.9	81	25%	20.3	15%	12.2
					100%	110.3	100%	109.4

To better understand the effect of negative autocorrelation, consider a portfolio that can either grow by 20 percent or fall by 10 percent in a given period (see Exhibit 10.4). Since both returns are equally likely, the one period average return equals 5 percent. In addition, if returns are independently and identically distributed, after two periods there is:

1. A 25 percent probability that an initial investment of $100 will grow to $144
2. A 50 percent probability (two equally probable scenarios) that $100 will grow to $108
3. A 25 percent probability that $100 will shrink to $81

The expected value in two periods equals $110.3, the same as if $100 had grown consistently at the *arithmetic* average of 5 percent for two periods. But if the four scenarios are not equally likely, the expected value in two periods will not equal $110.3. For instance, if there is a 70 percent probability that low returns will be followed by high returns (or vice versa), the expected value in two periods is only $109.4. In this case, compounding the arithmetic mean will lead to an upward bias in expected return.

To correct for the bias caused by estimation error and negative autocorrelation in returns, we have two choices. First, we can calculate multiperiod holding returns directly from the data, rather than compound single-period averages. Using this method, a cash flow received in five years will be discounted by the average five-year market risk premium, not by the annual

Exhibit 10.5 Cumulative Returns for Various Intervals, 1903–2002

percent

		Cumulative returns			Annualized returns	
Arithmetic mean of	Number of observations	U.S. stocks	U.S. government bonds	U.S. excess return	U.S. excess returns	Blume estimator
1-year holding periods	100	11.3	5.1	6.2	6.2	6.2
2-year holding periods	50	24.1	10.9	12.6	6.1	6.1
4-year holding periods	25	49.9	23.1	23.0	5.8	6.0
5-year holding periods	20	68.2	29.5	32.3	5.8	5.9
10-year holding periods	10	165.6	72.1	70.1	5.5	5.6

Source: Ibbotson Associates, McKinsey analysis.

market risk premium compounded five times.[9] In Exhibit 10.5, we present arithmetic averages for holding periods of 1, 2, 4, 5, and 10 years. To avoid placing too little weight on either early or recent observations, we use nonoverlapping returns. The downside of this method is that 5- and 10-year holding periods have very few observations. As shown in the exhibit, the annualized excess return trends downward from 6.2 percent to 5.5 percent as the length of the holding period increases.

Alternatively, researchers have used simulation to show that an estimator proposed by Marshall Blume best adjusts for problems caused by estimation error and autocorrelation of returns:[10]

$$R = \frac{T-N}{T-1} R_A + \frac{N-1}{T-1} R_G$$

where T = Number of historical observations
N = Forecast period
R_A = Arithmetic average
R_G = Geometric average

In the last column of Exhibit 10.5, we report Blume's estimate for the market risk premium. Blume's method generates the same downward-trending estimate of the market risk premium (albeit more smoothly than the raw holding period averages). Based on both estimation techniques, it appears 5.5 percent is a reasonable approximation for *historical* excess returns.

[9] Jay Ritter writes, "There is no theoretical reason why one year is the appropriate holding period. People are used to thinking of interest rates as a rate per year, so reporting annualized numbers makes it easy for people to focus on the numbers. But I can think of no reason other than convenience for the use of annual returns." J. Ritter, "The Biggest Mistakes We Teach," *Journal of Financial Research*, 25 (2002): 159–168.

[10] D. C. Indro and W. Y. Lee, "Biases in Arithmetic and Geometric Averages Premia," *Financial Management*, 26(4) (Winter 1997); M. E. Blume, "Unbiased Estimators of Long Run Expected Rates of Return," *Journal of the American Statistical Association*, 69(347) (September 1974).

Survivorship bias Other statistical difficulties exist with historical risk premiums. According to one argument,[11] even properly measured historical premiums can't predict future returns, because the observable sample will include only countries with strong historical returns. Statisticians refer to this phenomenon as survivorship bias. The U.S. market outperformed all others during the twentieth century, averaging 4.3 percent in real terms (deflating by the wholesale price index) versus a median of 0.8 percent for other countries.[12] A concurring study[13] notes that the –100 percent returns from China, Russia, and Poland are too often ignored in discussions of stock market performance.

Since it is unlikely that the U.S. stock market will replicate its performance over the next century, we adjust downward the historical arithmetic average market risk premium. Using data from Philippe Jorion and William Goetzmann, we find that between 1926 and 1996, the U.S. arithmetic annual return exceeded the median return on a set of 11 countries with continuous histories dating to the 1920s by 1.9 percent in real terms, or 1.4 percent in nominal terms. If we subtract a 1 percent to 2 percent survivorship bias from the long-term arithmetic average of 5.5 percent, the difference implies the future range of the U.S. market risk premium should be 3.5 to 4.5 percent.

Market risk premium regressions Although we find no long-term trend in the historical risk premium, many argue that the market risk premium is predictable using observable variables, such as the aggregate dividend-to-price ratio, the aggregate book-to-market ratio, or the aggregate ratio of earnings to price.

The use of current financial ratios to estimate the expected return on stocks is well documented and dates back to Charles Dow in the 1920s. The concept has been tested by many authors.[14] To predict the market risk premium using financial ratios, excess market returns are regressed against a financial ratio, such as the market's aggregate dividend-to-price ratio:

$$R_m - r_f = \alpha + \beta \ ln\left(\frac{\text{Dividend}}{\text{Price}}\right) + \varepsilon$$

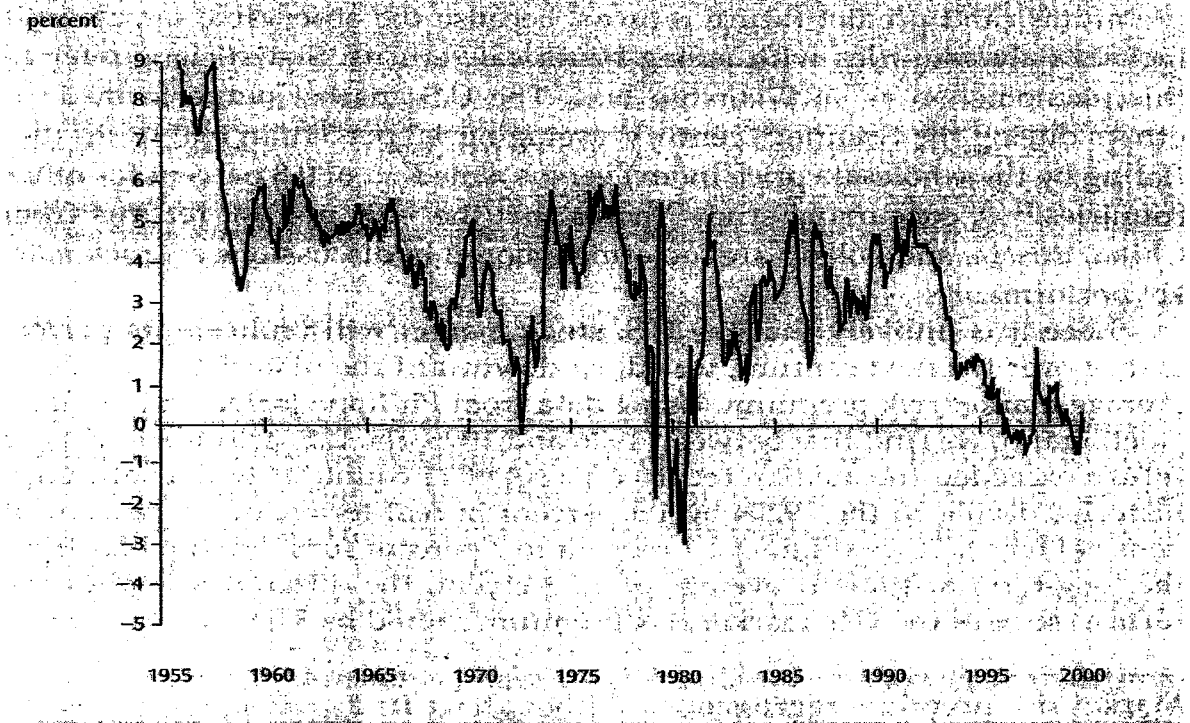
[11] S. Brown, W. Goetzmann, and S. Ross, "Survivorship Bias," *Journal of Finance* (July 1995): 853–873.

[12] P. Jorion and W. Goetzmann, "Global Stock Markets in the Twentieth Century," *Journal of Finance*, 54(3) (June 1999): 953–974.

[13] Elroy Dimson, Paul Marsh, and Michael Staunton, *Triumph of the Optimists* (Princeton: Princeton University Press, 2002).

[14] E. Fama and K. French, "Dividend Yields and Expected Stock Returns," *Journal of Financial Economics*, 22(1) (1988): 3–25; R. F. Stambaugh, "Predictive Regressions," *Journal of Financial Economics*, 54(3) (1999): 375–421; and J. Lewellen, "Predicting Returns with Financial Ratios," *Journal of Financial Economics*, 74(2) (2004): 209–235.

Exhibit 10.6 Expected Market Risk Premium Based on Dividend Yield



Source: Lewellen (2004); Goyal and Welch (2003); McKinsey analysis.

Using advanced regression techniques unavailable to earlier authors, Jonathan Lewellen found that dividend yields *do* predict future market returns. But as shown in Exhibit 10.6, the model has a major drawback: the risk premium prediction can be negative (as it was in the late 1990s). Other authors question the explanatory power of financial ratios, arguing that a financial analyst relying solely on data available at the time would have done better using unconditional historical averages (as we did in the last section) in place of more sophisticated regression techniques.[15]

Forward-looking models A stock's price equals the present value of its dividends. Assuming dividends are expected to grow at a constant rate, we can rearrange the growing perpetuity to solve for the market's expected return:

$$P = \frac{\text{DIV}}{k_e - g} \quad \text{converts to} \quad k_e = \frac{\text{DIV}}{P} + g$$

In the previous section, we reviewed regression models that compare market returns (k_e) to the dividend-price ratio (DIV/P). Using a simple re-

[15] A. Goyal and I. Welch, "Predicting the Equity Premium with Dividend Ratios," *Management Science*, 4, 9(5) (2003): 639–654.

gression, however, ignores valuable information and oversimplifies a few market realities. First, the dividend-price yield itself depends on the expected growth in dividends (g), which simple regressions ignore (the regression's intercept is determined by the data). Second, dividends are only one form of corporate payout. Companies can use free cash flow to repurchase shares or hold excess cash for significant periods of time; consider Microsoft, which accumulated more than $50 billion in liquid securities before paying its first dividend.

Using the principles of discounted cash flow, along with estimates of growth, various authors have attempted to reverse engineer the market risk premium. Two studies used analyst forecasts to estimate growth,[16] but many argue that analyst forecasts focus on the short term and are severely upward biased. Fama and French use long-term dividend growth rates as a proxy for future growth, but they focus on dividend yields, not on available cash flow.[17] Alternatively, our own research has focused on *all* cash flow available to equity holders, as measured by a modified version of the key value driver formula (detailed in Chapter 3):[18]

$$k_e = \frac{\text{Earnings}\left(1 - \frac{g}{\text{ROE}}\right)}{P} + g \text{ such that } \text{CF}_e = \text{Earnings}\left(1 - \frac{g}{\text{ROE}}\right)$$

Based on this formula, we used the long-run return on equity (13 percent) and the long-run growth in real GDP (3.5 percent) to convert a given year's S&P 500 median earnings-to-price ratio into the cost of equity.[19]

Exhibit 10.7 on page 306 plots the nominal and real expected market returns between 1962 and 2002. The results are striking. After stripping out inflation, the expected market return (*not* excess return) is remarkably constant, averaging 7.0 percent. For the United Kingdom, the real market return is slightly more volatile, averaging 6.0 percent. Based on these results, we estimate the current market risk premium by subtracting the current real long-term risk-free rate from the real equity return of 7.0 percent (for U.S. markets). At year-end 2003, the yield on a U.S. Treasury inflation-protected security (TIPS) equaled 2.1 percent. Subtracting 2.1

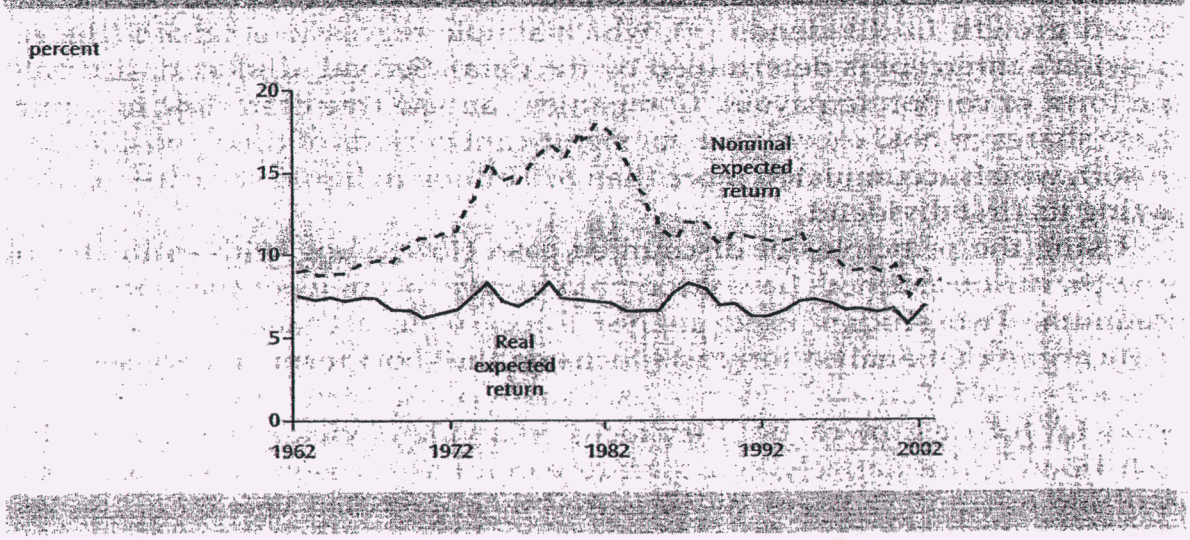
[16] J. Claus and J. Thomas, "Equity Premia as Low as Three Percent? Evidence from Analysts' Earnings Forecasts for Domestic and International Stocks," *Journal of Finance*, 56(5) (October 2001): 1629–1666; and W. R. Gebhardt, C. M. C. Lee, and B. Swaminathan, "Toward an Implied Cost of Capital," *Journal of Accounting Research*, 39(1) (2001): 135–176.

[17] Eugene F. Fama and Kenneth R. French, "The Equity Premium," Center for Research in Security Prices Working Paper No. 522 (April 2001).

[18] Marc H. Goedhart, Timothy M. Koller, and Zane D. Williams, "The Real Cost of Equity," *McKinsey on Finance* (Autumn 2002): 11–15.

[19] Using a two-stage model (i.e., short-term ROE and growth rate projections, followed by long-term estimates) did not change the results in a meaningful way.

Exhibit 10.7 Real and Nominal Expected Market Returns



percent from 7.0 percent gives an estimate of the risk premium at just under 5 percent.

Although many in the finance profession disagree about how to measure the market risk premium, we believe 4.5 to 5.5 percent is an appropriate range. Historical estimates found in most textbooks (and locked in the mind of many), which often report numbers near 8 percent, are too high for valuation purposes because they compare the market risk premium versus short-term bonds, use only 75 years of data, and are biased by the historical strength of the U.S. market.

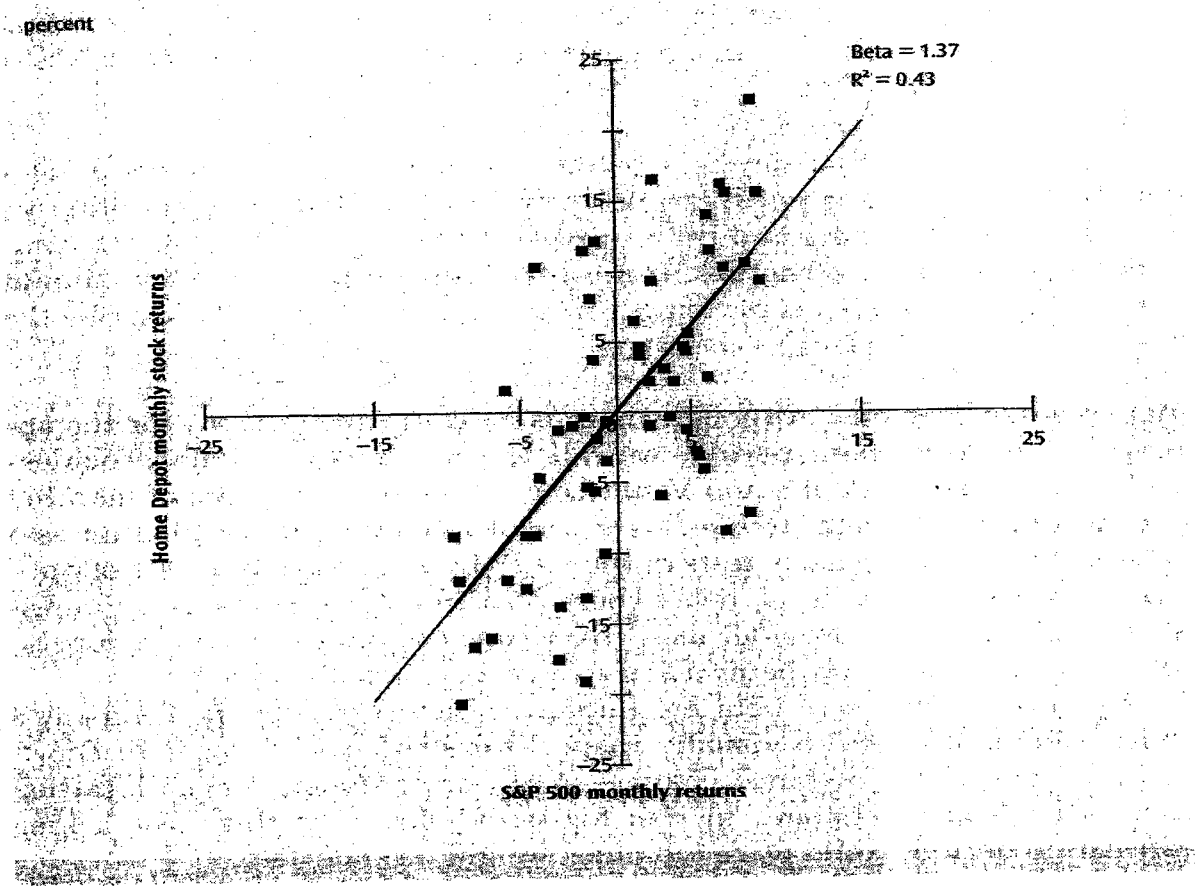
Estimating beta According to the CAPM, a stock's expected return is driven by beta, which measures how much the stock and market move together. Since beta cannot be observed directly, we must *estimate* its value. To do this, we first measure a raw beta using regression and then improve the estimate by using industry comparables and smoothing techniques. The most common regression used to estimate a company's raw beta is the market model:

$$R_i = \alpha + \beta R_m + \varepsilon$$

In the market model, the stock's return (not price) is regressed against the market's return.

In Exhibit 10.8, we plot 60 months of Home Depot stock returns versus S&P 500 returns between 1999 and 2003. The solid line represents the "best

Exhibit 10.8 Home Depot: Stock Returns versus S&P 500 Returns, 1999–2003



fit" relation between Home Depot's stock returns and the stock market. The slope of this line is commonly denoted as beta. For Home Depot, the company's raw beta (slope) is 1.37. Since typical betas range between 0 and 2, with the value-weighted average beta equaling 1, this raw result implies Home Depot is riskier than the typical stock.

But why did we choose to measure Home Depot's returns in months? Why did we use five years of data? And how precise is this measurement? The CAPM is a one-period model and provides little guidance on implementation. Yet, based on certain market characteristics and a variety of empirical tests, we reach several conclusions:

- Raw regressions should use at least 60 data points (e.g., five years of monthly returns). Rolling betas should be graphed to examine any systematic changes in a stock's risk.

- Raw regressions should be based on monthly returns. Using shorter return periods, such as daily and weekly returns, leads to systematic biases.
- Company stock returns should be regressed against a value-weighted, well-diversified portfolio, such as the S&P 500 or MSCI World Index.

Next, recalling that raw regressions provide only estimates of a company's true beta, we improve estimates of a company's beta by deriving an unlevered industry beta and then relevering the industry beta to the company's target capital structure. If no direct competitors exist, you should adjust raw company betas by using a smoothing technique. We describe the basis for our conclusions next.

Measurement period Although there is no common standard for the appropriate measurement period, we follow the practice of data providers such as Standard & Poor's and Value Line, which use five years of monthly data to determine beta. Using five years of monthly data originated as a rule of thumb during early tests of the CAPM.[20] In subsequent tests of optimal measurement periods, researchers confirmed five years as appropriate.[21] Not every data provider uses five years. The data service Bloomberg, for instance, creates raw betas using two years of weekly data.

Because estimates of beta are imprecise, however, plot the company's rolling 60-month beta to visually inspect for structural changes or short-term deviations. For instance, changes in corporate strategy or capital structure often lead to changes in risk for stockholders. In this case, a long estimation period would place too much weight on stale data.

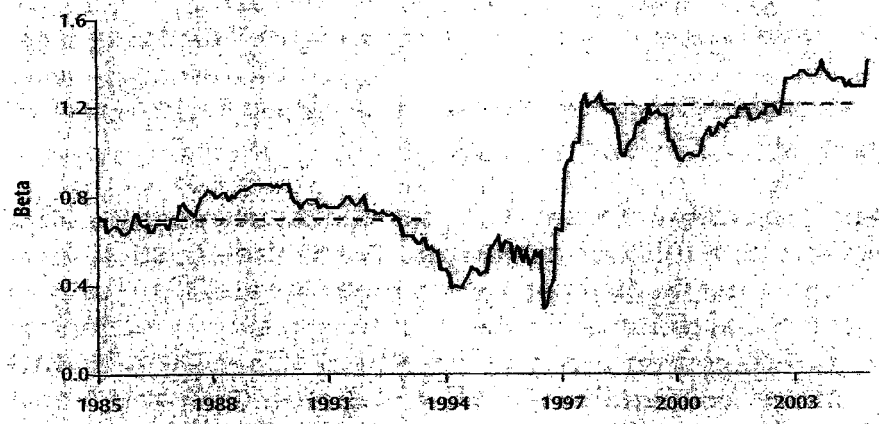
In Exhibit 10.9, we graph IBM's raw beta between 1985 and 2004. As the exhibit shows, IBM's beta hovered near 0.7 in the 1980s but rose dramatically in the mid-1990s and now measures near 1.3. This rise in beta occurred during a period of great change for IBM, as the company moved from hardware (such as mainframes) to services (such as consulting). Subsequently, using a long estimation period (for instance, 10 years) would underestimate the risk of the company's new business model.

Frequency of measurement In 1980, Nobel laureate Robert Merton argued that estimates of covariance, and subsequently beta, improve as returns are

[20] F. Black, M. Jensen, and M. Scholes, "The Capital Asset Pricing Model: Some Empirical Tests," in *Studies in Theory of Capital Markets*, ed. M. Jensen (New York: Praeger, 1972).

[21] Alexander and Chervany tested the accuracy of estimation periods from one to nine years. They found four-year and six-year estimation periods performed best but were statistically indistinguishable. G. Alexander and N. Chervany, "On the Estimation and Stability of Beta," *Journal of Financial and Quantitative Analysis*, 15 (1980): 123–137.

Exhibit 10.9 IBM: Market Beta, 1985–2004



measured more frequently.[22] Implementing Merton's theory, however, has proven elusive. Empirical problems make high-frequency beta estimation unreliable. Therefore, we recommend using monthly data.

Using daily or even weekly returns is especially problematic when the stock is rarely traded. An illiquid stock will have many reported returns equal to zero, not because the stock's value is constant but because it hasn't traded (only the last trade is recorded). Consequently, estimates of beta on illiquid stocks are biased downward. Using longer-dated returns, such as monthly returns, lessens this effect. One proposal for stocks that trade infrequently even on a monthly basis is to sum lagged betas.[23] In lagged-beta models, a stock's return is simultaneously regressed on concurrent market returns and market returns from the prior period. The two betas from the regression are then summed.

A second problem with using high-frequency data is the bid/ask bounce. Periodic stock prices are recorded at the last trade, and the recorded price depends on whether the last trade was a purchase (using the ask price) or a sale (using the bid price). A stock whose intrinsic value remains unchanged will therefore "bounce" between the bid and ask price, causing distortions in beta estimation. Using longer-period returns dampens this distortion.

[22] R. Merton, "On Estimating the Expected Return on the Market," *Journal of Financial Economics*, 8 (1980): 323–361.

[23] M. Scholes and J. T. Williams, "Estimating Betas from Nonsynchronous Data," *Journal of Financial Economics*, 5 (1977): 309–327. See also E. Dimson, "Risk Measurement When Shares Are Subject to Infrequent Trading," *Journal of Financial Economics*, 7 (1979): 197–226.

Over the past few years, promising research on high-frequency beta estimation has emerged, spawned by improvements in computing power and data collection. One study used five-minute returns to measure beta, and the estimation method produced more accurate measurements than the standard 60-month rolling window.[24] Since that research was limited to highly liquid stocks, however, we continue to focus on longer-dated intervals in practice.

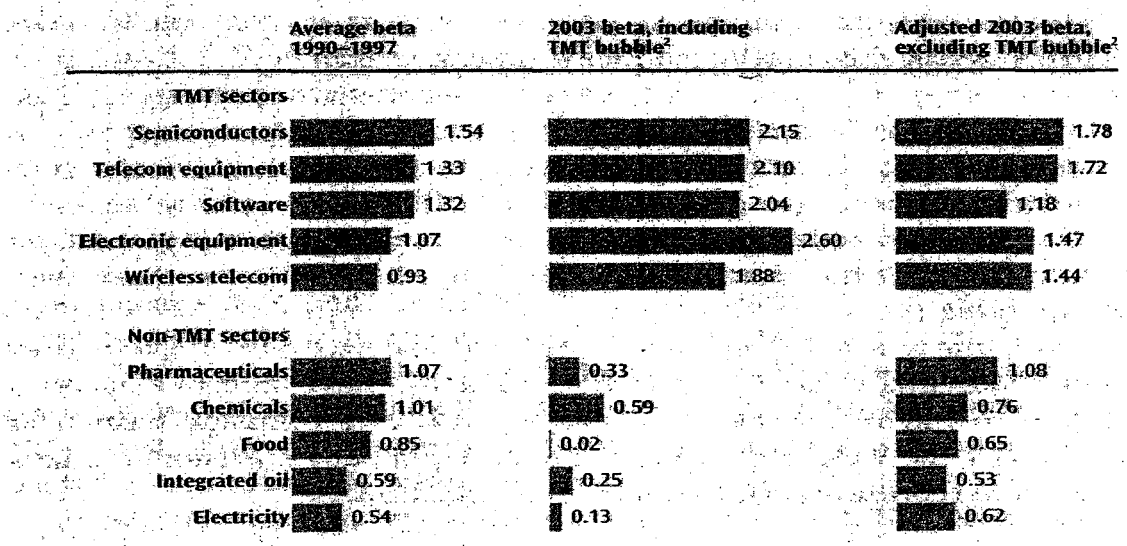
The market portfolio In the CAPM, the market portfolio equals the value-weighted portfolio of all assets, both traded (such as stocks and bonds) and untraded (such as private companies and human capital). Since the true market portfolio is unobservable, a proxy is necessary. For U.S. stocks, the most common proxy is the S&P 500, a value-weighted index of large U.S. companies. Outside the United States, financial analysts rely on either a regional index like the MSCI Europe Index or the MSCI World Index, a value-weighted index comprising large stocks from 23 developed countries (including the United States).

Most well-diversified indexes, such as the S&P 500 and MSCI World Index, are highly correlated (the two indexes had an 85.4 percent correlation between 1999 and 2003). Thus, the choice of index will have little effect on beta. For instance, Home Depot's beta with respect to the S&P 500 is 1.37, whereas the company's beta with respect to the MSCI World Index is nearly identical at 1.35. Do *not*, however, use a local market index. Most countries are heavily weighted in only a few industries and, in some cases, a few companies. Consequently, when measuring beta versus a local index, you are not measuring market-wide systematic risk, but rather a company's sensitivity to a particular industry.

The internet bubble distorted the market portfolio In the late 1990s, equity markets rose dramatically, but this increase was confined primarily to extremely large capitalization stocks and stocks in the telecommunications, media, and technology sectors (commonly known as TMT). Historically, TMT stocks contribute approximately 20 percent of the market value of the S&P 500. Between 1999 and 2001, this percentage rose to nearly 50 percent. And as the market portfolio changed, so too did industry betas. As shown by the historical betas for 10 industries in Exhibit 10.10, betas related to TMT rose dramatically during the tech boom, while betas outside the TMT sector fell. For instance, between 1990 and 1997, the food industry had an average beta of 0.85. Immediately following the tech boom, the food industry's beta dropped to zero.

[24] T. Bollerslev and B. Y. B. Zhang, "Measuring and Modeling Systematic Risk in Factor Pricing Models Using High-Frequency Data," *Journal of Empirical Finance*, 10 (2003): 533–558.

Exhibit 10.10 Measuring Beta with and without TMT Bubble Years[1]



[1]TMT stands for telecommunications, media, and technology.
[2]Period from January 1998 to December 2001.
Source: Thomson Financial Datastream; McKinsey analysis.

But will these new, widely dispersed, betas continue? Probably not. Since 2001, the market portfolio has returned to its traditional composition. Therefore, betas are likely to normalize as well. To this end, we argue that estimates of future beta should exclude observations from 1998 to 2001.[25] Remember, the end goal is not to measure beta historically, but rather to use the historical estimate as a predictor of future value. In this case, recent history isn't very useful and should not be overweighted.

Improving estimates of beta: Industry betas Estimating beta is an imprecise process. Earlier, we used historical regression to estimate Home Depot's raw beta at 1.37. But the regression's *R*-squared was only 43 percent, and the standard error of the beta estimate was 0.20. Using two standard errors as a guide, we feel confident Home Depot's true beta lies between 0.97 and 1.77—hardly a tight range.

To improve the precision of beta estimation, use industry, rather than company-specific, betas.[26] Companies in the same industry face similar

[25] André Annema and Marc Goedhart, "Better Betas," *McKinsey on Finance* (Winter 2003): 10–13.
[26] If unlevered industry betas are drawn from the same distribution, the standard error of the industry average equals the volatility of the beta distribution divided by the square root of the number of observations. Thus, the standard error of an industry beta falls as the number of beta observations rises.

operating risks, so they should have similar operating betas. As long as estimation errors across companies are uncorrelated, overestimates and underestimates of individual betas will tend to cancel, and an industry median (or average) beta will produce a superior estimate.[27]

Simply using the median of an industry's raw betas, however, overlooks an important factor: leverage. A company's beta is a function of not only its operating risk, but also the financial risk it takes. Shareholders of a company with more debt face greater risks, and this increase is reflected in beta. Therefore, to compare companies with similar operating risks, we must first strip out the effect of leverage. Only then can we compare beta across an industry.

To undo the effect of leverage (and its tax shield), we rely on the theories of Franco Modigliani and Merton Miller (M&M), introduced in Chapter 5. According to M&M, the weighted average risk of a company's financial claims equals the weighted average risk of a company's economic assets. Using beta to represent risk, this relation is as follows:

$$\underbrace{\frac{V_u}{V_u + V_{txa}}\beta_u}_{\text{Operating Assets}} + \underbrace{\frac{V_{txa}}{V_u + V_{txa}}\beta_{txa}}_{\text{Tax Asset}} = \underbrace{\frac{D}{D+E}\beta_d}_{\text{Debt}} + \underbrace{\frac{E}{D+E}\beta_e}_{\text{Equity}}$$

where V_u = Value of the company's operating assets
V_{txa} = Value of the company's interest tax shields
D = Market value of the company's debt
E = Market value of the company's equity

In Appendix D, we rearrange the equation to solve for the beta of equity (β_e). This leads to:

$$\beta_e = \beta_u + \frac{D}{E}(\beta_u - \beta_d) - \frac{V_{txa}}{E}(\beta_u - \beta_{txa}) \quad .$$

To simplify the formula further, most practitioners impose two additional restrictions.[28] First, because debt claims have first priority, the beta of

[27] Statistically speaking, the sample average will have the lowest mean squared error. However, because sample averages are heavily influenced by outliers, we recommend examining both the mean and median beta.

[28] In Chapter 5, we detailed alternative restrictions that can be imposed to simplify the general equation regarding risk. Rather than repeat the analysis, we focus on the least restrictive assumption for mature companies: that debt remains proportional to value. For a full discussion of which restrictions to impose and how they affect the cost of capital, please see the section on adjusted present value in Chapter 5.

debt tends to be low. Thus, many assume (for simplicity) the beta of debt is 0. Second, if the company maintains a constant capital structure, the value of tax shields will fluctuate with the value of operating assets and beta of the tax shields (β_{txa}) will equal the beta of the unlevered company (β_u). Setting β_{txa} equal to β_u eliminates the final term:

$$\beta_e = \beta_u \left(1 + \frac{D}{E}\right) \tag{1}$$

Thus, a company's equity beta equals the company's operating beta (commonly known as the unlevered beta) times a leverage factor. As leverage rises, so will the company's equity beta. Using this relation, we can convert equity betas into unlevered betas. Since unlevered betas focus solely on operating risk, they can be averaged across an industry (assuming industry competitors have similar operating characteristics).

To estimate an industry-adjusted company beta, use the following four-step process. First, regress each company's stock returns against the S&P 500 to determine raw beta. In Exhibit 10.11 on page 314, we report regression betas for Home Depot (1.37) and Lowe's (1.15). Next, to unlever each beta, calculate each company's market-debt-to-equity ratio. To calculate net debt ($6.310 billion for Home Depot), add the book value of reported debt ($1.365 billion) to the estimated value of operating leases ($6.554 billion) and then subtract excess cash ($1.609 billion).[29] To determine equity value ($80.101 billion), we multiply the company's stock price ($35.49) by the number of shares outstanding (2.257 billion). With debt and equity in hand, compute debt to equity (.079). Applying equation 1 leads to an unlevered beta of 1.27 for Home Depot and 1.02 for Lowe's. In step three, determine the industry unlevered beta by calculating the median (in this case, the median and average betas are the same).[30] In the final step, relever the industry unlevered beta is to each company's *target* debt-to-equity ratio (using current market values as proxies).

Unlevered cost of equity As demonstrated, we can unlever an equity beta in order to improve beta estimation for use in the CAPM and WACC. We also can use unlevered industry betas to estimate a company's unlevered cost of equity. To estimate the unlevered cost of equity for use in an adjusted present value (APV) valuation, simply apply the CAPM to the industry unlevered beta.

[29] The process for valuing operating leases and excess cash is detailed in Chapter 7.
[30] In most valuations, more than two company betas are available. For Home Depot, Lowe's is the only publicly traded competitor. As a general rule, use as many direct comparables as possible.

Exhibit 10.11 Determining the Industry Beta

$ million

Capital structure	Home Depot	Lowe's
Debt	1,365	3,755
Operating leases	6,554	2,762
Excess cash	(1,609)	(948)
Total net debt	6,310	5,569
Shares outstanding (millions)	2,257	787
Share price ($)	35.49	55.39
Market value of equity	80,101	43,592
Debt/equity	0.079	0.128

Beta calculations	Home Depot	Lowe's
Raw beta (step 1)	1.37	1.15
Unlevered beta (step 2)	1.27	1.02
Industry average unlevered beta (step 3)	1.14	1.14
Relevered beta (step 4)	1.23	1.30

Improving estimates of beta: Smoothing For well-defined industries, an industry beta will suffice. But if few direct comparables exist, an alternative is beta smoothing. Consider the simple smoothing process used by Bloomberg:

$$\text{Adjusted Beta} = (.33) + (.67)\ \text{Raw Beta}$$

Using this formula "smooths" raw estimates toward 1. For instance, a raw beta of 0.5 leads to an adjusted beta of 0.67, while a raw beta of 1.5 leads to an adjusted beta of 1.34. Bloomberg's smoothing mechanism dates back to Blume's observation that betas revert to the mean.[31] Today, more advanced smoothing techniques exist.[32] Although the proof is beyond the scope of this book, the following adjustment will reduce beta estimation error:

$$\beta_{adj} = \frac{\sigma_\varepsilon^2}{\sigma_\varepsilon^2 + \sigma_b^2}(1) + \left(1 - \frac{\sigma_\varepsilon^2}{\sigma_\varepsilon^2 + \sigma_b^2}\right)\beta_{raw}$$

[31] M. Blume, "Betas and Their Regression Tendencies," *Journal of Finance*, 30 (1975): 1–10.
[32] For instance, see P. Jorion, "Bayes-Stein Estimation for Portfolio Analysis," *Journal of Financial and Quantitative Analysis*, 21 (1986): 279–292.

where σ_ε = The standard error of the regression beta
σ_b = The cross-sectional standard deviation of all betas

The raw regression beta receives the most weight when the standard error of beta from the regression (σ_ε) is smallest. In fact, when beta is measured perfectly ($\sigma_\varepsilon = 0$), the raw beta receives all the weight. Conversely, if the regression provides no meaningful results (σ_ε is very large), you should set beta equal to 1.

For Home Depot, the standard error of the beta estimate equals 0.20, and in 2004 the cross-sectional standard deviation of beta (across all S&P 500 stocks) equaled 0.590. Therefore, the adjusted beta equals $0.103 + (1 - 0.103) \times 1.37$, or 1.33.

Alternatives to the CAPM: Fama-French Three-Factor Model

In 1992, Eugene Fama and Kenneth French published a paper in the *Journal of Finance* that received a great deal of attention because they concluded, "In short, our tests do not support the most basic prediction of the SLB [Sharpe-Lintner-Black] Capital Asset Pricing Model that average stock returns are positively related to market betas."[33] At the time, theirs was the most recent in a series of empirical studies that questioned the usefulness of estimated betas in explaining the risk premium on equities. Among the factors negatively or positively associated with equity returns were the size of the company, a seasonal (January) effect, the degree of financial leverage, and the firm's book-to-market ratio.[34] Based on prior research and their own comprehensive regressions, Fama and French concluded that equity returns are inversely related to the size of a company (as measured by market capitalization) and positively related to the ratio of a company's book value to its market value of equity.

Given the strength of Fama and French's empirical results, the academic community has begun measuring risk with a model commonly known as the Fama-French three-factor model. With this model, a stock's excess returns are regressed on excess market returns (similar to the CAPM), the excess

[33] E. Fama and K. French, "The Cross-Section of Expected Stock Returns," *Journal of Finance* (June 1992): 427–465.

[34] R. Blanz, "The Relationship between Return and the Market Value of Common Stocks," *Journal of Financial Economics* (March 1981): 3–18; M. Reinganum, "Misspecification of Capital Asset Pricing: Empirical Anomalies Based on Earnings Yields and Market Values," *Journal of Financial Economics* (March 1981): 19–46; S. Basu, "The Relationship between Earnings Yield, Market Value and Return for NYSE Common Stocks: Further Evidence," *Journal of Financial Economics* (June 1983): 129–156; L. Bhandari, "Debt/Equity Ratio and Expected Common Stock Returns: Empirical Evidence," *Journal of Finance* (April 1988): 507–528; D. Stattman, "Book Values and Stock Returns," *The Chicago MBA: A Journal of Selected Papers* (1980): 25–45; and B. Rosenberg, K. Reid, and R. Lanstein, "Persuasive Evidence of Market Inefficiency," *Journal of Portfolio Management* (1985): 9–17.

Exhibit 10.12 Home Depot's Fama-French Cost of Equity

Factor	Average monthly premium (percent)	Average annual premium (percent)	Regression beta	Contribution to expected return (percent)
Market risk premium		4.5	1.35	6.1
SMB premium	0.25	3.0	(0.04)	(0.1)
HML premium	0.36	4.4	(0.10)	(0.5)
Premium over risk free rate				5.5
			Risk free rate	4.3
			Cost of equity	9.8

returns of small stocks over big stocks (SMB), and the excess returns of high book-to-market stocks over low book-to-market stocks (HML).[35] Because the risk premium is determined by a regression on the SMB and HML stock portfolios, a company does not receive a premium for being small. Instead, the company receives a risk premium if its stock returns are correlated with those of small stocks or high book-to-market companies. The SMB and HML portfolios are meant to replicate unobservable risk factors, factors that caused small companies with high book-to-market values to outperform their CAPM expected returns.

To run a Fama-French regression, we need monthly returns for three portfolios: the market portfolio, the SMB portfolio, and the HML portfolio. Given the model's popularity, Fama-French portfolio returns are now available from professional data providers.

We use the Fama-French three-factor model to estimate Home Depot's cost of equity in Exhibit 10.12. To determine the company's three betas, regress Home Depot stock returns against the excess market portfolio, SMB, and HML. The regression in Exhibit 10.12 used monthly returns and was specified as follows:

$$R_i - r_f = \alpha + \beta_1(R_m - r_f) + \beta_2\left(R_S - R_B\right) + \beta_3\left(R_H - R_L\right) + \varepsilon$$

As the exhibit indicates, Home Depot's traditional beta remains unchanged, but its cost of equity is lower in the Fama-French model because Home Depot is correlated with other large companies (small companies outperform large companies) and other companies with a low book-to-market ratio (high book-to-market companies outperform low book-to-

[35] For a complete description of the factor returns, see E. Fama and K. French, "Common Risk Factors in the Returns on Stocks and Bonds," *Journal of Financial Economics*, 33 (1993): 3–56.

market companies). Based on the historical annualized premiums for SMB (3.0 percent) and HML (4.4 percent), Home Depot's cost of capital equals 9.8 percent, versus 10.4 percent according to the standard CAPM. (These values are not comparable to the cost of equity presented in Exhibit 10.1, which used industry betas.)

The Fama-French model suffers from the same implementation issues as the CAPM. For instance, how much data should you use to determine the each factor's risk premium? Since 1926, small companies have outperformed large companies, but since 1982, they have not. Should returns be regressed using monthly data? Should regressions use five years of data? Given the model's recent development, many of these questions are still under investigation.

Alternatives to the CAPM: The Arbitrage Pricing Theory

Another alternative to the CAPM, the arbitrage pricing theory (APT), resembles a generalized version of the Fama-French three-factor model. In the APT, a security's actual returns are *fully* specified by k factors and random noise:

$$\tilde{R}_i = \alpha + \beta_1 \tilde{F}_1 + \beta_2 \tilde{F}_2 + \cdots + \beta_k \tilde{F}_k + \varepsilon$$

By creating well-diversified factor portfolios, it can be shown that a security's expected return must equal the risk-free rate plus the cumulative sum of its exposure to each factor times the factor's risk premium (λ):

$$E[R_i] = r_f + \beta_1 \lambda_1 + \beta_2 \lambda + \cdots + \beta_k \lambda_k$$

Otherwise, arbitrage is possible (positive return with zero risk).

On paper, the theory is extremely powerful. Any deviations from the model result in unlimited returns with no risk. In practice, implementation of the model has been elusive, as there is little agreement about how many factors there are, what the factors represent, or how to measure the factors. For this reason, use of the APT resides primarily in the classroom.

In Defense of Beta

Fama and French significantly damaged the credibility of the CAPM and beta. Today, most academics rely on three-factor models to measure historical risk and return. Even so, the three-factor model has its critics. To start, the CAPM is based on solid theory about risk and return (albeit with strong assumptions), whereas the Fama-French model is based purely on empirical evidence. Although the latter model has been loosely tied to risk factors

such as illiquidity (size premium) and default risk (book-to-market premium), no theory has gained universal acceptance.

In addition, S. P. Kothari, Jay Shanken, and Richard Sloan argue that beta may work better than portrayed in Fama and French. They point out that Fama and French's statistical tests were of low enough power that the tests could not reject a nontrivial (beta-related) risk premium of 6 percent over the post-1940 period.[36] Second, when they used annual returns, rather than monthly returns, to estimate beta (to avoid seasonality in returns), they found a significant linear relationship between beta and returns. Finally, they argue that the economic magnitude of size is quite small, and book-to-market premiums could be a result of survivorship bias.

Other research argues that the Fama-French three-factor model historically outperforms the CAPM because either beta or the market portfolio has been improperly measured. In a recent study, a one-factor model based on time-varying conditional betas eliminated the book-to-market effect.[37] Another article argues that regressions based on equity-only portfolios, such as the S&P 500, leads to the incorrect measurement of beta.[38] This mismeasurement is correlated with leverage, which in turn is correlated with size and book-to-market. When the researchers controlled for leverage, excess returns associated with HMB and SML disappeared.

The bottom line? It takes a better theory to kill an existing theory, and we have yet to see the better theory. Therefore, we continue to use the CAPM while keeping a watchful eye on new research in the area.

ESTIMATING THE AFTER-TAX COST OF DEBT

To estimate the cost of debt, use the yield to maturity of the company's long-term, option-free bonds. Technically speaking, yield to maturity is only a proxy for expected return, because the yield is actually a *promised* rate of return on a company's debt (it assumes all coupon payments are made on time and the debt is paid in full). An enterprise valuation based indirectly on the yield to maturity is therefore theoretically inconsistent: expected free cash flows should not be discounted by a promised yield. For companies with highly rated debt, however, this inconsistency is

[36] S. Kothari, J. Shanken, and R. Sloan, "Another Look at the Cross-Section of Expected Returns," *Journal of Finance* (December 1995).

[37] A. Ang and J. Chen, "CAPM over the Long Run: 1926–2001," (working paper, Los Angeles: University of Southern California, 2004).

[38] M. Ferguson and R. Shockley, "Equilibrium 'Anomalies,'" *Journal of Finance, 58*(6) (2003): 2549–2580.

immaterial, especially when compared with the estimation error surrounding beta and the market risk premium. Thus, for estimating the cost of debt for a company with investment-grade debt (debt rated at BBB or better), yield to maturity is a suitable proxy.

When calculating yield to maturity, use *long-term* bonds. As discussed earlier, short-term bonds do not match the duration of the company's free cash flow. To solve for yield to maturity (ytm), reverse engineer the discount rate required to set the present value of the bond's promised cash flows equal to its price:

$$\text{Price} = \frac{\text{Coupon}}{(1+\text{ytm})} + \frac{\text{Coupon}}{(1+\text{ytm})^2} + \cdots + \frac{\text{Face} + \text{Coupon}}{(1+\text{ytm})^N}$$

Ideally, yield to maturity should be calculated on liquid, option-free, long-term debt. If the bond is rarely traded, the bond price will be stale. Using stale prices will lead to an outdated yield to maturity. Yield to maturity will also be distorted when corporate bonds have attached options, such as callability or convertibility, as their value will affect the bond's price but not its promised cash flows.

Bond Ratings and Yield to Maturity

For companies with only short-term bonds or bonds that rarely trade, determine yield to maturity by using an indirect method. First, determine the company's credit rating on unsecured long-term debt. Next, examine the average yield to maturity on a portfolio of long-term bonds with the same credit rating. Use this yield as a proxy for the company's implied yield on long-term debt.

Investing in corporate debt is not risk free. Each year, a number of companies default on their obligations. In 2002, corporate bond defaults reached $163.6 billion worldwide. Since the probability of default is critical to bond pricing, professional rating agencies, such as Standard & Poor's (S&P) and Moody's, will rate a company's debt. To determine a company's bond rating, a ratings agency will examine the company's most recent financial ratios, analyze the company's competitive environment, and interview senior management. Corporate bond ratings are freely available to the public and can be downloaded from rating agency Web sites. For example, consider Home Depot. On June 10, 2004, Moody's reaffirmed its credit rating for Home Depot at Aa3 for its long-term debt. During that same time period, S&P rated Home Depot slightly higher at AA. In this case, the two agencies' ratings were different. Split ratings occur, but relatively infrequently.

Exhibit 10.13 Yield Spread over U.S. Treasuries by Bond Rating, December 2003

Basis points

	Maturity in Years						
Rating	1	2	3	5	7	10	30
Aaa/AAA	34	28	35	21	22	28	50
Aa1/AA+	37	31	33	34	40	29	62
Aa2/AA	39	33	34	35	42	33	64
Aa3/AA-	40	34	36	37	43	37	65
A2/A	57	49	49	57	65	48	82
Baa2/BBB	79	91	96	108	111	102	134
Ba2/BB	228	245	260	257	250	236	263
B2/B	387	384	384	349	332	303	319

Source: Bloomberg.

Once you have a rating, convert the rating into a yield to maturity. Exhibit 10.13 presents U.S. corporate yield spreads over U.S. government bonds. All quotes are presented in basis points, where 100 basis points equals 1 percent. Since Home Depot is rated AA by S&P and Aa3 by Moody's, we estimate that the 10-year yield to maturity is between 34 and 37 basis points over the 10-year Treasury. Adding 34 basis points to the risk-free rate of 4.34 percent equals 4.68 percent.

Using the company's bond ratings to determine the yield to maturity is a good alternative to calculating the yield to maturity directly. Never, however, approximate the yield to maturity using a bond's coupon rate. Coupon rates are set by the company at time of issuance and only approximate the yield if the bond trades near its par value. When valuing a company, you must estimate expected returns relative to *today's* alternative investments. Thus, when you measure the cost of debt, estimate what a comparable investment would earn if bought or sold today.

Below-Investment-Grade Debt

In practice, few financial analysts distinguish between expected and promised returns. But for debt below investment grade, using the yield to maturity as a proxy for the cost of debt can cause significant error.

To better understand the difference between expected returns and yield to maturity, consider the following example. You have been asked to value a one-year zero-coupon bond whose face value is $100. The bond is risky; there is a 25 percent chance the bond will default and you will recover only half the final payment. Finally, the cost of debt (not yield to maturity), estimated using the CAPM, equals 6 percent. Based on this information,

Exhibit 10.14 Beta by Bond Class, 1990–2000

Asset class	Beta
Treasury bonds	0.19
Investment-grade corporate debt	0.27
High-yield corporate debt	0.37

Source: Lehman Brothers, "Global Family of Indices, Fixed Income Research"; Morgan Stanley Capital International; U.S. Treasury, Paul Sweeting.

you estimate the bond's price by discounting expected cash flows by the cost of debt:

$$\text{Price} = \frac{E[\text{CF}]}{1+k_d} = \frac{(.75)(\$100)+(.25)(\$50)}{1.06} = \$82.55$$

Next, to determine the bond's yield to maturity, place promised cash flows, rather than expected cash flows, into the numerator. Then solve for the yield to maturity:

$$\text{Price} = \frac{\text{Promised}[\text{CF}]}{1+\text{ytm}} = \frac{\$100}{1+\text{ytm}} = \$82.55$$

The $82.55 price leads to a 21.1 percent yield to maturity, *much* higher than the cost of debt. So what drives the yield to maturity? Three factors: the cost of debt, the probability of default, and the recovery rate. When the probability of default is high and the recovery rate is low, the yield to maturity will deviate significantly from the cost of debt. Thus, for companies with high default risk and low ratings, the yield to maturity is a poor proxy for the cost of debt.

To estimate the cost of high-yield debt, we rely on the CAPM (a general pricing model, applicable to any security). Bond indexes are used to generate betas, since individual bonds rarely trade. Exhibit 10.14 presents the market beta for investment-grade and high-yield bonds. As reported in the exhibit, high-yield bonds have a beta 0.1 higher than investment-grade bonds. Assuming a 5 percent market risk premium, this translates to a premium of 0.5 percent over investment-grade bonds. Thus, to calculate the cost of debt for a company with debt rated BB or below, use the BBB yield to maturity and add 0.5 percent.

Incorporating the Interest Tax Shield

To calculate free cash flow (using techniques detailed in Chapter 7), we compute taxes as if the company were entirely financed by equity. By using all-equity taxes, we can make comparisons across companies and over time,

without regard to capital structure. Yet, since the tax shield has value, it must be accounted for. In an enterprise DCF using the WACC, the tax shield is valued as part of the cost of capital. To value the tax shield, reduce the cost of debt by the marginal tax rate:

$$\text{After-Tax Cost of Debt} = \text{Cost of Debt} \times (1 - T_m)$$

Chapter 7 detailed how to calculate the marginal tax rate for historical analysis. For use in the cost of capital, you should calculate the marginal tax rate in a consistent manner, with one potential modification to account for the timing of future tax payments. According to research by John Graham, the statutory marginal tax rate overstates the *future* marginal tax rate because of rules related to tax-loss carryforwards, tax-loss carrybacks, investment tax credits, and alternative minimum taxes.[39] For instance, when a company loses money, it will receive a cash credit only if it has been profitable in the past three years; otherwise, it must carry the loss forward until it is once again profitable.

Graham uses simulation to estimate the realizable marginal tax rate on a company-by-company basis. For investment-grade companies, use the statutory rate. For instance, because Home Depot is highly profitable, Graham's model estimates the company's future marginal statutory tax rate at the full 35 percent. The typical company, however, does not always fully use its tax shields. Graham estimates the marginal tax rate is on average 5 percentage points below the statutory rate.

USE TARGET WEIGHTS TO DETERMINE COST OF CAPITAL

With our estimates of the cost of equity and cost of debt, we can now blend the two expected returns into a single number. To do this, we use the target weights of debt and equity to enterprise value, on a market (not book) basis:

$$\text{WACC} = \frac{D}{V} k_d (1 - T_m) + \frac{E}{V} k_e$$

Using market values to weight expected returns in the cost of capital follows directly from the formula's derivation (see Appendix C for a derivation of free cash flow and WACC). But consider a more intuitive explanation: the WACC represents the expected return on an *alternative* investment with identical risk. Rather than reinvest in the company, management could return capital to investors, who could reinvest elsewhere. To return capital without changing the capital structure, management can repay debt and re-

[39] J. Graham, "Debt and the Marginal Tax Rate," *Journal of Financial Economics*, 41 (1996): 41–73; and J. Graham, "Proxies for the Corporate Marginal Tax Rate," *Journal of Financial Economics*, 42 (1996): 187–221.

purchase shares, but must do so at their *market* value. Conversely, book value represents a sunk cost, so it is no longer relevant.

The cost of capital should rely on target weights, rather than current weights, because at any point, a company's current capital structure may not reflect the level expected to prevail over the life of the business. The current capital structure may merely reflect a short-term swing in the company's stock price, a swing that has yet to be rebalanced by management. Thus, using today's capital structure may cause you to overestimate (or underestimate) the value of tax shields for companies whose leverage is expected to drop (or rise).

Many companies are already near their target capital structure. If yours is not, decide how quickly the company will achieve the target. In the simplest scenario, the company will rebalance immediately and maintain the new capital structure. In this case, using the target weights and a constant WACC (for all future years) will lead to a reasonable valuation. If you expect the rebalancing to happen over a significant period of time, then use a different cost of capital each year, reflecting the capital structure at the time. In practice, this procedure is complex; you must correctly model not only the weights, but also the changes in the cost of debt and equity (because of increased default risk and higher betas). For extreme changes in capital structure, modeling enterprise DCF using a constant WACC can lead to significant error. In this case, value the company with adjusted present value (APV).

To develop a target capital structure for a company, use a combination of three approaches:

1. Estimate the company's current market-value-based capital structure.
2. Review the capital structure of comparable companies.
3. Review management's implicit or explicit approach to financing the business and its implications for the target capital structure.

Estimating Current Capital Structure

To determine the company's current capital structure, measure the market value of all claims against enterprise value. For most companies, the claims will consist primarily of debt and equity (we address more complex securities in the last section). If a company's debt and equity are publicly traded, simply multiply the quantity of each security by its most recent price. Most difficulties arise when securities are not traded such that prices can be readily observed.

Debt If an observable market value is not readily available, you can value debt securities at book or use discounted cash flow. In most cases, book value reasonably approximates the current market value. This will not be

the case, however, if interest rates have changed dramatically since the time of issuance or the company is in financial distress. In these two situations, the current price will differ from book value because either expected cash flows have changed (increased probability of default lowers expected cash flow) or the discount rate has changed (interest rates drive discount rates) from their original levels.[40]

In these situations, value each bond separately by discounting promised cash flows at the appropriate yield to maturity. Promised cash flows will be disclosed in the notes of a company's annual report. Determine the appropriate yield to maturity by examining the yields from comparably rated debt with similar maturities.

Debt equivalent claims Next, value off-balance-sheet debt, such as operating leases and pension liabilities. As detailed in Chapter 7, operating leases can be valued using the following formula:

$$\text{Lease Value}_{t-1} = \frac{\text{Rental Expense}_t}{k_d + \dfrac{1}{\text{Asset Life}}}$$

Only include operating leases in debt if you plan to adjust free cash flow for operating leases as well. Consistency between free cash flow and the cost of capital is paramount. Any pension adjustments made to free cash flow must be properly represented in the debt portion of the cost of capital. Specifically, if you add back any tax shields during adjustments to NOPLAT, you must account for the tax shields in the present value of pension liabilities and the cost of debt.

Equity If common stock is publicly traded, multiply the market price by the number of shares *outstanding*. The market value of equity should be based on shares outstanding in the capital market. Therefore, do not use shares issued, as they may include shares repurchased by the company.

At this point, you may be wondering why you are valuing the company if you are going to rely on the market's value of equity in the cost of capital. Shouldn't we be using the estimated equity value? The answer is no. Remember, we are only estimating today's market value to frame management's philosophy concerning capital structure. To value the company, use *target* weights.

For privately held companies, no market-based values are available. In this case, you must determine equity value (for the cost of capital) either using a

[40] For floating-rate bonds, changes in Treasury rates won't affect value, since coupons float with Treasury yields. Changes in market-based default premiums, however, will affect the market value of floating-rate bonds, since bonds are priced at a fixed spread above Treasury yields.

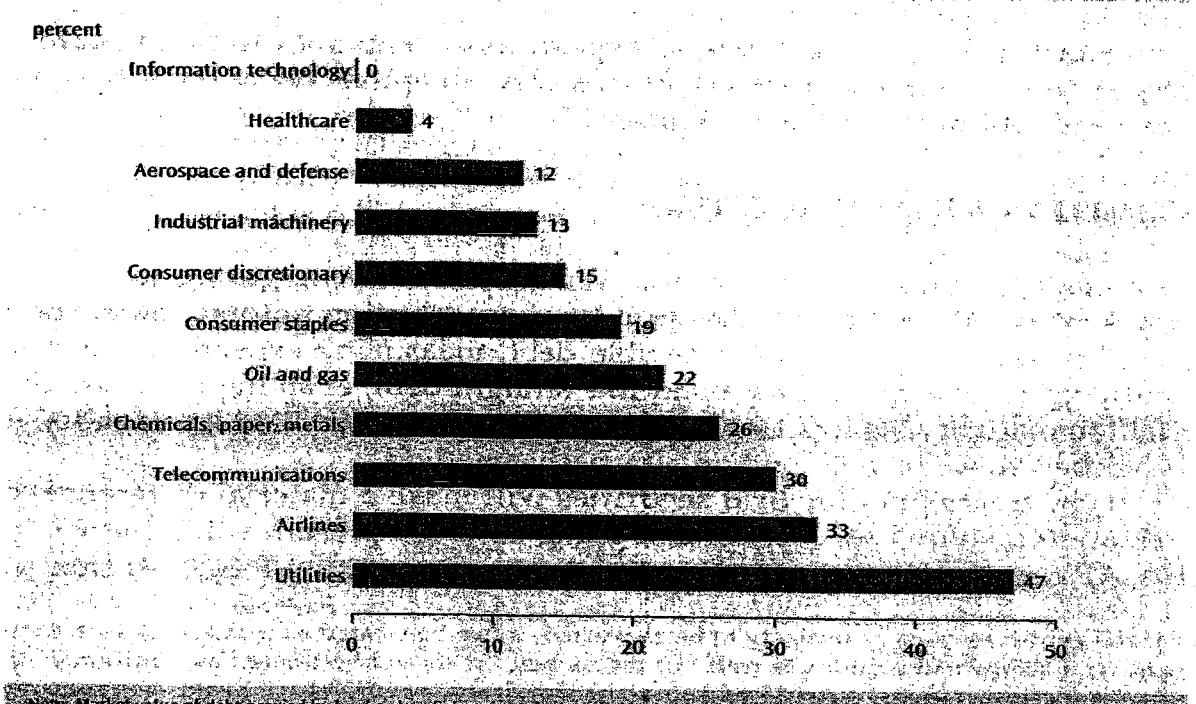
multiples approach or through DCF iteratively. To perform an iterative valuation, assume a reasonable capital structure, and value the enterprise using DCF. Using the estimate of debt to enterprise value, repeat the valuation. Continue this process until the valuation no longer materially changes.

Minority interest If minority interest—claims by outside shareholders on a portion of a company's business (often a subsidiary acquired by the company)—is publicly traded, then you can determine their approximate value directly from the market price for the shares. When the minority interest is not publicly traded, you must estimate its current value. To do this, apply a company-specific or industry price-to-earnings ratio directly to the income generated for minority interest.

Review Capital Structure of Comparable Companies

To place the company's current capital structure in the proper context, compare its capital structure with those of similar companies. Exhibit 10.15 presents the median debt-to-value levels for 11 industries. As the exhibit shows, industries with heavy fixed investment in tangible assets tend to have higher debt levels. High-growth industries, especially those

Exhibit 10.15 Median Debt-to-Market Value by Industry, 2003



Note: Market value of debt proxied by book value. Enterprise value proxied by book value of debt plus market value of equity.

with intangible investments, tend to use very little debt. Economy-wide, the median debt-to-value ratio for the S&P 500 is 13.1 percent, and the median debt-to-equity ratio is 19.7 percent.

Having a company with a different capital structure is perfectly acceptable, but you should understand why. For instance, is the company by philosophy more aggressive or innovative in the use of debt financing, or is the capital structure only a temporary deviation from a more conservative target? Often, companies finance acquisitions with debt they plan to quickly retire or refinance with a stock offering. Alternatively, is there anything different about the company's cash flow or asset intensity that can explain the difference? Always use comparables to help you assess the reasonableness of estimated debt-to-equity levels.

Review Management's Philosophy

As a final step, review management's historical financing philosophy (or question management outright). Has the current team been actively managing the company's capital structure? Is the management team aggressive in its use of debt? Or is it overly conservative? Consider UPS, a company with a well-known conservative culture. Although cash flow is strong and stable, the company rarely issues debt. From a financing perspective, it doesn't need to issue additional securities; investments can be funded with current profits. Since the company is primarily employee owned, there is little threat of outside takeover. Therefore, UPS is unlikely to increase its target debt-to-value ratio anytime soon.

Over the long run, one would expect most companies to aim toward a target capital structure that minimizes cost of capital. We will address the choice of capital structure in Chapter 17.

COMPLEX CAPITAL STRUCTURES

The weighted average cost of capital is determined by weighting each security's expected return by its proportional contribution to total value. For a complex security, such as convertible debt, measuring expected return is challenging. Is a convertible bond like straight debt, enabling us to use the yield to maturity? Is it equity, enabling us to use the CAPM? In actuality, it is neither, so we recommend an alternative method.

If the treatment of hybrid securities will make a material difference in valuation results,[41] we recommend using adjusted present value (APV). In the APV, enterprise value is determined by discounting free cash flow at

[41] If the hybrid security is unlikely to be converted, it can be treated as traditional debt. Conversely, if the hybrid security is well "in the money," it should be treated as traditional equity. In these situations, errors are likely to be small, and a WACC-based valuation remains appropriate.

the unlevered cost of equity. The value of incremental cash flows related to financing, such as interest tax shields, is then computed separately. To determine the company's unlevered cost of equity, use the unlevered industry beta. This avoids the need to compute company specific components, such as the debt-to-equity ratio, a required input in the unlevering equation.

In some situations, you may still desire an accurate representation of the cost of capital. In these cases, split hybrid securities into their individual components. For instance, you can replicate a convertible bond by combining a traditional bond with a call option on the company's stock. You can further disaggregate a call option into a portfolio consisting of a risk-free bond and the company's stock. By converting a complex security into a portfolio of debt and equity, you once again have the components required for the traditional cost of capital. The process of creating replicating portfolios to value options is discussed in Chapter 20.

HEINEKEN CASE

In the case for this chapter, we explain how we estimated Heineken's WACC. Our estimate of Heineken's WACC is 7.5 percent as of the end of February 2004, as shown in Exhibit 10.16, based on a target market value capital structure of 10 percent debt to 90 percent equity, with the cost of equity at 8.0 percent and pretax cost of debt at 4.5 percent.

Our estimate of Heineken's target capital structure (10 percent debt to 90 percent equity) is based on historical analysis. Heineken's current capital structure using market values is 24 percent debt to 76 percent equity, as shown in Exhibit 10.17 on page 328, but the current capital structure is higher than Heineken's historical norm (see Exhibit 10.18 on p. 328). Heineken historically has had less than 10 percent debt. Its debt in 2002 and 2003 is higher because of recent acquisitions. In light of Heineken's excess cash balances, significant cash flow, and conservative dividend, we expect the company to reduce its debt levels significantly within a few years. So we selected a conservative long-term capital structure of 10 percent debt.

Exhibit 10.16 Heineken: Weighted Average Cost of Capital

percent

	Target capital structure	Cost	Tax benefit	Weighted cost
Debt	10.0	4.5	35	0.3
Common equity	90.0	8.0		7.2
Total	100.0			7.5

Exhibit 10.17 Heineken: Current Capital Structure

	Book value € million	Percent of total capitalization	Market value € million	Percent of total capitalization
Short-term debt	1,113	14	1,113	6
Long-term debt	2,721	33	2,809	15
Retirement related liabilities	526	6	526	3
Total debt	4,360	53	4,448	24
Common equity	3,167	38	13,171	71
Minority interest	732	9	1,030	5
Total equity	3,899	47	14,201	76
Total capitalization	8,259	100	18,649	100

Even though we did not use Heineken's year-end 2003 capital structure, we present its calculation in Exhibit 10.17, as follows:

- *Short-term debt:* Short-term debt matures within one year, so in most cases, book value approximates market value.
- *Long-term debt:* None of Heineken's debt is publicly traded, so market quotes were unavailable. Heineken supplied limited information on its long-term debt issues. For the debt instruments for which we had information, we used the current face value, years to maturity, coupon rate, and opportunity cost of debt to estimate the market value by discounting the expected cash flows to the present (see Exhibit 10.19). For long-term debt where no information was available, we assumed the current book value was a reasonable proxy for market value.

Exhibit 10.18 Heineken: Historical Capital Structure

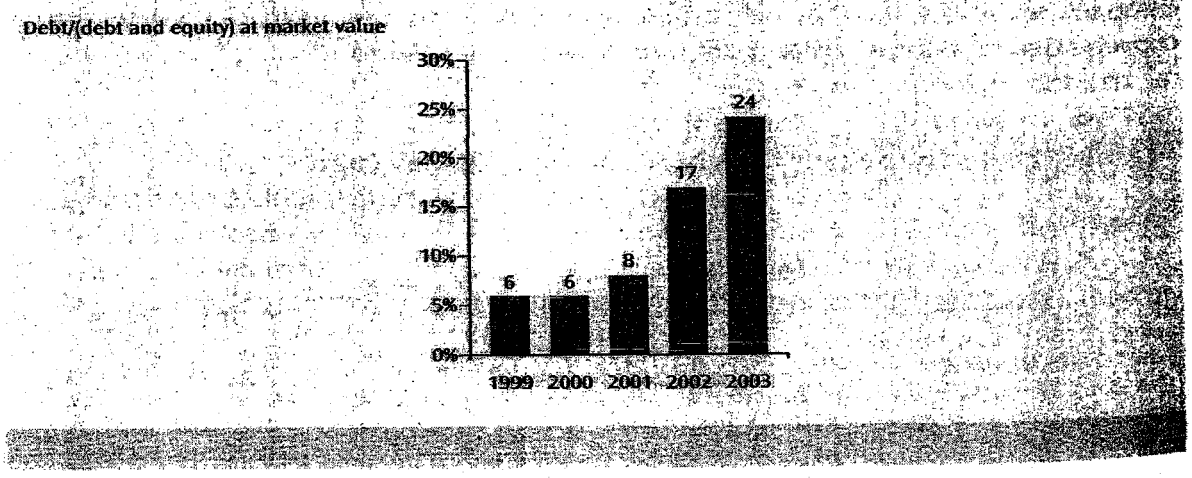


Exhibit 10.19 Heineken: Market Value of Long-Term Debt

Debt issue	Coupon rate percent	Book value € million	Year of maturity	Market value € million
Bond loan from credit institution	4.4	497	2010	496
Bond loan from credit institution	5.0	596	2013	624
Loan from credit institution	5.3	387	2008	414
Loan from credit institution	4.1	506	2008	540
Other issues		735		735
Total long-term debt		2,721		2,809

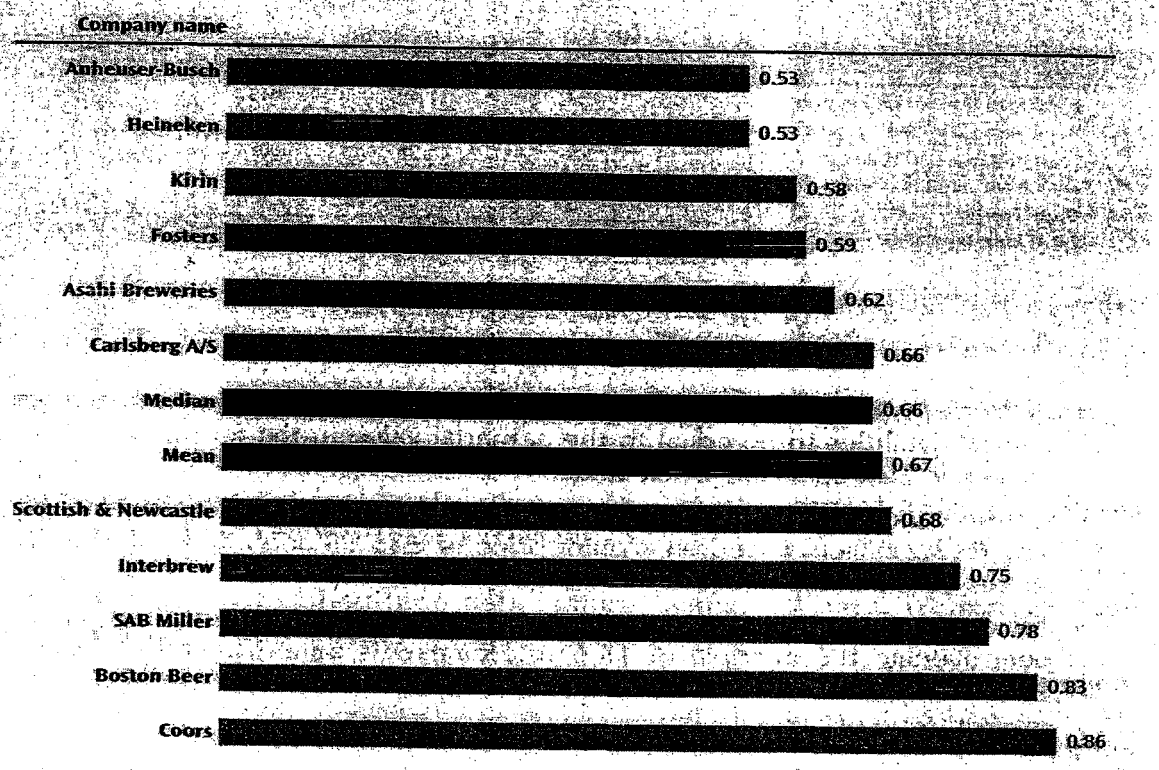
- *Retirement-related liabilities:* We estimated the market value of net retirement-related liabilities to be equal to the actuarial value in the footnotes, which for Heineken also equals its book value.
- *Common equity:* In late February 2004, the market value of Heineken's equity was €13.2 billion, based on a share price of €33.65 and a total of 392 million shares outstanding.
- *Minority interest:* To estimate a market value for minority interest, we applied a peer-average P/E multiple of 15.6 to Heineken's minority-interest income in 2003. Given minority-interest income in 2003 of 66 million, we estimated the market value of minority interest to be €1.0 billion.

We estimated the cost of Heineken's debt and equity as follows:

- *Cost of debt:* We assumed that Heineken's opportunity cost of debt equals that of the similarly rated companies (as expressed as a premium over the risk-free rate). Although Heineken has not been rated by S&P or Moody's, we have assumed that its rating would be similar to highly rated beer companies. In the Netherlands, the default premium for investment-grade companies comparable to Heineken was about 40 basis points in February 2004. Since the euro risk-free rate in February was 4.1 percent, the opportunity cost of debt is 4.5 percent before taxes, or 2.9 percent after taxes.
- *Cost of equity:* Using the capital asset pricing model, we estimated Heineken's cost of equity to be 8.0 percent based on a euro risk-free rate of 4.1 percent,[42] a market risk premium of 5.2 percent,[43] and a levered beta of approximately 0.75 rounded. The levered beta is based on the median of the unlevered betas for a sample of brewers (0.66), shown in Exhibit 10.20 on page 330, relevered to Heineken's target capital structure (debt-to-value ratio of 10 percent). To unlever and relever the betas, we used the formula $\beta_l = \beta_u \times (1 + D/E)$, as explained

[42] We used the yield on German treasury bonds for the risk-free rate, as they are the most liquid and have the lowest yield to maturity.
[43] The market risk premium is based on a 7.0 percent real return on equities less the real return on the risk-free rate of 1.8 percent at the time of the Heineken valuation.

Exhibit 10.20 Beer Industry Unlevered Betas



earlier in this chapter. In the brewing industry, the range of unlevered betas was 0.53 to 0.86, and the median and mean were almost identical (0.66 and 0.67, respectively). As we mentioned earlier, individual companies' betas are difficult to measure, so we typically use the industry median rather than a company's measured beta unless we have specific reasons to believe that the company's beta should differ from the industry.

EXHIBIT
R-17
ADMITTED

FENNEMORE CRAIG
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Attorneys for Chaparral City Water Company

BEFORE THE ARIZONA CORPORATION COMMISSION

IN THE MATTER OF THE APPLICATION OF CHAPARRAL CITY WATER COMPANY, INC., AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES FOR UTILITY SERVICE BASED THEREON.	DOCKET NO. W-02113A-07-0551

REJOINDER TESTIMONY OF

THOMAS J. BOURASSA

(COST OF CAPITAL)

December 4, 2008

current MRP, the models employed by the Company and Staff are similar in most respects, and we both rely on the same sample group of six publicly traded water utilities, which are the utilities that have been used by the Commission in setting rates for water and wastewater utilities for a number of years. As a result, our cost of equity estimates are similar.

Q. HOW DO THE COST OF EQUITY ESTIMATES OF THE COMPANY AND STAFF COMPARE TO RUCO'S COST OF EQUITY ESTIMATES?

A. RUCO continues to use a completely different sample of utilities as well as methods and approaches that depress the cost of equity. The results in this case are obvious:

Company Rebuttal	13.0%
Company Rejoinder	13.2%
Staff Direct	11.8%
Staff Updated	14.8%
RUCO Direct	8.83%
RUCO Surrebuttal	8.60%

I will address the problems with RUCO's methods later in this testimony. It is apparent, however, that RUCO's methods are quite different from those used by Staff and the Company, and produce an extremely low cost of equity.

C. <u>Staff's Financial Risk Adjustment</u>

Q. DID YOU ALSO RECOMPUTE STAFF'S FINANCIAL RISK ADJUSTMENT?

A. Yes. It is shown on Schedules TJB-11 through TJB-13. In doing so, I again followed Staff's method, which is the formula originally derived from the CAPM by Professor Hamada. *See* Bourassa Rb. at 29. I also used the book value of the equity in the sample utilities' capital structures, which, as I explained in my

rebuttal testimony, is not the correct method of implementing the Hamada formula. *Id.* at 34-35.

Q. WHAT IS STAFF'S UPDATED RISK ADJUSTMENT, USING THE BOOK VALUE OF EQUITY?

A. It would be 290 basis points, or nearly 3.0 percent! That is extraordinarily high. In my experience before the Commission, I have never seen a downward adjustment greater than 100 basis points, and I have only seen a downward adjustment when the utility had a capital structure consisting of 100 percent equity and no debt. The magnitude of this adjustment is driven by Staff's improper use of the book equity of the sample utilities, coupled with Staff's CAPM's model and, more specifically, its current MRP determination.[3]

Q. DID YOU RE-COMPUTE STAFF'S FINANCIAL RISK ADJUSTMENT USING THE MARKET VALUES OF THE SAMPLE UTILITIES' EQUITY?

A. Yes. This calculation is shown on Schedules TJB-14 through TJB-16. The use of the correct inputs – the market value of the sample utilities' equity – results in a downward adjustment of 80 basis points (0.80 percent). Keep in mind that this adjustment is tied to Staff's CAPM estimate and resulting cost of equity of 14.8 percent. If Staff's method were used, the resulting cost of equity would be 14.0 percent (14.8 percent – 0.80 percent), which is higher than the Company's 11.5 percent recommended cost of equity.

Q. ARE YOU PROPOSING A DOWNWARD ADJUSTMENT OF 80 BASIS POINTS FOR CHAPARRAL CITY?

A. Absolutely not, given that approximately one-quarter of Chaparral City's capital

[3] Since my rebuttal testimony was filed, I located an additional text discussing the calculation used to determine the effect of leverage. That text also states that market values should be used, not book values. Tim Koller, Marc Goedhart and David Wessels, *Valuation: Measuring and Managing the Value of Companies* 312-13 (John Wiley & Sons, Inc. 4th ed. 2005).

structure consists of debt. As explained in my rebuttal testimony at pages 32 to 33, the Commission has generally considered an adjustment of this nature only when the utility's capital structure consists of 100 percent equity, and even then, it has not always made an adjustment to the cost of equity. *See, e.g.,* Arizona Water Company, Decision No. 68302 (Nov. 14, 2005) (no adjustment for financial risk based on capital structure containing 73 percent equity); Black Mountain Sewer Corporation, Decision No. 69164 (Dec. 5, 2006) (no financial risk adjustment based on capital structure consisting of 100 percent equity). Here, one-quarter of the Company's capital structure is debt. It would be punitive, in my opinion, to apply a downward adjustment to the cost of equity under these circumstances.

V. THERE IS NO BASIS TO ADJUST THE COST OF EQUITY OR THE RATE OF RETURN DOWNWARD FOR INFLATION

A. Summary of Company's Final Position

Q. WHAT IS THE COMPANY'S FINAL POSITION ON WHETHER ITS COST OF CAPITAL SHOULD BE ADJUSTED DOWNWARD FOR INFLATION?

A. The Company continues to maintain that a downward adjustment for inflation is improper and would deprive the Company of an opportunity to earn a fair rate of return on the fair value of its utility plant and property, i.e., its FVRB.

Q. PLEASE SUMMARIZE THE BASIS FOR THE COMPANY'S POSITION.

A. There are a number of serious problems with the adjustments to account for inflation proposed by Staff and RUCO. They are, in summary, as follows:

- The failure to account for the impact of inflation on other aspects of the Company's business, namely operating expenses and earnings, which impacts the Company to a much greater extent than an alleged increase in rate base (*see* Bourassa Rb. at 24-26).

EXHIBIT
R-15
Admin not

BEFORE THE ARIZONA CORPORATION COMMISS

Arizona Corporation Commission
DOCKETED
NOV 14 2005
DOCKETED BY

~~COMMISSIONERS~~

JEFF HATCH-MILLER, Chairman
WILLIAM A. MUNDELL
MARC SPITZER
MIKE GLEASON
KRISTIN K. MAYES

IN THE MATTER OF THE APPLICATION OF ARIZONA WATER COMPANY, *AN* ARIZONA CORPORATION, FOR ADJUSTMENTS TO ITS RATES AND CHARGES FOR UTILITY SERVICE FURNISHED BY ITS WESTERN GROUP AND FOR CERTAIN RELATED APPROVALS.	DOCKET NO. W-01445A-04-0650 DECISION NO. 68302 **OPINION AND ORDER**

DATES OF HEARING:	October 15, 2004 (Oral Argument), June 10 and 16, 2005 (Pre-Hearing Conferences), June 17, 20, 21, 22, 23 and 24, 2005
PLACE OF HEARING:	Phoenix, Arizona
ADMINISTRATIVE LAW JUDGE:	Teena Wolfe
IN ATTENDANCE:	Kristen K. Mayes, Commissioner
APPEARANCES:	Norman D. James and Jay L. Shapiro, FENNEMORE CRAIG, and Robert W. Geake, Vice President and General Counsel, on behalf of Arizona Water Company; Marvin S. Cohen, SACKS TIERNEY, on behalf of Pivotal Group, Inc.; Joan S. Burke and Danielle D. Janitch, OSBORN MALEDON, on behalf of the City of Casa Grande; Daniel Pozefsky, on behalf of the Residential Utility Consumer Office; and Timothy J. Sabo and Diane M. Targovnik, Attorneys, Legal Division, on behalf of the Utilities Division of the Arizona Corporation Commission.

BY THE COMMISSION:

I. INTRODUCTION

On September 8, 2004, Arizona Water Company ("Arizona Water," "Company," or "Applicant") filed the above-captioned application with the Arizona Corporation Commission ("Commission") requesting a rate increase for the Company's Western Group systems. Arizona

Eastern Group systems, which it believes demonstrated such an effect (Kennedy Rb. Exh. RJK-R4). We do not find Arizona Water's analysis of reduction in customer consumption in the Company's Eastern Group systems to be definitive. The proffered analysis does not appear to consider numerous factors in addition to rate design that may affect the specific water use of customers, including but not limited to precipitation levels and growth. Importantly, the Company did not claim, in connection with the presentation of its Eastern Group elasticity study, that the Eastern Group systems were not earning their authorized rate of return. Although the Company claims that inverted-block rates create revenue instability and will likely lead to under-collection of revenues, the effect on revenue collection in this case due to the implementation of the proposed rate design is not known and measurable, and we will therefore not adopt any "elasticity" adjustment to the revenue requirement we authorize herein. As is evidenced by the Company's plans to expand its water treatment infrastructure, much of the Western Group is poised for rapid growth (see Hammon Dt. at 4-5). We find that the risk of revenue instability the Company fears is sufficiently offset by the current growth in the Company's customer base to allow the implementation of a conservation-oriented rate design at this time. It is highly likely that new growth will be available to compensate for possible reductions in usage by existing customers, if demand proves to be elastic and existing customers respond to the conservation signals by reducing their usage in response to the new rate design. If, even with customer growth, Arizona Water finds it is not recovering its authorized revenue requirement, it is within the Company's control to file a rate case. After considering the evidence presented, we find that it is in the public interest for the Company to implement the conservation-oriented rate design proposed by Staff

IX. OTHER ISSUES

A. Automatic Adjustment Mechanisms

Arizona Water is requesting authority to continue its existing purchased power and purchased

water adjustment mechanisms. RUCO, Casa Grande, and Staff recommend that the mechanisms be discontinued.

Staff states that adjustment mechanisms have traditionally been used to mitigate the regulatory lag for volatile, very large expense items, and are useful when a commodity constitutes a utility's single largest expense, such as for electric utilities where purchased gas or purchased power is the utility's single largest expense (Ludders at 7-8; Ludders Sb. at 6). Staff testified that Arizona Water's purchased pumping power and purchased water costs do not have these characteristics (Ludders Dt. at 7-9; Ludders Sb. at 6).

RUCO argues that the circumstances in this case parallel the circumstances in the Eastern Group Decision, in which the purchased water adjustment mechanisms for the Company's San Manuel and Superior systems were eliminated, and that the mechanisms should likewise be eliminated in this case (RUCO Br. at 15; Reply Br. at 8-9).

Casa Grande agrees with the Commission's reasoning in the Eastern Group Decision that adjustment mechanisms provide utilities with a disincentive to obtain the lowest possible cost commodity, because the costs are simply passed through to the ratepayers, and points to the fact that the Company has made no demonstrable effort to procure alternative, lower cost sources of power (*see* Tr. at 60,628) as an illustration of the problem created by adjustors (City Br. at 16).

The Company asserts that there is a significant likelihood that the Company's cost for power provided by ***APS*** will increase in the near future, citing ***APS'*** recent application filed on July 22, 2005.[17] The Company argues that ***APS'*** recently approved Power Supply Adjustor makes the Company's costs for power at least as volatile as ***APS'*** cost of producing that power (Co. Br. at 27). We do not agree. APS' Power Supply Adjustor contains numerous complex safeguards designed to limit volatility to ratepayers (see Decision No. 67744 at 13-19). While we take notice of APS' July

[7] ***APS*** made a filing on July 22, 2005 in Docket No. E-01345A-05-0526 requesting recovery of unrecovered fuel and purchased power costs through the Power Supply Adjustor approved in Decision No. 67744 (April 7,2005).

22, 2005 filing, the outcome of the filing is unknown. The effect it may have on Arizona Water's expenses, if any, is not known and measurable. The expenses we approve herein already include an adjustment for known and measurable post-test year changes in the Company's electricity costs (see Section V.B above).

The Company's Ajo system is the only Arizona Water system that retains a purchased water adjustment mechanism. The rates we approve herein also take into account a recent rate increase granted to AIC,[18] its water source supplier for the Ajo system (see Hubbard Dt. at 27-28). Arizona Water has already passed those increased costs on to its Ajo customers through the existing idjustment mechanism, and following this Decision, will recover those costs in base rates for the system, reducing the adjustor to a zero balance *(id.)*. Prior to the 2004 AIC rate increase, Ajo system's water costs had not changed for 15 years (Tr. at 636). Arizona Water's witness Kennedy estified that AIC will likely raise its rates due to the necessity to treat for arsenic under the new EPA standard in the next couple of years (Tr. at 636-637). Rather than simply authorizing the Company to pass through as-yet unknown possible increased costs to ratepayers, we find it more reasonable to consider any increased costs due to AIC's arsenic remediation in Arizona Water's next rate case, when the magnitude of any increased costs will be known and measurable, and can be examined the context of the Company's other concurrent expenses, along with any possible cost-reducing tlternatives.

There is a danger of piecemeal regulation inherent in adjustment mechanisms. Because they tllow automatic increases in rates without a simultaneous review of a utility's unrelated costs, tdjustment mechanisms have a built-in potential of allowing a utility to increase rates based on certain isolated costs when its other costs are declining, or when overall revenues are increasing aster than costs due to customer growth. Adjustment mechanisms should therefore be used only in

[18] Decision No. *67092* (June *29*, 2004).

extraordinary circumstances to mitigate the effect of uncontrollable price volatility or uncertainty in the marketplace. We have evaluated the propriety of continuing the Company's existing purchased water and purchased power adjustment mechanisms in the Western Group based on all relevant factors, including the APS Power Supply Adjustor. The evidence presented in this case does not support a finding that the Company's power and water supply costs are subject to a degree of price volatility or uncertainty that justifies the existence of its adjustment mechanisms, and we will therefore order that they be discontinued.

B. Arsenic Cost Recovery Mechanism

The Company states in its application that under the new EPA rule reducing the maximum contaminant level ("MCL") for arsenic in drinking water from 50 parts per billion ("ppb") to 10 ppb, effective January, 2006, the Company must construct new arsenic treatment facilities for its Casa Grande, Stanfield, and White Tank systems (Kennedy Dt. at 10; Whitehead Dt. at 7-8; Hammon Dt. at 9). A Company-wide accounting order was approved in Docket No. W-01445-04-0473 for the deferral of operating and maintenance ("O&M") expenses for arsenic treatment. Arizona Water is requesting approval of an ACRM for its Western Group that is the same as the ACRM previously approved for the systems in its Northern and Eastern Groups. Arizona Water states that its proposed ACRM would allow the Company to recover capital costs and certain recoverable O&M costs directly related to the construction and continued operation of facilities required to comply with the new EPA MCL of 10 ppb for arsenic. In the application, Anzona Water estimates the total capital cost of the new facilities at $13.6 million, and estimates annual O&M expenses of $2.1 million. No party objected to the Company's request, which is reasonable and will be adopted.

C. Depreciation Rates

Staff recommends adoption in this case of the previously approved Company-wide depreciation schedule by National Association of Regulatory Utility Commissioners ("NARUC")